Open Research Online

The Open University's repository of research publications
and other research outputs

Impact of a post registration degree programme for occupational therapists in Sri Lanka

Thesis

oro.open.ac.uk

IMPACT OF A POST REGISTRATION DEGREE PROGRAMME FOR OCCUPATIONAL THERAPISTS IN SRI LANKA

Marjorie Helen Gardner

Dip COT, B.Sc. (Hons), M. A.

Thesis submitted for the award of Doctor of Education (EdD)

Centre for Research in Education and Educational Technology

The Open University

October 2018

ABSTRACT

This study evaluates the impact of a post registration degree programme in Occupational Therapy (OT) run by the University of Kelaniya, Sri Lanka, on the professional lives and professional practice of the first batch[1] of students to complete the course (n=19). The students were all experienced, practising occupational therapists holding a Diploma in Occupational Therapy from the School of Occupational Therapy in Colombo, Sri Lanka. The degree programme was supported by Voluntary Services Overseas (VSO), the World Health Organisation (WHO), and the European Union (EU).

Within a Realist Impact Evaluation (RIE) methodology, three strands of enquiry were synthesised: documentary analysis of documents relating to the course development, delivery and evaluation; qualitative semi-structured interviews with graduate first batch students (n=17); and qualitative semi-structured interviews with a range of stakeholders in the course (n=12).

Expectations of impacts prior to course delivery were expressed by non-student stakeholders in broad terms such as '*more comprehensive services of a better quality*' whereas students were more concerned with professional development. Specific outcomes reported by students included a stronger professional identity, increased confidence in their professional practice, opportunities for career development and a sense of what occupational therapy, as a profession, could achieve in Sri Lanka. Outcomes reported by non-student stakeholders related to service and societal benefit and capacity building within the occupational therapy profession. The mechanisms by which degree level education supported these outcomes were explored as well as the influence of contextual supports and barriers to transferring learning into practice.

The overall impact of educating diploma holding occupational therapists to degree level has been to build capacity and capability in the profession, developing confident, client-centred, evidence-based practitioners and educators, such that future degree programmes are now sustainable without support from outside of Sri Lanka.

---

[1] 'batch' is the Sri Lankan term for 'cohort'

ACKNOWLEDGEMENTS

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS AND ACRONYMS

CBR	Community Based Rehabilitation
CMOC	Context-Mechanism-Outcome Configuration
COPM	Canadian Occupational Performance Measure
CPE	Continuous Professional Education
EU	European Union
DfID	Department for International Development
GWHA	Global Health Workforce Alliance
HCPC	Health Care Professions Council
HIC	High Income Country
HV	Home Visit
INGO	International Non-Governmental Organisation
LMIC	Low and Middle Income Country
MDG(s)	Millennium Development Goal(s)
MDT	Multi-Disciplinary Team
MOHO	Model of Human Occupation
NGO	Non-Governmental Organisation
NHS	National Health Service
OT(s)	Occupational Therapist(s)
RIE	Realist Impact Evaluation
SDG(s)	Sustainable Development Goals
SLAOT	Sri Lankan Association of Occupational Therapists
UN	United Nations
UNDP	United Nations Development Programme
VSO	Voluntary Services Overseas
WFOT	World Federation of Occupational Therapists
WHO	The World Health Organisation

LIST OF APPENDICES

CHAPTER 1: INTRODUCTION

This study is an exploration and evaluation of the impact of the first post registration B.Sc. occupational therapy degree programme in Sri Lanka, on the professional practice and professional lives of practising occupational therapists in Sri Lanka. Using the framework of Realist Impact Evaluation (RIE) (Pawson and Tilley, 2004), the study methods include documentary analysis and semi structured interviews with the first graduate batch of students, and stakeholders in the course.

The introduction provides an overview of the background and context in which the degree programme was delivered and a perspective on the profession of occupational therapy, with particular reference to the profession in Sri Lanka. The language of evaluation is examined in order to clarify both the aims of the study and discussion throughout the thesis. Finally, my own background, motivation and relationship to the programme under investigated is outlined.

1.1 BACKGROUND AND CONTEXT

In 2008, the UK based charity, Voluntary Service Overseas (VSO), launched an initiative: 'Supporting and Developing Rights Based Mental Health Services in Sri Lanka' with the European Union (EU) as the major funder. The programme focused on five main areas in its efforts to improve mental health services in Sri Lanka, and in particular, to promote an understanding of mental health service users' rights to accessible, equitable and effective mental health care. These five areas were: training and education; community based services; networking and sharing; communication through positive action; and empowerment through consumer advocacy.

Within the training and education initiative, a key objective concerned the education of mental health professionals:

> *'It was the aim of VSO to raise the profile of all disciplines working in the field of mental health, bringing educational standards to a degree and post degree level – bringing them in line with international standards of education, providing equality among disciplines, and ultimately, raising the standard of care and treatment for service users.'* (VSO, 2013, p. 30)

In April 2011, I joined VSO in Sri Lanka for 14 months in order to develop and lead a post-registration degree programme in occupational therapy. I returned for a further six months in 2013 to support the graduation of the first batch and selection of the second batch for the programme. This was the first degree programme for occupational therapists (OTs) in Sri Lanka. Occupational therapists throughout Sri Lanka were invited to apply for the degree programme which was an external degree run within the medical faculty of the University of Kelaniya. Places were allocated following interview. The successful students were 20 of the most senior and experienced OTs in Sri Lanka who already held a Diploma in occupational therapy awarded by The School of Occupational Therapy and Physiotherapy in Colombo, Sri Lanka, and accredited by the World Federation of Occupational Therapists (WFOT).

The post registration degree programme was made possible by a partnership between VSO, the University of Kelaniya, Sri Lanka and the Sri Lankan Association of Occupational Therapists (SLAOT). At that time, VSO was in receipt of ten year funding from the European Union to build capacity in Sri Lanka's Mental Health Services (VSO, 2005). This included input to improve professional training. The Diploma in occupational therapy was recognised to be weak in addressing mental health issues and, therefore, VSO's support of the B.Sc. occupational therapy degree programme was primarily in order to make good these deficits, thereby contributing to meeting their objectives within mental health services. VSO recognises today that this programme was one of their most significant and lasting achievements in Sri Lanka (Young Asia TV, 2014).

The SLAOT, although small in number, are a very effective advocate for the profession of occupational therapy in Sri Lanka. A small number of individual senior occupational therapists worked hard both with VSO and the University of Kelaniya in order to enable the development of the degree programme. Other professions supplementary to medicine, such as physiotherapy, already had access to degree programmes and the SLAOT recognised a need to establish parity between the profession of occupational therapy and other similar professions.

The University of Kelaniya, Sri Lanka, is home to one of the island's major medical schools. The Faculty of Medicine, Ragama, Sri Lanka has a relatively newly

established Department of Disabilities. Therefore, widening the range of healthcare professional education on campus was consistent with the remit of this department. The Medical Faculty had already run a successful post-registration degree programme in Speech and Language Therapy and it was a natural progression for the Faculty to move into occupational therapy education. The University of Kelaniya was also able to access financial support directly from the World Health Organisation (WHO) for the education of rehabilitation professionals as part of the WHO's own disability programme. WHO work to combat disability through advocating and supporting programmes of Community Based Rehabilitation (CBR) (Khasnabis and Heinicke Motsch, 2010). This is an approach which focuses on how to deliver rehabilitation in areas with poor access to healthcare resources. Building capacity within rehabilitation professionals is a key component of the WHO strategy to reduce the impact of disability within low and middle income countries (LMICs) (WHO, 2011).

1.2 A PERSPECTIVE ON THE PROFESSION OF OCCUPATIONAL THERAPY WITH PARTICULAR REFERENCE TO SRI LANKA

Occupational therapy is a rehabilitation profession alongside physiotherapy, speech and language therapy, prosthetists and orthotists. There is a shortage of most of these professions in many low and middle income countries and many of the world's disabled people[2] have little or no access to rehabilitative services (WHO, 2011; 2016). The role of OTs in these countries is both as a provider of services but potentially more importantly, as trainers of local community workers, in order to reach as much of the population as possible. The School of Occupational Therapy and Physiotherapy in Colombo opened in 1976. It remains the only school in Sri Lanka which trains occupational therapists from 'A' level entry students and is run in association with the Faculty of Medicine, University of Colombo, who award the Diploma in Occupational Therapy (Yappa, n.d.). In July 2016 the school completed 40 years of training of training occupational therapists. An audit conducted at that

---

[2] There are different opinions about the use of the terms 'disabled people' and 'people with disabilities". Whilst 'people with disabilities' puts the person first, 'disabled people' recognises that disability is a function of social and environmental barriers and that being disabled is not a characteristic within the person.

time showed that the school had trained a total of 183 occupational therapists of which 104 were still practising (Kumara, 2016, personal communication).

Worldwide, the USA was the first country to develop formal education for occupational therapists in 1917; the first to develop degree level training for all occupational therapists in the 1940s; the first to develop an entry level occupational therapy masters degree in 1962 and the first to develop an entry level clinical doctorate in occupational therapy in 1999 (Brown et al., 2015; Brown et al., 2016). Developments in occupational therapy education in the USA have an impact worldwide and contribute to *'credential creep'* (Brown et al., 2016, p. 310), a situation in which the minimum academic requirements for entry into a profession become inflated, for example to doctoral level, and the previous entry requirement, for example a bachelor's degree, becomes devalued (Brown et al., 2016). In the UK, a number of post registration degree programmes ran in the 1990s and early 2000s in order to upgrade the qualification of diploma trained occupational therapists. These no longer exist as entry level degree programmes have become the norm. However, in Singapore a post registration occupational therapy degree programme, started in 2012 to upgrade the qualification of diploma holding occupational therapists, is still running. This programme is full time for one year and is provided by Singapore Institute of Technology in partnership with Trinity College, The University of Dublin (Lim et al., 2014).

The post registration degree programme in Sri Lanka runs for two years part-time. Participating students are given leave from their place of work on Friday and Saturday (Saturday is normally a working half day) in order to attend the course but received no financial support or reduction in their caseloads. As of April 2018, 19 of the original 20 students have been awarded a B.Sc. in occupational therapy by the University of Kelaniya (1st batch). A second batch of 20 students has also finished the degree programme and the students have been awarded their degrees. A further 20 students (3rd batch) started the course in November 2015; they are currently finishing their research projects and are expected to complete late 2018.

There were less than 100 OTs in the whole of Sri Lanka at the time the post registration degree programme started in 2011 and 104 in 2016. With two batches having completed the degree programme and one batch nearing completion, the

programme has the potential to reach nearly 60% of occupational therapists in Sri Lanka, and contribute to professional capacity building and benefits to patients.

1.3 RESULTS, EFFECTS, OUTCOMES AND IMPACTS

A variety of words are used to describe observed changes attributable to programmes of activities (Stern, 2015). The terms 'results', 'effects' and 'outcomes' are synonyms of each other (Oxford University Press, 2018) and are often used in their respective definitions. The International Rescue Committee (n.d.) defines outcome as *'the planned or achieved results of an intervention's outputs '*. Although the noun 'impact' can also be used interchangeably with 'effect', the phrasal verbs 'impact on' and 'impact of' carry a sense of influence on events (Oxford University Press, 2018). Used in this way the meaning conveyed concerns the broad impact that a programme of activities may have, within a given context, which may have a causal relationship to specific outcomes. Within the health profession education literature and the development literature, impact is used both as a noun, indicating effects or outcomes and as a verb, indicating the influence of programme activities by which outcomes have been realised. Morrison (2003), with reference to medical education wrote; *'The full impact of the curriculum may not be known until sometime after the student has graduated.'* (Morrison, 2003, p. 385); whilst Stern (2015) quoted the Organisation for Economic Development and Assistance's definition of impact as being *'positive and negative, primary and secondary long terms effects produced by a development intervention...'* (Stern, 2015, p. 4).

In this study, impact is defined as the broad influence of the educational programme under evaluation in terms of the differences observed or experienced that can be attributed to the educational intervention. The differences themselves are referred to as outcomes.

1.4 AIMS OF THE STUDY

Stern (2015) stated that evaluation of the impact of a programme is essentially asking the question *'Did this programme make a difference or would changes have occurred anyhow?'* (Stern, 2015, p. 5). Applying this question to the current study, the overall aim is to establish if educating practising occupational therapists to degree level makes a difference to their professional lives and professional practice

and whether or not any observed differences can be attributed to the degree programme. A number of agencies and individuals committed time, energy and finances to enable this course to be developed and delivered. This study also aims to identify their aspirations and examine to what extent they were realised.

The availability and accessibility of a competent health workforce is a major issue within LMICs (see discussion in Chapter 3). Understanding the impact that the B.Sc. occupational therapy degree programme has had on the profession of occupational therapy in Sri Lanka could inform developments in health worker education in other LMICs. This in turn has the potential to have a positive influence on the availability and access to rehabilitation professionals, rehabilitation services and the experience of disability in these countries (WHO, 2011; 2016).

1.5 RESEARCHER BACKGROUND AND MOTIVATION

I qualified as an occupational therapist in 1981, having first gained a degree in psychology and worked as a research assistant on psychomotor deficits in Parkinson's disease. Since then I have always worked in the field of mental health as a clinical practitioner, team leader and lecturer. I gained a Master's in management and leadership in health and social care in 1998. I have an interest in what health professionals actually do, what degree of autonomy they have, what choices they make about what they do and what influences those choices. In keeping with this, my M.A. dissertation was a qualitative investigation of the influences on practice of occupational therapists in community mental health teams, a work setting which has considerable role blurring, a high percentage of generic tasks and often little professional specific supervision (Gardner, 1998).

I submitted my CV to VSO in 2010, due to my interest in sharing my skills in a development context. Within days I was asked by VSO to lead on a B.Sc. degree programme in occupational therapy in Sri Lanka. I arrived in Colombo, Sri Lanka in April 2011, interviews for students were held in the first week of May 2011 and by the end of May 2011 the course had started. The speed of events meant I was already leading and teaching on the course before I had any real experience of living and working in Sri Lanka, a country I had never visited before and whose culture I knew almost nothing about. I had no resources to deliver the course except what I had

taken with me and a box of textbooks donated from various sources in the UK and sent over by boat. The challenges of delivering the course in the early months were considerable but little by little I came to know my students, their work context and their lives, and through them and my Sri Lankan work colleagues, my understanding of living and working in Sri Lanka developed.

As the course progressed I came to understand the concerns of Sri Lankan occupational therapists, their strengths as therapists and areas for development. I came to admire their commitment to learning, their motivation and their unfailing good humour in the face of any challenge. I learnt about the Sri Lankan context; in which events rarely start when scheduled and that no amount of planning could prevent power cuts, flash floods, sudden loss of teaching resources or even sudden loss of a room to teach in. However, I also learnt that my students could almost always find a solution to whatever difficulties we faced and that they were invested emotionally, intellectually and financially in making the course a success.

Towards the end of the course I could see, in student's written work, in our discussions in class, their presentations and in their response to clinical practice that their capacities as therapists were growing and changing. I was learning of developments which had not even been anticipated by the key stakeholders at the beginning of the course. I was beginning to formulate questions such as: What is it about educating to degree level that makes a difference? What were the significant experiences that contributed to reported changes in practice? How would the degree influence the rest of the students' professional lives? It was at that time, despite there being no plans for a formal evaluation of the course, that I resolved to capture and communicate the impacts of the course primarily through students' individual stories of the difference it had made to their professional lives.

I started out in my role as an outside expert, 'parachuted' in for a specific task, but by the end of the course I was on the inside, having travelled the whole two years of the course with the group of 1st batch students. It could, therefore, be considered that I was too close to this initiative and was too invested in the success of the course to conduct an evaluation. On the other hand I was the person who most understood the course development and delivery and had relatively easy access to data collection. My own reflections, learning and experience of delivering the

course have also played a part in the evaluation. The implications of my being an insider researcher are discussed further in Chapter 4.7.

1.6 OVERVIEW OF THE THESIS

This thesis represents a trajectory starting with the background of the programme under evaluation and my own involvement in it. Once started on the doctorate of education I assembled all documentary material pertaining to the course including my own reports and reflections up to that point and put them to one side whilst I conducted the main part of the literature review and developed a research strategy. I then planned the field work trips to Sri Lanka. I have continued to reflect on the process of the research study in a research journal.

Chapter 1: Introduction

Chapter 1 has presented an overview of context, researcher background and aims of the study.

Chapter 2: Literature Review

Chapter 2 reviews the literature on evaluating educational outcomes across a broad range of health professions before examining the position of occupational therapy in particular. Frameworks for evaluating outcomes and understanding how training is translated into practice are reviewed. The concept of professional identity is considered in more detail as this emerges strongly from the literature as a mediating factor influencing professional practice.

Chapter 3: The Development Context

The context within LMICs with reference to health worker education is explored and a development perspective, the Capability Approach (Robeyns, 2005), is considered as a theoretical framework for understanding the relationship between building capacity and achieving capability in the healthcare workforce.

Chapter 4: Methodology

Chapter 4 firstly outlines the conceptual framework for this study before presenting the chosen research paradigm of critical realism and the methodology of Realist Impact Evaluation (RIE) (Pawson and Tilley, 2004). The research falls into three distinct phases, and the methods used included documentary analysis (Phase 1), semi-structured interviews (Phase 1 and 2) and member checking groups (Phase 3).

For each phase, the aims are outlined and processes of data collection and analysis described. In addition this chapter addresses issues of trustworthiness, the implications of being an insider researcher and ethical concerns.

Chapters 5, 6 and 7: Findings

Chapters 4, 5 and 6 cover the findings of Phases 1, 2 and 3 of the research. In each case findings are examined and presented within a RIE framework. In Phase 1 the findings illustrate expectations of the impact of the degree programme from the key stakeholders involved in the planning and delivery of the degree programme. In Phase 2 the findings give insight into the students' experience of the degree course and their reflections on the differences it has made to their professional lives. In Phase 3 the findings demonstrate the degree of ownership felt by the students of the findings of Phase 2. In addition Phase 3 presents the results of a quantitative analysis of the course registers.

Chapter 8: Discussion

Chapter 8 discusses the findings in the context of the previously presented conceptual framework, examining issues of context, individual learner factors and capacity and capability building. The discussion also examines the issues of measuring the impact of educational interventions with reference to the methodology used in the study, RIE and the Capability Approach.

Chapter 9: Conclusions

This chapter concludes the study, returns to the original aims and addresses to what extent they have been met. I examine my reflexive engagement with the research process before considering the implications of the findings with reference to theoretical concepts previously discussed. Finally, strengths and limitations of the study are identified and recommendations for further research are proposed.

CHAPTER 2: LITERATURE REVIEW

The research literature pertaining to the evaluation of the outcomes of education was reviewed with particular reference to health profession education, the difficulties of defining and measuring impact, the role of education in the development of a professional identity and considerations of educating healthcare professionals within development contexts.

2.1 LITERATURE REVIEW STRATEGY

The literature review process is outlined in Figure 1. The literature review starts with an overview of how educational programmes are evaluated and progresses to examine the evidence base in non-medical (that is health professional education apart from medicine) education in particular. Within evaluation of non-medical health professional education programmes, two further strands are explored: occupational therapy education and the development of a professional identity in health professional education. A development perspective on health worker education in LMICs is presented in Chapter 3.

Figure 1: Scope of the literature review

Evaluation of educational programmes → Evaluation of non-medical health professional education programmes/Continuous Professional Education → Evaluation of occupational therapy education programmes/CPE; Health professional education and professional identity with specific reference to occupational therapists
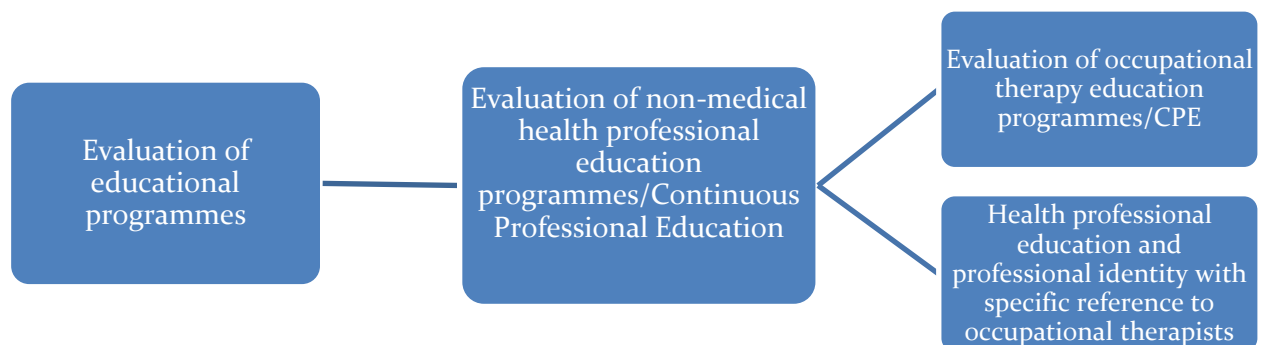
The literature review process started in June 2015 prior to the majority of the data collection and analysis. This was to establish an understanding of the key concepts and frameworks in the area under study to inform these later processes. The Open University online library was my main access to relevant literature and through that

I used Google scholar and the CINHAL database. In the early stages of the literature review I also searched SAGE publications and through my membership of the Royal College of Occupational Therapist was able to search a wide range of occupational therapy journals including journals in Asia such as the Hong Kong Journal of Occupational Therapy and the Asian Journal of Occupational Therapy. Initial search terms were 'evaluation of education'; 'evaluation of continuous professional education'; 'occupational therapy education' and 'post-registration degree programmes'.

Starting from these first searches subsequent literature was almost exclusively accessed through snowballing techniques in which I followed the thread of an idea through the citation history of a key article already in my possession. Google scholar was used in order to access forward citations. In this way I was able to develop webs of knowledge around the key concepts and the relationships between them as they emerged from the research process. In addition I receive e mail alerts from Sage publications, all major occupational therapy journals, Lancet Global Health and a number of evaluation journals in order to keep up to date with new publications. In 2018 I conducted a further CINHAL search to identify more recent relevant references. In the field of methodology I started out with a couple of seminal references and started the web of knowledge from there. The RAMESES II project site proved a valuable source of advice and material on conducting a realist evaluation (http://www.ramesesproject.org/Home_Page.php). On the development context, although some useful material emerged from the literature searches, the majority of material was accessed through my own knowledge as a starting point to develop webs of knowledge as outlined above.

2.2 EVALUATION OF EDUCATIONAL OUTCOMES

2.2.1. *The purpose and scope of evaluations of educational programmes*

Morrison (2003) provided a discussion piece on the evaluation of medical education as part of a series on learning and teaching in medicine in the British Medical Journal. This discussion piece presented a relatively narrow focus on the evaluation of educational programmes and argued that educational evaluation is a local quality

improvement initiative equivalent to clinical audit, addressing such questions as: Are students learning objectives being achieved? Are teaching standards satisfactory? Is the curriculum fit for purpose? Morrison (2003) did not consider evaluation in education as research but part of a continuous quality improvement programme primarily aimed at informing curriculum development. Wilkes and Bligh (1999) adopted the same narrowly focused position in their discussion on evaluating medical interventions, in that they define educational evaluation as *'the systematic appraisal of the quality of teaching and learning'* (p. 1269). They considered evaluation to be a key driver in curriculum development and provided an overview of four different approaches to evaluation. Three of these, student orientated, programme orientated and institution orientated, could be understood in terms of quality improvement initiatives and an institutional focus. However, the final approach, stakeholder orientated, takes into account the claims and concerns of all affected by a programme of education including longer term effects within organisations and society. Hutchinson (1999) took a slightly different perspective to both Morrison (2003) and Wilkes and Bligh (1999) and argued that although educational research is given less value within the medical profession than clinical research, it should be analogous to clinical research in its importance to the profession and is equally complex:

> *Defining true effectiveness, separating out the part played by the various components of an educational intervention, and clarifying the real cost: benefit ratio are as difficult in educational research as they are in the evaluation of a complex treatment performed on a sample group of people who each have different needs, circumstances, and personalities'* (Hutchinson, 1999, p. 1267)

Hutchinson (1999) argued that the link between educational interventions and patient care is the most important focus of educational research but the most difficult link to identify. Hutchinson identified an urgent need for rigorous research design and reliable and meaningful outcome measures.

Educational events can range from a one-day workshop to a six year degree programme. Since the purpose and scope of educational events varies so widely it follows that the purpose and scope of evaluating these programmes will also vary in a similar manner. In addition, within even the most lengthy and complex programmes, educational evaluation may focus primarily on the student and the

institution, or aim to evaluate impacts within the work context and society at large (Hutchinson, 1999; Wilkes and Bligh, 1999).

2.2.2. Frameworks and methods of evaluating educational programmes

Attree (2006) examined the status of education evaluation, with particular reference to healthcare education and concluded that *'no toolkit of standardised "off the shelf", valid, reliable and sensitive measures exists'* (p. 640). Nevertheless, a number of frameworks and methodologies are used in educational research to evaluate the outcomes of education. Despite being developed in the 1950s and 1960s, Bloom's Taxonomy of Learning Domains (Atherton, 2013) and Kirkpatrick's training evaluation model (www.kirkpatrickpartners.com) remain influential in the evaluation of educational and training outcomes (Yardley and Dornan, 2012). Bloom's taxonomy model comprises three overlapping domains of learning: the cognitive domain, the affective domain and the psychomotor domain. These domains underpin the classic: knowledge; attitudes; skills; structure prevalent in learning frameworks and evaluations. Each domain is comprised of a hierarchy of levels of learning commonly displayed as a pyramid such that educational outcomes/learning objectives at the bottom of the pyramid need to be achieved before progress can be made to the next level. The Cognitive Domain is composed of knowledge gained but also the ability to apply, analyse and evaluate that knowledge. It progresses from the bottom level of recall of data to the ability to critically evaluate and create at the top. The Affective Domain is composed of feelings, attitudes, beliefs and values and within the pyramidal hierarchy progresses from awareness of received information to internalising values and beliefs. The Psychomotor Domain, which was never fully developed by Bloom himself (Atherton, 2013), is composed of skills and doing rather than thinking. Within the psychomotor pyramidal hierarchy acquired skills progress from the ability to imitate actions, to execute a given skill reliably, to unconscious mastery of a skill.

Figure 2: Bloom's taxonomy: cognitive domain

Evaluation
Assess effectiveness

Synthesis
Create, develop

Analysis
Interpret, identify principles of a process or concept

Application
Use, apply theory, problem solve

Understanding
Meaning, interpret

Knowledge
Remembering, recognition
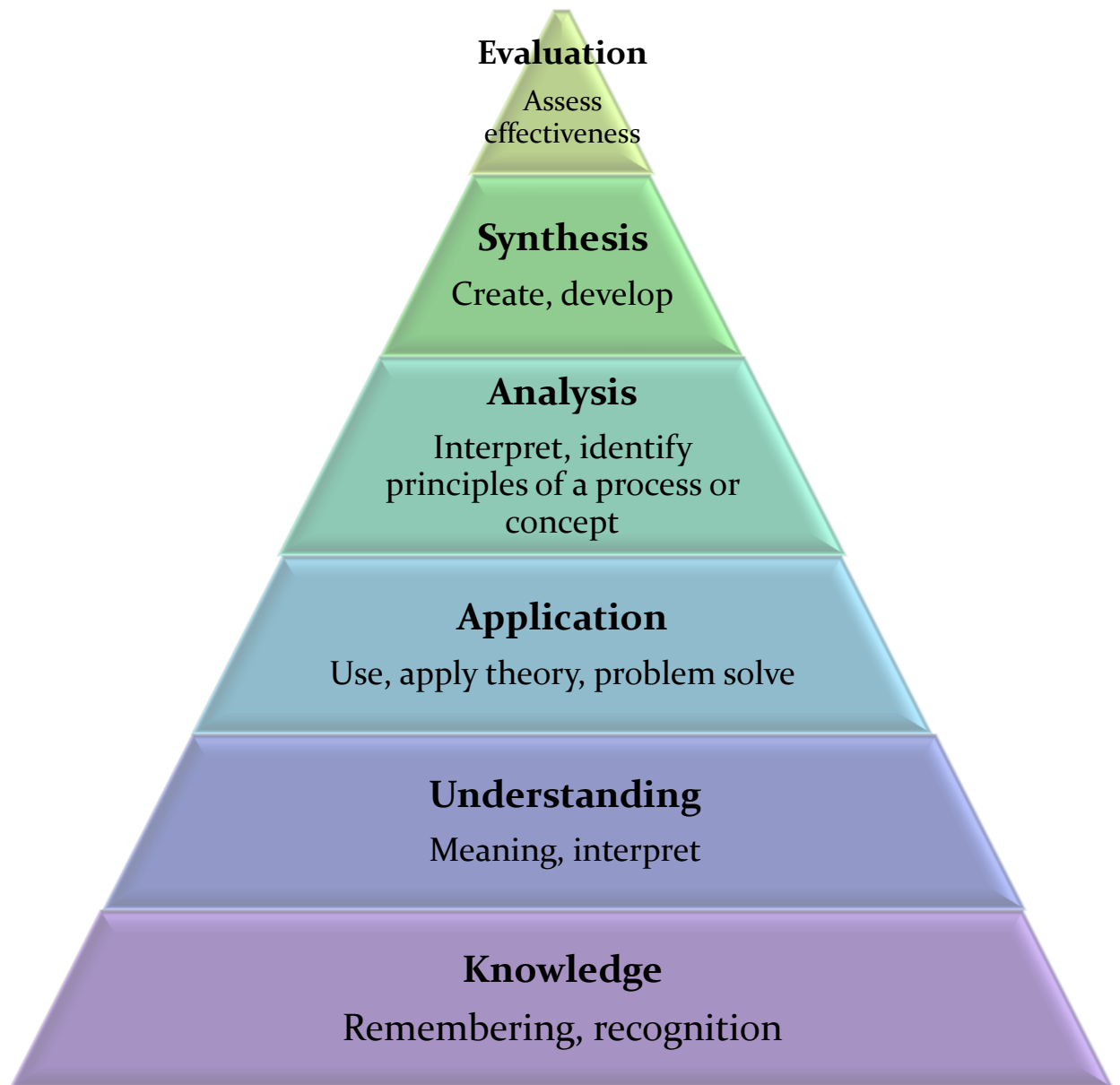
(Adapted from Atherton, 2013)

Figure 3: Blooms taxonomy: affective domain

Internalise
Adopting belief system or philosophy

Organise and Develop
Reconciling conflicts, develop value system

Value
Attaching value, expressing personal views, challenging, arguing

Respond
Reacting, participating, questioning, seeking clarification

Receive
Becoming aware and open to attitudes, values, feelings
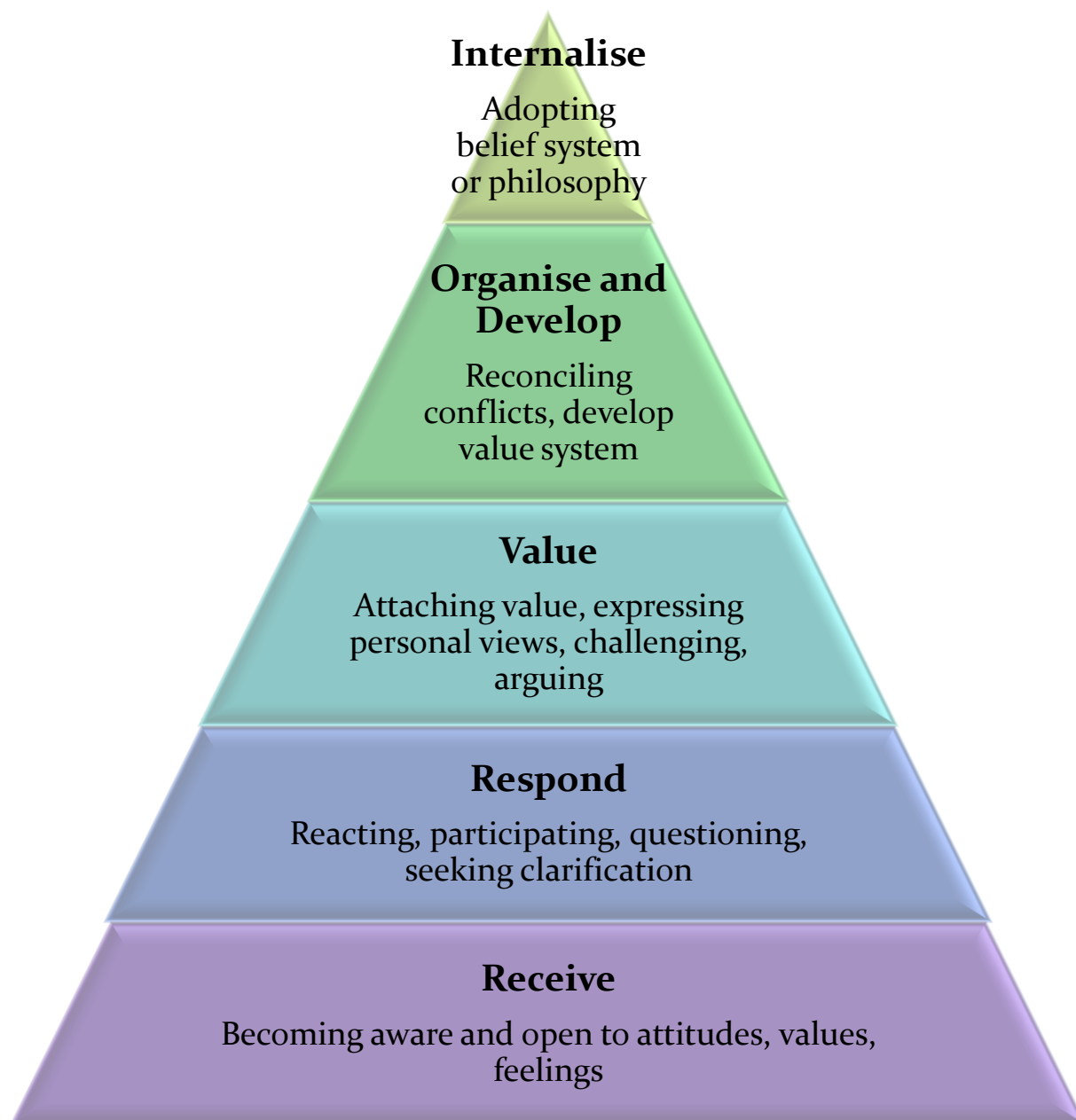
(Adapted from Atherton, 2013)

Bloom's taxonomy, particularly the cognitive hierarchy, continues to have major impact on curriculum development, assessment strategies and learning outcomes in educational settings, including university modules (The Open University, 2018). Learning outcomes developed with reference to Bloom's taxonomy become the focus of evaluation of levels of student achievement in both continuous assessment and examinations. Course evaluation will often involve an assessment of how well the programme has enabled students to achieve the learning outcomes as evidenced by pass rates and grade distribution.

Kirkpatrick's model (www.kirkpatrickpartners.com), although originally developed for use within organisational and business settings, also remains a popular model for evaluating educational programmes. Yardley and Dornan (2012) identified numerous uses of Kirkpatrick's model in their review of the evaluation literature pertaining to medical education. It remains the nearest to a 'toolkit' currently available. Within the original model, the term 'training' is preferred to 'education', but the model has been adopted widely in educational settings. The model identifies four levels of training, or educational outcomes, as illustrated in Table 1

Table 1: Kirkpatrick's 4 levels of training evaluation

LEVEL	DESCRIPTION	EVALUATION METHODS
1.**REACTION**	**Students personal reaction to the learning or training experience**	**Student satisfaction surveys. 'Happy face' sheets. Post course evaluation forms**
2.**LEARNING**	**Increase in educational capability. Knowledge and skill based learning.**	**Tests, examinations, essays, presentations, skill assessments.**
3.**BEHAVIOUR**	**Transfer of knowledge and skills to the work context. Behaviour change**	**Supervision, competency frameworks, 360 degree feedback**
4. **RESULTS**	**Impact on organisational goals and objectives. Return on investment**	**Within education and healthcare settings this could be seen in terms of meeting standards and targets.**

Level 1 of Kirkpatrick's model could be seen to be equivalent to the lowest level of Bloom's affective domain in that it concerns learner reactions including being open to receive new information. Level 2 of Kirkpatrick's model includes both acquired knowledge and skills and is broadly equivalent in focus to both Bloom's cognitive and psychomotor domains, although within the Kirkpatrick model these are not specified in as much detail as in Bloom's domains. Levels 3 and 4 of the Kirkpatrick model go beyond Bloom's taxonomy in considering the actual transfer of knowledge and skills learnt within the work place and impacts on the actual organisation.

Both Bloom's and Kirkpatrick's frameworks, including modifications to them, continue to inform evaluation practice in education. Barr et al. (1999) conducted a review of 19 studies of interprofessional education programmes within health and

social care. In terms of classifying the outcomes of these studies, Barr et al. conclude that of the available classifications of educational outcomes Kirkpatrick's model (1967, cited in Barr et al., 1999) offered the best framework. Barr et al. (1999) adapted Kirkpatrick's model, modifying levels 2 and 4, in a manner which makes the model particularly suitable for classifying outcomes within health and social care professional education (see Table 2), and which has been adopted by other researchers in similar fields within health and social care.

For example, Booker and Brabban (2004) adopted Barr's revised framework to conduct their review of evaluations of psychosocial interventions training for community mental health nurses, and a similar modification was also adopted by Gijbels et al. (2010) for analysing outcomes in their systematic review of evaluations of the impact of post registration training for nurses. Gijbels et al. (2010) concluded that this modified Kirkpatrick framework proved a useful structure for organising and analysing their review.

Table 2: Barr's (1999) Modification of Kirkpatrick's hierarchy

Level 1 **Learner's reactions**	Participant's views of their learning experience and their satisfaction with the programme
Level 2a **Modification of attitudes/perceptions**	Changes in attitudes or perceptions towards patients/clients and their conditions, circumstances, care and treatment.
Level 2b **Acquisition of knowledge/skills**	Knowledge: acquisition of concepts, procedures and principles. Skills: acquisition of problem-solving, psychomotor or social skills.
Level 3 **Change in behaviour**	Behavioural change transferred from the learning environment to the workplace, prompted by modifications in attitudes or perceptions, or the application of newly acquired knowledge/skills.
Level 4a **Change in practice**	Wider changes in the organisation/delivery of care, attributable to an educational programme.
Level 4b **Benefits to patient/carers**	Any improvement in the health and well-being of patients/clients as a direct result of the education programme

(Adapted from Barr et al., 1999, pp. 10-11 and Gijbels et al., p. 65)

Sykes and Temple (2012) did not use the full Kirkpatrick model in their systematic review of the impacts and effects of formal continued professional education on registered nurses. However, they organised their evidence from the 21 papers reviewed along the lines of knowledge, skills, attitudes and behaviour; a taxonomy which owes much to both Bloom and Kirkpatrick.

Recently, The Open University in Scotland (2016) conducted an evaluative study of the use and impact of an Open University course, aimed at people working within health and social care. They too, used an adapted Kirkpatrick framework to organise and present their qualitative data from 18 respondents:

> *'In terms of Kirkpatrick's levels of learning, the data collected in this evaluative study suggest that the majority of users of the course liked it (**Level 1**) and learnt about the history of SDS, its ethos and structures (**Level 2**). Furthermore, they changed how they worked (**Level 3**) and also were often able to influence colleagues' work practices (**Level 4**).'*

(The Open University in Scotland, 2016, p. 20)

In summary, the Kirkpatrick model, including modifications to it, is widely used within the field of evaluation of educational programme; indeed, it is difficult to find any other model used with the same regularity. However, the use of the Kirkpatrick framework is not without its critics as examined in the following section.

2.2.3. Challenges to the Kirkpatrick four-level model

A number of authors in the field of evaluation of education argue that there are fundamental concerns about the uncritical use of Kirkpatrick's model, in particular with regard to implicit assumptions within the framework and lack of consideration of contextual factors. Alliger and Janak (1989) first identified, through a meta-analysis of training evaluation studies, what they considered to be three problematic assumptions with regard to the Kirkpatrick model which are largely implicit within the literature. Firstly, the assumption is that each level is more informative than the previous in terms of outcome information; that is Level 1 has the least information and Level 4 the most, which in turn leads to the assumption that Level 4 outcomes are 'better' than Level 1 outcomes; secondly that the levels are causally linked and thirdly that the levels are positively correlated with each other. These assumptions

are supported by language used within the literature such as referring to the four levels of Kirkpatrick's model as a hierarchy as in Hooper et al. (2012). Alliger and Janak (1989) could find little evidence to support assumptions of correlations between the four levels or that there is a linear causality between Levels 1 to 4.

Bates (2004) supported the conclusions of Alliger and Janak (1989) and argued that although the causal linkage assumption is not supported by research it is still evident in the evaluation literature. For example, The OU in Scotland (2016) described their use of the Kirkpatrick framework in their methodology in the following manner:

> *'Each level of the chain is necessary to achieve results at the level above. Each depends on the other - if 'students' do not have a good experience ('Reaction' level 1), they will not take on new learning (level 2) and so on.'*
> (The Open University in Scotland, 2016, p. 6)

This demonstrates an unequivocal acceptance of the assumption of linear causality despite the fact that the evidence of a causal link has been found to be particularly weak between Level 1 and the further three levels (Alliger and Janak, 1989; Holton, 1996). Holton (1996) and Bates (2004) both argued that this assumption of causality has had an impact on how training courses are evaluated. The ease with which participant reactions can be measured, by 'Happy Face Sheets' or Likert scales, has led to a situation in which these measures are seen as *'legitimate surrogates or proxy measures for training outcomes'* (Bates, 2004, p. 344), whereas in fact, effective learning can often be challenging, frustrating and at times uncomfortable (Holton, 1996; Bates, 2004). Holton (1996) considered that the inclusion of learner reactions as a primary outcome, especially when reactions are measured in terms of satisfaction/happiness, is one of the greatest flaws of the Kirkpatrick model.

Alliger and Janak (1989) and Holton (1996) both argued that participant reactions should not be included in a model of training evaluation. Alliger and Janak (1989) suggested a change to the Kirkpatrick model, seen in Figure 4 below, to a representation shown in Figure 5, which disengages Level 1: Learner reactions, from any linear causal relationship with other training outcomes; accepts that Level 2 outcomes may be related to Level 3; and suggests that Levels 3 and 4 are interdependent, since successful results are likely to reinforce behaviour.

Figure 4: Representation of assumption of causal linearity within the Kirkpatrick model
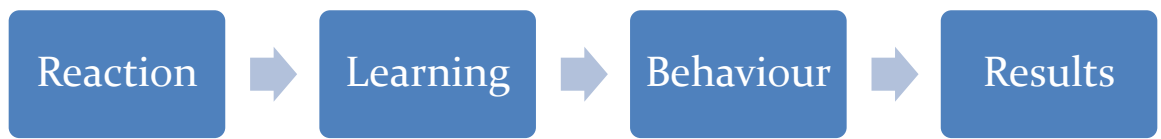
Figure 5: Representation of Alliger and Janak's (1989) modifications to the Kirkpatrick model
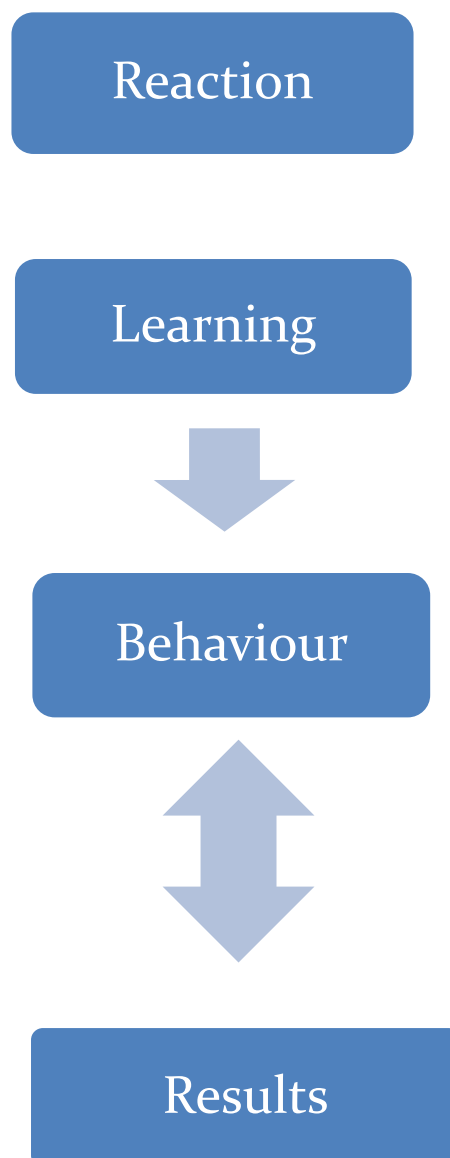
As well as the implicit assumptions in the Kirkpatrick model identified by Alliger and Janak (1989); Eraut (1985), Holton (1996), and Bates (2004) have all drawn attention to the lack of consideration of individual, academic and workplace contextual factors in evaluation learning transfer and training effectiveness. Eraut (1985) highlighted the lack of attention to the influence of academic and professional contexts on knowledge use and argued that all knowledge is context dependent, with the work context dominating professional socialisation particularly in the early post qualification years. Bates (2004) considered the Kirkpatrick model oversimplified and incomplete, particularly in its lack of consideration of contextual factors such as organisational culture, the climate for learning transfer, support in the workplace and available resources.

> *'The implicit assumption of the four level model is that all of the work contexts to which trainees return will have equal effects on learning transfer'*

> (Bates, 2004, p. 344)

He concluded that if measurement is restricted to the four levels of the model no data will be generated on why training was or was not effective and this has an impact on a lack of benefit from any evaluation process for stakeholders.

Holton (1996) paid particular attention to the lack of individual contextual factors within the four level model. He proposed a conceptual evaluation model with three primary outcome measures based on the three levels of learning, individual performance (behaviour) and results found in the Kirkpatrick model, but he adds three sets of moderating or influencing factors; motivational elements; environmental elements; and ability/enabling elements. Within these three factors both individual and organisational influences may play a part. For example, motivation to learn may have a direct effect on learning but this may be influenced by personality characteristics and individual ability as well as factors within the work environment.

Yardley and Dornan (2012) aimed to establish the suitability of Kirkpatrick's levels for appraising interventions in medical education. They undertook a narrative review of Kirkpatrick's own publications and identified 14 reviews which used Kirkpatrick's levels to evaluate medical education published between 2005 and 2010. They noted that this in itself indicates how widely the Kirkpatrick model is used.

Yardley and Dornan (2012) were able to identify only four articles which critically challenged the use of Kirkpatrick's model in evaluating education including Alliger and Janak (1989) and Horton (1996). Although these earlier studies were not concerned directly with medical education, Yardley and Dornan (2012) considered the issues they raised were applicable to it. In fact, Yardley and Dornan (2012) hypothesised that Kirkpatrick himself might agree with these challenges. They argued that Kirkpatrick advocated using the levels as a training heuristic and it was not the original intention to be used to '...*evaluate how professionals become expert practitioners through deliberate practice and social learning'* (Yardley and Dornan, 2012, p. 100.). None of Kirkpatrick's own examples of successful application came from fields as complex as medical education (and by extension other types of professional education) and Yardley and Dornan (2012) argued that the four levels are more suited to short term interventions and measurable endpoints.

In addition to the criticisms and concerns discussed above, Yardley and Dornan (2012) identified a specific problem with Kirkpatrick's model in the field of healthcare. They argued that the different levels concern different stakeholders and beneficiaries, but the model does not allow for these different perspectives to be part of the evaluation, a methodological issue in evaluating healthcare education previously discussed by Attree (2006). Yardley and Dornan (2012) concluded that Kirkpatrick's model may be appropriate for relatively simple training interventions in which the outcomes emerge quickly and can be easily observed and measured. However they found it unsuitable for the majority of educational interventions which are complex, in which many important outcomes are longer term, and in which both unanticipated outcomes need to be evaluated as well as expected outcomes.

Despite the challenges and criticisms outlined above, Kirkpatrick's model is almost ubiquitous in evaluation research, perhaps due to the lack of viable alternatives. Bates (2004) acknowledged the popularity of Kirkpatrick's model for the evaluation of training, and recognised that it has made a valuable contribution to the field. In part, this is because it simplifies the complex process of training evaluation, provides a systematic framework and language for talking about evaluation, and focuses on outcomes. Holton (1996) concluded that although the Kirkpatrick model

is *'elegant in its simplicity'* (Holton, 1996, p. 6) and has made a great contribution to evaluation research, it is best understood as a taxonomy of types of learning outcomes rather than a model of evaluation.

In summary, despite the widespread use of Kirkpatrick's model in evaluating training and education there are significant methodological issues associated with its use. These primarily concern the assumptions of causality implicit in the model, the lack of consideration of both individual and workplace contextual factors and an emphasis on what can be measured relatively easily, which leads to a lack of consideration of the perceptions of stakeholders and beneficiaries.

2.3   EVALUATION OF THE EDUCATION AND CPE OF NON MEDICAL HEALTHCARE PROFESSIONALS

In 1985, Eraut noted that very little is known about what is learnt during professional education apart from the results of formal examinations, and still less about continuous professional education (CPE). Wood (1998) conducted a review of the effects of CPE on the clinical practice of nurses and concluded that it was difficult to find any conclusive proof that CPE has any impact on direct patient care. Twelve years later, the situation was viewed similarly by Gijbels et al. (2010), who remarked on the *'dearth of systematic evidence of the impact on practice of post-registration nursing and midwifery education'* (p. 64). Gijbels et al. (2010) conducted a systematic review of 61 studies on the impact on practice of educational programmes, set within an educational setting, leading to recognised academic qualifications such as a diploma or master's level qualifications. The studies reviewed investigated impact from a range of perspectives including the nurse, patient, carer, education provider and health service organisation. In this review, they used Barr et al.'s (1999) revision of Kirkpatrick's Evaluation Hierarchy as a taxonomy of learning outcomes with which to organise the review data. They found that studies evaluated impact at different levels of the hierarchy. For example, some examined attitude change (level 2a) and some learner's reactions (level 1). The majority of studies conducted their evaluation from a learner perspective only, with a minority considering impact from the perspective of the education and health service providers (level 4a) and only 3 considering patient and/or carer perspectives (level 4b). In their summary Gijbels et al. (2010) noted:

'The findings indicate that students benefit in post registration programmes in relation to changes in attitude, perceptions, knowledge and skills. There is also some evidence that students apply their newly acquired attitudes, knowledge and skills. There is however limited evidence of the direct impact on organisational and service delivery changes, and on benefits to patients and carers.'   (Gijbels et al., 2010, p. 64)

As discussed earlier (Section 2.1.3), the available frameworks for evaluating impact on practice, notably the Kirkpatrick hierarchy, give little attention to the role of context. Eraut (1985) noted the lack of attention to the influence of both academic and professional contexts on how knowledge is put into practice and considered that the impact of both the educational and work context on transfer of knowledge and skills into practice is both underestimated and under researched.

Hardwick and Jordan (2002) conducted a study on the impact of part-time, post registration degree programmes in nursing and midwifery. Postal questionnaires were sent to all graduates of the Bachelors and Masters programmes of a particular UK institution who graduated between 1994 and 1998. Of the 58 graduates contacted, 43 responded. The questionnaire was designed to explore factors which had motivated graduates to undertake the course, graduates' perceptions of change in practice since graduating and any perceived workplace barriers to applying graduate skills and knowledge. The most common reason given for studying was to improve knowledge of nursing and midwifery (37/43) but the need to upgrade academic qualifications was also a strong motivating factor (25/43). The most commonly cited change to practice was increased use of research skills. No examples of changes to clinical practice were given despite specific prompts in the questionnaire. Workplace barriers were more evident in those graduates who were working in clinical settings as compared with those working in education. Negative attitudes and resentment from both colleagues and managers were the most commonly given example of workplace barriers. The authors suggested that research literacy was the main outcome of these programmes rather than changes to direct patient care with the factors influencing this outcome being the learners themselves, the educational intervention and the workplace culture (Hardwick and Jordan, 2002). Hardwick and Jordan's study is one of the few that examine the impact of a part time post registration degree programme broadly analogous to the programme under study in this research. Unfortunately the use of questionnaires

only as the research design possibly limited more detailed exploration of changes to practice and reasons for constraints on practice.

Sykes and Temple (2012) also focused on the impacts of formal courses of CPE which led to a qualification. They conducted a systematic review of the literature in order to examine the evidence for impacts on practice of formal continuing education for registered nurses. This involved a review of 21 articles which were subject to a narrative synthesis. The identified articles addressed the impact of individual study modules and full educational pathways but not pre-registration programmes. This included, for example, registered nurses in possession of a Diploma in Nursing, who undertook a bachelor's degree programme. They aimed to identify the '*knowledge, skills, behaviours and/or attitudes that registered nurses acquire as a result of undertaking post registration higher education*' (Sykes and Temple, 2012, p. 196) and to establish how these are applied in the workplace. Although a variety of impacts was reported in these papers, the synthesis indicated that only nurses who had taken courses up to Diploma level or who had taken isolated modules, for example, on medication management, showed any transfer of knowledge into practice. In addition, there was evidence that, even when students did transfer knowledge and skills into their practice this was not sustained. The importance of the influence of the work context also emerged from their review, with strong evidence for barriers within the working environment against implementing changes in practice; in particular, lack of managerial support and resistance to change from colleagues in the workplace as in the Hardwick and Jordan (2002) study (Sykes and Temple, 2012).

Cotterill-Walker (2012) conducted a literature review of 15 studies of the impact of post registration masters level nurse education on nursing practice. Five recurrent themes were identified in the review: increased confidence and self-esteem; enhanced and confident communication; personal and professional growth, particularly research awareness and writing skills; ability to apply knowledge to practice and improved analytical thinking and decision making. Although it seemed clear that nurses had benefited from their studies and had the potential to improve patient care it was less clear that there was, in fact, any direct benefit to patients. The role of workplace constraints on practice also emerged from the

review. Cotterill-Walker (2012) suggested that the lack of evidence is in part due to the lack of *'measurable and observable criteria against which the educational outcomes for master's level performance can be evaluated'* (Cotterill-Walker, 2012, p. 63) and argued for research into developing such criteria as well as into workplace constraints and limitations to transfer of knowledge into practice.

The three studies outlined above highlight the importance of context in determining whether potential outcomes from CPE are realised. One of the studies reviewed by Sykes and Temple (2012) was that of Ellis and Nolan (2005) who conducted one of the more extensive evaluations of a particular programme of CPE. They set out to explore the context of CPE and factors that influenced outcomes with reference to a particular English National Board post registration short course (ENB 941). Their study included documentary analysis of the curriculum and related course documents and in-depth semi-structured interviews with educators, students and their managers. Interviews were conducted pre course, post course, after six months and after 12 months. Fifteen students and 21 managers were interviewed resulting in 121 interviews over the course of the study. They concluded that four main factors interact over time to influence the extent to which the potential benefits of CPE on patient care are realised. These were identified as: the CPE selection procedure; students' preparedness and motivation; the quality of the educational experience; and the nature of the clinical environment that students return to. These results support Eraut's (1985) earlier analysis of the importance of both the academic and work context in influencing transfer of learning into practice. However, of the four identified factors, by far the most influential in impacting on the transfer of CPE into practice was the work context, in this case represented by the clinical environment or *'practice milieu'* (Ellis and Nolan, 2005, p. 103).

Ellis and Nolan (2005) were concerned less with classifying impacts than with identifying the processes which influence whether impacts are realised. This is an aspect of impact evaluation further examined by Clark et al. (2015) and Draper et al. (2016). Clark et al. (2015) interviewed representatives of four key stakeholder groups: students, managers, educators, and representatives from healthcare organisations. Their aim was to explore the different stakeholder perceptions of the

processes influencing a positive impact of CPE on practice. They presented a previously developed impact on practice framework within healthcare education, which is structured around four domains corresponding to the four stakeholder groups. Processes which influence whether, or to what extent continuous professional education (CPE) impacts on practice are understood to operate both within and between the four domains: the individual learner; the manager of the student in the workplace; the educational provider delivering the CPE; and the healthcare organisation/workplace. Table 3 displays a comparison between the contextual factors identified as being important in influencing transfer of knowledge and skills into clinical practice by Ellis and Nolan (2005) and the four domains identified by Clark et al. (2015).

Table 3: Comparison of contextual factors

Ellis and Nolan 2005	Clarke et al. 2015

Ellis and Nolan 2005	Clarke et al. 2015
Participants' disposition towards the educational event (preparedness interest and motivation)	The individual learner
Quality of Educational Experience	The educational provider
Selection for CPE	The students' manager
The practice milieu	The Healthcare Organisation
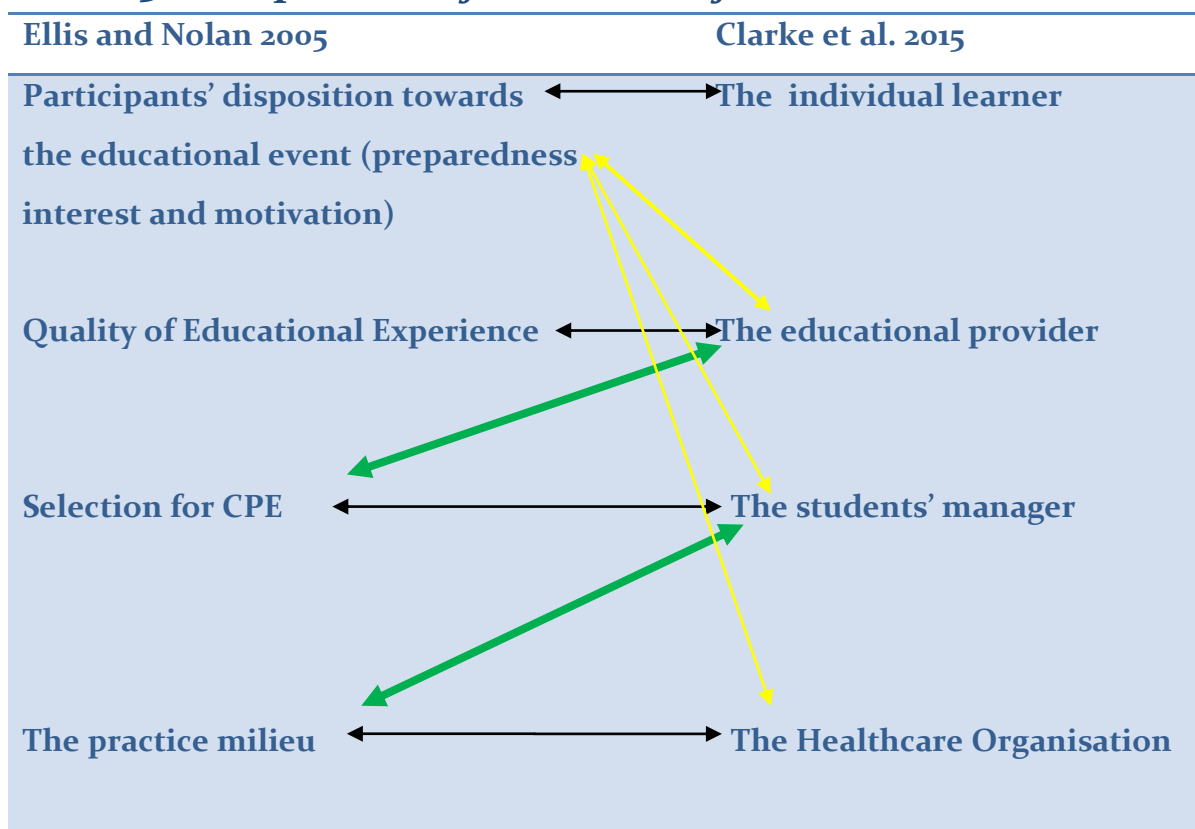
In Table 3, it can be seen that Ellis and Nolan (2005) focused on more specific contextual factors compared to the four domains described by Clark et al. (2015). These specific factors can be understood firstly as examples of the types of issues which operate within the domains identified by Clark et al. (2015), shown by the black arrows. However, further consideration reveals the extent to which these

specific factors operate between domains, represented by green arrows. For example, the practice milieu is influenced both by a student's manager and the culture of the organisation to which the student returns and selection for CPE is a function of partnership between the educational provider and the student's line manager. It could be argued that even a factor such as a student's disposition, which might be considered to be purely within the individual learner domain, could be influenced by the material provided by the educational provider, support from the line manager and aspects of the organisational culture.

Four key themes were identified from the interview analysis in Clark et al.'s (2015) study. These were: *'A positive, supportive organisational culture'* (Clark et al., 2015, p. 390); effective partnership working, especially between educators and managers; a supportive learning environment both within the workplace and within the education system and factors which moderate ability to change practice. Table 4 gives an overview of these moderating factors, both those which were seen as facilitating and those which were seen as inhibiting transfer of CPE into practice.

Table 4: Maximising the impact of CPE on practice

FACILITATORS AND INHIBITORS
Facilitators Health service provider commitment: strategic approach to valuing CPE, ring fenced and equitable access to funding, study time, workplace-based support Alignment of organisational and individual priorities for CPE Commitment of the manager: as a supporter, change agent and role model Manager's clear expectations about how new learning will be used in practice Students and managers having a clear understanding of course requirements Readiness to study and adequate preparation to study Course design (content and assessment) that meets service needs Collaborative approaches to course evaluation Mechanisms for celebrating achievement and success Strong partnership working between education and service Creating effective learning communities
Inhibitors Clinical demands that restrict service involvement in developing, delivering and evaluating CPE Education and service providers with different cultures, agendas and timescales Inflexibility imposed by education providers Lack of organisational processes that systematically support CPE in the workplace Limited autonomy for students to initiate and sustain change Juggling work and study alongside clinical role demands

(Clark et al., 2015, p. 392)

Within this analysis of factors which can either facilitate or inhibit transfer of knowledge and skills into practice, there is clear perception of the importance of the role of both the educational and work contexts, including the impact of those who work in and manage those contexts. In a further study using the same data (Draper et al., 2016), the central role of the work context and the manager in particular, at all stages of the CPE process was highlighted. In both Clark et al. (2015) and Draper et al. (2016) there is also clear reference to the importance of an effective partnership between the academic and work context, a factor previously highlighted by Eraut (1985).

2.4 EVALUATION OF THE EDUCATION OF OCCUPATIONAL THERAPISTS

Occupational therapy is a small profession compared to nursing. According to the Health and Social Care Information Centre, as of September 2017, 319,350 qualified nurses were employed by NHS England (HSCIC, 2016). On this database occupational therapists are not differentiated from other allied health professionals but the Health Care Professions Council (HPCP n.d.) had 30,171 registered occupational therapists in England as of March 2018. Not surprisingly, therefore, the research base on the impact of healthcare education, both pre and post registration, and CPE, on occupational therapists is less developed than in the nursing and medical professions.

Hooper et al. (2013) conducted a systematic mapping review of the international literature on the educational approaches and teaching methods in occupational therapy between 2000 and 2009. They argued that the *'scope of scholarship'* (Hooper et al., 2013, p. 9) within occupational therapy education had not been previously categorised and described. They identified a need to develop a map of the field of education in occupational therapy in order to provide a baseline supporting further research into educational approaches and teaching methods best suited to promote competency in graduate occupational therapists. They examined 129 articles published in the international literature between 2000 and 2009. Of these 129 articles, 22 included an educational intervention and examined the impact of that intervention. Hooper et al. (2013) used a modified Kirkpatrick hierarchy very similar to that developed by Barr (1999) and used by Gijbels et al. (2010), to categorise the

outcomes in these 22 articles. It is not identified within their mapping review if the authors of any of these 22 articles used the Kirkpatrick hierarchy to measure impact themselves. Hooper et al. (2013) reached similar conclusions to Gijbels et al. (2010) and Sykes and Temple (2012), that is, outcomes of the studied educational interventions were primarily studied at the level of acquisition of skills and knowledge (specifically reasoning skills) (n=15), level 2b on the Kirkpatrick hierarchy, followed by impact on attitudes and perceptions (n =13), level 2a on the Kirkpatrick hierarchy. In addition, 11 of the articles studied student reactions at level 1 on the Kirkpatrick hierarchy. Only three articles researched impact on behavioural change (level 3), and no articles researched impact on changes in practice (level 4a) or benefits to patients (level 4b). Hooper et al. (2013) found a similar situation regarding the evaluation of educational interventions in occupational therapy to that described by Gijbels et al. (2010) and Sykes and Temple (2012), in their studies on evaluation of educational interventions in nursing. Research in both these areas of healthcare education supports the earlier conclusion of Attree (2006), that evaluations of educational outcomes in the field of health professional education beyond level 2 on the Kirkpatrick hierarchy are rare.

None of the 22 articles identified in the study by Hooper et al. (2013) addressed outcomes from a whole course of study such as a diploma or degree course. They either focused on a particular aspect of a larger educational programme (Chung, 2001; Cooper and Spencer-Davis, 2006) or a small scale educational intervention such as a continuous professional development initiative within a particular service area rather than within an educational establishment (Miller and Ischler, 2001; Stern, 2008).

Establishing whether a particular training intervention makes a difference is not only important to educational programme managers. Occupational therapists themselves use outcome measures to assess whether their intervention has made a difference to clients and a number of the small scale research studies on educational interventions in occupational therapy examine the impact of training on the use of such outcome measures. Typical of these is Cook et al. (2007), who researched the impact of a one day workshop on the use of outcome measures. As well as the workshop, a resource pack was provided which included copies of nine, free to

access, validated and reliable outcome measures, ready for use. Follow up support by telephone and email was given for four months after the workshop. Cook et al. (2007) reported a 67% increased use of outcome measures based on a self report questionnaire give pre workshop and at four months follow up. At follow up, participants were also asked to identify the key factors that supported their behaviour change. These emerged as the educational elements of the workshop itself; presentation, discussion and practice; and the resource pack provided. Colquhoun et al. (2012) also studied the use of outcome measures in occupational therapy practice. The purpose of their study was to establish whether the use of a particular client-centred, standardised outcome measure, that is the Canadian Occupational Performance Measure (COPM) would improve clinical practice in occupational therapy. Therapists were assessed by being scored on a predetermined set of eight practice dimensions during a structured interview format with access to client charts. Therapists were interviewed at the start of the study, then after 12 weeks usual practice, which was followed by a training event in the use of COPM, then after 12 weeks of COPM use. The authors reported an increase in performance across all eight practice dimensions but acknowledged limitations to the study particularly with regard to the interviewers not being blind to the study aims, there being no consideration of client perceptions and no observational data to corroborate the interviews.

Hooper et al. (2013) found little research on the impacts of a whole programme of pre-registration or post registration study leading to either diploma or degree in occupational therapy. Hodgetts et al. (2007) had previously noted that the perceptions of students and graduates of occupational degree programmes had received little attention in the literature. The research available either followed very small sample sizes from graduation, or examined particular aspects of the curriculum or teaching methods. Hodgetts et al. (2007) examined the perspectives of three cohorts of the occupational therapy degree programme at the University of Alberta, Canada: students early on in the programme (n=159), students nearing graduation (n=85) and graduates within one year of graduating (n=22). A much smaller sample of longer term graduates who were, on average, two years post graduation (n=7) had telephone interviews. These four groups were asked about their satisfaction with the pre-registration occupational therapy degree programme

at the University of Alberta, Canada, and the extent to which they felt prepared for practice. They used a combination of surveys, focus groups and telephone interviews as their research methods. They found that both students and recent graduates felt that they needed more competence in technical skills and intervention strategies. Overall students were satisfied with the occupational programme although this satisfaction was higher for 1st year students than those approaching graduation. Longer term graduates also expressed the need for more input on intervention strategies within the occupational therapy programme but this had become of less importance to them given their involvement in work place professional development activities.

The study of Hodgetts et al. (2007) covered the transitional phase from student to graduate to practitioner. This transitional phase was also examined by Morley (2009) with regard to evaluating the success of a preceptorship programme for newly qualified therapists. Morley (2009) used a mixed methods approach within a realist framework, and collected data via a survey of all newly qualified therapists on the preceptorship programme, followed by semi-structured interviews of four pairs of supervisors and supervisees at 6 months and 12 months through the programme. The aims of the research were to explore the impact of the preceptorship programme and identify the contextual factors that sustained any positive effects of the programme. Five themes relating to contextual factors which moderated the impact of the preceptorship programme were identified. These were: job design, such as the setting and whether the occupational therapist worked alone; realities of practice, such as staff shortages and high caseloads; developmental strategies available such as role modelling and co-working; team culture which could be either challenging or supportive; and professional identity, the development of which was strongly related to the other contextual factors. Morley (2009) found that newly qualified therapists who worked alone in multidisciplinary teams, under pressure to work autonomously without access to co-working or role modelling with a more experienced occupational therapist, were likely to struggle in the development of a strong professional identity and experienced less benefit from the preceptorship programme.

No evaluations have been identified of the impact on practice of gaining a post registration degree in occupational therapy in the UK. A literature search of journals with occupational therapy in the title from 1980 to 2017 found only one article relating to a post registration degree in occupational therapy (Croft, 1991). Croft (1991) described the post registration course at Derby College of Higher Education and its potential benefits to diploma holders. A brief evaluation of the post registration degree programme in Singapore was conducted after graduation of the first cohort in June 2013 and presented as a poster at the Asia Pacific Medical Education Conference (Lim et al., 2014). Thirty one out of a possible thirty two students completed a course specific questionnaire which focused on perceptions of course specific occupational therapy content, teaching methods and gains in specific areas of understanding. Lim et al. (2014) reported that students' perceptions of both the educational climate and course specific elements were very strongly positive. In particular, the development of a robust professional identity emerged strongly as an outcome. This seemed to have been supported by the opportunity afforded by the course to spend time on clinical practice in a service setting in Ireland. The original intention of completing a more in depth evaluation of this programme was never realised (Lim, 2017, personal communication). Lim's study (2014) highlights a thread evident within the literature on evaluating health professional education, of the development of professional knowledge, confidence, self-esteem and a strong professional identity (Morley, 2009; Gijbels et al., 2010; Cotterill-Walker, 2012). The relationship between educational inputs and the development of professional identity in health professionals is considered in more detail below.

2.5 PROFESSIONAL EDUCATION AND PROFESSIONAL IDENTITY

Ibarra (1999) defined professional identity as:

> *'...the relatively stable and enduring constellation of attributes, beliefs, values, motives, and experiences in terms of which people define themselves in a professional role.'* (Ibarra, 1999, p. 764)

Social Identity Theory (Hogg, 2006), which examines the role of the self-concept in group membership and intergroup relations, has informed the discourses on

professional identity within the field of health and social care. This includes Adams et al. (2006) with reference to a number of healthcare professions; Willetts and Clarke (2014) with respect to nursing and Turner and Knight (2015) with regard to occupational therapy.

Within this context, professional identity is seen as an aspect of social identity whereby members of a particular professional group share values, attitudes, knowledge, skills, behaviours and professional practices which shape their professional role and differentiate them from other professional groups in the workplace. Within the work context, the interactions between professional groups also influence each group's professional identity (Eraut, 1985), which continues to be refined and developed as much by the perceptions of others as by the self-perceptions of group members.

The values, attitudes, knowledge, skills, behaviours and professional practices of a professional group, all of which underpin a sense of professional identity, are strongly influenced by their pre and post registration professional education (Barr, 1999; Gijbels et al., 2010; Professional Standards Authority, 2016). Indeed, Weld (2015), with reference to medical education, considered that the development of a professional identity is the fundamental goal of professional education. It might be predicted, therefore, that the development of a professional identity would feature prominently in the higher education literature. However, Trede et al. (2012), in their review of the literature on professional identity development, concluded that:

> *'There is a dearth of journal articles in the higher education literature that comprehensively explore the development of professional identity through higher education.'* (Trede et al., 2012, p. 368)

Trede et al. (2012) conducted a systematic review of the higher education literature focusing on journals published between 1998 and 2008. Twenty articles which met their selection criteria were analysed in depth. Only one of these articles gave a definition of professional identity and engaged with the debate on professional identity within the broader literature and only a minority of the articles gave any consideration to external influences and the relationship between the education provider (colleges and universities) and the workplace. Trede et al. (2012) concluded that there was evidence from the review, that effective professional roles

within the workplace are supported by a strong professional identity, but they argued that much further research is needed in this area.

Baxter (2011) reviewed the literature on professional identity with particular reference to public sector professional identities within the public sector workforce in the UK and argued that there is a consensus in the literature on the importance of developing a professional identity for *'professional salience and effectiveness' (*Baxter, 2011, p. 16). Baxter (2011) focused on the development and maintenance of a professional identity, its association with motivation, job performance and job satisfaction and the impact on professional identity of challenges to working practices within the public sector. The professions examined were in the fields of youth work, social work, nursing and teaching. Baxter (2011) identified five main criteria within the literature that contribute to an understanding of what being a professional means. Four of these relate to issues of registration, accreditation, standards and ethics but the fifth concerns having a sense of what the profession actually does, what it means to be a member of that profession and having a professional identity which differs from that of other professions. Baxter (2011) examined the workplace challenges to professional identity associated with the prevailing economic and political climate in the UK as well as the role of both initial professional training and continuous professional development on developing and sustaining professional identities. A five stage model (Figure 6) maps out the different activities undertaken at different points in a professional's career which underpin how the professional identity is first formed and how it can be sustained and developed. Identified challenges to professional identity in the UK include a culture of 'marketisation' (Baxter, 2011, p. 9), an era of spending cuts in public services, the impact of centrally generated performance targets and a drive towards more multidisciplinary working. The latter, although potentially supporting better communication and more co-ordinated responses within public services, can weaken professional identity through role blurring and resultant professional insecurities, particularly when there is no longer professional line management. In turn, a weakened professional identity can impact on professional effectiveness, motivation, job satisfaction and ultimately retention rates within the profession, whereas:

'The importance of developing a professional identity within a sphere or field has been recognized as vital for professional salience and effectiveness. Acting as a key element in both the retention and motivation of the individual; linking strongly to performance and general job satisfaction.' (Baxter, 2011, p. 16)

The Professional Standards Authority (2016), in their review of the literature on professional identity and professional regulation, support the view of both Trede (2012) and Baxter (2011), that there is evidence of links between a strong professional identity and quality of care.

Figure 6: The five stages of learning professional identities
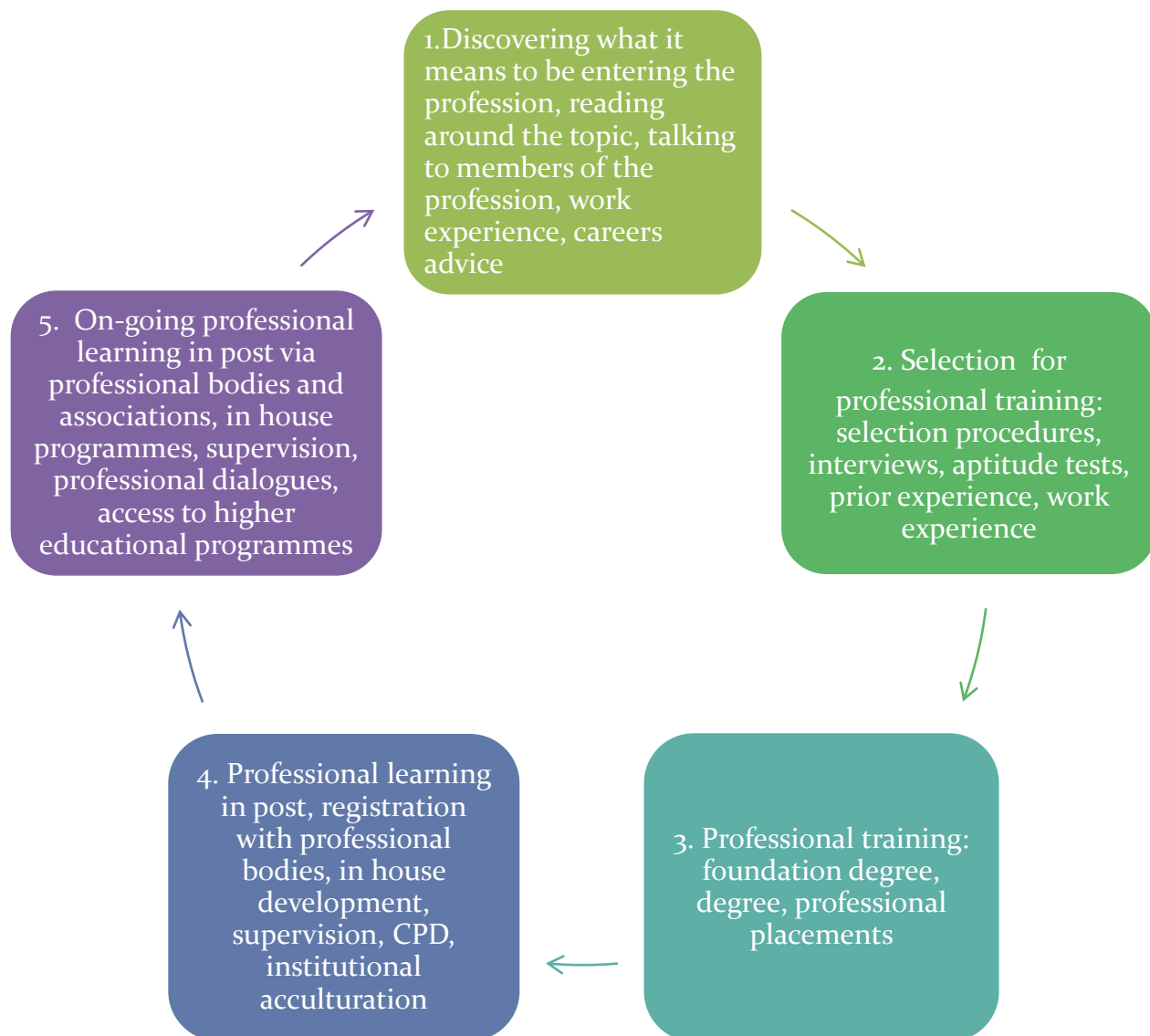
(Adapted from Baxter, 2011, p. 86)

The first two stages of this model, when an individual is investigating career options open to them and the profession best suited to them, are identified as periods when the professional identity first begins to be formed. This is supported by Adams et al.

(2006) who investigated the factors influencing professional identity in 1,254 first year health and social care students from a range of disciplines. They found that a degree of professional identity was present even before students commenced their pre-qualification training. First year health and social care students were found to have relatively strong professional identities on entry to their programme of study but this varied between the different professions. Physiotherapy students had the strongest professional identity at this stage whilst social work students had the weakest. Occupational therapy students were second to physiotherapy students in the strength of their professional identities. Other factors were influential in supporting professional identity at this stage. These were previous work experience in health and social care, better understanding of team work, greater cognitive flexibility (as measured by a scale developed by Martin and Rubin, 1995, cited in Adams et al., 2006), which refers to an individual's ability to structure knowledge effectively to adapt to problem solving situations and knowledge of their chosen profession.

Reid et al. (2008) integrated data from two large international studies concerning the development of professional identity in a range of professions. Data in this study were drawn from Sweden and Australia and involved more than 500 interviews with a range of professionals, for example, psychologists and future civil servants in Sweden and musicians and lawyers in Australia. Interviews were conducted with first year students, final year students and within the first year of professional work. A particular focus of the study was to understand the role of higher education and how the pedagogic experience as a whole contributed to the formation of professional identity. Differences were found between the higher educational programmes of different professionals in how clearly the profession role was articulated and communicated to students. Similarly, expectations on professional activities and the future work role were more clearly expressed in some programmes compared with others which has implications for the design and pedagogy of professional education programmes. Also, as Reid et al. (2007) noted, there are differences between how different professions are perceived with regard to their economic and social significance, both within and between countries, and these differences also inform professional identity formation. The authors conclude that professional identity formation depends on a dynamic between a student's

learning experiences, the way they anticipate their potential membership of their future profession and their actual experiences when they enter their working life as a professional.

Despite Baxter's discussion on the wider determinants of professional identity, the scope of the model (Figure 6), (Baxter, 2011), focuses almost exclusively on pre-registration familiarisation with the profession, pre-registration training and post registration continuous professional development. Whilst these activities undoubtedly influence professional identity, other factors outside of profession specific training influence the extent to which a professional can fulfil their role effectively. This in turn can impact on the strength of their professional identity. The wider socio-economic climate (Reid et al., 2007; Baxter, 2011), prevailing policies on the management of particular professional groups (Morley,2009; Baxter, 2011) and the workplace environment (Ellis and Nolan, 2005; Clark et al., 2015; Draper et al., 2016) may all influence a professional's role and their professional identity.

2.5.1 Professional identity and occupational therapists

The development and maintenance of a professional identity is well represented in the occupational therapy literature (Turner and Knight, 2015) and it is in this area that the influence of contextual factors, both from academic and work environments, emerges strongly. Whilst this impact of health professional education is also evident in the research within other professional groups, for example, the research of Adams et al. (2006) with a range of health professionals, and Willetts and Clarke (2014) within the nursing profession, it has a particular resonance for occupational therapy. The occupational therapy profession is small and has a long history of debate over its professional identity (Reilly, 1962; Turner and Knight, 2015). Turner and Knight (2015) have argued that reflection on professional identify has been a key discourse within occupational therapy for some time and quote Reilly (1962):

> 'The wide and gaping chasm which exists between the complexity of illness and the commonplace of our treatment tools is, and always will be, both the pride and anguish of our profession'   (Reilly, 1962, p. 1)

Because occupational therapists are concerned with ordinary life activities, their professional activities are in danger of being viewed as 'ordinary' such that the

importance of the meaning and purpose of engagement in these activities is lost on the observer (Clouston and Whitcombe, 2008). Occcupational therapists themselves have struggled to articulate the philosophical value base of their profession, an issue particularly highlighted by Hammell (2004; 2009).

Turner and Knight (2015) reviewed the literature pertaining to occupational therapy and professional identity and identified 79 articles from 12 journals across eight countries. From these 79, 12 articles were selected as being central to the review's focus and these were appraised. Their analysis revealed two major themes in the literature: firstly, the reasons for issues with professional identity within the profession of occupational therapy and secondly, the consequences of these issues. The main sub-theme under the reasons for issues with professional identity was the dominance of the health and social care discourse within the workplace of occupational therapists and their difficulty in introducing a discourse based on an occupational perspective on health as opposed to a biomedical perspective on health. Sub-themes identified under the consequences of issues with professional identity, included being undervalued in the workplace and being over influenced in their professional practice by both colleagues and the work context (Turner and Knight, 2015).

The growth of generic roles within healthcare, particularly within multidisciplinary teams (MDTs) (Baxter, 2011; Professional Standards Authority, 2016), can impact disproportionately on smaller professions like occupational therapy. Many practitioners will find themselves working single handed within a service area with little opportunity for co-working with, or supervision from, other occupational therapists (Gardner, 1998; Morley, 2009), and under pressure to fulfil generic team duties. Morley (2009) found that newly qualified therapists were particularly disadvantaged by such working arrangements in terms of developing a strong professional identity (see Section 2.4). In addition, the growth of interprofessional education in healthcare can obscure profession specific knowledge and skills and places more demands on educators to articulate the specific knowledge and skill base of each of the health professions (Schaber, 2014).

Wilding and Whiteford (2009) conducted an action research study with 15 occupational therapists working in acute care. Whilst acknowledging that

multidisciplinary team work can be an effective means of coordinating a range of inputs to a client group, they argued that the strength in an MDT is due to the range of expertise potentially available. Too often this is diluted due to role blurring and confusion over professional identity, as well as caseload and time pressures. They argued that being *certain about one's professional domain of concern is an ethical and moral issue* (Wilding and Whiteford, 2009, p. 434) since if individual professional domains are blurred, clients' needs are unlikely to be met. They also found that enhancing profession specific knowledge and focusing on an occupational perspective helped occupational therapists in acute care redevelop their professional identity and identify clients' occupational needs.

Clarke et al. (2014; 2015) investigated the impact of a particular type of professional placement on the development of professional identity in occupational therapists. These role emerging placements are defined as those *'which occur at a site where there is not an established occupational therapist role'* (College of Occupational Therapists, 2006, p. 1) and took place in the final year before graduating as an occupational therapist. This would place the OTs at stage 3 of Baxter's model (Baxter, 2011). A sample of five students from such placements were interviewed before and after graduation. Clarke et al. (2014) concluded that role emerging placements allowed the student occupational therapists to develop their identity as occupational therapists. They found that these particular placements facilitated a process of reflection on the nature of occupational therapy and an ability to verbalise the core essence of occupational therapy. This strengthening of professional identity was maintained six months into their first job despite the realities of practice as a fully qualified occupational therapists (Clarke et al., 2015).

The results of Clarke et al. (2014; 2015) at first may seem at odds with those of Morley (2009), but these two studies examined impact of professional development activities on professional identity at two different stages of the Baxter model. In the studies by Clarke et al. (2014; 2015), the participants were still students, albeit in their final placement, when they experienced the role emerging placements, whereas the participants in the Morley (2009) study were in their first job after graduation when they experienced the preceptorship programme. It may be that being in an environment which enables acculturation with one's own professional

group is more important in one's first professional appointment than when on the final clinical practice as a final year student.

Ownership of a unique set of beliefs and values and engagement in a professionally unique discourse is one strategy proposed by Turner and Knight (2015) to strengthen the professional identity of occupational therapists. They discussed a number of studies which support the premise that sound knowledge of theories of occupation and occupational science, plus an understanding of the fundamental value base of the profession, strengthen professional identity and occupation based practice (Whitcombe, 2013). This strategy is given support from two studies of occupational therapists at the end of their first year of training (Ikiugu and Rosso 2003; Boehm et al., 2015). Both of these studies were concerned with exploring the role of the provider of health care education in the development of professional identity. Ikiugu and Rosso (2003) researched the impact of a new curriculum in occupational therapy education. Student feedback from a variety of qualitative and quantitative sources was analysed and the impact on professional identity was concluded to be positive.

> *'The curriculum examines the construct of occupation focusing on the view of the human as an occupational being, occupation as a medium of change, and occupational therapists as scholars and agents of change.'*

> (Ikiugu and Rosso, 2003, p. 20)

Boehm et al. (2015) also conducted their study in the context of a revised curriculum which specifically sought to promote a more occupation focused paradigm in the profession. They found that the majority of students reported a strong professional identity at the commencement of the programme, which supports the finding of Adams et al. (2006). However, there was also evidence that the strength of professional identity increased throughout the first year of the programme. Holland et al. (2013) found that professional confidence, an attitude closely allied to professional identity, was supported in newly qualified occupational therapists in South Africa by profession specific knowledge and skills but also by their own self-belief.

In summary, it seems clear that the professional training programmes have a role in developing professional identity (Ikiugu and Rosso, 2003; Boehm et al., 2015) and

ongoing CPE activities post registration, also contribute to developing and maintaining professional identity (Morley, 2009; Wilding and Whiteford, 2009). The effectiveness of the development of and maintenance of a professional identity may have an impact on job performance, effectiveness and job satisfaction and therefore, it seems feasible, that issues of professional identity may affect transfer of training into practice. However, the work context is also a powerful agent in both early professional socialisation and ongoing maintenance of a profession specific identity (Morley, 2009; Turner and Knight, 2015).

2.6 CONCLUSIONS

Three key factors emerge from the academic debate on evaluating educational and training outcomes. These are the need for, a consideration of the types of outcomes (Barr, 1999; Gijbels et al., 2010), a consideration of stakeholder and beneficiary perspectives (Attree, 2006; Clark et al., 2015; Draper et al., 2016), which is also evident in the development context (VSO, 2015) and a consideration of individual (Holton, 1996), academic and workplace context (Eraut, 1985; Ellis and Nolan, 2005; Clark et al., 2015; Draper et al., 2016).

With reference to types of outcome, the implicit linear causality of Kirkpatrick's model has been challenged but less obvious causal relationships may well exist between different types of outcomes. Yardley and Dornan (2012) have argued that *'rich nuances or even the whole essence of information may be lost when stories of experience are omitted'* (Yardley and Dornan, 2012, p. 103) and they proposed that these causal relationships need to be illuminated on a case by case basis, for example, through case studies, personal narratives, and interviews. However, there may be other aspects of the evaluation process which do have a linear relationship to the four levels. Hutchinson (1999) did not consider causality, but agreed with Kirkpatrick that outcomes increase in complexity from Level 1 to Level 4 and argued that as one moves from Level 1 to 4, this is reflected by an increase in the length of time needed for evaluation, an increase in potential confounding variables and a corresponding decrease in the availability of simple and reliable measures. In addition, the number of stakeholders and beneficiaries are likely to increase from Level 1 to 4 (Yardley and Dornan, 2012), increasing the complexity of any evaluation.

A review of the literature on the evaluation of educational programmes reveals a consensus on the lack of appropriate measures and the need to develop research designs fit for the task. Attree (2006) analysed the methodological issues within the evaluation of education in health care and considered how they can be addressed. She argues that one of the challenges associated with measuring impact reliably, is that the many stakeholders have different perceptions of impact, an argument also made by Ellis and Nolan (2005). In addition, there is the need to examine the issue of attribution, understanding how and in what circumstances the educational inputs give rise to the observed outputs. This is complicated by the contexts in which both these types of activities occur and the presence of confounding variables. Often these contexts and variables are simply ignored and reflect *'a tendency to strip programmes of their context and thereby fail to provide important explanations as to how and why programmes work'* (Ellis and Nolan, 2005, p. 99). Whilst relatively simple measures from a scientific positivist tradition may be effective for some types of evaluations (Yardley and Dornan, 2012), such as a specific skill training, beyond level 2 of Kirkpatrick's levels, a synthesis of quantitative and qualitative methods is frequently proposed as the way forward in the development of research designs appropriate for the evaluation of complex outcomes of education programmes (Hutchinson, 1999; Attree, 2006; Yardley and Dornan, 2012). Ellis and Nolan (2005) argued that one of the severe limitations in educational evaluation has been an over reliance on a positivist world view.

In summary, there is no widely accepted method of either understanding or measuring the impact of health professional education on practice. Modifications of Kirkpatrick's original model are still in use (Barr et al., 1999; Gijbels et al., 2010), although outcomes beyond Kirkpatrick's level 2 are rarely assessed (Attree, 2006). Neither Bloom's taxonomy or Kirkpatrick's model take any account of the influence of the educational or work context on the transfer of education into practice, but increasingly this is seen as a vital component in evaluation of educational outcomes (Ellis and Nolan, 2005; Attree, 2006; Trede et al., 2012; Clark et al., 2015). Whilst some outcomes can be measured within a positivist tradition, qualitative or mixed methods studies are seen as the means by which processes of causality and attribution can be illuminated and the role of context examined. Realist impact evaluation is a methodology designed to evaluate complex social programmes and

its use in this study is examined in Chapter 4 below. However, firstly, in Chapter 3 the development context within which the degree programme was developed and delivered is considered.

CHAPTER 3: THE DEVELOPMENT CONTEXT

The post registration degree programme for occupational therapists was developed within a middle income country, Sri Lanka, and financial support for the programme came from the development budgets of the EU, the Department for International Development (DfID) and WHO. Within the development literature various terms are used to denote the level of resources a country may have to meet its development goals. The terms 'South', 'East', 'Undeveloped', 'Low Income Country' and 'Majority World' are all used to refer to countries with low resources to meet their development goals and 'North', 'West', 'Developed', 'High Income Country and 'Minority World' are all used to refer to countries with high resources to meet their development goals (Hammell, 2018). In this study the term 'High Income Countries' (HICs) is used to denote high resource countries and 'Low and Middle Income Countries' (LMICs) is used to denote low resource countries. These terms are defined by per capita income by The World Bank (2017).

From 2000 to 2015, the eight United Nations global goals, the Millennium Development Goals (MDGs), guided much global development work. It was within this time frame that the degree programme which is the subject of this research was initiated and delivered, with two batches of students completing the degree by 2015. By 2013, a report by the Global Health Workforce Alliance (GHWA) and the World health Organisation (WHO) found that significant shortfalls remained in the global health workforce as well as inequitable geographical distribution which was having an impact on achieving the health related MDGs (Campbell et al., 2013). The Global Sustainable Development Goals, which replaced the MDGs were agreed by the United Nations in New York in September 2015. Most commonly referred to as the SDGs, they aim to build on the previous MDGs and complete what they did not achieve. There are 17 SDGs covering a wider remit than the MDGs with 169 associated targets (The United Nations, 2015) which cover the period from 2015 to 2030.

The Global Sustainable Development Goals (United Nations, 2015) now provide the framework which informs much of the work of development agencies and international NGOs. The Department of International Development identifies the UK's objective to achieve the United Nations' Global Goals as one of its core

commitments (The Cabinet Office, 2018) and Save the Children Fund pledge *'to play a full part in helping the world meet the global Sustainable Development Goals (SDGs)'* (Save the Children Fund, n.d.). Oxfam has published its own vision in a post SDG world (Oxfam, 2016) in which it argues that by investing aid in ways that give national governments and their citizens more influence over their own development, donors will be more able to ensure that aid is delivering the maximum impact and allowing countries to sustain their own development priorities.

The SDG most relevant to the work of health professionals is SDG3: *'Ensure healthy lives and promote well-being for all at all ages';* and the associated target most relevant to the training and development of health professionals is Target 3.c: *'Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States'* (United Nations, 2015, pp. 20-21). SDG 3 is also a priority for the WHO and in response they have developed a global strategy on human resources for health, 'Workforce 2030', in order to *'Accelerate progress towards universal health coverage and the UN Sustainable Development Goals by ensuring equitable access to health workers within strengthened health systems'* (WHO, 2016, p. 8). The WHO (2016) identifies that restrictions in the availability of health workers, as well as difficulties in the education, retention, accessibility and performance of the health workforce are felt by countries at all levels of socio economic development. However, these difficulties are compounded in low resource countries, where long term under investment in health worker education results in chronic shortages. These shortages may be exacerbated by international recruitment of health workers from low resource settings, hence, one of the WHO's global milestones in its global workforce strategy is that *'All countries are making progress towards halving their dependency on foreign trained health professionals'* (WHO, 2016, p. 9), to be achieved by 2030.

Many INGOs and International Charities work to build capacity within the health workforce in LMICs. Many of these are based within HICs and as a consequence many health professionals from HICs have experience working within LMICs either as volunteers or salaried staff. Some INGOs and charities specialise in providing

medical, nursing and allied health personnel in crisis situations such as conflict or natural disasters. For example, Medecins sans Frontieres (https://www.msf.org.uk/), International Rescue Committee (https://www.rescue.org/), UK Med (https://www.uk-med.org/); whilst others work on longer term capacity building projects, such as Voluntary Services Overseas (https://www.vsointernational.org/), Health Volunteers Overseas (https://hvousa.org/) and Oxfam (https://www.oxfam.org.uk/). Although many have overseas offices, all of these organisations are based in either the U.S.A or Europe.

This pattern of organisations and professionals from HICs working in partnership with organisations within LMICs, with the aim of training health workers and improving both health and psychosocial outcomes, has been criticised by some as a form of intellectual neo-colonialism (Sweet et al., 2014; Hammell, 2018), that is, the use of economic, political, cultural, or other pressures in order to have influence over another country (Oxford English Dictionary, 2018). This is a particularly sensitive issue in that many LMICs have a history of being colonised by HICs within Europe and this history still informs some development partnerships. However unintentioned this may be, a combination of the widely held assumption that western knowledge and expertise is the gold standard, both in health care and health professional education, the resources which often come with professionals from HICs (Collier and Valentin, 2018), and in some cases a history of colonisation by the country of origin of the development agency involved (Hammell, 2018), can lead to a profound imbalance of power in the development relationship. Collier and Valentin (2018) conclude from their experience of training non specialist health workers in mental health in Haiti, that this power differential is such that local clinicians will always defer to foreign doctors for their training curricula, and teaching from foreign doctors is preferred '...*even on topics infrequently encountered by them*' (Collier and Valentin, 2018, p. 297). These issues can have a negative effect on collaborative practice and mutual goal setting (Pinner and Kelly, 2017) and ultimately on sustainability. Freeman (2015) and Collier and Valentin (2018) argue the importance of developing partnership frameworks that address these inequities; '*ultimately, seeking equity within a partnership recognizes each partner's right to be "at the table," regardless of an imbalance in resource contribution.*' (Pinner and Kelly, 2017, p. 4)

Efforts have been made to develop such partnership frameworks. Leffers and Mitchell, (2011) developed a model for partnership and sustainability which has been widely cited (Pinner and Kelly, 2017). It was developed through a qualitative investigation involving interviews with 13 nurses who all had extensive experience of working within global partnerships in LIMCs. The model highlights the need for an engagement process involving what they term 'cultural bridging'; a process involving mutual respect and mutual learning; collaborative teamwork; mutual goal settings and capacity building. These elements of engagement are thought to underpin effective partnership leading to sustainability. However, Leffers and Mitchell's research strategy illustrates the very issues of inequity that they were seeking to illuminate, as all the nurses interviewed were from the USA and none from the LIMCs involved in the partnerships. Similarly, Hansen (2015) conducted a qualitative study of how occupational therapy educators develop and sustain global partnerships. A sample of eight occupational therapy academics were interviewed, all based in the USA. Similar themes of building a relationship based on mutual respect and learning, sharing power and resources and effective communication and collaboration emerge from Hansen's study, albeit from a HIC perspective. There is a danger that efforts to establish partnership frameworks in order to ameliorate the effects of power imbalances and intellectual colonialism, may actually perpetuate them by not giving equal voice to host country perspectives.

Pinner and Kelly (2017) gave an overview of 30 years of international partnerships by the INGO Health Volunteers Overseas and what they have learnt in terms of '*key indicators of how to establish and maintain successful international partnerships in education and health worker capacity building.*' (Pinner and Kelly, 2017, p. 1). These are: mutual goal setting; honest and open communication; equity; mutual benefit; flexibility and active partner engagement throughout the project. It is not clear in their review whether the perspectives from their partners have been taken into account. Hansen (2015) recognised the limitation in her own research due to the lack of perspectives from host country partners, whilst Upvall and Leffers (2018) have attempted to rectify the omission of lack of host country professional perspectives in Leffers and Mitchell's (2011) study. Their research involves a replication of the Leffers and Mitchell study, but in their case, 15 interviews were conducted with 15 nurses from LMICs with extensive involvement in global health

partnerships. The analysis revealed three new concepts to incorporate into the original model; the concept of transparency reflected the need for open communication and negotiation of partnership roles; the concept of accompaniment was associated with the need for long term partnerships built on openness and humility and the concept of an expanded worldview reflected one of the key benefits for the host partners.

In an attempt to ensure that the voices of partners within LMICs are heard, Voluntary Services Overseas, in collaboration with the Institute of Development Studies (VSO, 2015), conducted a global participatory action research project working closely with partners in four LMICs. The aim was to understand how volunteering contributes to sustainable development by working closely with the local communities within which volunteers were placed. Their literature review revealed that whilst there has been a considerable amount of research on how volunteering benefits the volunteer, their employing organisation on return and their future careers, there is little on their impact within the community in which they worked. Similarly there is an extensive literature on the benefits to teaching staff and their students, studying for a variety of health professions, in taking part in international placements or service learning projects, for example, Dalmida et al. (2016). Many of these global partnership initiatives in which healthcare workers are involved lay claim to capacity building, capability development and working for sustainability but measurements of such outcomes are often lacking (Pinner and Kelly, 2017; VSO, 2015). In addition, it is often unclear exactly what is meant by these terms within the development literature and this is explored in the following section.

3.1 CAPACITY, CAPABILITY AND SUSTAINABILITY

The United Nations Development Programme (UNDP, 2009) outlined the various ways in which the term capacity building is used and how it often refers to capacity building at many different levels, that is, with individuals, communities, institutions and society. Building on these different uses of the term the UNDP defined capacity as *'The ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner'* (UNDP, 2009, p. 3)

and capacity development as *'The process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time.'* (UNDP, 2009, p. 5). Although sustainability, like capacity building, is also considered to operate at a number of levels, in this case economic, social and environmental, the UNDP (2009) does not clarify how sustainability should be defined or measured. Leffers and Mitchell (2011) also noted that the term 'sustainable development' is frequently used in the development literature within the domain of health outcomes but rarely defined.

Kates et al. (2005) argued that the broad scope of the term 'sustainable development' makes it difficult to articulate one agreed definition and remarked on the longevity of what is thought of as the original definition of sustainable development from the World Commission on Environment and Development (WCED): *'Humanity has the ability to make development sustainable– to ensure it meets the needs of the present without compromising the ability of future generations to meet their own needs'* (WCED, 1987, quoted in Kates et al., 2005, p. 2). This broad definition is widely cited and serves as an umbrella concept for initiatives across a broad range of development domains, including initiatives focusing on different levels of human action, from the individual to national governments (Kates et al., 2005). The concept of sustainability is thus able to address a range of very different development challenges and works as a compromise concept between those who are primarily concerned about the human condition, those who are primarily concerned about the natural environment, those who value economic development and those who seek civic society and political reform.

However, within development initiatives in the fields of improving health outcomes and health workforce education, the term 'sustainable' is commonly used to describe an aim or objective that the initiative will be supported and continue after external support to the project is withdrawn (Amazigo et al., 2007). Amazigo et al. (2007) referred to an earlier definition advanced by WHO in respect of a specific health improvement initiative, which defines sustainability as *'The ability of a project to continue to function effectively, for the foreseeable future, with high treatment coverage, integrated into available health care services, with strong community ownership using resources mobilized by the community and government'*

(WHO, 2002, p. 5) and they used elements of this definition as criteria to measure sustainability. Sustainability implies that individuals and communities, having developed capacity, such as resources, skills and knowledge, will have the capability to be able to put that knowledge into practice and maintain a given project. A development approach that focuses specifically on developing capability, the capability approach, is outlined in the following section.

3.2 THE CAPABILITY APPROACH

Being able to put resources, skills and knowledge into practice is at the core of the debate on the outcomes of health worker education. The capability approach may offer an additional perspective to this debate. Developed in the 1980s and 1990s by the economist Sen, who first published on the capability approach in 1979 (Sen, 1979), the capability approach offered an alternative to the prevailing utilitarian framework in welfare economics and in particular with the notion that measuring resources such as income, served as a proxy for well-being. Instead, Sen's approach focuses on the freedoms people have to be who they wish to be and do what they wish to do, that is, their capabilities, which represent *'the opportunity to achieve valuable combinations of human functionings — what a person is able to do or be'* (Sen, 2005, p. 153). Capabilities are not purely a function of a person's abilities such as knowledge, skills and experiences but reflect the opportunity or freedoms a person has within their social, economic, political and physical environment. Capability theory distinguishes between capabilities, that is, what one is able to be or do, and achieved functionings, what one actually achieves in terms of being and doing (Bickenbach, 2014). The crucial link between capability and achieved functioning is personal agency, which is the freedom to choose which functionings one values. Robeyns (2005) has produced an interpretation of Sen's work and developed a visualisation of the relationship between the key concepts. A simplification of Robeyn's work, in order to highlight the key relationships most relevant to this study, is shown in Figure 7 below.

The route from capability inputs to achieved functioning is influenced by conversion factors. Often referred to as contextual factors, and described in very similar terms to the contextual elements of RIE, in the capability approach they are

organised into 3 groups: individual, social and environmental. Social conversion factors cover a wide range of social and legal norms, gender roles, public policies and services, community life, social inequalities and discriminatory practices. Environmental conversion factors include climate, geography, the physical environment of homes and community spaces, public transport and infrastructure (Robeyns, 2005). Social and environmental conversion factors operate outside of the individual and can act at all steps of the process, influencing access to goods and services and opportunities for capability (freedom to achieve). They can also act on individual conversion factors. These are factors within the individual, some of which will have been present from birth, such as physical constitution, biological sex and other inherited characteristics. Other individual conversion factors may be acquired through exposure to risks and opportunities such illness, trauma, life experiences and the availability or not of education and healthcare and as such can be affected by the social and environmental context.

Figure 7: The capability approach

CONVERSION FACTORS

Social institutions
Legal framework
Climate
Infrastructure
Social norms
Public services

| CAPABILITY INPUTS (means to achieve) GOODS and SERVICES | INDIVIDUAL CONVERSION FACTORS | CAPABILITY SET Set of achievable functionings | CHOICE | ACHIEVED FUNCTIONINGS |
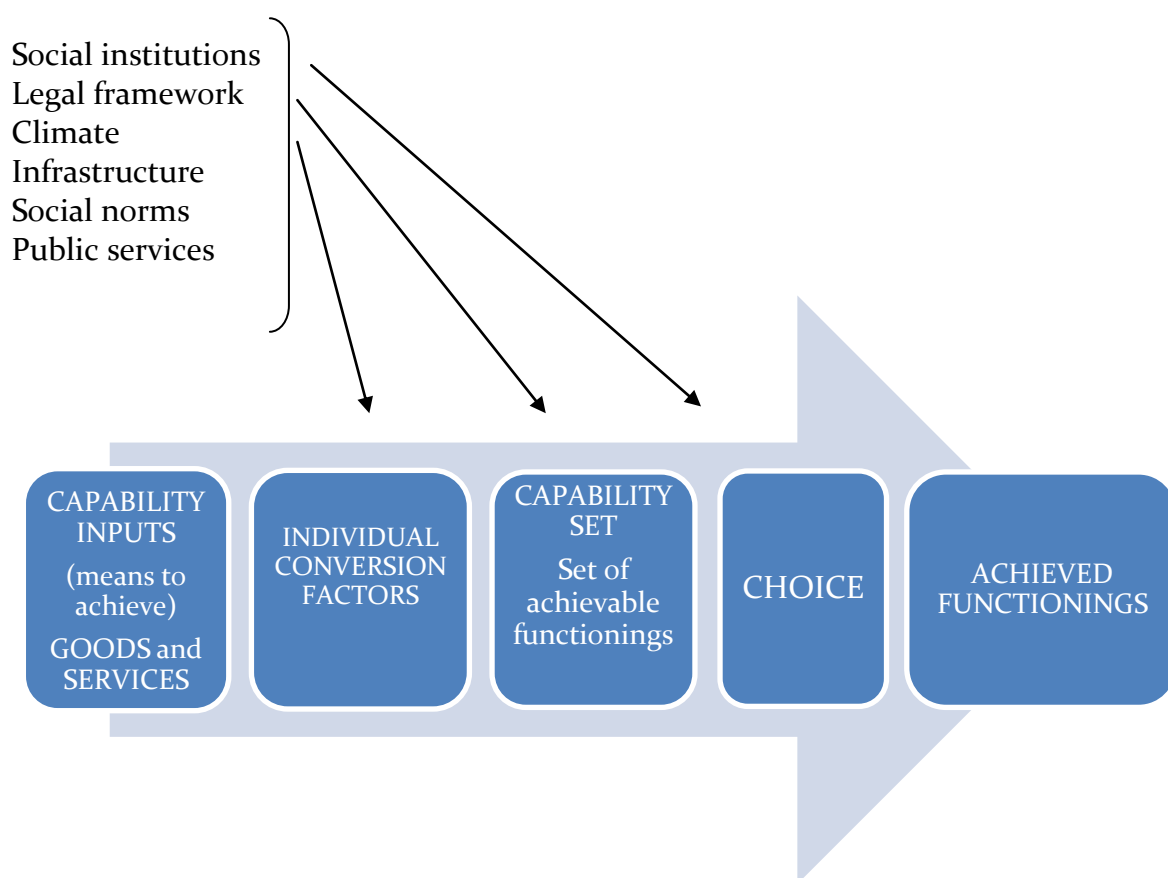
(Adapted from Robeyns, 2015, p. 98)

64

The terminology of the capability approach is often illustrated with reference to people with some impairment. Using myself as an example, I need glasses for driving. My requirement for glasses (an individual conversion factor) plus the glasses themselves (the goods) provide me with the capability of driving, that is the freedom to drive. I have the choice whether I take up the opportunity afforded to me to drive and if I do, this would be one of my achieved functionings. However, if I could not afford glasses (no access to the goods) or if I lived in a community with poor public services such that I did not have access to eyesight testing (a social/environmental conversion factor), then I would not have the capability to drive, even if in both cases I had the ability to drive a car. It is worth noting that the lack of one capability, in this case driving, may have impact on others, for example, the capability to travel to and from employment.

In terms of the education of the health workforce, the capability approach may offer an alternative lens through which to examine the conversion of abilities to achieved functionings. Occupational therapy is a profession which is concerned with enabling clients to achieve valued functionings. The capability approach offers a lens through which to understand the clinical practice of OTs as well as to illuminate their professional development.

3.3 DEVELOPMENT OF OCCUPATIONAL THERAPY IN LMICs

Occupational therapy evolved as a profession in the UK and USA in the early twentieth century and in the 100 years since has spread across the globe. However there are huge disparities in the numbers of occupational therapists between different countries with many LMICs countries having few, if any occupational therapists (Alochi, 2018; Buchanan et al., 2018; Mesfin et al., 2018). Most of the first occupational therapists working in LMICs were trained in the UK or the USA and returned to their home country to practice having been taught in cultures very different from their own (Hammell, 2018). There is a continued supremacy of English in occupational therapy textbooks and a global dominance of research, theory and models of practice from the USA, UK and Australasia which contributes to a lack of diversity in theoretical frameworks and worldviews (Iwama, 2006;

Hammell, 2015 and 2018). This may exert undue influence on curricula and resources for the training and subsequent practice of occupational therapists across all countries and cultures.

The WHO's global strategy on human resources for health, aims, by 2030, for all countries to be making progress in the training of doctors, nurses and allied health professionals, such as occupational therapists, in order to halve the existing inequalities of access to health workers. The training of occupational therapists in LMICs often relies on the development of a partnership with an academic institute or a development agency from a HIC. As with other global health partnerships previously discussed, often these partnerships reflect historical colonial connections. The College of Medicine and Health Sciences of the University of Rwanda is in the process of educating the first group of occupational therapists on a four year bachelor programme. The first group of 14 students are graduating in 2018. They have been supported in developing and delivering the curriculum by University College of Ghent in Belgium and Humanity and Inclusion (formerly Handicap International), an INGO in the field of disability, with financial support from the Belgian government (Kagwisa, 2018). Mesfin et al. (2018) report evidence of only one practicing occupational therapist in Ethiopia and no occupational therapy training courses. However the University of Gondar, Ethiopia, is currently in partnership with Queen's University, Ontario, Canada in order to co-develop and co-deliver an undergraduate programme at the University of Gondar.

In order to understand the processes by which new occupational therapy programmes are developed in low resource countries, Roberts and Hooper (2017) conducted a qualitative multiple case study of five newly developed occupational therapy programmes in LMICs countries. They found that certain critical events, such as the presence of occupational therapists from other countries, or the return of occupational therapists to their home country who had been educated abroad, or personal experiences of occupational therapy leading to the commitment of key stakeholders, often acted as catalysts for programme development. However, the actual process of course development, and resources to support delivery were often supported by stakeholders both within and outside of the country concerned as evidenced by the examples above.

Alochi (2018) has completed an analysis of the situation as regards the training and accessibility of occupational therapists in Africa. Whilst noting that few studies address the occupational therapy workforce in Africa, most focusing on the medical and nursing workforce, Alochi attempted to collate available data from across all 54 African countries. Of these 54 countries, 15 have occupational therapist training programmes. The majority of these educate up to Diploma or Bachelor degree level with the exception of South Africa which is well served with training programmes at Masters and Doctoral level.

Alochi (2018) estimates that there are 7,453 occupational therapists in Africa for a population of 1.216 billion, resulting in one occupational therapist for every 163,156 people. In Uganda, with a population of 44.27 million, it is estimated that more than 5.6 million have a disability. Given a population of practising occupational therapists of 87, this equates to an occupational therapist for every 64,655 people with disability. Alochi (2018) compares this with data from the USA which shows a practising occupational therapist for every 507 people with disability. Alochi's study demonstrates the huge inequalities of access to health professionals across the world and concludes that Africa is severely challenged in educating enough occupational therapists to meet the needs of the population for rehabilitation services.

The situation in Asia is similar to Africa in that India is well served with occupational therapy training courses, from Bachelor up to Doctorate level degrees whilst countries such as Vietnam (Buchanan et al., 2018) and Nepal (Association of Nepal's Occupational Therapists, n.d.) have no training programmes for occupational therapists and only a handful of occupational therapists trained abroad.

3.4 SUMMARY

The literature from the development context demonstrates the need to educate competent health workers in order to improve availability and access to healthcare within LIMCs. Failure to do this will mean that SDG3: *Ensure healthy lives and promote well being for all at all ages,* will be unattainable. The post registration degree programme for occupational therapists was developed to contribute to

addressing this need. For development agencies working to support global partnerships to achieve SDG3, evaluation of capacity building, capabilities, and transfer of these capabilities into practice within the health workforce is necessary in order to inform future initiatives. This study aims to evaluate the extent of capacity building and transfer of capabilities into practice following degree level education for one group of health professionals in an LMIC.

CHAPTER 4: METHODOLOGY, DESIGN AND METHODS

The literature review reveals the need for new ways of evaluating the impact of health professional education on practice. Traditional frameworks for evaluating educational outcomes have been criticised as flawed (Horton, 1996; Yardley and Dornan, 2012) and do not consider the influence of stakeholder perceptions on outcome (Ellis and Nolan, 2005), neither are they equipped to examine the influence of context (Clark et al., 2015; Draper et al., 2016). Attributing any observed changes in practice to a particular educational intervention is also problematic (Attree, 2006). The literature supports the use of both qualitative and quantitative methods as a means to examine the complex outcomes of educational programmes including stakeholder perceptions and context.

This study uses the research design of realist impact evaluation (RIE) (Pawson and Tilley, 2004) as a means to address some of the issues in evaluating education that emerged from the literature review. Although RIE uses a distinctive theoretical framework for data analysis, it embraces any method of data collection that is relevant to the research questions. In this evaluation, traditional qualitative techniques of semi-structured interviews and case studies (The Open University, 2013) have been combined with analysis of policy documents, progress reports, evaluations and course records in order to address the research questions.

Firstly, the conceptual framework of the study is presented below. The conceptual framework is outlined at this point in the thesis as it is informed not only by the theories, ideas and existing evidence base as outlined in Chapter 2, the literature review, but also by the concepts, global strategies and evidence base outlined in Chapter 3, the development context.

4.1 CONCEPTUAL FRAMEWORK

I developed the conceptual framework to explain the key issues relevant to this study and their relationship to each other in order to inform the research process itself (Maxwell, 2013). The conceptual framework reflects the concerns within the literature and within the development context pertaining to the evaluation of both educational and developmental programmes of activities. The focus of this research

is on evaluating a programme aimed at building capacity within a health profession. Building capacity can be understood as activities to build knowledge, skills, attitudes and behaviours. A concern of all such initiatives is measuring the attainment of the desired capacities, but more importantly whether any increased capacity is translated into capability and impacts on practice. The conceptual framework represents the influence that culture and context, personal factors, and the inputs from a particular educational programme have on capability and whether that is translated into impact on practice.

Figure 8: Conceptual Framework
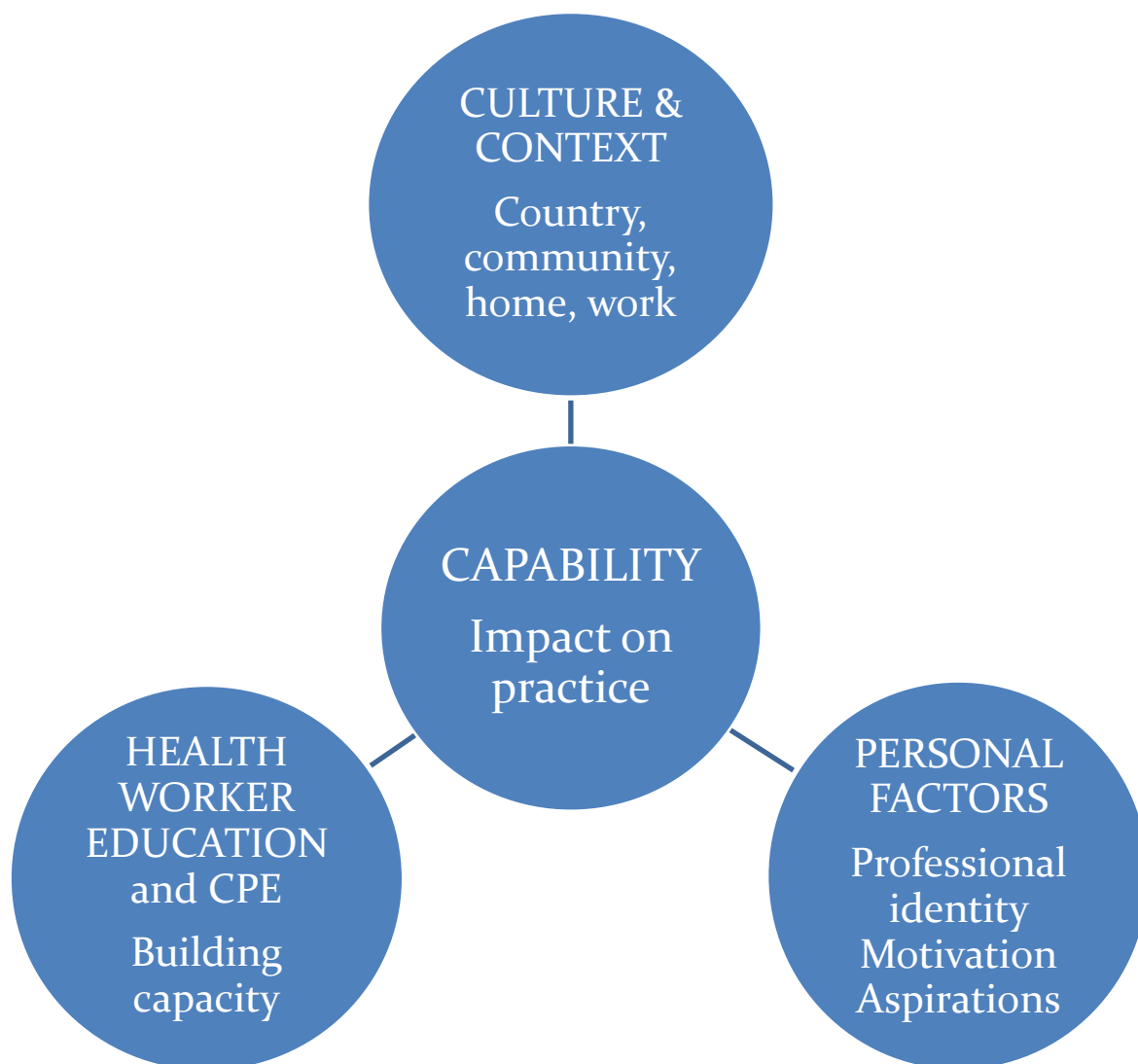
Each concept area in this framework presents challenges of measurement. For example, how can the influence of the home environment on the impacts of an educational intervention with a group of health professional be measured? Understanding the causal relationships between each element of the conceptual framework also presents challenges to any evaluation of impact.

Within the conceptual framework, culture and context covers the whole range of environmental and social contexts from the influence of the home and family, through the influence of the community and social groupings, the particular organisational and work environment and the social and legal framework of the country. Professional development and training covers all the different forms of training and continuous professional education for health professionals. Personal factors concern the personal history and development of individuals which may ultimately affect their aspirations, motivation and identity, particularly in this case, their professional identity. These three sets of factors all have a role to play in developing capacity, capability and determining the extent of impact on practice.

4.2 AIM AND RESEARCH QUESTIONS

The broad aim of this research was to establish if educating practising occupational therapists to degree level makes a difference to their professional lives and professional practice, and what those differences are. There were two research questions:

Research question 1: What is the overall impact on the professional lives and professional practice of the first batch of students to complete the programme?

> 1a. What outcomes emerge from the study and are they attributable to the degree programme?

> 1b. To what extent were the original aspirations of the degree programme realised?

> 1c. To what extent does context influence if and how outcomes are realised?

Research question 2: Does the methodology of Realist Impact Evaluation add to the literature on evaluating educational outcomes in terms of illuminating the causal pathway by which an educational intervention for the healthcare workforce may deliver impact on practice?

4.3 THE RESEARCH PARADIGM

4.3.1 The ontology and epistemology of critical realism

Grix (2002) stated: *'If ontology is about what we may know, then epistemology is about how we come to know what we know'* (Grix, 2002, p. 177). The research paradigm adopted for this research is critical realism. Realism is a philosophical position which asserts the world is real and exists independently of the observer. However critical realism contends that finding out about this real world can be difficult since the world we think of as real depends in part on our beliefs and expectations which shape our perceptions of the world. Critical realism thus accepts an inherent subjectivity in knowledge production which brings it nearer to a social constructivist position (Gray, 2014).

Maxwell and Mittapalli (2010) identified the common feature of research within a critical realist paradigm as a realist ontology combined with a constructivist epistemology. The ontological stance of critical realism is realism, that is, there is a world that exists independently of ourselves and our theories, that we can attempt to understand; whilst the epistemological stance is constructivism, that is, all our knowledge about the world is from particular perspectives and is *'partial, incomplete and fallible'* (Maxwell and Mittapalli, 2010, p. 152).

4.3.2 Critical realism and social science research

Maxwell and Mittapalli (2010) argued that philosophical realism is increasingly being viewed as an alternative to both positivism and constructivism in research and evaluation in the social sciences and that critical realism has achieved:

> *'Widespread, if often implicit, acceptance as an alternative to naïve realism and to radical constructivist views that deny the existence of any reality apart from our constructions'*   (Maxwell and Mittapalli, 2010, p. 152)

Both Hammersley (1992), and Maxwell (2013), advocate the application of critical realism to qualitative research. However, Maxwell and Mittapalli (2010) noted that critical realism had not had as much influence on research methodology in social research as they would have expected, with the one exception of programme evaluation, where the realist evaluation approaches of Pawson and Tilley

(1997; 2004) and Mark et al. (2000) have made an impact. More recently, Salter and Kothari (2014) reviewed 14 studies which used realist evaluation in the assessment of knowledge transfer, particularly of research based knowledge within healthcare settings. Their aim was to examine whether theory based evaluations such as RIE were better suited to evaluate complex interventions designed to effect knowledge transfer. They concluded that the use of realist evaluations is not without its challenges to the researcher particularly with regard to establishing Context-Mechanism-Outcome Configurations (CMOC for explanation see Section 4.4 below) but is gaining ground in the area of evaluation of knowledge transfer.

Rather than focusing on outcomes, with little regard to how they have been produced, a type of evaluation which has been called '*black box*' (Salter and Kothari, 2014, p. 2). A critical realist perspective supports a process view of causality and examines the actual causal mechanisms by which some events influence others, rather than accepting implicit assumptions of causality such as are inherent in the Kirkpatrick model (See Chapter 2.2.3). In addition, a process view of causality embraces the context within which the causal mechanism takes place and does not seek to control for context as though it were an extraneous variable (Maxwell and Mittapalli, 2010). These qualities of a critical realist paradigm and realist evaluation in particular make it suitable to address the challenges raised in the literature regarding evaluating educational programmes including issues of attribution (Attree, 2006) and the effect of academic and work contexts (Ellis and Nolan, 2005; Clark et al., 2015; Draper et al., 2016).

4.4 THE RESEARCH DESIGN: REALIST IMPACT EVALUATION

Given the arguments outlined above, the chosen research design was Realist Impact Evaluation (RIE) which was devised by Pawson and Tilley (2004). The application of RIE has been further developed by Westhorp (2014) and Wong et al. (2012; 2017). RIE belongs to a family of theory based evaluations which aim to identify the theory of change which underpins any anticipated or observed outcomes, that is, the 'how' and the 'why' of evaluation (De Silva, 2014; Stern, 2015). RIE is an evaluation design which views complex social programmes, such as public health interventions, community based programmes and educational programmes as theories, in the

sense that underpinning all such programmes is a theory concerning how the programme activities will produce the desired outcomes (Pawson and Tilley, 2004). These programme theories are often not clearly articulated. A key goal of all theory based evaluations is firstly to make explicit the underlying programme theory and examine the assumptions of how, and in what circumstances, programme activities were expected to achieve outcomes. However, RIE also examines unanticipated and undesired outcomes which may reveal covert programme theory.

RIE focuses on the mechanisms which drive outcomes and differs from some other theory based evaluations in the strong emphasis it places on context. Pawson et al. (2004) argued that complex social programmes typically offer programme activities such as resources, opportunities and constraints which potentially can change participants' understanding, reasoning and behaviour. However, whether they actually do so or not, depends on participants' circumstances, that is, their unique context. A defining element of RIE is the relationship between context, mechanism and outcome, the characteristics of which are outlined in Table 5 and Figure 9 below.

Establishing the relationship between context, mechanisms and outcomes is one of the key aims of RIE and these are described as a Context-Mechanism-Outcome-Configuration (CMOC). CMOCs are statements or diagrams that explain the context, mechanism and outcomes of particular programmes, of the type: *'In 'X' context, 'Y' mechanism generates 'Z' outcome'* (Wong et al., 2012, p. 13). Identifying both the contexts and mechanisms which influence whether outcomes are achieved or not is a critical part of RIE and these CMOCs are, in effect, hypotheses to be tested in the evaluation.

> *'Realist evaluations asks not, 'What works?' or, 'Does this program work?' but asks instead, 'What works for whom in what circumstances and in what respects, and how?''* (Pawson and Tilley, 2004, p. 2)

Table 5: Characteristics of Contexts, Mechanisms and Outcomes

CONTEXT	MECHANISMS: the generative force that leads to outcomes	OUTCOMES
Cultural norms and values Economic conditions Public policy Outcomes of any previous related programmes The physical, social and psychological environment The experiences and capabilities of individuals	Often hidden, involving mental processes Sensitive to context How participants of a programme interpret programme resources and opportunities and how these act by: Enabling reasoning Changing reasoning Changing beliefs/norms Changing preferences Enabling choices	Intended and unintended consequences of the programme. May be quantitatively or qualitatively measured May be evident in decisions taken, choices made and behaviours demonstrated.

(Adapted from Jagosh, 2015)

Figure 9: CMO Configuration

| CONTEXT

Environment in which programme activities take place | ➕ | MECHANISM
Gained knowledge and enabled reasoning in response to programme resources | ➡ | OUTCOMES

Effects |
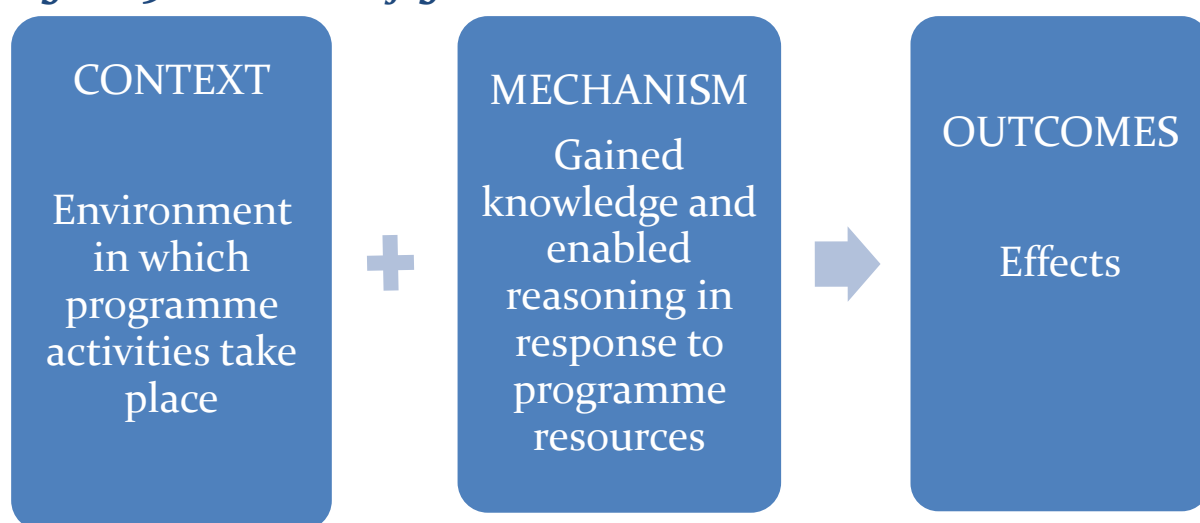
RIE considers that, even if not initially clearly articulated, programmes can be understood in terms of presumed theoretical propositions. Once identified, these lead to hypotheses to be tested. For example, the B.Sc. in occupational therapy, the impact of which is the topic of this study, was supported by Voluntary Services Overseas (VSO). In their retrospective account of their mental health programme in Sri Lanka, VSO stated:

> *'It was the aim of VSO to raise the profile of all disciplines working in the field of mental health, bringing educational standards to a degree and post degree level – bringing them in line with international standards of education, providing equality among disciplines, and ultimately, raising the standard of care and treatment for service users.'*

<div align="right">(VSO, 2013, p. 30)</div>

Therefore, the implicit programme theory underpinning VSO's support of the post registration degree programme can be understood as: *If health professionals are educated to degree level, the programme activities will develop knowledge, skills and attitudes which will raise the standard of care and treatment for service users*. Pawson and Tilley (1997) argued that all programmes provide resources and opportunities and it is the interaction between these and the *'the reasoning of its intended target population'* (Westhorp, 2014, p. 5) that gives rise to outcomes.

Identifying implied or unstated mechanisms of change is one of the first tasks of RIE so that they become part of the research inquiry. In the example concerning VSO above, an implied mechanism of change could be that the possession of new knowledge and skills improves clinical reasoning and enables the participant to make better informed choices as regards patient treatment.

RIE emerged as the research design of choice for a number of reasons. It is a framework which can embrace qualitative interviewing, analysis of planning documents, records, past evaluations, demographic data, numeric data, case studies and observations as part of the research effort. Gray (2014) noted that *'pluralism is the 'gold standard' of realist research'* (Gray, 2014, p. 26), wherein any method or data source is considered legitimate if it helps address the research questions. This makes RIE a good fit for the current study. In addition, theory driven evaluations, which espouse a process view of causality, such as RIE, can potentially provide insight into attribution, an important requirement of evaluation of educational

programmes. RIE also gives prominence to the role of context and the influence of context on whether outcomes are realised or not, an issue which emerged strongly from the literature review. Theory driven evaluations which *'open up the 'black box' that connects 'causes' and 'effects''* (Stern, 2015, p. 7) are increasingly the evaluations of choice for developmental organisations such as the Gates Foundation, Grand Challenges Canada and the UK Department for International Development (De Silva, 2014; Stern, 2015). The post registration degree programme which is the focus of this study was primarily a development initiative funded by DfID and the European Union acting through VSO. Conducting this study within an RIE framework places it in a context that is understood and respected by development organisations and one which is increasingly used for the evaluation of education of health professionals (Salter and Kothari, 2014; Wong et al., 2017). Figure 10 gives an overview of the research rationale within a critical realist paradigm.

Figure 10: Overview of the Research Rationale

PHILOSOPHICAL PERSPECTIVE

- REALISM

ONTOLOGY

- CRITICAL REALISM

EPISTEMOLOGY

- CONSTRUCTIVISM

METHODOLOGY

- REALIST IMPACT EVALUATION
- THEORY DRIVEN
- PROCESS VIEW OF CAUSALITY
- ABDUCTIVE ANALYSIS

METHODS

- SEMI-STRUCTURED INTERVIEWS
- DOCUMENT ANALYSIS
- THEMATIC ANALYSIS: Deductive
- PATTERNS OF MEANING and CMOCs: Inductive
- MEMBER CHECKING

DATA SOURCES

- FIRST BATCH STUDENTS
- COURSE STAKEHOLDERS
- PROGRAMME DOCUMENTS
- COURSE REGISTERS
- PARTICIPANT PERFORMANCE DATA
- CASE STUDIES

4.4.1 Trustworthiness of the research

Guba (1981) identified four key criteria for establishing the trustworthiness of any inquiry, regardless of paradigm. These are truth value, applicability, consistency and neutrality and have been labelled and defined in the scientific or positivist tradition as internal validity, external validity or generalisability, reliability and objectivity. Guba (1981) redefined and translated these terms in order to be more useful to establishing trustworthiness in naturalistic inquiry. Truth value involves establishing confidence in the credibility of the findings; applicability involves establishing the extent to which the findings may have applicability or transferability to other contexts or other participants; consistency refers to whether the findings are dependable, that is could they be replicated with the same or similar participants and contexts and neutrality concerns confirmability that findings are a function of the participants and the conditions of the inquiry, rather than reflective of the biases and perspectives of the inquirer (Guba, 1981).

These concepts of credibility, transferability, dependability and confirmability have endured in discussions on quality and rigour in qualitative studies, for example, Krefting (1991) and Shenton (2004) used the same four criteria to examine strategies within the research process to increase trustworthiness. Others, such as Mays and Pope (2000) continued to use the term validity, and conflated assessing validity with assessing quality in qualitative research, whereas Twining et al. (2017) equated credibility with trustworthiness. Although variations in the use of language exist, there is agreement on the need to improve trustworthiness in qualitative research and to develop strategies to enhance trustworthiness (Mays and Pope, 2000; Santiago-Delefosse et al., 2016; Twining et al., 2017).

The credibility of a piece of qualitative research depends on what is described as a dense (Guba, 1981) or thick (Curtin and Fossey, 2007) description of the context and all the circumstances concerning the research study. There should be a clearly presented logic of inquiry throughout the research and detailed and transparent presentation of methods of data collection and data analysis. However, in addition, certain research strategies are identified in order to enhance credibility, in particular triangulation and participant or member checking (O'Cathain, 2010; Santiago-Delefosse et al., 2016, Twining et al., 2017). O'Cathain (2010) examined the

different meanings of the term triangulation and observed that although in the positivist tradition it is used as a method of corroboration between two sets of findings, in qualitative and mixed methods research it can be used to describe the use of different methods to gain a more complete picture or a richer perspective on the phenomenon being studied. It is the latter sense of the term that informs this study. Data triangulation refers to using data from different sources, such as different groups of participants and method triangulation refers to the use of a number of different methods of data collection. Member checking involves giving participants an opportunity to commenting on the results of the data analysis and allows the researcher to find out if their findings reflect participants' experiences (Curtin and Fossey, 2007). Mays and Pope (2000) considered that it is better to think of member checking as a way of reducing error in the findings but that it also has the potential to produce further data which needs interpreting.

Schofield (2002) argued that the qualitative research community has paid little attention to the issue of generalisability or transferability. Factors contributing to this disregard include a perception that it is unachievable and/or irrelevant, due to the fact that characteristics of much qualitative research make it difficult to achieve external validity, for example, single case study designs and the lack of replicability. However, interest in the potential of the transferability of qualitative studies has increased as qualitative research has become more widely used in the evaluation of both education research (Guba and Lincoln, 1982) and healthcare (Mays and Pope, 2000). These are often large scale and funded by agencies who have an interest beyond the particular cases studied (Schofield, 2002). Guba and Lincoln's (1982) argument for replacing the concept of generalisability in qualitative research with one of 'transferability' refers to the degree to which one situation studied may be similar to another situation. Schofield (2002), considered the consensus of qualitative researchers as being that generalisability in the sense of producing universal laws is not a useful aim for qualitative research but that did not mean that studies in one situation cannot contribute to a 'working hypothesis' in another. For such working hypotheses to be possible, it is important, similarly to establishing credibility, that researchers report their studies with rich and detailed descriptions.

In this study, attempts to enhance credibility included data triangulation through semi-structured interviews with participants from different stakeholder groups, method triangulation through collection of data through a range of methods, semi structured qualitative interviews, documentary analysis and quantitative analysis of the course registers. The potential for transferability is supported by a focus on contextual facilitators and inhibitors (Clark et al., 2015) within the interviews and the emphasis on context during data analysis within an RIE.

4.4.2 Research Journal

I kept a research journal throughout the study to enable me to capture my own responses to the literature, the data, the data collection process and the analysis. This consisted of my reflections on actions I had taken and reflexive accounts of my responses to the literature and data. Essentially, this allowed me to capture my own development, identify and challenge personal biases, and contribute to a credible and trustworthy study. At the start of the study I captured all previous reflections from the time I actually worked on the degree programme and some of these contribute to the documentary analysis in Phase 1. Thereafter I collected dated entries whenever stimulated to do so by my response to the data, literature or other research activities. My reflexive engagement with the study is discussed further in Chapter 9.

4.5 DATA COLLECTION

Three types of data were collected and analysed for the study. Documents pertaining to the development and first presentation of the programme; semi-structured interviews with 1st batch students and stakeholders; and quantitative data relating to programme delivery (course registers). The study was conducted in three phases broadly corresponding to three trips to Sri Lanka for data collection:

Phase 1: November 2015: Documentary analysis and semi-structured interviews with three first batch students and three stakeholders (programme architects).

Phase 2: June 2016: Semi-structured interviews with 13 first batch students and nine stakeholders (community stakeholders and medical stakeholders).

Phase 3: January 2018: Member checking groups and examination of course registers.

Figure 11 demonstrates the aims of each phase and the relationship between the three phases.

Figure 11: Overview of Research Process

PHASE 1	PHASE 2	PHASE 3
• AIMS: To illuminate initial programme theory in terms of CMOCs To pilot the student interview	• AIMS: To identify outcomes of course and emerging programme theory in terms of CMOCs	• AIMS: To confirm or modify CMOCs To collect quantitative data from course records
• METHODS: Document analysis pertaining to course set up. Interviews with three course stakeholders (to identitify initial programme theory). Interviews with three students to pilot interview and identify initial programme theory from a student perspective.	• METHODS: Interviews with 14 students and 9 course stakeholders (5 medical, 4 community based)	• METHODS: Member checking groups run as 'realist interviews' Examination of course registers.
• KEY QUESTIONS: What did you expect and why did you think it would work? What outcomes have you experienced/seen so far?	• KEY QUESTIONS: What outcomes have you experienced/seen? Does your context influence outcomes? • What do you think supported these outcomes ?	• KEY QUESTIONS: Is this your story? Is there anything you would like to add? • Is there any quantitative evidence to support CMOCs ?

4.5.1 PARTICIPANTS

Participants formed two distinct groups: graduates of the degree programme (students) and stakeholders of the degree programme.

STUDENTS

Seventeen out of a possible 19 first batch students who had graduated with a degree in occupational therapy from the University of Kelaniya, were interviewed using a semi structured format (Appendix 7). They are identified as students S1-17. Sixteen of these first batch graduate interviewees had graduated from the course in June 2013 but one of them had taken resits and had only recently graduated at the time of the interviews in June 2016. Interviews were focused on the first batch as, having graduated three years previous to the main study, they would be in a position to reflect on the impact the degree programme had had on their professional lives and professional practice. The second batch had finished their degree programme but at the time of the interviews had not officially graduated. They were not considered suitable for this study due to still being officially students on the programme and not having had enough time to embed learning into practice.

The 17 students comprised six men and eleven women. Five worked full time in the field of mental health, two worked in both mental and physical health, six worked in adult physical health, two worked primarily in paediatrics and two were full time teachers of occupational therapy[3]. Notes were kept of each student's place of work and size of the occupational therapy department.

STAKEHOLDERS

Stakeholders were identified as people within the healthcare environment in Sri Lanka who had an interest in the degree programme. Those interviewed were a purposive sample of individuals who had supported the development of the degree programme and/or supported their staff to benefit from the degree programme, and/or had an interest in the outcomes of the programme. In all, 12 semi structured interviews were conducted with stakeholders (Appendix 8). They were divided into three groups depending on their relationship to the programme. Three stakeholders were interviewed who had been influential in the development of the

---

[3] Although part of VSO's mental health programme, places on the degree programme were not restricted to OTs who worked in mental health services.

programme; they were identified as course architects, A1-3. Four stakeholders were representatives from community organisations such as Non-Governmental Organisations (NGOs) or Social Service Departments who had had contact with students during their clinical practice; they were identified as community stakeholders, C1-4. Five stakeholders were medical professionals within student workplaces; they were identified as medical stakeholders M1-5. Descriptive data for stakeholders was limited to place of work and field of work.

4.5.2 DOCUMENTS

Four types of documents were examined: VSO policy documents, University of Kelaniya course documents, reports and evaluations from the beginning of the course in 2011 up until the graduation of the first batch in 2013 and case studies and reflections.

A timeline of these documents is given in Table 6.

All of the documents analysed were available to me as a consequence of my role with VSO and my long term involvement with the University of Kelaniya. Some were written by myself in response to requests from VSO, others are based on field notes I took at the time to record what seemed to me, as an educator, to be significant.

Documents D1 to D8, inclusive were subject to documentary analysis during Phase 1 of the study and the results of this contributed to the thematic analysis of the six interviews which were also part of Phase 1.

Documents D9 were included in Phase 3 of the study as they were only complete and available at that stage of the research.

Table 6: Timeline of documents

DATE	DOCUMENT CODE	TITLE
		PHASE 1
September 2005	D1	Sri Lanka: Mental Health Programme Area Plan: VSO
March 2011	D2	University of Kelaniya: B.Sc. Occupational therapy: Course Curriculum (Extracts Appendix 1)
May 2011	D3	Course Ground Rules: M.H. Gardner (Appendix 2)
April 2012	D4	End of first year evaluation: M.H Gardner
May 2012a	D5	Most Meaningful Change: Introduction of client centred practice. M.H.Gardner for VSO (Appendix 3)
May 2012b	D6	Final Report: End of placement report: M.H.Gardner for VSO (Appendix 4)
August 2013	D7	Case Study 1: Report on the completion of the first presentation of the B.Sc. occupational therapy degree programme: M.H Gardner for VSO monitoring purposes (Appendix 5)
August 2013	D8	Case Study 2: 'It turns a new page in my life' Student narrative prepared for M.H Gardner as part of a Case Study for VSO monitoring purposes (Appendix 6)
		PHASE 3
January 2018	D9	Course registers from the three completed presentations of the B.Sc. Occupational Therapy degree programmes

4.5.3. PHASE 1: Formulation of programme theory and potential CMO configurations.

A Realist Impact Evaluation starts with the process of identifying the initial programme theories. These are often covert hypotheses embedded in programme proposals and documents. Pawson and Tilley (2004) suggested a number of possible sources of evidence for this process including policy documents, records, interviews with practitioners and stakeholders and any previous evaluations. Phase 1 of the study involved the analysis of documents D1-D8, three interviews with 1st batch students and three interviews with programme architect stakeholders.

The purpose of Phase 1 was to explore the context, identified needs and expectations which led to the development of the occupational therapy post registration degree programme as well as first indications of potential outcomes and CMO configurations.

Documentary Analysis

These documents were examined through an RIE 'lens' to enable potential CMO configurations to be developed. Documents D1-D8 were examined as part of Phase 1. Documents D1 and D2 were prepared to support the development of the course and were examined for expressions of programme theory such as presumed mechanisms and anticipated outcomes. Document D4 was the result of an end of first year evaluation conducted with the students and as such gave some early indications of possible outcomes. Documents D3 and D5-7 were all forms of reports written by myself for VSO which were required for monitoring and evaluation purposes during the first presentation of the course. They capture my own early hypotheses about what was being achieved through the degree programme.

Student Interviews

The three interviews in Phase 1 were conducted in Sri Lanka in November 2015. The interviews were semi structured following a broad outline (Appendix 7). Potential interviewees were initially contacted by e-mail which included an information sheet (Appendix 10) about the research study. This was followed by contact by mobile phone once I was in Sri Lanka. Contact via mobile phone was initially made by text as it was judged that it would be easier for a potential participant to decline involvement via text rather than when speaking to myself. If the student was happy

to participate dates and times for the interview were arranged. At the start of each interview, the information sheet and consent to participate forms were discussed with the interviewee (Appendices 9 and 10). In addition, although it was made clear to all interviewees that any contribution from themselves used in the final report, such as quotes from interviews, would be identified only by a code, they were nevertheless asked if they would wish to be named at the end of the research report as a contributor (Appendix 11). This was in acknowledgement that within the Sri Lankan context, anonymity is not as highly valued as in the UK context, and in fact being identified as having contributed to a research project was seen as valued recognition of their input.

All interviewees were interviewed at their place of work to cause the minimum of disruption to their working day. All interviews were conducted in English and took place in as private a place as local resources allowed with the interviewee and myself. All interviewees were speaking in English as a second language. The average length of the interviews was 34 minutes. Because of the busy nature of the hospital environment some interviews had interruptions from telephone calls or accidental intrusions into the room. If this happened, the interview was paused until after the interruption. Each interview was audio-taped, with the interviewee's consent using an Olympus Voice Recorder VN711PC. Field notes recording contextual information were made.

Stakeholder Interviews

The three interviews in Phase 1 were conducted in Sri Lanka in November 2015. The interviews were semi structured following a broad outline (Appendix 8). These three programme architect stakeholders were specifically selected for Phase 1 due to their involvement in supporting and developing the B.Sc. Occupational Therapy degree programme and the likelihood that they would have had expectations of what the degree programme might achieve. Contact was made with these three stakeholders once I was in Sri Lanka and dates and times for the interviews were arranged. At the start of each interview, the information sheet and consent to participate forms were discussed with the interviewee (Appendices 9 and 10). In addition, although it was made clear to all interviewees that any contribution from themselves used in the final report, such as quotes from interviews, would be

identified only by a code, they were nevertheless asked if they would wish to be named at the end of the research report as a contributor (Appendix 11).

Interviews were conducted in English, in as private a place as local resources allowed, and were audio-taped, with the interviewee's consent using an Olympus Voice Recorder VN711PC. Although English is widely spoken by professionals in Sri Lanka, some of the interviewees were less fluent than others and two of the interviews were conducted with the help of a translator as the interviewee was better able to be fluent in Sinhala. Field notes recording contextual information were made.

4.5.4 PHASE TWO: Exploration of impact on professional lives and practice.

This was the main data collection phase of the research and was informed by the findings of Phase 1, in particular those regarding expected outcomes and the emerging role of context in shaping outcomes. Twenty two semi structured interviews were conducted and audio-taped. The focus of the interviews with the students was on any perceived impact that completing the degree course had on their professional lives and professional practice. There were two groups of stakeholders, medical and community. The medical stakeholders had all had opportunity to work with the students before and after gaining their degree qualification. The interview focused on their experiences of working with the students and any observations they could make of their clinical practice prior to and post the degree programme. The community stakeholders had had little experience of working with occupational therapists before the degree programme. All had worked with the students as part of their community clinical practice. For this group of stakeholders the focus was on exploring any changes in perception they had of the role of occupational therapy, their thoughts on the contribution of the student occupational therapists and any long term benefits or detriments to their service.

Student Interviews

The 14 interviews in Phase 2 were conducted with 1st batch students in June 2016. The arrangements for organising and conducting the interviews were as in Phase 1. Interview length ranged from 18 minutes 54 seconds to 56 minutes 10 seconds. The

mean interview length was 31 minutes. Within this larger group of interviewees differences in English language fluency were more evident. All higher education in Sri Lanka is in the English Language so first batch students were, on the whole, competent speakers in English although some were more fluent than others. As a result, the shorter interviews tended to be with those who struggled to express themselves clearly in English, whilst the longer interviews were with those students who were more fluent. It was clear during one or two interviews that the interviewees found it an effort expressing themselves in English, with possible resultant loss of freedom of expression and poverty of descriptive detail.

Stakeholder Interviews

The nine interviews in Phase 2 were conducted with stakeholders in June 2016. The stakeholder group comprised of five medical stakeholders and four community stakeholders as described above. The arrangements for organising and conducting the interviews were as in Phase 1 with the exception of two stakeholders whose interviews were arranged spontaneously when the opportunity arose. In both these cases the stakeholder happened to be at the workplace of a student being interviewed at that time and agreed to be interviewed. Two of the stakeholder interviews were conducted with the help of a translator as the interviewee was more comfortable speaking in Sinhala.

4.5.5 PHASE 3: Member checking and course registers

Phase 3 was informed by Phases 1 and 2 as the data from both phases had gone through the first cycle of data analysis before the member checking groups and the examination of the course register.

Member checking groups

Three member checking groups were held in Colombo hospitals in January 2018. Each group was composed of four students who had previously been interviewed. Twelve students out of a possible 17 took part in the member checking groups. When conducting the interviews I had travelled to students' workplaces, some of which are many hours travel outside of Colombo. For the member checking groups it was not practical for some of these students to travel into Colombo, similarly it was not practical, for example, to set up a member checking group in a hospital

nine hours train journey from Colombo where only one of the original interviewed students worked.

The member checking groups were run as realist interviews (Manzano, 2016), a method in which a researcher presents the emerging programme theory from the study as CMOCs to be modified or refined by stakeholders. First of all I introduced the group to the research methodology of RIE. A one sheet handout was prepared which explained RIE including a table outlining the characteristics of Context, Mechanism and Outcome (Appendix 14). A second handout showed a similar table in which the key CMOCs which had emerged from all 17 of the student interviews were compiled. Students were talked through the RIE framework and then shown the compilation of all their interviews. After talking through the CMOCs, I asked the group for their comments and suggestions. Essentially the questions addressed: 'Is this your story?' and 'Does this represent your experiences?' At the end of each group I asked participants if it was possible for them to choose one COMC which best reflected the most valued outcome for them as a result of completing the degree programme. This was not to produce any numerical ranking of most valued outcomes but to aid the identification of underlying mechanisms, in particular, reasoning and values that supported these most valued outcomes. With the groups consent, their comments were audio-taped using an Olympus Voice Recorder VN711PC.

Course Registers

During interviews in both Phase 1 and Phase 2 the outcome of capacity building within the OT profession was mentioned by interviewees from both student and stakeholder groups. One aspect of this capacity building was with regard to teaching other occupational therapists. The availability of the course registers for all three presentations of the degree course allowed a quantitative inquiry into the number of hours that a Sri Lankan born and trained occupational therapists, in particular 1st batch graduates, had contributed to the degree programme in each presentation. This served as a measure of the capacity within the profession to sustain the training of occupational therapists at degree level. The course registers at the Medical Faculty, University of Kelaniya are paper documents in which lecturers record hours taught and sign their entry. The inquiry involved examining

course registers from May 2011 to January 2018, together with the course secretary, and counting the hours taught by Sri Lankan born and trained occupational therapists. This data collection was the final step of this project and took place in February 2018 after the teaching component of the 3rd presentation of the B.Sc. was complete.

4.6 ANALYSING THE DATA

After the documentary analysis in Phase 1, the data analysis mainly concerned the qualitative analysis of the interviews of both students and stakeholders in both Phase 1 and Phase 2.

All interviews were transcribed using an Olympus As-2400 transcription kit. The software associated with this equipment enables all audio files to be held securely during the transcription process. Each interview was listened to a number of times in order to produce an accurate verbatim record of the interview including pauses, interruptions and expressions if these were able to be either remembered from the original interview or could be heard on the audiotape (for example, laughing). This in depth familiarisation with the data formed the first stage of the data analysis (Braun and Clarke, 2006).

Qualitative data analysis is frequently described as an iterative or cyclical process in which each stage informs both previous and subsequent stages (Ramsay, 2013; Silver and Lewins, 2014). This reflects the experience of data analysis in this study, in that the analysis of the interviews in Phase 1 informed the analysis of the interviews in Phase 2 and both informed the Phase 3 member checking groups.

4.6.1 PHASE 1

The six interviews conducted in Phase 1 were analysed by thematic analysis. Braun and Clarke (2006) defined thematic analysis as *'a method for identifying, analysing and reporting patterns (themes) within data.'* (Braun and Clarke, 2006, p. 79). Their overview of the use of thematic analysis, whilst emphasising that it is not wedded to any particular theoretical framework, nevertheless recommends it should be applied in a manner which is methodologically sound within an explicit epistemological position. Braun and Clarke (2006) discriminated between inductive thematic analysis, a 'bottom-up' approach which does not attempt to fit the data into any pre-

existing scheme, and deductive or theoretical thematic analysis, a 'top-down' approach which is driven by existing theory, *a priori* themes from the literature or the specific research questions. However, other qualitative researchers (Timmermans and Tavory, 2012; Silver and Lewins, 2014) consider that these two approaches are not mutually exclusive:

> *'In practice, researchers may find they employ both inductive and deductive approaches iteratively throughout the whole process of the research project'*
>
> (Silver and Lewins, 2014, p. 161)

The dialectic process of using deductive and inductive analysis concurrently, in such a way that the two techniques inform each other, is known as abduction (Silver and Lewins, 2014), which Timmermans and Tavory (2012) described as a creative process that has the potential to illuminate new hypotheses within the data. A useful framework to understand the role of deductive, inductive and abductive qualitative analysis with regard to different research paradigms is outlined by Silver and Lewins (2014). A crucial element of this framework is the role of theory and the point in the analysis at which either deductive or inductive analysis is used. Using this framework, a theory driven evaluation, such as RIE, demands an initial deductive or theory informed thematic analysis informed by the literature review, initial programme theory and the research questions. However a subsequent inductive analysis is vital in discovering unanticipated patterns of meaning within the data as these are likely to contain the 'stories' and patterns of meaning which will throw light on the process of causality. Silver and Lewins refer to this process as *'theory-driven abductive analysis'* (2014, p. 39).

A number of *a priori* themes were identified from the literature review plus the initial programme theories from the documentary analysis had been identified. These informed the initial thematic analysis. These themes were further developed through a subsequent inductive analysis of the transcripts. Themes and sub themes were finally examined through an RIE lens and possible CMOCs developed from the thematic analysis.

4.6.2 PHASE 2

Fourteen additional student interviews and nine additional stakeholder interviews were analysed in Phase 2. Whilst transcribing these interviews, particularly the

student interviews, I was struck by the narrative within each one, and how the students' stories were illuminating CMOCs, causal chains of events which are a crucial component of Realist Impact Evaluation (Pawson and Tilley, 2004). I therefore decided to complement the thematic analysis of the interviews with a narrative analysis within an RIE framework.

As previously noted, RIE itself does not favour any particular method of data analysis. What is important is that the data are examined within a RIE framework such that attention is given to whether and how themes coalesce into CMO configurations (Pawson and Tilley, 2004; Westhorp, 2014). In Phase 1, I started the analysis with the thematic analysis and then 'built' the CMOCs that could explain the outcomes from the identified themes. However, in Phase 2, I maintained the integrity of the narrative so that the student's story remained intact. Reissman described a narrative as *'talk organised around consequential events'* (2002, p. 219) and noted how respondents in research interviews are telling their story. In doing so, they order and make sense of their experience (Bamberg, 2010). I observed this whilst transcribing the interviews and also noted that the thematic analysis of Phase 1 had the effect of breaking up the text so that causal sequences of events were lost. CMOCs can be understood as stories of connected and sequential events and using this framework directly on the narrative proved effective in capturing narratives of consequential events. Attree (2006) argued that finding clear evidence of attribution of the role of programme activities in facilitating outcomes in healthcare education is particularly difficult. However, by maintaining the original narrative intact during the analysis, subtle indications of attribution could be identified in the form and language of the text.

Each interview, including the six interviews from Phase 1, was colour coded throughout in terms of three themes: Context, Mechanism and Outcomes. Because these categories are very broad, this approach facilitated a wide range of themes to be identified under outcomes in addition to the *a priori* themes identified from the literature in Phase 1, and a much greater breadth of contextual themes. Following the coding of each interview a table of Context, Mechanism and Outcomes was developed. An example of this is provided in Table 7 below:

Table 7: Example of student CMO analysis

CONTEXT	MECHANISM **Response to programme activities**	OUTCOME
Insecure professionally Other 4 CPSM health professionals have degrees Long history of failed initiatives to set up the degree Links with VSO established early 2010 and then progress made till start of degree May 2011 Personal commitment of time and money	Enjoyed and perceived benefit from all aspects of the course Learnt what occupational therapy is and what occupational therapists do *Linked to:* Changed perspective on multidisciplinary team work Changed understanding of client centred practice Enabled understanding of research methodology	Increase in confidence in self Confident of role of OT and strengthened professional identity *Linked to:* Improved multidisciplinary teamwork Attitude change from therapist in charge to patient centred Putting patient centred care into practice Confident with evidence based practice

4.6.3 PHASE 3

Member Checking Groups

The emerging CMOCs from Phase 1 and 2 were prepared for the member checking groups. This had deliberately been prepared without too much detail in order that the students in the group would see opportunity to add their own detail or modification. After the groups the audio recordings were transcribed by myself. Only the students' comments directly relating to the presented CMOCs and suggested additions were used in the analysis. Student comments were added directly to the original document that had been presented to them and a list was produced of the most valued CMOCs.

Course Registers

The data from the course registers required little analysis. The hours taught by Sri Lankan born and trained occupational therapists were collated across the three presentations and divided in terms of which modules of the degree had been taught.

4.7 THE INSIDER-OUTSIDER DEBATE

There is a debate within qualitative research circles on the relative merits of conducting research from an insider or outside perspective. With regard to this study on the impact of a post registration degree programme, I lived in Sri Lanka and worked on the programme in Occupational Therapy from April 2011 to June 2012 and again from February 2013 to August 2013. As an occupational therapist myself I belong to an international community of occupational therapists, as did my students. I was also accepted as a staff member at the medical faculty of the University of Kelaniya. I could be seen therefore as an 'insider researcher' from both a professional perspective and due to my considerable involvement in the programme under evaluation.

Merton (1972), in his work on social groupings argued that we are all insider and outsiders in that we are members of some social groups and not others. Membership of such groups may depend on age, gender, ethnicity, education, professional experience and language. These same factors influence the insider or outsider perspectives on the experience of being a researcher (McNess et al., 2015). However, a number of researchers have questioned a dichotomous understanding of the concepts of insider and outsider. Hellawell (2006) started from a position of reviewing the insider-outsider concept as an aid to developing reflexivity in student researchers. Citing Hammersley (1993), he agreed with Hammersley's position that both insider and outsider perspectives have their advantages and argued that they are best understood as being on a continuum, or even a number of parallel continua corresponding to different elements of the research process. Hellawell's key argument is that researchers need to consider where they and their research sit on these continua and

> *'Reflect critically on their own perceptions of where they stand in relation to their informants, and just as, if not more, significantly, what they consider to be the informants' perceptions of this relationship'* (Hellawell, 2006, p. 492)

McNess et al. (2015, p. 295) examined dualist concepts of insider and outsider researcher which view the outsider researcher as *'detached and objective'* and the insider researcher as *'culturally embedded and subjective'* and concluded that in an

increasingly international, collaborative research context, the boundaries between insider and outsider are becoming more fluid. McNess et al. (2015) identified a potential *'Third Place'* in which researchers are *'neither complete observers nor complete participants'* (McNess et al., 2015, p. 311). Milligan (2016), in her study of the use of participatory techniques in a school in rural Kenya, also argued against the idea that there are fixed positions of insider and outsider in the research context. In consideration of her own experience, she proposed the concept of the 'inbetweener' researcher, neither inside nor outside and actively working to reduce 'outsider' barriers. The debate illustrates a growing voice for the recognition of a dynamic and fluid appreciation of insider-outsider research perspectives and a consideration of their relative benefits.

4.7.1. THE SRI LANKAN CONTEXT

In terms of the insider-outsider dimension as a researcher (Hellawell, 2006) my considerable involvement in the post registration degree programme would put me firmly at the insider end of the dimension. I directed the whole degree programme, sourced the contributions that I did not teach and directly taught a high proportion of the curriculum. In terms of the benefits of being an insider researcher, this degree of knowledge about the programme and the participants was helpful in the practicalities of conducting the research. As Costley et al. (2013) remarked, as an insider:

> *'...you are in a unique position to study a particular issue in depth and with special knowledge about that issue. Not only do you have your own insider knowledge, but you have easy access to people and information that can further enhance that knowledge.'*   (Costley et al., 2013, p. 3)

This was certainly my experience whilst conducting this research. Knowing that certain information existed at all, and having access to it, was a distinct advantage. In addition, my experiences of working on the degree programme and the evaluations I had conducted myself were also available to me. Five of the documents analysed in this report are ones which I wrote from 2011-2013. As an insider researcher I have found it extremely useful to be able to re-examine my experiences and learning, by revisiting these particular documents from an RIE perspective. It is clear that as I worked on the programme I developed ideas about

significant outcomes and hypotheses and about what was working and why. These documents capture my reflections from the time I was actively working on the degree course and they have allowed me to make my own hypotheses explicit, open to examination and to own my own perspective.

From my students' point of view, it is likely I would be seen as an outsider. I am not of Sri Lankan origin; I am a white, European female and was the only one within the medical faculty. Professionally, although an occupational therapist, I did not have a designated place within the local healthcare professional hierarchies, knew little, in the early stages particularly, about their working environments and was not in a position to influence their career opportunities. In fact, being uninvolved in any local educational or healthcare politics meant I was often confided in as someone who would be 'neutral' in a given situation, a point made by McNess et al. (2015):

> *'Insiders may confide in outsiders on issues they would not discuss with those on the inside'* (McNess et al., 2015, p. 302)

However, being an insider researcher, albeit one who also had some outsider status, is not without disadvantages to the research process. As a lecturer and the course leader, there was an imbalance of power between myself and the students. Costley et al. (2013) discussed the power imbalance which is present within any qualitative interview in which the interviewer is often in control of the whole course of the interview, including time and place, the questions asked and the subsequent analysis. This power imbalance is potentially greater when the interviewer is known, respected and has status within the research environment. It is possible that this is inflated even more in Sri Lanka where there are strongly hierarchical professional structures and a strong tradition of respect towards seniors in any profession. There is a wish to please within all verbal communication, particularly towards anyone who may be seen as higher status. As a result, participants may have felt obliged to take part in the interviews, may have felt that they should not speak openly about anything that may be seen as a negative reflection on the course and may have tried to anticipate what I would like to hear.

These factors are mitigated against by conducting the research three years after graduation so that participants' responses could have no impact on their results or career progression. In addition, after graduation the participants were formally

acknowledged as colleagues rather than students, and communications are no longer within a teacher-learner environment. The recruitment process was designed so potential participants could opt in rather than have to opt out so that strategies of polite avoidance could be used should students not wish to participate.

During the interviews I focused on participants' experiences in their work place, showing interest in their stories of their professional lives after graduation, rather than asking for judgements about the course which might lead them to deliver what they thought I might like to hear. Despite this, some participants did freely offer their advice about how the degree course itself could be improved which I interpreted as an indication of how comfortable they felt within the interview situation.

4.8 ETHICAL CONSIDERATIONS

Full ethical clearance for this study was given by The Open University Human Research Ethics Committee (HREC). I was informed by the BERA ethical guidelines for educational research (BERA, 2011) whilst formulating information sheets, consent forms and arrangements for interviewing and data storage. A risk assessment matrix was completed as part of the HREC application and no risks to myself or the participants were identified

Arrangements for the participation of the students are outlined in Chapter 4.5.1. I was concerned that students would feel under obligation to talk with me due to my long involvement in their degree education hence the initial contact by text once I was in Sri Lanka, as this is easier to ignore if a student does not wish to participate. In fact, one student did not respond to the text despite me being reasonably confident that it had been received and therefore was not contacted further. The consent to participate form, the information sheet and the consent for acknowledgement form all bore The Open University logo, address and contact e-mail addresses (Appendices 9, 10 and 11). Within the information sheet procedures for ensuring confidentiality of information and anonymity for participants are laid out. However, research with a known small batch of students (n=17) and within a small profession (n=104) cannot truly protect anonymity despite coding of interview extracts within the text of the thesis. It may be even easier to

identify stakeholders within the thesis because of their different perspectives depending on their role. Perhaps because of being aware of this, all students and stakeholders were happy to be named as contributors.

Implications of being an insider researcher and strategies to mitigate the potential effects are discussed in Chapter 4.7 above. As Costley et al. (2013) argued, power imbalances are evident in between any researcher and the researched. In the Sri Lankan context it is likely that the power imbalance often observed between subject experts from HICs working with people within LMICs (discussed in Chapter 3) would have influence. The inclusion of member checking groups in Phase 3 of the research is a strategy designed to give power back to participants so that they have the chance to either own or disown the interpretations offered.

4.9 SUMMARY

The conceptual framework presented in this chapter is informed by both the literature review and development theory. It forms a framework with which to consider both methods and findings. The research paradigm of critical realism and the key characteristics of the methodology of realist impact evaluation have been outlined with Figures 10 and 11 giving overviews of the research rationale and process.

The research has 3 distinct phases. Methods of data collection and analysis are described for each phase. My own involvement with the programme under study has been examined with reference to both the implications of being an 'insider' researcher and ethical considerations.

CHAPTER 5: PRESENTATION OF FINDINGS: PHASE 1

Phase 1 findings consist of the documentary analysis, the analysis of three interviews with stakeholders who were identified as course architects and the analysis of three student interviews.

5.1 PHASE 1: DOCUMENTARY ANALYSIS

A timeline of the documents analysed in Phase 1 is given in Table 7, Chapter 4.5.2. These documents were examined through an RIE 'lens' in order to discover the initial programme theories and early indications of CMOCs. The aim was to identify hypotheses about expected and observed outcomes and mechanisms of change. The documents had the potential to throw light on three areas of interest: expectations of the impact of the degree course before implementation, early evaluation of outcomes from the course including my own evaluations of course progress and students' responses to programme activities and outcomes.

5.1.1 SRI LANKA: Mental health programme plan: VSO (2005)

This document outlines the context of mental health services in Sri Lanka and details programme activities to meet VSO's overall aim for the mental health programme which was *'People with mental health problems participate actively in society'* (VSO, 2005, p. 3.). Information from this document is organised into an RIE framework in Table 8. Only expected outcomes relevant to this research are included.

The VSO Sri Lankan Mental Health Programme Plan (2005) gives a good overview of the context in which VSO was operating in Sri Lanka at that time and outlines aims, programme activities and expected outcomes. Implicit in the document is the theory that improving the training of mental health workers will contribute to the aim that people with mental health problems will participate actively in society. No training content is specified apart from supporting *'rights based'* services. However, changes in teaching methods are identified as an outcome from the programme which implies that a need has been identified for the teaching of mental health professionals to be interactive, stimulating and practical.

Table 8: VSO mental health programme: CMOCs

CONTEXT	MECHANISM	EXPECTED OUTCOMES
Impact of 20 years of conflict on the mental health of the population	The Sri Lankan Mental Health Programme Plan details the programme activities designed to meet the expected outcomes, but does not explicitly identify possible mechanisms of change.	Overall aim of VSO's mental health programme: People with mental health problems participate actively in society.
Impact of Tsunami on 26th December 2004 on mental health of specific sectors of the population		Pre-service education of health professionals and non-medical support workers in at least 2 institutions support a rights-based (accessible, equitable and effective) approach to treating/caring for people with mental health problems
One of highest rates of suicide in the world.	For example:	
Mental health legislation which does not protect the rights of people with mental illness.	Training workshops	
Mental health services concentrated in urban areas and institutions	Volunteers support development of new training courses	Mental health modules included in curriculum for medical students
People with mental illness marginalised and stigmatised with lack of awareness of their rights.	Volunteers support new teaching and learning methods	Higher education institutions provide certified courses for non-medical mental health workers (OTs, Social Workers, Nurses)
Lack of trained mental health practitioners.		
Lack of multi-disciplinary team working		Lecturers on supported courses adopt more interactive, stimulating and practically oriented teaching and learning methods
Lack of client centred practice.		

No mechanisms of change, linking programme activities to outcomes are suggested. However, recently, VSO has articulated its Theory of Change more explicitly in a document covering all programme areas (VSO, 2014). Central to VSO's understanding of the mechanisms underpinning change is the role of the volunteer. VSO believes that having volunteers working within a particular development context in partnership with local workers over a relatively long period of time (usually 1-2 years) creates a situation where knowledge, skills and attitudes can be shared and understood. Changes in reasoning and understanding and practice are

supported by long term engagement and mutual respect. This long term engagement from volunteers also develops partnerships with a more equitable distribution of power and influence as compared with other models of international development (VSO, 2015), for further discussion on this see Chapter 3.

5.1.2 The University of Kelaniya B.Sc. Occupational Therapy curriculum document, March 2011

This document follows the convention of all curriculum documents for the University of Kelaniya. The objectives and overall learning outcomes have been extracted from the course document in Appendix 1.

As in the VSO document in Table 8, one of the key programme aims is to positively impact on service users, in the case of the curriculum, by supporting the provision of '*more comprehensive services of a better quality*' (Appendix 1, p. 1). In fact the majority of the overall learning outcomes refer to changes in practice that would be difficult for the University to assess. For example: '*Refer individuals to other agencies for services, as appropriate, and to be proactive in communicating with these agencies.*' (Appendix 1, p. 1). Perhaps only the first learning outcome is one which the University could be confident of assessing: '*Demonstrate specific knowledge and skills that are required for the competent practice of Occupational Therapy'* (Appendix 1, p. 1).

Within the degree programme, learning of knowledge and skills, i.e. level 2 outcomes in Kirkpatrick's model (www.kirkpatrickpartners.com), are assessed through examinations, case reports, individual and group presentations and essays. Since eventually 19 of the 20 students who started the course (one left due to health reasons) finished the course and gained a degree in occupational therapy, awarded by the University of Kelaniya, then it can be concluded that this learning outcome has been met.

There is an inherent assumption in the course document that completion of the course modules, and success in the assessments attached to each module, will lead to the desired changes in practice. However, as discussed in Chapter 2.2, behaviour change and transfer of knowledge into practice, or level 3 outcomes, are more difficult to assess. This was especially the case for this batch. The most experienced

occupational therapists in Sri Lanka were interviewed and selected for this course based on their commitment to continuous professional education. It was therefore almost impossible to apply any competency or supervision framework back in their workplace as there were no occupational therapists suitably qualified to assess them.

In RIE terms, the curriculum document has a programme theory, that successful completion of the course will lead to *'more comprehensive services of a better quality'* (Appendix 1, p. 1), but the desired behavioural outcomes in terms of changes in clinical practice are not measured by the programme; the mechanisms by which the programme activities might generate such outcomes are not articulated and there is no consideration of the impact of context on whether desired behavioural outcomes will be realised or not.

5.1.3 Reports and evaluations prepared by myself from May 2011 until the first batch graduated in August 2013

GROUND RULES: M. Gardner, May 2011

When I first met the student group in May 2011 my aim was to introduce myself to the students and for us to get to know each other. As part of this session I introduced the concept of 'ground rules' i.e. establishing how we would work together and what our expectations were of each other. We discussed the ground rules that we could all sign up to as a group. These were agreed, written up, and circulated to the whole batch afterwards (see Appendix 2)

Some 'rules' were what one would expect in a similar discussion in any higher education establishment such as *'when one person is talking to the group we will all listen'*. However two issues arose from this discussion that reflect the particular context in which the course was being run; these are presented in Table 9.

Insights from this particular experience are important from an ethical perspective. During data collection it was important to emphasise at all times that involvement was voluntary and that there were no consequences of participation or non participation and that all contributions would be anonymised. It was also important to bear in mind how important the course was to the first batch students and how reluctant they would be to deliver any comment that would be construed negatively.

Table 9: Ground Rules: Contextual Issues

CONTEXTUAL ISSUES ARISING FROM GROUND RULES DISCUSSION
All group members are equal **Staff will respect all group members equally and show no favouritism** During this discussion it became clear to me that some students felt they had been unfairly discriminated against in the past and that gaining advantage through one's status or through one's connections was not uncommon and therefore any favouritism was a potential issue Awareness that a health professional or a university lecturer would have their own code of conduct which would govern their behaviour in this regard was not evident.
All members of the group will take responsibility for the sustainability of the course **Everyone in the group should 'pull their weight' in helping to make the course a success.** This was when I first became aware that the first batch included occupational therapists who were well known in the profession in Sri Lanka and through their professional association had worked very hard with the University of Kelaniya and VSO to make the degree course a reality. They were, as a group very motivated and invested in making the course a success.

END OF COURSE EVALUATION: M. Gardner, April 2012

At the end of the course, but before graduation, an evaluation session was facilitated. Eighteen out of a possible 19 students were present. Students filled in an individual evaluation form before sharing and discussing their impressions in groups of three. Finally, a plenary session was conducted to bring everyone's ideas together. This was not an evaluation at the time informed by any principles of research. It was an evaluation typically conducted by the university to get feedback on the aspects of a course that had worked well or not so well for the students.

The original evaluation forms give the students' written comments in their own words. They have been examined in two different ways but both methods were informed by Barr's modification to Kirkpatrick's model (1999) and Bloom's taxonomy (Atherton, 2013) in terms of the process of classifying evidence of learner reactions, acquisition of knowledge, skills and attitudes and any reference to potential changes in practice. Firstly, a content analysis was conducted in which key words and phrases were counted. As part of this process, qualifying words such as *'very'* were eliminated and phrases such as *'helpful to practice'* and *'helps OT*

practice' were combined into one phrase, in this case *'helpful to OT practice'*. Specific models of practice e.g. recovery model were counted, other phrases such as *'OT models'* and *'models of practice'* were combined into *'OT models'*. Table 10, shows response frequencies and Figure 12 a visual representation of the responses.

Table 10: Frequency table of evaluation responses

INTERESTING	18
OT MODELS (OF PRACTICE)	9
NEW KNOWLEDGE	8
HELPFUL TO OT PRACTICE	8
EVIDENCE BASED PRACTICE (EBP)	7
LEARNING	6
COGNITIVE BEHAVIOUR THERAPY (CBT)	6
FRAMES OF REFERENCE	6
NEW WAY OF THINKING	4
TRAFFIC LIGHT MODEL (RELAPSE PREVENTION TECHNIQUE)	4
PALLIATIVE CARE	4
NEW APPROACHES	4
CLIENT CENTRED PRACTICE	3
RECOVERY MODEL	3
THOUGHT- PROVOKING	3
USEFUL	3
GOOD	3
STRESS VULNERABILITY MODEL	2
EXCELLENT	2
SOCIOLOGY	2
PERSONALITY DISORDER	2
UNDERSTANDING	1
NEW	1
SUCCESSFUL	1
DIFFICULT	1
HELPFUL-TO-LIFE (OWN)	1
BROADENING	1
EYE-OPENING	1
IMPORTANT	1
ASSESSMENTS	1
AWARENESS	1
CONCEPTS	1
PSYCHOLOGY	1
INSTITUTIONALISATION	1
SOCIAL MODEL OF DISABILITY	1
PRACTICAL SKILLS	1
DEMENTIA	1

Figure 12: Word cloud of responses
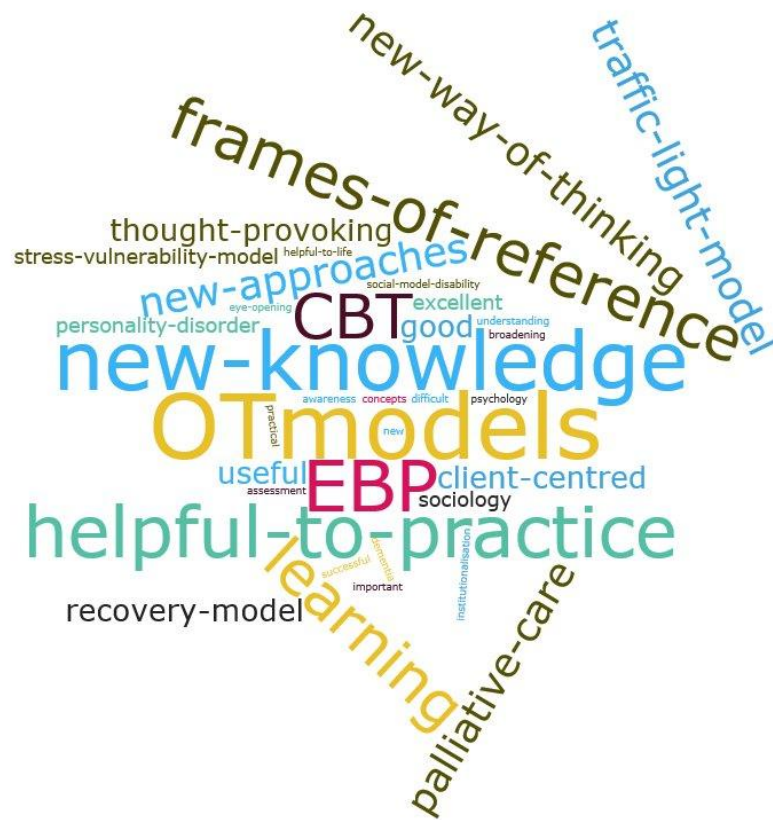
Secondly, the evaluation responses from the frequency table were colour coded with reference to both Bloom's and Kirkpatrick's frameworks and the student's own words used to illustrate the resultant coding.

The yellow highlighted responses reflect Kirkpatrick's level 1 and the lowest level of Bloom's Affective domain i.e. students' reaction to the learning experience. Within the original evaluation form students were not asked specifically about their overall satisfaction with the programme. However, words such as 'interesting' which featured in every form, 'good' and 'useful' reflect a generally positive view exemplified by the quote:

> *'Very interesting especially the teaching method, first time did some online learning'*

The pink highlighted responses reflect Kirkpatrick's level 2a (Barr et al.'s modification, 1999), that is, changes in attitudes or perceptions towards patients/clients and their conditions, circumstances, care and treatment. They describe challenges and changes to professional attitudes towards patients and their

treatment. They can also be understood in terms of the higher levels of Bloom's Affective domain in that they refer to attitudes and values, to attitudes being examined, challenged and internalised. Client centred practice and the recovery model have been included in this section because, as well as having a knowledge component they overwhelmingly depend on establishing certain attitudes, values and beliefs as regards service user autonomy, particularly those with mental health problems. There are also indications of student's changing perceptions of their own abilities. Taken all together these responses (16) carry a lot of weight in the evaluation forms.

> *'Give a new way of looking towards mental health clients and approaches'*
>
> *'CBT... is thought provoking and improve new way of thinking about our service seekers'*
>
> *'Very useful, a new way of thinking about our practice'*
>
> *'Improved confidence, self esteem'*

The green and turquoise highlighted responses reflect Kirkpatrick's level 2b (Barr et al., 1999), that is, specific knowledge, skills, concepts and theoretical frameworks which students found particularly useful. Some of these are about specific conditions e.g. dementia, but the most numerous responses refer to models of practice and frames of reference, that is, frameworks which are designed to help professionals such as occupational therapists understand different contexts of practice (for example a psychosocial as opposed to a biomedical approach) and different theoretical frameworks within their own profession. The turquoise responses belong in Bloom's cognitive domain although the level at which the student is operating is revealed in their fuller qualitative responses.

> *'The knowledge we got through this area was very much important to re-organise/organise our knowledge'*
>
> *'For the first time thought about clinical reasoning/hypothesis'*
>
> *'Gained knowledge, most of the things we learnt from this module can apply to even our life'*
>
> *'This module is helping us to improve our skills in OT practice as well as to implement the above techniques in our working place'*

The green highlighted responses refer to skill acquisition such as gaining competency using assessments and a particular relapse prevention tool, the traffic light model. As they also have an aspect of knowledge acquisition, these responses could be understood as belonging to both Bloom's psychomotor and cognitive domain.

> *'Learned new skills regarding fall prevention/management – older adults"*

> *'Very helpful to carry out practical work: assessment of play is very interesting and new'*

> *'Training methods were very practical, we learnt to write a case report in a new method"*

The grey highlighted responses relate to Kirkpatrick's level 3, that is behavioural change transferred from the learning environment; 'helpful to life' and 'helpful to OT practice' have been separated out as they give some indication that the knowledge, skills and attitudes acquired are actually informing practice from the student's perspective. The student's own words are particularly useful in illustrating their own perceptions on whether the knowledge, skills and attitudes gained through the course had influenced practice.

> *'It was useful to get new knowledge and understanding. Specially to get new way of thinking on applying sociology theories in our day-to-day practice'*

> *'This is the first module I started to think and practice differently...reflective case report: writing skills gained'*

> *'This module is helping us to improve our skills in OT practice as well as to implement the above techniques in our working place'*

> *'Thought provoking for stress vulnerability model. Applied for several individuals'*

In summary, the analysis of this early evaluation gives some evidence to support the theory that course activities provided resources and opportunities for knowledge and skill acquisition relevant to practice. There are also indications of changes to attitudes and beliefs. Within an RIE framework, these changes can be understood as mechanisms enabling understanding, enabling reasoning, changing beliefs and attitudes, changing preferences, enabling choices and ultimately influencing behaviour change in practice.

MOST MEANINGFUL CHANGE: M.Gardner for VSO: MAY 2012a

As part of their evaluation process, VSO asks all volunteers to complete a 'Most Meaningful Change' report (Appendix 3). VSO asks volunteers to reflect on their placement and identify one aspect of their work which for them represents the most meaningful change they have been involved in. This document represents a snapshot of how I evaluated the most significant impact of the course in May 2012. Returning to this document after some time it is interesting to see how, at that time, I had formulated a hypothesis about what had been the most meaningful change I had observed and why. It is possible to reconstruct this as a CMOC in Table 11.

Table 11: MMC: CMO Configuration

PROGRAMME ACTIVITIES:
Course lectures, seminars and videos on the psychology and sociology of health care. Presentations on models of client centred practice and a specific tool to support client centred practice; the Canadian Occupational Performance Measure (COPM) Class discussions acknowledging current practice but offering alternative ways of thinking about the professional-patient relationship.
CONTEXT:
A health care system in which the professional knows best and patient priorities are not taken into account. Patients do not expect to be asked about their own concerns or priorities. Students are highly motivated to succeed. Students feel challenged by a different perspective from a foreign lecturer on the patient-therapist relationship, but are interested in different models of practice.
MECHANISM:
Resources given which increased knowledge and skills and enabled reasoning around the benefits of client centred practice. Skills developed with an assessment tool (COPM) enabled choices to be made re implementing client centred practice. Ideas which challenged prevailing assumptions were presented. These initially caused some confusion and debate but facilitated changing beliefs. *'Previous assumptions about how professionals should practice were challenged during class discussion. Professional expertise was acknowledged but students were asked to reflect on how that could be put to use to further service user/client priorities and how this in turn could lead to more effective engagement and rehabilitation'* (Gardner, 2012a)
OUTCOMES
Use of COPM by a majority of students as evidenced by their case study reports Use of a client centred frame of practice with service users as evidenced by some students in their case study reports and reflective journals.

Whilst there was some evidence to support this CMO configuration, there was no indication as to what extent and in what contexts these outcomes were facilitated.

VSO FINAL REPORT: M. Gardner, May 2012b

This report (Appendix 4) was compiled to accompany the Most Meaningful Change document above. The main body of the report details programme activities. Returning to this document after three years reveals that VSO's objective in supporting the development of the course was explicit:

> *'Pre-service education of health professionals and non-medical support workers in at least 2 institutions support a rights-based approach to treating/caring for people with mental health problems'* (VSO, 2005)

and one of the associated outcomes: '*Accredited courses offered for non-medical health workers*' (VSO, 2005) had been met, since the B.Sc. OT programme was accredited through the University of Kelaniya. However, I was unaware of any specific objectives or expected outcomes for my role within the B.Sc. programme, and therefore offered my thoughts on the 'implicit' objectives of the placement:

> *'To support the delivery both in terms of coordination and teaching, of a degree programme for occupational therapists in Sri Lanka, which:*
>
> *Develops the skills and values of client centred practice*
>
> *Addresses some of the weaknesses in the original Diploma programme particularly with regard to mental health theory and practice*
>
> *Incorporates current theory and best practice including community based practice and the theory and practice of CBR'*

> (Gardner, 2012b, Appendix 4)

This report demonstrates a lack of clearly articulated expected outcomes for the B.Sc. OT programme prior to programme delivery. In fact the programme activities themselves were identified as outcomes of the programme rather than the means by which outcomes are facilitated. The only indication of any CMO relationship comes from the Most Meaningful Change report previously discussed above.

VSO CASE STUDY including a first batch STUDENT NARRATIVE prepared by M. Gardner

In August 2013 I was asked by the country director of VSO Sri Lanka if I would prepare a 'Case Study'. This involved following a given proforma designed to give some qualitative and quantitative insight into an area of achievement for VSO during a particular quarter of the year. (Gardner, 2013, Appendix 5). The first B.Sc. OT programme had just finished and the first batch had been given their results. We had just recruited for the second batch and therefore it seemed a good opportunity to showcase the B.Sc. O.T. course to VSO London.

In order to help me fulfil this brief I asked a first batch student if she could write something about her experience of the course and the difference it had made to her. I gave no guidelines or advice but left it up to her own judgement what to include. Her narrative (Appendix 6) informed my report. This narrative gives an example of the considerable personal challenges students faced in order to become degree students, their motivation to succeed, and in this case, the impact gaining a degree had on professional confidence and identity, leading to a successful scholarship application.

By the time this report was written I had spent two years preparing, delivering and thinking about the course. I had had the chance to speak to some of the students' heads of department and also to some key individuals working in challenging community settings where the students has been placed for a month of clinical practice. Consequently the Case Study shows that I had continued to develop ideas about course outcomes and some COM configurations can be developed from re-examining the report from a RIE perspective. Figure 13 shows a COM configuration for the outcomes of the community based clinical practice which all students were required to undertake. This was a challenge for most students who had spent their whole working lives within institutions.

Figure 13: CMO configuration for community practice

CONTEXT		MECHANISM		OUTCOMES
A country with centralised health services and poor access to any rehabilitation services in rural areas A 4 week community practice as part of a degree programme at respected university Student motivation to succeed	**+**	Changed understanding of the burden of disability in rural areas Changed beliefs about own ability to provide services in rural areas	→	Direct services provided in community settings Improved access to rehabilitation services by developing care pathways for referrals Contact between student and community placement maintained (in some cases)

However, it was also clear that these outcomes did not apply to all the community settings where students were placed requiring some further investigation of contextual factors which may have influenced outcomes.

The student narrative (Appendix 6) draws on personal aspirations, challenges and personal success after completing the degree course. Figures 14 and 15 show possible CMO configurations emerging from this narrative. They also demonstrate a feature of RIE whereby the relationships between CMOCs are developed, and the outcomes of one can become the context of another.

Figure 14: CMO configuration for achievement of degree

CONTEXT		MECHANISM		OUTCOMES
Studying a degree programme at a respected university Professional aspirations both individual and as a professional group Supportive family	**+**	Increased belief in own abilities Enabled understanding and reasoning in field of occupational therapy	→	Achievement of a degree in occupational therapy
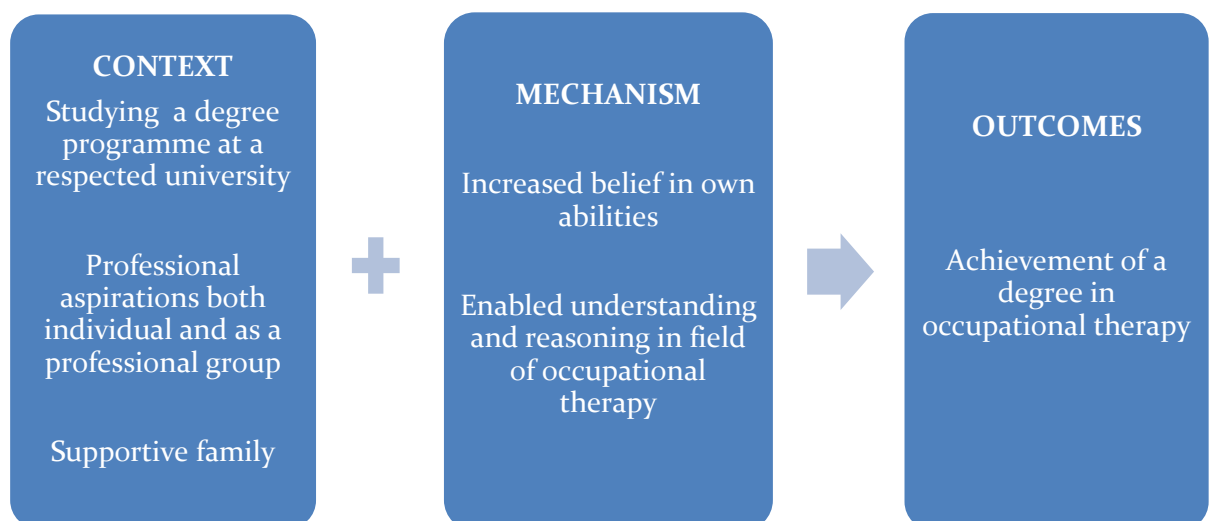
Figure 15: CMO configuration showing how the outcome of Fig 14 becomes the context in Fig 15

CONTEXT		MECHANISM		OUTCOMES
Achievement of a degree in occupational therapy Supportive family Personal aspirations	**+**	Increased belief in own abilities Knowledge gained and skills acquired enabled choice to apply for scholarship	→	Awarded International Scholarship Appointed to teach 2nd batch on OT degree programme
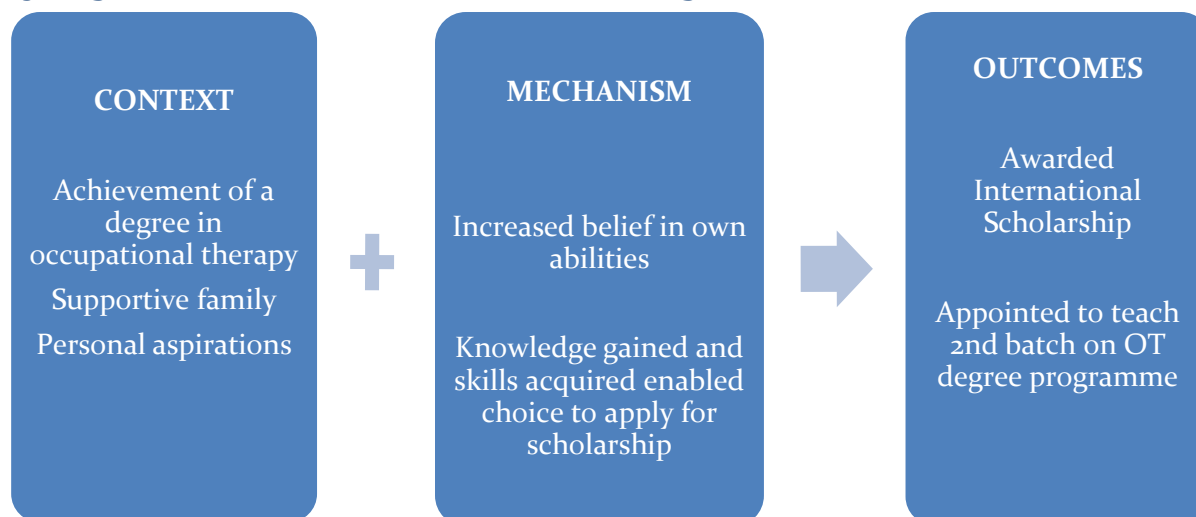
5.2 PHASE 1: INTERVIEWS

5.2.1 *A PRIORI THEMES IN THE LITERATURE*

Prior to analysis a number of *a priori* themes were identified from the literature as being potentially relevant. These were knowledge acquired, skills acquired, changes in attitudes/beliefs/values, behavioural change in the workplace (transfer of learning), organisational impact, benefits to patients/carers and professional identity. In addition, the role of context in moderating outcomes was recognised.

5.2.2 *INTERVIEWS WITH THREE FIRST BATCH STUDENTS*

To a greater or lesser extent all of these themes were evident in the 3 student interviews (See Appendix 12 for the coding template from the student interviews).

Theme A: Knowledge acquired, emerged as a strong theme underpinning changes in attitudes, beliefs and behaviour change in the work place. 'Knowledge' was frequently referred to as a global concept:

> *'Our knowledge has improved and we understand the importance of other professions'.* S1

Although some specific areas of knowledge are mentioned, these are often common to all rehabilitation professionals:

> *'The terminology, client centred practice, social model of disability, medical
> model of disability, these are very new.'*   S1

> *'Actually not only the therapy…..legal aspect also improving…earlier we didn't
> think about the autonomy or legal aspect of client.'*   S3

Profession specific knowledge featured in this theme and also supported professional identity (Theme G).

Theme B: Skills acquired, also emerged as a strong theme in respect of generic, as well as professional specific skills:

> *'Also, communication skills, because earlier I don't like to talk to
> physiotherapists or other professions, but now I have a lot of confidence.'*   S3

Theme C: Changes in attitudes, beliefs and values is linked to changes in the patient-therapist relationship. Adopting a client centred model of practice can be understood in terms of both knowledge gained and adopting different attitudes and values towards patients.

> *'Earlier we do more medical model, what we think, what we decide, what we
> practice, now we are thinking more about the client …. now we are considering
> more their priority rather than our priority.'*   S3

Theme D: Behavioural change, strongly linked to themes A, B, C and G, was evident in reflections on both professional relationships and patient-therapist relationships.

> *'Actually we can say honestly, the physiotherapy and occupational therapy we
> have some misunderstanding earlier, because we think this is our part, that is
> their part. Now it has all totally disappeared.'*   S1

> *'Earlier I asked patient to do something, to do activities….but I don't have a
> way, I don't know how to benefit the patient, now I know about due to the
> evidence base.'*   S3

Theme E: Organisational change was evident both in respect to behavioural changes towards work colleagues, which could impact on team working throughout the organisation, and also with regard to a specific professional activity, Home Visits (HV), particularly pre-discharge HVs. HVs are a regular part of an OT's role in the UK but were not in Sri Lanka at the start of the degree course. However, it was a course requirement that students develop their knowledge and skills as regards

conducting effective assessment and pre-discharge HVs. Within the hospital where all three of the interviewees were based, HVs have now become accepted practice.

> *'Actually, the Home Visit is important, all are accepting, nothing to say, the consultant, the director all are accepting...'* S1

Theme F: The concept of 'benefit' was broader than patient/carer benefit and included both personal benefit from having done the course and societal benefit. This theme was particularly well articulated by S2 who linked personal benefit to patient and carer benefit, and thus to the benefit of society as a whole. S2 spoke about a particular initiative she was involved in concerning building capacity in special needs teachers in rural Sri Lanka.

> *'My personal supervisor for the research, she ...selected me for that ... programme, she came to know about me as an OT because of the degree course, direct benefit for me also, throughout the whole process, the whole team, the whole of society came to know about OT.'* S2

Theme G: Professional identity was seen in expressions of feeling more confident as a professional but was evident not only in the content of the interview, but also in the positive emotional response of interviewees. The theme of being confident, being able to stand up and say who you are and what you do, and therefore have better working relationships with colleagues, was strong in all three interviews.

> *'After the degree we have more confidence to go forward, to tell I am an occupational therapist, this is my part, I can work with you, and those lot of misunderstanding we push out...actually 'we came out from the cage (laughs).'* S2

All three interviewees worked at the same large physical rehabilitation hospital and therefore significant aspects of the working context were similar across all three interviewees. Contextual factors did not strongly differentiate between these interviewees but it did influence outcomes. The impact of the work context on practice for all three was particularly evident in the development of Home Visits as part of the OT role. It was also a large and very supportive occupational therapy team within the hospital which helped transfer of new skills, e.g. new documentation protocols into practice.

> *'Because in our hospital we are just like sisters and brothers, they every time will help to me and others...just like a family, everything we discuss.'* S3

116

Looking at the data through an RIE lens it is possible to construct CMO configurations which represent hypotheses based on this interview data, for these interviewees, within this working environment, at this point in time.

Figure 16: CMO configuration re improved multi-disciplinary working

CONTEXT	MECHANISM	OUTCOMES
The working environment of the 3 interviewed OTs	Knowledge gained increased competence and changed beliefs about self as an OT.	More effective team working
Supportive OT team	Reasoning about relationships with other professionals changed, enabling choices to be made about working practices	Stronger professional identity Better coordinated patient care

Figure 17: CMO configuration re home visits

CONTEXT	MECHANISM	OUTCOMES
The working environment of the 3 interviewed OTs	Knowledge and skills gained increased competence and changed beliefs about the OT role in Home Visiting.	Home Visiting accepted as part of OT role
Supportive senior clinicians		More patients benefit from pre discharge HVs to establish discharge needs
Supportive senior management	Results of HVs changed beliefs about the importance of this service in both OTs and senior clinicians	
Experience of conducting 10 HVs in order to fulfill course requirements		Stronger professional identity

5.2.3 INTERVIEWS WITH COURSE ARCHITECTS

The aim of the interviews with the course architects was to illuminate initial programme theory. That is, why did the course architects support the development of the course and what did they think such a programme would achieve? However, these course architects also observed outcomes from the course, and therefore, in their interviews their perspective often shifts from pre to post course.

Analysis of these three interviews revealed that the *a priori* themes from the literature had less relevance, with the exception of 'organisational impact' and the broad theme of 'benefits'. The full coding template is in Appendix 13. Potential benefits included benefit to the whole SL health service and society as a whole:

> *'So there needed to be a much greater awareness and acceptance of the need to do things out in the community and in people's homes.'* A1

As well as personal benefit to OTs:

> *'There was a perceived need for supporting …health professionals who had no career pathways that were clearly open to them.'* A1

And to patients:

> *'We would be able to strengthen the OT service so that there would be a better service offered to individuals with mental health issues.'* A1

The introduction of Home Visits was relevant to 'Organisational impact' as well as 'Benefits to patients' as in the student interviews:

> *'Now we have final approval of role of OT with HVs, now practicalities to be finalised.'* A2

> *'The home visits and the community therapy, these things have been initiated as an outcome of this degree course'* A3

Unlike the student interviews, themes on the development of the profession of OT in Sri Lanka, as well as maintaining the profession's status within the professional hierarchy were strong:

> *'The aim was to raise the profile of occupational therapy with the Ministry of Health and to raise the status of the profession with other professions.'* A3

It was recognised that improvements to working practices were also required, and that to facilitate that, it had been necessary to get key figures in the profession on board to support implementation of improvements.

> *'Previously Diploma course produced practical OTs – to do a job, but not evidenced based, reflective practitioners'*   A2

> *'We realised that if we didn't get key figures of the profession fully supportive of the degree programme, that could mean that people who graduated with the degree were not allowed to use what they had learnt to their full capacity, so then that outcome, which we expected from upgrading their skills…would be of no value.'*   A1

There was a recognition of an increase in the capacity of the profession to be involved in teaching OT and supervising OT students after the first batch had graduated:

> *'The fact that we were then able to get the best of the graduates from the first batch back into teaching the second and third batches has really enabled the growth and development of the profession'*   A1

In particular, the proposed development of a new four year entry level degree course in occupational therapy depended on the increased capacity in the profession and was already being identified as an outcome of the post registration degree course:

> *'It definitely is because if we hadn't done the top-up degree….given that OTs are in such small numbers we would have had quite a lot of difficulty in recruiting staff to teach on the course'*   A1

The course architects were involved with the development of the course but also were in a position to experience the impact of the course. Their interviews were able to throw light on the initial programme theory, that is, what the course was expected to achieve as well as what it did achieve. Their interviews were included in the narrative analysis of all stakeholder interviews in Phase 2 and the CMOCs developed from the course architect interviews are presented in Chapter 6.2, Table 12.

5.3 SUMMARY

The aims of Phase 1 were to explore the context, identified needs and initial programme theory underpinning the development of the degree course in occupational therapy, as well as potential emerging CMOCs. Although initial programme theories were largely covert they were able to be accessed through the documentary analysis and interviews with stakeholders.

The process of documentary analysis itself proved valuable as a means of organising and reviewing, through a RIE lens, all existing material pertaining to the course development and progress up to the point of the commencement of the research. This, plus the student and stakeholder interviews, allowed for both initial programme theory and hypotheses concerning emerging CMOCs to be identified, preparing the ground for Phase 2 of the research.

CHAPTER 6: PRESENTATION OF FINDINGS: PHASE 2

Phase 2 findings consist of the analysis of all 17 student interviews (including re-analysis of the three phase 1 student interviews) and the analysis of all 12 stakeholder interviews (including re-analysis of the three phase 1 stakeholder interviews).

6.1 STUDENT INTERVIEWS

As outlined in Chapter 4, these 17 interviews were subject to narrative analysis within an RIE framework. The results are presented by considering each element of the RIE framework, that is: Context, Mechanism and Outcome. The barriers and challenges to transferring training into practice are discussed under both Context and Outcomes as these were evident in the narratives as outcomes which were not realisable, in the main due to contextual constraints. Finally an overview of the key narratives is presented.

Narrative analysis within a RIE framework allowed the story that each student told to remain intact whilst illuminating their stories in the form: Before I started the degree programme this was my situation and how I felt about it (context); when I undertook the degree programme these were my experiences and responses to the educational experience (mechanism); after finishing the degree I can recognise changes in my personal and professional life (outcomes); I would like to be able to do/am unable to do some things (aspirations and unrealised outcomes) but that is not possible because of certain factors (contextual barriers and challenges). The complete story in the form of a CMO configuration could be evidenced in the narratives, often encapsulated within a brief paragraph, and were colour coded as:

Professional Context pre degree course

Response to programme activities: Mechanism

Outcome from degree course

This use of colour coding is illustrated below in an extract from one of the interviews (S2).

'Before the degree course I didn't have any courage to do a presentation... actually...(laughs) to be honest I have to tell... but now I have confidence because of the degree course.... we did lot of presentations, we come to the stage and do the presentation, making the PPTs, actually that electronic skills, that PPT making skills, those things also improving by this course, actually.'

S2

6.1.1 CONTEXT

The cultural context of living and working in Sri Lanka ran through the students' narratives. The influence of context was evident in three main areas of their lives. Firstly, the personal context involved their personal and family life, their aspirations and motivations. Secondly, overlapping with the personal context was their professional context which involved both how they felt about their profession, their professional training, the place of occupational therapy within the hierarchy of healthcare professionals in Sri Lanka and their particular work context. Thirdly, influencing both their personal and professional contexts was the influence of the Sri Lankan culture as a whole.

PERSONAL CONTEXT

Prior to joining the post registration degree course in occupational therapy students described themselves as low in confidence and self esteem, most were highly motivated to improve on their original training and felt that there were no opportunities for them to develop professionally:

> *'We didn't have learning opportunities, we just stagnate in that positions'* S4

> *'We have a hope to get a degree … we are differentiated from others when we don't have a degree, as diploma holders, because of that I get some er, what you call...idea about dignity, mmm ..not dignity....to improve our status.'* S6

They were willing to commit considerable time and money, with impact on their family life in order to pursue the degree course:

> *'There were some practical things actually because we were doing the course while we are continuing our clinical work, and also myself and my wife, ...both were included in the first batch so my looking after my daughter, her educational things and family matters...'* S10

Because of the possible impact on personal and family life some expressed ambivalence about pursuing the course:

> '*What will happen, my spare time I will have to think of the studies... and if I do not have anything positive with this?*'   S15

but there was also the feeling that they were falling behind their social group peers:

> '*Good thing, because that my other friends also, they had degree at that time, so still at that moment I didn't have degree so I wanted that and was very happy to do degree.*'   S16

and that possession of a degree held some status within their family and community:

> '*I wanted to do degree for the ... respect and for my personal improvements, like er...what do you call that...mmm...for reputation, first thing and then for upgrade my knowledge.*'   S7

PROFESSIONAL CONTEXT

Students spoke about their professional context and its influence on their professional practice both before and after they had successfully completed their degree. Students were all institution based and had no or very limited contact with the communities from which their patients came.

Prior to the degree programme

When the degree programme first became available in May 2011, the professional context emerged as a strong motivator for students to apply. Students described considerable professional insecurity. Many felt that their original professional training did not equip them to even articulate what their role as an occupational therapist was. They therefore worked in fear and anxiety that they might be questioned about what they were doing and why:

> '*I felt that, when I am going to explain about OT, I felt some in feared, I was anxious...*'   S6

> '*... I am working as OT in a general hospital, there is no (other) OT in that region, so if I were (when I was) appointed there, even director or paediatrician, they don't know what is the OT, so I tried to explain what is the OT, what is the roles, it is a very difficult thing for me.*'   S14

In addition, they felt professionally insecure as the other main professions supplementary to medicine in Sri Lanka; physiotherapy, speech and language therapy and audiology all had access to degree programmes:

> *'Actually we…the occupational therapists, we are struggling to get a first degree, that all other professions, you know, the physiotherapy and others have one degree from Peradeniya and also at same time they got a degree from Colombo University..'* S1

The relative status of the different health professionals and the importance of improving one's position relative to other professions was also a source of stress and emerged as a powerful motivator:

> *'Always we were comparing our profession with other …professions supplementary to medicine, other PSM categories, so they were actually far away from us, they had developed their things. So… we had an urgent need to start a degree programme.'* S10

In particular, the lack of a degree was a limitation to further academic development:

> *'The validity of my things I am going to say through my articles, presentations, will be very much higher than normal level…I am really [in] need… of an OT degree programme.'* S9

Students reflected on the professional context prior to starting the degree programme, identifying their professional shortcomings and recognising that prior to the degree training they worked primarily as a technique based profession:

> *'Yes, and one thing I have to say, most of the Sri Lankan OTs are not understanding about the models, they have techniques, they have a lot of techniques, they know the work, but they don't have understanding to organise it according to that model.'* S5

They neither worked to any model of occupational therapy, or theoretical framework:

> *'In the diploma course…actually I should be frank, we were not taught about even the frames of references.'* S8

nor were they aware of principles of evidenced based practice:

> *'I was not practising any frames of references, models and some kind of evidence based practice in our day to day practice at that time.'* S10

For some students, the experience of working with OTs from other initiatives within VSO's mental health programme opened their eyes to the gaps in their knowledge:

> *I identified the difference between me and …. because of [their] work experience and… the degree programme of occupational therapy, because…we got little bit of knowledge of occupational therapy from Diploma, then I identified that's a big gap between the degree and diploma'*   S12

In the absence of any alternative frames of reference or models of occupational therapy, the biomedical frame of reference, also known as the medical model, took precedence:

> *'That is why we are telling that earlier we do more medical model, what we think, what we decide, what we practice.'*   S2

> *'Some OTs as well are thinking in the medical model, very very difficult, so they can't use frameworks then, they can't use models they are very medicalised… so then we can't lift our profession, that's where the problem comes in defining our profession.'*   S5

The main motivation to undertake a degree course from the professional context was an overwhelming feeling of insecurity. A poor understanding of the professional role they were trained for, plus an unease as regards the proficiency and relative status of other professions, led to the belief that the profession needed a degree. There were few references to their expectations of what a degree could offer to patient care at this point in time and they struggled to elaborate beyond 'better service':

> *'First I wanted to polish myself, I want to upgrade myself academically… and second one, to give more good practice and give better service to the clients, that's why, those are the two reasons I choose to do this course.'*   S5

There is a strong thread in the narratives that as a profession, the occupational therapists knew that there were short comings in their training and practice, but they did not know what they did not know, and because of this could not predict what impact having a degree would have on patient care:

> *'I was a professional person… because of that thing I had an urgency of need to start a degree programme, so we worked on that thing… I didn't know … the real education benefit of the degree, because we just had a qualification of diploma.'*   S10

After attaining their degree

All occupational therapists in Sri Lanka work within the health service and report ultimately to medical directors. This tended to reinforce a biomedical approach to care before the students had studied at degree level. However, despite this strong hierarchical arrangement many students reported that within their work context, both before and after they had attained their degree they were relatively free to provide whatever therapy they deemed suitable for the patient, as long as it produced the desired results:

> *'Freely decide I can, because the consultant [has] referred patient and says 'do the needful' which denotes I am very free to organise my treatment plan.'* S9

> *'We do the assessment and we plan the treatment and we don't do what we don't want.'* S7

This working environment had the effect that innovations in practice learnt during the degree programme could potentially be implemented without comment or restriction from other staff. Barriers to transfer of learning came generally not directly from other staff or medical directors, but by staff shortages and/or heavy caseloads within the occupational therapy team, perceived by occupational therapists themselves:

> *'When I am using the COPM, it takes too much time, so I can't spend that much time for a single patient, still I doing the assessment that I find what he needs and doing that, set my goals...'* S8

A key aspiration of the degree programme was services becoming more community focused. However, changes in practice that would potentially take occupational therapists out of the hospital setting, in particular home visiting, were affected by a number of contextual factors such as caseloads, number of staff within the occupational therapy team, resources such as vehicles and in some cases the attitudes of medical staff. The three students interviewed in Phase 1 all worked in the same hospital. The relatively large team of occupational therapists in that hospital plus the support of both senior occupational therapists and senior consultants meant that home visiting was accepted fairly quickly as an appropriate extension of the role of the occupational therapists in that work context (see Chapter 5.2.2 and Figure 17).

Some students from other work contexts were also able to develop their role in community settings:

> *'Yea, nowadays every Wednesday, I did community practice for Home Visiting, with supporting social service department.'* S14

But others struggled to find the resources within their services to enable them to conduct home visits despite the recognition that this would enable better rehabilitation:

> *'Because there are only two OTs in my department so I couldn't do any HVs still, but when I get more OTs I can start that also.'* S8

> *'Yes definitely, because most of these people are partly rehabilitated, not fully, at the time they are discharged...[but] because of the facilities, the transport, the expenses, those are not being provided by the ministry so that is some shortage.'* S9

> *'Dr ... is also asking to do some community work, but there's a problem, because here we are treating of patients, and another thing is, there is no official support to do those things.'* S12

In S12's situation, her consultant was very keen for her to do community work but her own assessment of her workload plus the fact, as also in the case of S9, that there was no system to support working outside of the hospital meant that it remained a challenge to implement. Not all consultants however supported community work and home visiting:

> *'Now I realise the patients who come to my department, it is very beneficial if I could do a HV with them but still I couldn't arrange it with my consultant as he is not allowing me to do such a thing.'* S8

SRI LANKAN CONTEXT

The wider context of the students' family and the community context in Sri Lanka occasionally emerged in the narratives. Students felt that just as they had struggled to understand their own profession, it was also difficult to explain to family and friends and this, partnered with the lack of an undergraduate degree, lowered their status. Words such as 'respect and 'dignity' were frequently used when describing their personal aspirations to have a degree and this respect was anticipated in a context beyond the purely professional.

The capacity of the state university system in Sri Lanka is limited and it is estimated that not more than 20% of the 140,000 students who qualify for university education are able to gain a place (Board of Investment of Sri Lanka, 2016). Not surprisingly, achieving an undergraduate degree is highly prized and confers status on degree holders.

6.1.2 MECHANISMS

In a social programme like the post registration degree programme RIE understands mechanisms as the participants' responses to the programme activities. Dalkin (2015) emphasised that all programme activities take place within a context and contexts influence participants' responses. These responses are often hidden, involving changes in attitudes, reasoning and values which subsequently influence behaviours and choices. Attree (2006) noted that finding clear evidence of attribution of the role of programme activities in facilitating outcomes in healthcare education was particularly difficult to establish. Examining the narrative links between context, mechanisms and outcomes could potentially support a conclusion that certain outcomes are attributable to the degree programme.

Although RIE discriminates between programme activities and the response to programme activities, students did not clearly make this differentiation. Often the response to particular programme activities had to be inferred from the context of the narrative. Students often spoke of particular course activities but did not always explicitly articulate their response to them. However, by maintaining the narrative intact during the analysis, the causal chain of events from context, through response to programme activities (mechanism), through to outcomes could often be identified, revealing subtle indications of attribution. Key connecting phrases within the flow of the narrative indicate that events were consequential, for example; 'earlier', 'but now' 'when we compare' and support attribution of the changes in practice to the degree programme. Mechanisms cannot be identified without reference to context and outcomes therefore in this section there is necessarily some overlap with 6.1.1 (Context) and 6.1.3 (Outcomes).

The following extract is coded to indicate the key words that reference previous practice (context) and link changes in practice (outcomes) to the student's response to the degree programme (mechanism):

'Personally I believe we are very high knowledge wise, because we got the degree, and all the new things are taught from our degree courses so even the health promotion, health education, the client centred practice…attitude I changed a lot actually, you can say that earlier, you know that when the client [came] in, we [were] expecting that he has to do what I say, because we know that, but now you know, even though we know the medical part, everything the client know better than us, we just direct, that's all, so they are demanding, their expectation is very much high, I never tell 'you do this' , I am listening what they say…I try and get what they want, that's the thing.'   S1

NEW KNOWLEDGE AND SKILLS

Many aspects of the course curriculum were mentioned as beneficial to clinical practice. Similar to the end of course evaluation, specific occupational therapy content, particularly occupational therapy models of practice emerged strongly from the narratives, in addition to course content which explored the philosophy and value base of occupational therapy. This occupational therapy specific content appeared to change students' beliefs in themselves as occupational therapists, in terms of both attitudes and competencies. They learnt for the first time what occupational therapy is and what occupational therapists do. A number of models and frameworks of occupational therapy were mentioned by name and these seemed to have made the most impact on the clinical reasoning of the students. These were the Canadian Model of Occupational Performance Model (CMOP), the Model of Human Occupation (MOHO), the cognitive behavioural frame of reference and the biopsychosocial frame of reference. These frameworks offered a theoretical perspective to practice but also offered specific assessment tools that could be used in practice such as the Canadian Occupational Performance Measure (COPM), the Stress Vulnerability Model, the Five Areas assessment, the Traffic Lights Recovery Plan and a whole suite of MOHO assessments.

'Techniques…we learnt techniques in the Diploma , but to organise it according to the model, and practising it, that's what we learnt from the Bachelor's degree'   S5

'I learnt that Model of Human Occupation, in this degree, that was most helpful in helping me to assess the patient'   S6

Having the opportunity to learn to use and practice internationally accepted assessment tools was valued. In particular, having hard copies of these assessments, which they could take to their work place, enabled transfer into clinical practice.

The students' experience of the research module in the curriculum, an understanding of evidence based practice and the experience of conducting their own research also acted as a mechanism, changing their clinical reasoning.

> *'I got the idea of how to do the research and how we can apply the outcome of that research with our patients and caregivers.'* S12

> *'It opens new ways for us, especially evidence based practice, and I like very much reflective practice, and still I am learning those things with my clients, not only clients, but with my personal life too, and the research.'* S4

For some, the mechanism of response to the research module can only be inferred from the narrative illustrating experiences before and after.

> *'My personal experience, earlier the foreign professionals come... and they give the workshops... and do the presentations and everything...the 'p' values, the scores and everything! ... Really I saw workshop for stroke rehabilitation, and they publish... the whole presentation, the 'p' values, I don't know totally! I find something from the conclusion, that is all...recent past, last two months back I had a workshop, and they give the 'p' values and now I clearly know what they are telling, totally understand, there are a lot of personal improvement.'* S1

Occupational therapists are equally trained in the mental health and physical fields. The frameworks and assessments mentioned above can be used within all areas of practice, although some may be more usually applied in the physical milieu and some in the mental health milieu. However, for those students who worked in neurological and teaching settings, exposure to the theory and practice of a specific therapeutic approach, Constrained Induced Movement Therapy (CIMT) for stroke rehabilitation, was particularly influential in terms of reported transfer into practice.

'THE HIDDEN CURRICULUM'

As in Phase 1, students spoke of the impact of learning generic professional skills and behaviours which were not in fact part of the course curriculum, nor identified as anticipated outcomes in any strategy documents or curriculum learning outcomes.

'We learnt lot of things…. actually not only the lectures ….we learnt lot of other tough things because of your professional standards… actually during my degree learning, I had opportunities regarding improvement of my professional theories, principles and things, as well as a lot of things for my life.'   S4

'During the degree course actually I learnt there is a hidden curriculum, I felt I learn a lot of things and I try to apply these things to teach the students, one thing is 'The Ground Rules', yes, and the Transfer of Skills also and the punctuality, and the discipline… actually they come from the hidden curriculum I thought.'   S13

What became clearer in Phase 2 is that the lecturers on the course acted as role models in terms of their own attitudes, beliefs and professional behaviour. The style of teaching was also very different to what students had previously experienced, giving them opportunities to work cooperatively together, study online, research topics online, take some responsibility for their own learning and present to each other. This appeared to change their reasoning as regards professional development and professional behaviour leading to increased confidence and self esteem which supported their professional practice.

A NEW PERSPECTIVE ON THE COMMUNITY

As part of the degree course each student was required to spend one month in a community setting which had not previously had access to the services of an occupational therapist. In addition they were required to conduct 10 home visits to assess a patient's functioning within the home environment. The home visits could be conducted from the community placement or their usual place of work. Analysis of all 17 student interviews supports the findings of the Phase 1 student interviews and the documentary analysis with regard to the impact of the community experience and home visits (see Figure 13). Most of the students, despite many years of experience within hospital settings had no experience of working with either mental or physical disabilities in the community and had never visited a patient in their home environment

'In my experience I had only hospital and institution experience only, because we don't do community placements, no?'   S7

Due to the lack of any previous experience in home visiting, a resource pack was prepared to support the students practice. Similarly to the assessment resources, this resource pack facilitated transfer of skills into practice.

'Home Visits...that was really, really, good because it is one of the core areas in OT which we don't practice in Sri Lanka, because we didn't have that much of knowledge, like what to assess and how to assess. We were taught how to do a proper Home Visit with validated assessments...yes that Home Visit manual and checklist was really important because in my private practice I visit homes.'   S17

S17 was not the only student to refer to the impact of such resources being useful to private practice which is commonly undertaken by occupational therapists in Sri Lanka even if it was not possible to transfer the practice into their role within the health service.

'I had no any idea about the community... when I started my degree I had been working here for 11 years and had never done a Home Visit only I was in a department, I have never gone out from there, just doing the treatment part, [not] any rehabilitation, but with this community placement I get some knowledge about the HVs also and it gave me a real good sense about the communities and what I should say... because there are only two OTs in my department so I couldn't do any HVs still, but when I get more OTs I can start that also.'   S8

The above two extracts illustrate complete CMO configurations within the narrative from which the mechanism can be identified. In the case of S8, the influence of context in moderating outcomes is clear. The potential outcome of actually doing more home visiting and community work is not realised due to staff shortages. However, the experience of working in a community setting opened the students' eyes both to the level of disability in the community and the potential role that occupational therapists could play within people's own homes and community.

'Actually we learn from the degree course, we able to move to the community we can do lot as OTs, that's the thing.'   S13

CHANGES IN ATTITUDE AND BELIEFS

The first colour coded extract from S1's interview in section 6.1.2 above, indicates a change of attitude towards client centred practice. Crucially, the use of 'earlier' to indicate past practice and 'but now' to indicate current practice demonstrates a change in practice over time (i.e. an outcome) which is attributed to having completed the degree course. An understanding, developed through participation

in the degree programme, of the rights of service users and the benefits of client centred practice emerged as key influences on changes in attitudes towards the relationship between therapist and patient.

> *'That is why we are telling that earlier we do more medical model, what we think, what we decide, what we practice, now we are thinking more about the client and we are trying to practice with the evidence, and also now we are considering more their priority rather than our priority'*   S2

The change in attitude then supported changes in behaviour towards patients and as evidenced above, a move away from believing that the medical model was the only available model of practice.

Changes in attitude and belief were especially evident in terms of how students viewed both themselves as occupational therapists and the potential role of occupational therapists in their communities. Their responses to course content as discussed above changed their views of themselves as occupational therapists and in particular supported an increase in self belief and self confidence. Their responses to the experience of working in a community setting for one month changed their beliefs about their own efficacy in community settings and the nature of disability in the community.

6.1.3 OUTCOMES

The impact of the post registration degree programme on students' professional lives and professional practice can be seen in three main areas; personal, professional and societal. Students themselves, in their narratives, often referred to outcomes as 'benefits' and distinguished between personal benefits, professional benefits and wider benefits to patients, students and the wider society. However, it was also clear that these benefits overlapped with each other and were not mutually exclusive, for example an improvement in self-belief had impact both in their personal and professional lives.

The relationship between context and outcome emerged as a cyclical process, each informing the other. This was particularly evident in regard to two issues which impacted on the experience of the students in their workplace, becoming a graduate and becoming a confident practitioner.

BECOMING A GRADUATE

The health professional landscape in Sri Lanka is very hierarchical. Maintaining or improving one's position within this landscape is very important and a degree qualification is associated with increased status. It emerged that gaining a degree, which was clearly an outcome of the programme, was also operating within the work context. Once they became known as professionals with a degree in the workplace, the context of the work place changed for them and their colleagues. Within the workplace, the knowledge of the students' degree status changed the reasoning of their colleagues, which acted as a mechanism, the outcome of which was a change in the attitudes and then the behaviour of work colleagues towards the students.

> *'Yes, that's a real change, when they are introducing, they are introducing me as 'she is a B.Sc. degree holder', very appreciating that.'* S6

> *'Dr---------- she is the person who selected me for that study programme, she came to know about me as an occupational therapist because of the degree course.'* S2

Becoming a graduate conferred both personal and professional benefits. As well as the status and respect which came with being a degree holder, the possession of a degree in occupational therapy opened opportunities for further development. Some of these opportunities were at the workplace level where the new graduates found that their professional opinions had more value, they were given more respect in the multidisciplinary team and were more likely to be asked to take part in planning and policy meetings. Many of the students had become involved in training other professionals in the workplace since graduating.

> *'Now teaching medical students, 4 hours per group on role of occupational therapists, explaining model of practice, CMOP, OT skills, relaxation, anxiety management, anger management, behaviour therapy programmes.'* S5

Many opportunities are, on the whole, not available to non-graduates such as post graduate degrees and scholarship programmes. The degree, plus their increased professional confidence meant that opportunities were applied for that would previously have been seen as out of reach. As of April 2018, seven of the students

interviewed have between them gained a range of opportunities: two are studying for research degrees, two have been awarded scholarships for short periods of study abroad, one has had the opportunity to work on a Sri Lankan research project, two have served as the degree course coordinator and six have become regular lecturers on the post registration B.Sc. Occupational Therapy programme for the 2nd and 3rd batches whilst three are lecturers on the Diploma in Occupational Therapy programme:

> *'Because of degree programme learning I received visiting lecturer post and I delivered my knowledge and my practice and my experience to my colleagues.'*

> S4

BECOMING A CONFIDENT PRACTITIONER

Being accepted onto the degree programme and the process of engagement with the course content activated mechanisms such as the students' increased beliefs in their own abilities and the development of an understanding of oneself as an occupational therapist. They became more confident in their professional knowledge and had greater self esteem. This impacted on how they conducted themselves in their workplace. In particular, as well as being more confident professionals, they could articulate what their role as an occupational therapist was:

> *'In past, if asked, what are you doing? What theories? I couldn't do a proper answer for them, but now I know if I use some theory, I can say according to this framework or this theory we do this, and can do this thing according to that framework.'* S7

These outcomes also generated change within the working environment. Attitudes towards occupational therapy changed, as did the relationship between the occupational therapists and their colleagues, leading to both an increase in opportunities offered and accepted. This is articulated by S9:

> *'Yes definitely, it created a difference in my life, in my professional life because my confidence within my professional practice is enhanced, due to my OT degree programme, because that nowadays I am not reluctant to participate in any sort of occasion, educational session or presentation or participating as a resource person or such kind of thing. I volunteer to participate and that confidence has been built in with my career.'* S9

'Yes , they understand and the referrals for the OT are increased due to that...they have told me: actually we thought that OT is things like that, but now we understand, after my presentations also, most of them told, we understood what is OT, actually attitude has changed.' S6

Being clearer about their role led to improvements with regards to insecurity at work. These insecurities had previously led to professional rivalry and poor relations within the MDT. Being secure about their role supported better MDT working:

'We [were] scared about the others, but now we clearly know where we are about our profession and about our identity, and there is nothing to hide, that's all, it is simple!' S1

'Now I know it is not only my duties, it is the team work, that is the main point I learnt from the degree programme is team work, when I am working in a MDT.' S3

As well as becoming more confident in the workplace and being able to articulate their role more effectively they also became more confident in applying specific occupational therapy skills, transferring knowledge and skills into practice. Students referred to specific occupational therapy models of practice and improvements in assessment:

'Now I am using MOHO, by using MOHO I can explain about OT very well to other persons who don't know about OT. I use that, I use presentations, I prepare presentations using MOHO.' S6

'Yes, earlier it was a mess; we don't know how to approach, what's the problem ..... we identify the problem but it was not specific, now specifically we can understand what is the error, in our performance, the skill or the environment.' S5

As emerged in the Phase 1 analysis, the new theoretical knowledge supported a new confidence in being an occupational therapist and a stronger professional identity:

'Main change we got, how we apply the theory, knowledge, OT theory into practice... and the second thing... attitudes, I mean how OTs should work independently as a profession... what is identity of occupational therapist, that

*identity I think we got, we developed that identity through the degree course, …
I mean I felt we were practising a medical model in mental health, so we were
doing different things, different interventions, but degree programme put all
these things nicely into an OT frame, the degree course brought a new identity,
a real identity for Sri Lankan occupational therapy and new understanding.'*

<div align="right">S10</div>

Not only did students have a stronger professional identity but they were proud of
that identity:

*'Actually I am proud about being an occupational therapist…I am thinking
when the patient comes to me I can assess the patient, all the aspects, and I
can decide how I can help the patient, for me, as an occupational therapist, I
am happy.'*

<div align="right">S6</div>

'THE HIDDEN CURRICULUM'

In Phase 1, there was a strong theme of the importance of learning generic
knowledge and skills. In Phase 2 this was described by one student as 'the hidden
curriculum' and the full impact of this aspect of the course on students' reasoning
became more apparent. However, the hidden curriculum also impacted on skills.
Students felt more secure in their professional identity and in their profession
specific skills but additionally they felt they had the skills to communicate these
things to their colleagues. The importance of communication skills, problem
solving skills, presentation skills, decision making skills and personal stress
management skills all featured in their narratives as improving their personal and
professional life.

*'All of us, whether we work in the health service or we work in teaching or in
industry, everyone has their own life stresses, and our own vulnerabilities, we
can help patients see that but we can help ourselves see that as well.'*

<div align="right">S13</div>

*'I learnt to do work up to date actually, and I improved my language skills and I
improved my presentation skills and I was able to speak with people in front of
me with confidence, after my degree learning'*

<div align="right">S4</div>

In particular, the ability to present in front of an audience was a significant
achievement mentioned in most of the interviews. During the course the students
had regularly presented to each other as part of the assessment strategy. This was

completely new to them and most had never produced a PowerPoint before, but they gained confidence throughout the course.

> *'Before the degree course I didn't have any courage to do a presentation... actually...(laughs) to be honest I have to tell, at that time I have hesitations to do a presentation, but now I have confidence because of the degree course, we did lot of presentation in front of the crowd....we come to the stage and do the presentation, making the PPTs, actually that electronic skills, that PPT making skills, those things also improving by this course.'*   S2

6.2 STAKEHOLDER INTERVIEWS

The stakeholders belonged to three distinct groups; course architects, medical stakeholders and community stakeholders. These three groups had different relationships to the student group and the degree programme. None were directly in receipt of the degree programme activities, but, in different ways were in a position to reflect on whether the degree programme had made a difference and what those differences might be. Identified mechanisms for the stakeholders do not reflect their response to the programme activities themselves, but their response to their perceptions of the impact of the programme activities on the students' attitudes and behaviours. The medical stakeholders were well placed to comment on the difference the degree programme had on the students' clinical practice having worked with them before, during and after the degree programme.

6.2.1 COURSE ARCHITECT STAKEHOLDERS

The course architects were interviewed in Phase 1 and the interviews were analysed thematically. The three main themes were that of 'benefit', to OTs, patients, the health service and Sri Lankan society; 'development of the OT profession' and 'organisational impact' (see Table 12). As with the three student interviews which were also analysed thematically in Phase 1, themes tended to be outcome based. These interviews were re-analysed within an RIE framework in order to give more attention to context and mechanism and establish CMOCs. With this narrative analysis it became clearer that the course architects discriminated between context pre and post the degree programme and also between anticipated and observed outcomes. Before the degree course, mechanisms reflect the reasonings and beliefs in response to the prevailing context and the perceived need for the degree

programme. After the graduation of the first batch mechanisms were related to perceptions of differences the degree programme had made and therefore are more clearly a response to programme activities. Table 12 gives an overview of the key relationships between context, mechanism and outcome for the course architect interviews.

Table 12: Course Architects: CMOCs

CONTEXT PRE COURSE	MECHANISM PRE COURSE	ANTICIPATED OUTCOMES
No career pathway for OTs Degree course for Speech and Language Therapists Efforts from SLAOT to gain support for degree Recognition that mental health component of OT diploma was deficient Recognition that diploma produced practical OTs but not evidence based OTs	Belief that offering a degree programme will upgrade professional practice particularly in regard to mental health and the community. Reasoning that a degree in OT would be appropriate for a Department of Disability Studies Belief that this was fulfilling a national need	Raise profile of OT in mental health Raise status of profession with regard to other professionals Better services for the mentally ill Increase community and home based practice Upgrading knowledge and skills e.g. EBP, cardiac rehabilitation Career path for OTs
CONTEXT POST COURSE Success of degree programme in producing graduate OTs Expansion of Dept of Disability Studies at Kelaniya University Improved status of graduates in workplace Beginnings of career paths for OTs	**MECHANISMS POST COURSE** Students' research projects support need for home visits and change perceptions of OTs role OTs showing confidence in new areas, HVs, EBP, MDT work, teaching, which changes reasoning about OTs competencies Belief in sustainability of education of OTs to degree level	**OUTCOMES OBSERVED/EXPERIENCED** Increased teaching capacity in the profession Development of a 4 year A level entry OT degree course on basis of teaching capacity Home Visits approval given from some managers Client centred practice, EBP New assessment processes 1st batch students supporting OTs to join 2nd batch degree programme.

6.2.2 MEDICAL STAKEHOLDERS

The five medical stakeholders came from a variety of settings. These ranged from small provincial hospitals to large regional facilities and included physical and mental health services. All of the interviewed stakeholders were directly involved with the clinical management of one or more of the student OTs.

CONTEXT, MECHANISMS AND OUTCOMES

The five medical stakeholders worked in a variety of settings from large regional hospitals to small rural hospitals. Two worked in mixed physical and mental health settings, two from mental health settings and one from a physical rehabilitation setting. All had working relationships with one or more of the interviewed students. They expressed a variety of attitudes and beliefs with regard to perceived capabilities of occupational therapists prior to the degree programme. These ranged from very positive in terms of their ability to take part in a degree programme to some mistrust about role development for occupational therapists. Some attitudes within this group reflected the hierarchical relationships within the healthcare professions with some medical stakeholders appearing to lay claim to leadership positions with regard to the development of occupational therapists.

However, there was a consensus within the medical stakeholder group regarding recognition of the poor quality training available for many health professionals in Sri Lanka, including occupational therapists, particularly in mental health services.

> *'Those working in the department, working as OTs, or social workers, or counsellors. They lack training, the training is insufficient.'*   M2

It was also acknowledged that Sri Lanka was a challenging environment in which to introduce any change to health services due to centralised control from the Ministry of Health and this also, was particularly true for mental health services. It was recognised that services were institutionally based and there was little support for community work despite there being a need to move to more community based services.

> *'There are psychiatrists working in the community and large no of clinics ... and the importance of you to work in the community scores very high, even in Sri Lanka.'*   M1

The identified mechanisms were all from the perspective of the medical stakeholders. Similar to the course architects, they reflected their perceptions of what might influence expected and observed outcomes for the OTs taking part in the degree programme. The outcomes identified by the medical stakeholders included outcomes experienced by themselves, outcomes observed in regard to patients and outcomes observed in regard to the practice of occupational therapists. As seen in the students' interviews, the actual gaining of a degree operated as an outcome which subsequently changed the work context, influencing mechanisms within colleagues by which other outcomes were achieved. The medical stakeholders also expressed personal aspirational outcomes with regard to the education of OTs. They are classified as outcomes as they spring from their experience of working with OTs who had gained their degree. Table 13 gives an overview of the CMOCs developed from the medical stakeholders' interviews. Mechanisms are numbered in order to illustrate which mechanisms influenced which outcomes.

6.2.3 COMMUNITY STAKEHOLDERS

Four community stakeholders were interviewed. Two were senior managers within non-governmental organisations providing services to disabled people within the community, one was a senior manager within a community social services department and one was a doctor who acted as the medical director in a community based alcohol and drug addiction service. As part of the degree programme students spent one month within community services and all four of these stakeholders had had a student placed with them. None of the stakeholders had any prior experience of working with OTs in their respective community services. However, one of the medical stakeholders (M2) held two roles, one of which was within hospital based psychiatric services and the other as a community psychiatrist. Within the community role M2 also had experience of a student on placement, and although familiar with OTs in the hospital had never previously worked with an OT in the community. Therefore there were parts of the interview with M2, which were also relevant to the community stakeholder analysis.

Table 13: Medical Stakeholders: CMOCs

CONTEXT
Poor quality training for health professionals apart from medicine Challenging climate for introducing change especially in mental health Little support for community work Services institutionally based

MECHANISMS
1. Influence of a 'paper qualification'. The status of having a degree. (expected and observed) *'degree would give them huge support…. that will also improve, more than their skills, their day to day confidence'* M1 **2.** Experience of community practice in changing perceptions and changing practice (observed) **3.** Development of research awareness enabling evidence based practice (expected and observed) **4.** Stronger theoretical grounding in occupational therapy enabling improved clinical reasoning (expected and observed)

OUTCOMES
Gaining a degree gives status and credibility (**1**) Potential to do research and study for Masters and Ph D qualifications (**1** and **3**) Development of speciality of OT, bridging gap between OTs and medical specialities (**1,3** and 4) Improved skills in home based rehabilitation (**2**, **3** and **4**) *'Yes how to create an enabling environment for them…so those things (she/he) has done'* M2 Improved documentation (**4** and **5**) Medical stakeholders having better understanding of role of occupational therapists in the hospital and the community and how this could make a difference to rehabilitation outcomes   (**1,2,3** and **4**) *'Because even I also used to think that they were mainly concerned around, you know, only work and vocational things, so I mainly came to know that is the social skills and communication skills, high EE, were done by them, and that is a good thing'* M2 **ASPIRATIONAL OUTCOMES:** To be more academically involved in the degree programme. To be consulted about content and to receive more feedback from the programme. *'I believe it is a very good thing…and I would like to be involved more academically with this degree programme'* M5 For OTs to be more involved in the community and be supported by the Ministry of Health to do so.

Table 14: Community Stakeholders: CMOCs

CONTEXT
No previous experience of working with OTs
Perception of OTs as activity therapists in institutions
Working within CBR framework but few resources
MECHANISMS
Seeing the impact of an OT in their service
Staff exposed to work of OTs and developed understanding of role of OT
OTs and community staff sharing experiences and appreciate each other's roles
Observed recovery principles in action
OUTCOMES
Observed benefits to service users and staff whilst OT with organisation, 3 roles identified: *'Direct OT input to* service users*, training [staff] and support workers to undertake simple OT interventions, family education to undertake simple OT interventions'*   C2   Changed attitude and beliefs towards OTs role. Understanding benefit of having an OT   *'Yes… there was a change in his attitudes and understanding that's the main thing actually, he believes [believed] that OTs are just doing activities…, in the hospital, but he understood that more than that, they can work in people's lives.'*   C3 (translated)   *'50% of our treatment time spent on improving their personal well being, so in that sense, availability of an OT throughout the period is very beneficial because they are competent and capable in improving that'*   C4   Contact maintained after placement improving care pathways and referrals.   *'Now…whenever he meets somebody that needs the help, like the services, now he knows to contact ….'*   C1 (translated)   *'When they started this project as a community placement, people get more chances to meet them (OTs) and get the services. He is saying this is the best service, through this programme, everything has changed'*   C1 (translated)   *'The mutual relationship that we have developed … I think this relationship will run in the future as well, so then in the future we will have a good bonding relationship with them, that will be a mutually helpful partnership'*   C3

CONTEXT, MECHANISMS AND OUTCOMES

The contextual influences on the four community stakeholders had many

similarities. As none had prior experience of OTs working within the community

their understanding of occupational therapy concerned providing activities in

hospital and/or running vocational activities. The WHO framework of community based rehabilitation was important to these community based organisations who were, on the whole, working in communities with high levels of poverty and disability.

Identified mechanisms were from the perspective of the community stakeholders. They represent the stakeholders' responses and experiences of this particular aspect of the degree programme. The requirement of the students to be placed in a community setting, meant that the community stakeholders experienced observing and working alongside an OT in their own setting. Outcomes expressed centred on a changed understanding of the role of occupational therapy and the development of relationships between OTs and the community placement. The experience of working within a community setting had an impact on both the community staff and the students. This shared experience changed attitudes on both sides.

There was a high degree of concordance of both mechanism and observed outcomes within the community stakeholder interviews. A number of related mechanisms underpinned all observed outcomes rather than specific mechanisms affecting specific outcomes. The identified CMOCs are shown in Table 14.

6.3 SUMMARY

Phase 2 was the main data collection phase of the research the aim of which was to identify the outcomes of the course in terms of CMOCs. The use of a narrative analysis within an RIE framework proved effective in illuminating the causal pathways of reported outcomes, allowing the interrelationships between CMOCs to become more apparent. Reported outcomes had impacts on professional, personal and societal contexts. This in turn facilitated new mechanisms, not only in the students themselves, but also in their work colleagues, which generated further outcomes. A number of key capabilities were identified as outcomes from the student interviewers and these were supported by interviews from both the medical and community stakeholders. These findings were then taken into Phase 3 of the research.

CHAPTER 7: PRESENTATION OF FINDINGS: PHASE 3

Phase 3 involved three member checking groups and a study of the degree course registers in order to ascertain the number of teaching hours contributed by Sri Lankan born and educated occupational therapists.

7.1 MEMBER CHECKING GROUPS

Three member checking groups were conducted as outlined in Chapter 4.6.5. The prepared document presented to the member checking groups which provided an overview of RIE is in Appendix 14. The prepared document which gave an overview of the CMOCs from all the student interviews is presented in Table 15 with the contributions from the students who participated in the member checking groups in italics.

Students demonstrated understanding and interest in the outlined CMOCs and expressed ownership of the configurations which had emerged from the analysis of their interviews.

>*'I actually totally agree with the context, mechanism and the outcome.'* S13

Students made reference to the fact that outcomes had not stood still since they were first interviewed. In particular, they were able to reflect that the context in which they lived and worked was changing, due to their own experiences on the degree programme and development of confidence in their own working practices.

>*'I think now that, when we think about these three categories, the context, mechanism and outcomes, now we are going more towards the outcomes, that most of contextual problems are now getting solved with our experiences and [now] we are taking that theory into practice...... that mechanism also very clearly understood by, I think, we all, that means... immediately just after the degree, we are degree holders [but] still at that time we had some er...anxiety...what we are going to do, could we do it?... but then we are thinking about how we are putting those things to the outcome, now I think the outcomes are now visible.'* S2

Students contributed to the CMOCs presented by adding rich detail particularly in two areas: the specific aspects of the 'Hidden Curriculum' which they had found

helpful to practice and outcomes relating to capacity building of the profession in relation to teaching and student supervision.

Aspects of the 'Hidden Curriculum' which were endorsed by the groups were the importance to them of having learnt a number of personal skills such as problem solving skills, time management, decision making skills and stress management skills. In addition, the actual delivery of the course gave them access to a number of professional role models and opportunities to discover online learning, self directed study, group project work and individual and group presentations, all of which were completely new to them.

In terms of development of the profession as a whole, the opportunities afforded to the 1st batch students such as access to higher degrees and teaching opportunities have been identified in Chapter 6.1.3. However, students expanded on the impact of these opportunities which had become clearer since the original interviews. Many students had teaching posts or visiting lecturer contracts both on the B.Sc. programme and the diploma course which is still running. Not only were more 1st batch students engaged in teaching but they were clear that they were teaching better than the teaching they had received as diploma students. They felt that the degree programme had equipped them to teach both on subsequent presentations of the B.Sc. programme as well as improve the quality of teaching and content of the diploma course. In addition, all 1st batch graduates act as clinical supervisors when occupational therapy students are on placement so they were increasingly able, as a group, to consolidate key learning outcomes for both degree and diploma students.

> *'I think another outcome is quality of teaching for the students, especially from the people who were in the first batch…..(we) do more supervision and direct teaching and the quality of teaching has improved…in my case..I was coming to the school I prepared my notes and presentations and everything, this I did not receive in previous times [comparing own experience as a student] but I prepared myself from the beginning and I have taught 3 batches now, second batch I updated.'* S11

Closely related to the perception of improved teaching quality was the reported increased interest within the profession of conducting research. Similar to the reported increase in both the amount and quality of teaching since the original individual interviews, students at the member checking groups felt that there had

also been a growth in research awareness both within the first batch and the second batch who graduated two years later:

> *'One thing I have seen, the first batch students and the second batch students after having completed the degree, they are more interested in doing research again. Everyone is discussing, can we do another research? Like that...so that is a great thing, earlier we didn't have any idea...'* S8

The dynamic explored in Chapter 6.1.3, in which the outcome of having a degree changed their working context, which in turn facilitated a mechanism in the minds of their colleagues, changing their colleagues' attitudes and behaviours was recognised by at least one student in the group.

> *'I don't know whether it is fits into the mechanism or outcome, people who are dealing with us, like other members in our MDT, they are having somewhat...mmm...how I can tell that... somewhat different response.'* S2

The work based outcomes as a result of being a degree holder were further expanded upon in the member checking groups. Again, this was in part a reflection of progress since the individual interviews had been conducted. It was generally acknowledged that they were more likely to be asked for a professional opinion and when given, their opinions were more respected within the MDT meetings. In addition they were more likely to be asked to contribute to wider policy making initiatives, including being involved in developing a new curriculum for a four year, entry level, B.Sc. in occupational therapy.

> *'And in addition we can enter little by little into policy making, because we are supporting the curriculum, offer our opinions about the degree.'* S4

> *'We gain more opportunities to offer ideas and our opinion, earlier we did not have opportunities.'* S3

Given the documents in front of them it was easy for students to simply agree with what was written. I therefore asked each member of each group to identify the outcome that was of most value to them. The responses overwhelmingly were concerned with professional identity, confidence, self-esteem and being able to explain and justify one's practice. These concepts were strongly interrelated and underpinning them was knowledge of evidence based practice.

Table 15: Overview of the research study CMOCs plus member checking responses

CONTEXT	MECHANISM	OUTCOMES Post course
Personal context pre course: Low confidence in self as an OT: anxious, fearful No opportunities for development Desire to upgrade knowledge and give better service to clients Desire for improved status and self respect Motivation to study Commitment of time and money	1.Motivation 2.Learnt what occupational therapy is and what occupational therapists do 3.Understanding client centred practice 4.Able to use specific OT theories and principles, models of practice 5. Values being an OT 6.Response to the 'hidden' curriculum *Problem solving skills* *Decision making skills* *Time management* *Role models* *Online learning* *Self directed study*	**Personal benefit** Improved confidence and self esteem *Dignity* (2,4,5,6,9) Ability to present and speak in public with confidence (1, 5,6) Belief in own abilities (2,4,6,7,9, 10) Opportunities taken up/secured: teaching students, staff, other professionals, higher education, scholarships etc (1,5,6,9, 10) *Research opportunities and projects* *Private practice* **Professional benefits** Strengthened professional identity, no longer confused or anxious about being an OT (2,3,4,5,7) Being able to say what I am doing and why (2, 5, 6, 7, 10)
Professional Context pre course Professional insecurity All other 4 PSMs have degrees No knowledge about models of practice in OT Poor understanding of EBP Technique based Medical model High professional autonomy	7.Developed understanding of international practices and assessments 8.Developed understanding of the benefits of HVs and community work	Using models of practice (e.g.COPM, MOHO) in assessment and treatment *Reflective Practice* (4, 7) Higher status in workplace (6,9) *Professional opinion has more value. MDT gives more respect and more likely to be asked professional opinion* *Involved in policy making*
Sri Lankan society context pre course Low awareness of role and potential of OT High status of degree **Post Course Context** Being known as a professional with a degree *Overall context having less of negative impact, issues being resolved*	9.Degree status opened up possibilities for further development *'a key that opens many doors'* 10.Research and EBP awareness developed	**Client and service benefits** Better MDT work (2, 5) Client centred practice (2, 3) *Client appreciation* Move to social model of care (2, 3) Awareness of role of OT at work (2,6) Expansion of role into HVs and community (2,8) *Expansion since interviews but depends on context* *Degree has informed diploma and quality of teaching and clinical supervision in diploma and degree has improved* (2,5,6,9,10)

'For me the biggest impact was my confidence and self esteem and dignity now I am very confident about myself, being an occupational therapist, that is the biggest thing.' S13

'Actually this degree programme improved my confidence and self esteem in two ways, first one is that I can understand my patient's thoughts and their goals more efficiently than earlier... I can do better treatment for them and they keep confidence in me, it is good for my professional life and as well as patient's life and in addition to that it ... opens up my higher studies and I think it is very very important for me.' S4

'In my case I feel it is identity, a different identity, I was just an OT, but now I feel I am a confident OT, different skills, evidence base, theory base, new purpose... strong self esteem, professional self esteem. This I was searching for from the degree not just a paper qualification but confidence, so I feel I have that.' S10

Table 15 shows an overview of the key CMOCs identified in Phase 1 and Phase 2 and confirmed in Phase 3. As in the Phase 1 interviews, themes within the categories of context and outcomes, fall into the three broad themes of personal, professional and client or service benefits. Mechanisms have been numbered to indicate which mechanisms seem to influence which outcomes.

7.2. ANALYSIS OF COURSE REGISTERS

Data were collected from the course registers as previously outlined in Chapter 4.6.5 and the findings are presented in Table 16. The results of the examination of the course register show a rapid take up of teaching on the B.Sc. between the first and second presentations when the first batch themselves would only have recently graduated. The teaching hours increased again for the third presentation despite the absence of a first batch graduate who contributed almost half the teaching hours from Sri Lankan occupational therapists in the second presentation but who was not available for half of the third presentation due to studying for a PhD abroad.

Table 16: Teaching hours of Sri Lankan OTs

	1st presentation 2011-13	2nd presentation 2013-15	3rd presentation 2015-2018
No of Sri Lankan born and trained occupational therapists contributing to teaching	2	7	7
No of Sri Lankan occupational therapists from the first batch contributing to teaching	1	6	6
No of hours taught by Sri Lankan born and trained occupational therapists	10	115	154.5
No of hours taught specifically by 1st batch students/graduates	5.5	110	151.5

MODULES	Hours taught 1st batch	Hours taught 2nd batch	Hours taught 3rd batch
Occupational therapy in neurological and developmental conditions	10	59	72.5
Occupational health and well being		3	15
Context of practice		3	
Knowledge and skills for practice		44	58
Occupational therapy in mental health		6	6
Research methodology			3
TOTALS	10	115	154.5

7.3 SUMMARY

The aims of Phase 3 were twofold; to access the course registers to analyse the only significant quantitative data available to the research; and to present the findings of Phase 2 to the research participants. Giving all of the student interviewees the chance to comment on the emergent CMOCs from Phase 2 was an important part of the research in terms of supporting credibility or truth value. In addition the member checking groups went some way to equalise the power relationship between myself and the students as well as contributing to the richness of detail in the findings. An important finding from Phase 3 is that the student interviewees recognised and validated their stories within the presented CMOCs, and in doing so added credibility to the findings.

CHAPTER 8: DISCUSSION

There is, as highlighted by WHO, '*No health without a workforce*' (Campbell et al., 2013, p. 1) and one of the critical questions to be answered in addressing the worldwide shortages in the health workforce is '*How does a country produce, deploy and sustain a workforce that is both fit for purpose and fit to practice in support of universal health coverage*' (Campbell et al., 2013, p. 7). Pinner and Kelly (2017) observed that the current global health workforce is estimated to have a shortfall of 7.2 million workers. Crucially, too few health professionals receive training, there are few opportunities for CPE and the capability to implement educational programmes and develop suitable curricula is limited. The post registration degree programme which is the subject of this research, represents a small step towards developing a profession that it is fit for purpose in a LMIC.

However, as with all educational interventions, not only in the sphere of healthcare, there is the question of measuring impact on practice, including demonstrating whether the impacts observed can be attributable to the programme. Returning to the research aims in Chapter 1.5 and the words of Stern: '*Did this programme make a difference or would changes have happened anyhow? *' (Stern, 2015, p. 5). In this Chapter, the findings from Chapters 5, 6 and 7 are revisited in order to determine whether the degree programme made a difference, what those differences were, and to what extent they can be attributable to the degree programme. In addition, the initial programme theories which were identified in Phase 1 are revisited in light of the findings. In order to address these questions, thematic threads and CMO configurations are examined across all data sources and all three phases of the research. Triangulation between methods and data is described by O'Cathain (2010) and recommended as a way of enhancing the credibility and trustworthiness of the research, whilst the synthesis of the data is recommended as part of an RIE in developing secure CMO configurations which illuminate the causal pathway underpinning outcomes.

The original aspirations for the degree programme, in RIE terms, the initial programme theory, was examined in Phase 1 by analysis of VSO strategy documents, case studies and interviews with the stakeholders who were identified as course architects. The expected outcomes of the VSO mental health programme

are shown in Table 8. A key desired outcome was that people with mental health problems in Sri Lanka participate actively in society and that they receive 'rights-based' services. This desired outcome was not only related to the occupational therapy degree programme but VSO's mental health programme as a whole. However, other anticipated outcomes were more directly related to the degree programme. VSO was working towards accredited training programmes in higher education institutions for occupational therapists, social workers and nurses. The aim was to bring health professional education up to international standards, to introduce more varied, interactive and practice orientated teaching methods and to develop more equality between the different health professions. The implicit programme theory was that by doing this through the placement of subject experts who were long term volunteers, occupational therapists would be educated to international standards and benefits would be seen in mental health care (VSO, 2015).

The Sri Lankan programme architects interviewed in Phase 1 saw the potential benefits of a degree to the profession of occupational therapy. They recognised the need for access to degree level education in order to develop a career pathway for occupational therapists in order for the profession to develop. They were also aware of the need to improve the status of occupational therapists in the workplace and for confident evidence based therapists who could be involved in more community based services. My own initial hypotheses about the impact of the course on the first batch students' practice concerned a growing appreciation of client centred practice, the beginnings of community based practice and an awareness of the opportunities for further professional development that were rapidly becoming available for the students.

The discussion of whether these initial hypotheses on the impact of the degree course were confirmed, what new hypotheses can be drawn from the data in terms of CMO configurations and an examination of the outcomes and overall impact of the degree programme is organised around the conceptual framework previously outlined in Chapter 4.1. Firstly, the developed capabilities of the first batch students are presented and the students' own words for describing these key outcomes are used to frame the discussion. Secondly, the influences of context and culture on the

findings are considered. Thirdly, individual learner or personal factors are examined and finally, evaluation frameworks and theoretical propositions previously outlined in the literature review and development context (Chapter 2 and 3) are revisited with reference to both RIE and the CA.

8.1 CAPABILITY

Did the degree programme increase the capabilities of first batch students?

The capabilities identified in this section directly address research question 1a: What outcomes emerge from the study and are they attributable to the degree programme?

'Now I am very confident about myself, being an occupational therapist'

Three related outcome themes underpin the students' perceptions of becoming confident practitioners. The first being: *'Now we know what OT is'* and the second being: *'Now I am very confident about myself'*. These two outcome themes inform a third outcome theme: *'Now we clearly know about our profession and our identity.'* A very strong CMOC thread runs through the initial evaluation in Phase 1, student interviews in Phase 1 and 2 and member checking groups in Phase 3 with regard to students knowing for the first time in their professional lives, what occupational therapy is, what the core theories and frameworks of occupational therapy are and the role that they, as occupational therapists could develop in their professional lives. This thematic thread starts in the analysis of the first brief evaluation which was undertaken as soon as the degree programme was completed. The most frequent responses in terms of what students valued in the course content were *'OT models of practice'* followed by *'new knowledge'*, *'helpful to OT practice'* and *'evidence based practice'* (note that the teaching of EBP was with reference to occupational therapy). These, plus the free text comments given at the time, support the proposition that students were learning course content that helped them understand the knowledge base and role of an occupational therapist for the first time. The thread continues in the student interviews in Phase 1 and Phase 2 and is strongly validated in the member checking groups in Phase 3. This finding is

in keeping with a number of studies previously reviewed in Chapter 2.4.2 which found that specific profession based content in curricula and in post registration CPE help develop and maintain a strong professional identity.

These three interrelated themes resonate with Holland et al.'s (2013) concept of professional confidence. They argued that *'Competence, professional identity and professional confidence are interlinked and work together ensuring fitness for practice'* (Holland et al., 2013, p. 105). Professional confidence itself is seen as a personal belief which includes an understanding and belief in the role and significance of a particular profession, as well as belief in one's own capacities to fulfil that role. Holland et al. (2013) explored this concept with novice practitioners in South Africa and concluded that these beliefs mature as practitioners gain experience. In a sense, the first batch students can be viewed as novice practitioners. Although educated to diploma level and having all worked for a number of years, the evidence suggests that their understanding of the role and significance of occupational therapy was developed through the degree programme and that previously, although good technical therapists, they had little idea of why what they were doing was occupational therapy or what was and what was not, within the scope of occupational therapy. This lack of knowledge, belief and confidence in the role of occupational therapy contributed to their professional insecurities.

In the student interviews in Phases 1 and 2, students reflected on their situation before the degree programme when *'We were scared'* and felt professionally insecure. They were genuinely frightened of anyone asking about their work because *'I couldn't do a proper answer for them'.* This insecurity led to anxieties about their role and the role of other staff within the MDT, particularly physiotherapists. Since they couldn't articulate their own role they were fearful of role encroachment by other professionals. This was compounded by the fact that other allied health professionals such as physiotherapists and speech and language therapists did have access to degree level education.

However, after completing the degree the students found themselves able to explain their role and articulate what they were doing and why, both to their patients and to their work colleagues: *'They understand and the referrals are increasing due to that'.*

Being able to articulate their role was not only because they knew more about the specifics of occupational therapy practice but also because they had the confidence to speak out, in MDT meetings, in presentations and in workshops (see Cotterill-Walker, 2012, in Chapter 2.2). This new found ability to articulate their role is also evidenced in the analysis of the interviews of the medical and community stakeholders in Phase 2 who spoke about their own changed attitudes and beliefs about OT and their greater understanding of the benefits of OT to their client groups, following working with the first batch students. In the member checking groups the outcomes of confidence, professional self-esteem and a strong professional identity were the most valued by students.

Trede et al. (2012), Baxter (2011) and the Professional Standards Authority (2016) argued that there are links between a strong professional identity and job performance. Such links are supported by analysis of the Phase 1 and Phase 2 interviews in which a number of specific changes to practice were discussed. Key among these changes to practice was the adoption of client-centred practice, which was understood for the first time as being fundamental to the role of an OT. This gave the students the confidence to develop it in their practice. The findings in Chapters 5-7 reveal a number of specific impacts on patient care which students reported transferring into practice. In addition to client centred practice, students reported the use of models of practice in occupational therapy, specific assessments tools to inform treatment, specific treatment techniques and the practice of home visiting   In particular, an understanding of evidence based practice, and the development of research skills meant that they were no longer dependent on what they had been taught but actively researched assessment and treatment practices.

The outcomes of increased confidence and a stronger professional identity work synergistically together to support the development of confident practitioners. Schmitz et al. (2018) are concluding a study into factors which mediate work readiness in occupational therapy graduates. Their research indicates the importance of professional identity formation on the ability to navigate the variety of potential work contexts that an OT may encounter. In common with the Sri Lankan graduates, the role of confidence as a mediator for the development of professional identity emerges strongly. Schmitz et al. (2018) suggested that this

could reflect the fact that occupational therapists work in a wide variety of clinical and community settings and are often working single handed or in small teams covering large caseloads, a situation also identified by Morley (2009). This can be challenging in terms of maintaining a strong professional identity and suggests that confidence and self-belief can help maintain professional identity in these circumstances.

'The key that opens many doors'

The phrase above comes from one of the member checking groups and was used by the student to describe the impact that holding a degree had on many aspects of their lives. The potential impact of having a degree emerged early on in the study during the documentary analysis. The analysis of the student narrative that was part of the VSO case study in Phase 1 (Appendix 6) supported the development of two CMOC configurations (Figures 14 and 15) which illustrate how the achievement of a degree, changed the personal and professional context and activated a mechanism which enabled the student to apply for, and be awarded an international scholarship. It is worth noting that this particular outcome occurred within only a matter of months of the degree programme ending indicating the speed at which significant outcomes were realised. These early CMO configurations are supported by Phase 1 and Phase 2 interviews and endorsed in the member checking groups. Although specific outcomes were different from individual to individual, overall there were a range of CMOCs all relating to having a degree. Holding a bachelor degree opened the door to post graduate study, scholarships, research involvement and teaching opportunities (see Chapter 6.1.3). What is clear is that mechanisms are not only operating within the student group but within the work context and society at large leading to a ripple effect of outcomes. Pawson and Tilley (2004) argue that mechanisms are often hidden in the minds of the participants. However, in this case, mechanisms lay not only in the minds of the students but also in the minds of students' colleagues whose attitudes and beliefs towards the students changed, which in turn influenced their behaviour towards them, which generated further outcomes.

When the students gained their degree and returned to the work place they changed the context of the work place both in terms of being known as holding a

degree qualification and their increased professional confidence. This change in the work context had an impact on their work colleagues, so that the reasoning of the work colleagues with regard to the competency of the students changed. This in turn changed the behaviour of the work colleagues such that they sought the professional opinion of the students more frequently and showed more respect for their opinions. This ultimately led to greater responsibility and opportunity in the workplace. These outcomes, in terms of the effect of being a degree holder, were anticipated by the course architect stakeholders and endorsed by the medical stakeholders (see Chapter 6.2).

In terms of the capability approach (see Figure 7), the degree programme can be understood as a capability input, that is goods or services which give the means to achieve. By virtue of these goods, each student increased their capability set, that is, their set of achievable functionings or freedoms. The identification of outcomes however, focuses on what is actually achieved and these achieved functionings involve personal agency or choice. Some students, in applying for scholarships, post graduate study and lectureships have exercised choice and increased their set of achieved functionings. These outcomes are easier to identify than subtle changes of practice in the workplace. However the student narratives suggest that their experience as graduates in the work place opened up opportunities which they have taken and increased their confidence so that they have chosen to change their practice.

'I learnt there is a hidden curriculum'

The increase in confidence and self-belief expressed by students was certainly helped by having a better grasp of what OT is but was also developed by the programme activities identified as the hidden curriculum. These course activities emerged strongly as developers of confidence, self-esteem and work related skills. The impact of these activities was acknowledged in the initial evaluation, was clearly identified in the Phase 1 and Phase 2 interviews and strongly endorsed and elaborated on in the Phase 3 member checking groups. For example, practice at presenting case studies during the degree course improved English language skills, power point skills, time management skills, decision making and presentation skills. These soft skills combined with specific OT knowledge meant they could conduct

themselves confidently in the work place. Being no longer afraid to speak up they could express their professional opinion in an articulate manner. This had the effect that others in the work context developed a better understanding of the role of occupational therapy.

What is this 'hidden curriculum'? The outcomes that students described as being part of the hidden curriculum are generally known as *'generic skills'* or *'generic graduate skills'* (Barrie, 2007, p. 439) and are understood to be:

> *'The skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable in a range of contexts and are acquired as a result of completing any undergraduate degree'*

(Barrie, 2007, p. 440)

Barrie (2007) presented four understandings of generic graduate skills: precursor skills, i.e. a prerequisite for university study; complementary skills; skills that help students apply or translate disciplinary knowledge and skills that enable and transform disciplinary knowledge. The way the students in this study describe the impact of the hidden curriculum suggests that these were enabling skills which had the power to transform the practice of disciplinary knowledge. Barrie (2007) also explores how these graduate generic skills are learnt and of the six categories he identifies, the category of 'engagement' best describes the first batch student experience. Engagement refers to the development of skills not through what is taught or how it is taught but by the student's engagement in the learning experiences provided. The potential importance of the hidden curriculum as a mechanism empowering outcomes was not evident in any of the initial programme theories revealed through the documentary analysis, course stakeholder interviews or my own initial hypotheses about course outcomes.

'And then I got the idea of how to do research'

Before the degree programme the students had never been exposed to any research in the field of occupational therapy, or indeed in any health related field and they had never heard of evidence based practice. The importance of developing practitioners skilled in EBP was first mentioned by one of the course architects in the stakeholder interviews in Phase 1. It emerged strongly from the content analysis of the first evaluation and was a consistent thread throughout Phase 1 and Phase 2

interviews. It was strongly linked to confidence in the work place and the ability to be able to discuss patient treatment on the same level as other health professionals, particularly doctors. In Hardwick and Jordan's (2002) questionnaire study on the impact of a part time post registration degree in nursing and midwifery, the most commonly cited change to practice was use of research skills although no examples of changes to clinical practice were given. They concluded that research literacy was the main outcome of the post registration programmes in their study rather than direct changes to patient care. In Cotterill-Walker's (2012) literature review of the impact of master's level study on practice, research awareness and associated analytic and writing skills were key themes (see Chapter 2.2). As in Hardwick and Jordan (2002), Cotterill-Walker (2012) could see no clear evidence of direct benefit to patients. However for the first batch, research literacy and an understanding of evidence based practice seemed to be directly linked to patient care by the students themselves in their narratives. In a context of almost no textbooks or relevant journals, the ability to understand the principles of research and evidence based care enabled the students' to evaluate the quality of research available via the internet, directly impacting on their practice.

Another factor contributing to confidence at work was that students could now fully understand research based presentations at work and take part in MDT discussions: *'We can give our opinions to the same academic level and actually we get weight for our powers and opinions'*. From a capability approach perspective there is a very real sense that the particular knowledge and skills gained from the research methodology module (the goods) made a significant contribution to the students' capacities and increased their capability set. The findings indicate that on the whole, students exercised reasoning and personal agency in using these skills in order to become evidence based practitioners and that EBP became an achieved functioning.

Students were not only applying EBP but had developed an interest in doing research in their own practice area. This growth in interest in conducting one's own research was evident in the member checking groups (Chapter 7.1) as was an interest in doing further research based study. Two students from the first batch are currently studying for their PhDs and more are interested in engaging with

doctoral study as well as Masters degrees and MPhils (member checking group 3). They are limited at the moment because of lack of availability of relevant courses in Sri Lanka. However, the success of those in first batch who have secured PhD positions is inspiring others to think that this is a possibility:

> *'I mean personally, but professionally also, whatever I get it will go back to the country and I will be a role model for others…even youngsters they want to do PhD and they start like feeling that OK we can do it. If this person can do why can't we!…so this B.Sc. helps in very many different ways.'* S17

'Another outcome is quality of teaching for the students'

The perceived increase in the quality of education for occupational therapists is related to the increase in research competency in the profession. The two students who are studying for their PhDs have contributed many hours teaching the second and third batch of the degree programme as well as the diploma students. Two of the first batch students were already teachers on the diploma course in occupational therapy at the start of the degree programme but the number of first batch students involved in teaching, and the number of hours taught, on both the degree and the diploma has increased rapidly from graduation (see Table 16). As of September 2018, six first batch students teach on the degree programme and a further two teach on the diploma programme.

The outcome of quality teaching was strongly evidenced within the member checking groups (Chapter 7.1). Taking place in January 2018, the member checking groups were held almost 18 months after the majority of the student and stakeholder interviews and students were keen to demonstrate the progress that had been made in some of the CMO configurations presented to the group, during those 18 months. It is within Phase 3 of the research that the full impact of the degree course on the teaching of occupational therapy, not only within the university and the school of OT but also within the clinical placements became clear.

> *'We know the theory behind what we do. When the students come to the clinical practice we will handle them in a different manner, with the knowledge, so the diploma students and the degree students are all receiving the benefits, which is another outcome.'* S10, member checking group 2

The Phase 1 interviews with course stakeholders revealed one of their initial programme theories as being the development of a career path for OTs and they were already observing and anticipating the impact on teaching and clinical supervision which would support the future education of the profession. This programme theory is supported by the evidence and plans are already underway for a four year entry level degree programme in occupational therapy which will depend on the teaching capabilities of the first batch students (see Chapter 5).

Five key capabilities

Figure 18 shows the relationship between context, mechanism and outcomes for the 5 key capabilities discussed above. The observed dynamic, evident as early as Phase 1, whereby the status of having a degree acts on the students' work contexts and potentiates further outcomes is incorporated into this illustration. The findings support the conclusion that the first batch students developed their capabilities by virtue of studying on the degree course.

These five capabilities were those distributed throughout the whole group of first batch students whether working in mental health, acute physical settings, rehabilitation or paediatrics. However, there were individual differences within the group. Dalkin (2015) described the impact that contexts may have on mechanisms and hence outcomes in RIE as a 'dimmer switch' as opposed to an 'on-off' switch, that is, context may affect the extent to which mechanisms can operate and outcomes are realised. Sections 8.2 and 8.3 below examine contextual factors which had some impact on outcomes addressing research question 1c: To what extent does context influence if and how outcomes are realised?

Figure 18: CMOCs for the five key capabilities

CONTEXT	MECHANISM	OUTCOME
Awareness of shortfalls in knowledge and skills	Changed beliefs about OT	Awarded degree in OT
Professional insecurity	Values being an OT	Able to say what an OT does and why
Poor relationships with other professionals	Enabled reasoning in OT practice	Increased professional belief and confidence
Motivated to study for a degree	Understanding of role and scope of OT	Demonstrates confidence in professional practice
Opportunity to study for a degree	Changed beliefs about self	Professional choices made e.g further study, teaching, EBP, client centred practice, home visits
High status of degree in workplace	Enabled research awareness and skills	Confident in generic work skills
		Confident in student supervision

CONTEXT	MECHANISM	OUTCOME
Recognised as a degree holder at work	Status as 'degree holder' in work context in minds of colleagues	Strengthened professional identity and self belief
Seen to be more articulate and confident at work		Increased respect from work colleagues
Demonstrates confident practice as an OT	Changes in attitudes of work colleagues towards role and competencies of OT	Higher status in workplace
Professional scope extended in workplace		Opinion has more value
Less professionally insecure	Feedback from results of own actions increase professional self belief	Opportunities: research projects, scholarships, lecturships
		Increased responsibility
		Increase in quality of teaching

162

8.2. CONTEXT AND CULTURE

Ideally within a RIE, data can be disaggregated with reference to context. This can help to identify specific contextual influences on mechanisms and thus outcomes. However, all the students were practising occupational therapists before the programme and they occupied a similar socio-economic group within Sri Lanka. They all worked for the Ministry of Health either in hospitals or in the OT training school. Personal contextual elements such as age and gender appeared to have no influence on mechanisms and outcomes. Seniority in the occupational therapy profession in Sri Lanka depends almost entirely on age. A head of department is always the OT who has worked the longest in any department, regardless of aptitude for the position. This situation did not appear to have any influence on the students' ability to transfer knowledge and skills into practice. Similarly gender did not differentiate the group. There were no comments on the influence of gender in any of the documents analysed, nor in any of the stakeholder or student interviews. There were therefore, few contextual factors by which the data could be disaggregated. In this study it became clear that the context all students shared, living in Sri Lanka and working within the Sri Lankan health service, was a more powerful catalyst on mechanisms than any of the contexts that divided the group. The value and status of a degree in Sri Lankan society emerged as a powerful contextual enabler, changing the students' work context such that it supported transfer of the knowledge and skills they had learnt from the degree programme into practice. If the degree increased their capacity as OTs, the status and value of that degree increased their capability to put that capacity into practice.

Nevertheless, there were some factors within the workplace context which did influence outcomes (see discussion of findings in Chapter 6.1.1) reflecting conclusions drawn in the literature as discussed in Chapter 2.2. Ellis and Nolan (2005) identified the workplace context as the most influential factor impacting on transfer of learning into practice. Sykes and Temple (2012), Clark et al. (2015) and Draper et al. (2016) all highlighted the central role of the work context and workplace barriers to implementing changes in practice. Similar to the UK, OTs in Sri Lanka are far less numerous than other health professionals. This means that it is not uncommon to be working single handed or in small departments with heavy

caseload pressures. As identified by Morley (2009), aspects of the work environment such as working single handed, having limited access to supervision or support from another OT, staff shortages and realities of practice such as heavy caseloads may limit the impact of CPE activities. Some of these factors were identified by the students in this study. Those who worked single handed or with heavy caseloads in hospital settings were most likely to experience constraints within the work environment and identify a lack of ability to transfer their new capabilities into practice. These fell into three main categories. Firstly the inability to conduct individual therapy to the standard that they aspired to due to time constraints or case load pressures resulting in some situations to a transfer of practices to students. Student 9, with reference to COPM, a client-centred outcome measure stated:

> *'We are not trying to directly do that assessment, we give it to the students and they present it to us, so automatically we get the feedback.'*   S9

Secondly, although OTs enjoyed a high degree of autonomy once a patient was referred to them, actually leaving the hospital to do a home visit or community work was difficult in some work contexts. This was due to the constraints outlined above but also the logistics and lack of institutional support of conducting such visits. Whilst there was some indication in the member checking groups that in the period of time since the original interviews practices were changing:

> *'No allocations there were in the past but nowadays we have two occasions to do home visits, so they need to arrange the ambulance to go there and visit these people. And we need social workers and architectural alterations, we went there, that is something like the home visits we did in the degree, actually we used that home visit booklet.'*   S9, member checking group 2

This was mainly in the larger departments situated in Colombo:

> *'Actually we do the home visits there, in Colombo.........Social workers and OTs, especially for dementia patients.'*   S1, member checking group 3

Those who worked in small departments which were in more rural locations struggled to capitalise on the gains made, for example, during their community placements within the local community:

*'After that [community placement] I did two sessions for the elderly
people….referrals coming, actually there are requests but with limited time I
can't do those things.'*   S6

Thirdly, there was the factor of facilities; some students were working in
departments with very limited space, without the facilities that would enable them
to transfer some of what they learnt into practice:

*'The therapists…those who complete the degree course, actually they look at
their client's problems by getting into their shoes, ok, but still they are working
in the hospital institute, therefore, there are difficulties, so we move to patient
centred care but there are limitations…barriers, we haven't facilities to do
it…physical barriers and time.'*   S9, member checking group 2

By the time of the member checking groups, 14 of the student group worked within
hospital settings, two in teaching and 1 in fulltime post graduate study. In common
with the findings of Holland and Jordan (2002) workplace constraints were more
evident for those working in clinical services rather than in education. Lecturers
can, for example, teach client-centred care without restrictions, whereas they can
see that their colleagues and their students on clinical practice face barriers to
implementation in practice.

8.3. INDIVIDUAL LEARNER FACTORS

In the field of evaluation of professional education, the role of context has been
recognised as an increasingly important element affecting transfer into practice
(Ellis and Nolan, 2005; Sykes and Temple, 2012; Clark et al., 2015). However, the role
of reasoning within the individual practitioner has been given relatively little
attention. Certainly, individual factors have been identified as important including
preparedness, interest and motivation (Ellis and Nolan, 2005) and motivation,
personality and ability (Holton, 1996). Clark et al. (2015) identified the individual
learner as one of four domains in their impact on practice framework. They also
identify a number of contextual inhibitors and facilitators on the impact of CPE on
practice. Facilitators concerning the individual learner are; having a clear
understanding of course requirements and a readiness to study with adequate
preparation to study, which approximates to Ellis and Nolan's (2005) concept of

preparedness. Inhibitors concerning the individual learner are lack of autonomy in the work place, a similar concept to resistance to change in colleagues and managers found by Sykes and Temple (2012), and juggling work and study.

As discussed earlier, Sri Lankan OTs have a high measure of autonomy within their workplace and do not face pressures to work generically, weakening their profession specific practice, a factor identified within multi-disciplinary teams in the UK (Morley, 2009; Turner, 2015). They are, for the most part, notwithstanding contextual factors outlined above, able to introduce changes into their practice. Whether they do so or not depends on their individual reasoning, values and choices and this lies at the heart of understanding the achieved changes to practice. None of the individual factors identified in the reviewed literature specifically addresses these particular individual learner factors but the capability approach does offer an interpretation of why a capability may be converted into an achieved functioning.

The CA explicitly includes values in personal agency and choice making. Values may influence reasoning between different courses of action as a professional and influence professional aspirations. It follows therefore, that identifying strongly with one's profession and valuing the roles and activities of one's profession may be a potentially powerful mechanism facilitating transfer of the knowledge and skills acquired through an educational intervention into practice, validating Weld's (2015) view that the development of a strong professional identity is a key goal in the education of competent professionals.

The first batch students were very motivated to study and attain their degrees, one of the facilitating learner factors identified in the literature (Holton, 1996; Ellis and Nolan, 2005). However, they did not start out with an understanding of the course requirements, they were not in any way prepared for the study experience and they struggled to manage both work and study commitments, all potential inhibitors to impact on practice identified in the literature. However, these potential inhibiting factors seem to be outweighed by the development of a strong belief in the profession of occupational therapy.

The CA understands capability as the freedom to achieve a specific functioning. These functionings are not only about 'doing' but about 'being'. An outcome of the post registration degree programme is that it gave the first batch students the ability to <u>be</u> occupational therapists. Being occupational therapists for the first time is what they described in their narratives and was the outcome they most valued in the member checking groups. They were able to be occupational therapists due to their increased capabilities as discussed in 8.1 above. These capabilities were supported by the skills, knowledge and values of occupational therapy they had learnt, and the confidence and professional self-belief they had developed through participation on the degree programme. Crucially they learnt to value being occupational therapists. Figure 19 below illustrates the relationships of factors influencing impacts on practice from an individual learner perspective and the pivotal role of the individual learner's personal agency.

8.4 HEALTH WORKER EDUCATION AND EVALUATION

This section addresses research question 2: Does the methodology of Realist Impact Evaluation add to the literature on evaluating educational outcomes in terms of illuminating the causal pathway by which an educational intervention for the healthcare workforce, may deliver impact on practice?

Popular frameworks for identifying, classifying and understanding the outcomes of educational inputs such as Bloom's taxonomy and Kirkpatrick's model, are essentially just that, in that they offer a classification system or taxonomy of outcomes. The arrangement of the both systems implies a hierarchy of complexity and attainment. Bloom's taxonomy has face validity in its arrangement as it is concerned purely with learning outcomes and not transfer into practice. With reference to Bloom's cognitive hierarchy, it is hard to dispute that remembering is necessary before understanding and understanding is necessary to application etc. Bloom's affective hierarchy has proved useful in this research in terms of understanding students' progress through changing attitudes and values. However the hierarchical arrangement with associated assumption of causality in Kirkpatrick's model has been challenged (see Chapter 2.2.3) and a growing body of research and debate has highlighted the importance of a consideration of context in

the transfer of training into practice. Modifications to Kirkpatrick's model by Alliger and Janak (1989) (Figure 5), whilst giving due consideration to a different causal pathway between the levels, does not address the effect of context and does not examine what the causal relationship actually is, the how and why which lies between 'learning' and 'behaviour' and between the educational input and observed outcomes. Within this 'black box' symbolically situated between 'learning' and 'behaviour' lie the assumptions about how and why learning is translated into practice which are never tested. The outcomes from this research could be organised within Barr's modification of the Kirkpatrick model (Table 2). It could be argued that there is some evidence for outcomes up to levels 4a and 4b, which cover wider changes in the organisation or delivery of care (4a) and improvement in the health and wellbeing of clients (4b). The introduction of home visits in some service areas would qualify for 4a, and reports of the impact of client centred practice on the clients themselves would qualify for 4b. However, although classifying the outcomes in this would illustrate the impacts of the programme it would not inform any understanding of how and why those particular outcomes were realised.

RIE was chosen as the research methodology because it explicitly examines the how and why behind outcomes, the causal mechanism between inputs and outputs as well as examining the role of context as a constraint or enabler. It therefore addresses the fundamental concerns expressed in the literature on the inadequacies of popularly used frameworks. Realist Evaluation aims to identify the mechanisms which drive the transformation of capacity into capability into actual transfer into practice. An individual's reasoning, regarding potential actions, is influenced by their available knowledge, skills, attitudes and experiences which may be gained through an educational input. This enables choices to be made that were not previously available to them. There is a synergy between the concepts of reasoning and choice within RIE and the concepts of personal agency, values and choice in the Capability Approach. Both approaches distinguish between capacity building, which gives the knowledge and skills for action, and personal agency or choice, which determines if the action actually happens (achieved functionings). Realist Impact Evaluation, like the capability approach sees context as enabling or constraining what can be achieved. The Capability Approach understands achieved
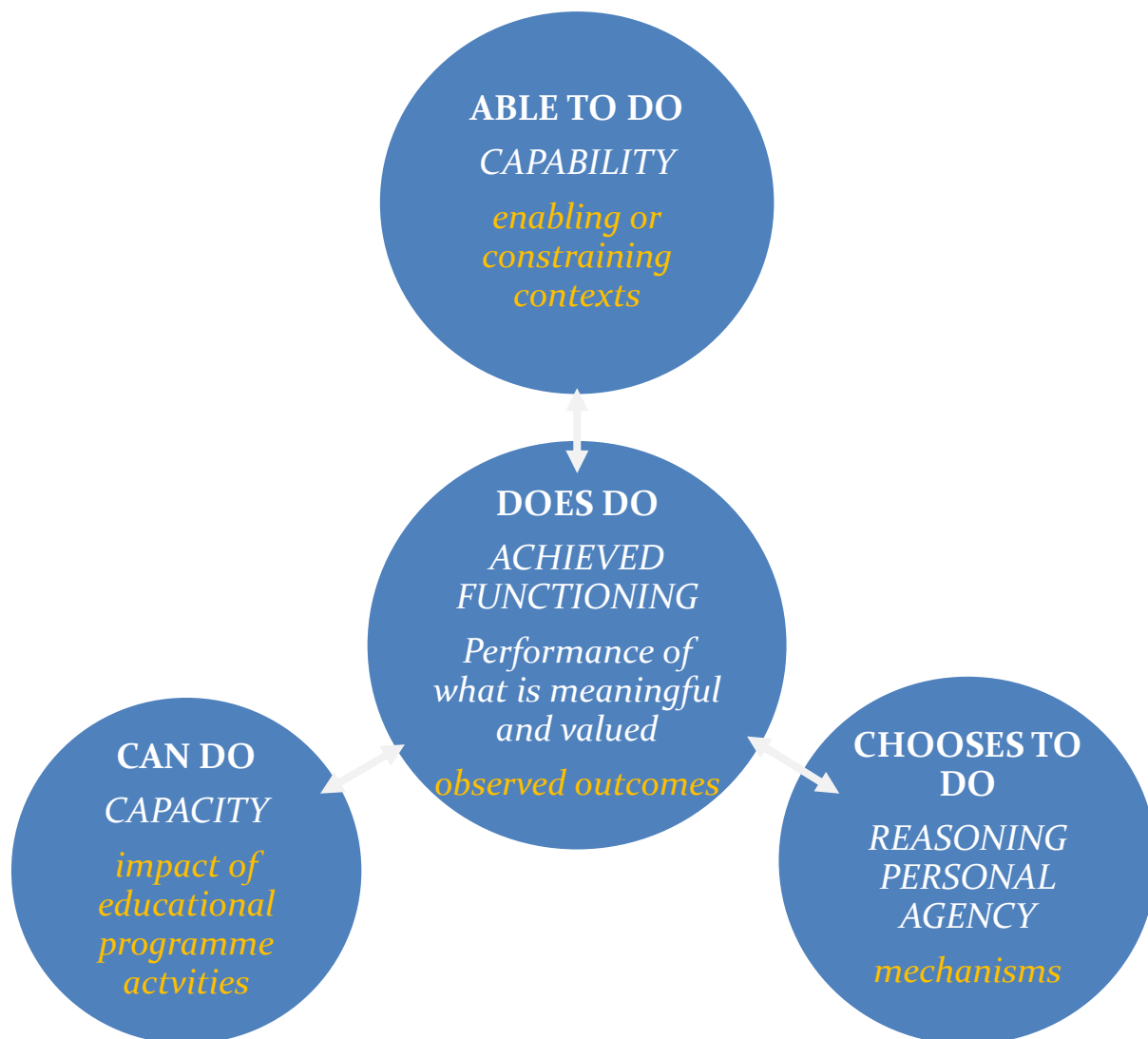
functionings as activities which the individual has chosen because they are of value. Hence values, as well as capability, are part of the reasoning process which drives choices and these may be affected by the personal, social and cultural context as well as the educational programme. Tao (2013) combined concepts from the Capability Approach with a critical realist paradigm to investigate teacher performance in Tanzania. Using the concept of valued functionings, Tao found that teachers in Tanzania work under social, economic and work based constraints on functioning such that their valued functionings at work often cannot be achieved and are at times in conflict with achieving valued functions in their home life. Consequently, teachers may choose to meet a valued functioning such as looking after their family, and risk poor performance in their school, for example, absenteeism.

Figure 19 below gives a simplified view of the relationship between the key concepts in RIE and CA and the areas covered in the conceptual framework, with specific reference to health professionals. It aims to cover the essential questions that need addressing in the evaluation of educational programmes: What can a person do? What are their capacities, their knowledge, skills, experience and resources, their professional education and training, CPE activities, work experience and further education? What are they able to do? How does their personal, social, work, economic, political and physical environment enable them or constrain them from doing? What do they choose to do? What do they value doing? What do they actually do?

The three elements of 'can do', 'able to do' and 'chooses to do' must all be met before 'does do' will be achieved. There are also the possibilities of virtuous or vicious circles of cause and effect. Using an example from the study, an OT may wish to do a pre discharge Home Visit (chooses to do) having learnt how to do so during the course (can do). The head of department thinks it is a good idea and supports the logistics (able to do), the OT conducts the visit (does do). The report from the Home Visit is well received by the MDT increasing the OTs confidence and making it both more likely that they will 'choose to do' a Home Visit in the future but also more likely that within the work context such visits are supported and increasing the likelihood that the OT will be 'able to do' them. In addition, the OTs

skills in conducting Home Visits are likely to be consolidated increasing their capacity (can do even better).

Figure 19: Combining realist evaluation with the capability approach: A performance model

ABLE TO DO
CAPABILITY
enabling or constraining contexts

DOES DO
ACHIEVED FUNCTIONING
Performance of what is meaningful and valued
observed outcomes

CAN DO
CAPACITY
impact of educational programme actvities

CHOOSES TO DO
REASONING PERSONAL AGENCY
mechanisms

Educational evaluation could benefit from frameworks that have been developed specifically to identify the constraints and enablers within all aspects of the environmental context which impact on functioning and performance (achieved functioning) such as RIE and the CA. It could also benefit from a methodology such as RIE which examines the mechanisms between educational inputs on the one

hand and behavioural outcomes on the other. Both RIE and CA recognise a point in the causal pathway between inputs and outputs where individual reasoning and choice makes the difference between specific functionings or activities being achieved or not. Whereas CA is a theoretical framework based on economic philosophy which gives a perspective on welfare economics and human development, RIE offers a methodological framework for examining the complex social programmes frequently enacted within development contexts. Their points of contact are the shared understanding of the individual as the key agent of change and the moderating effects of context on an individual's actions. The discussion below which presents the evidence for the overall impact of the degree course from this RIE evaluation adds further weight to the suitability of this methodology.

8.5 OVERALL IMPACT

At this point it is relevant to consider research question 1b: To what extent were the original aspirations of the degree programme realised? As well as the overall impact of the degree course, which addresses research question 1: What is the overall impact on the professional lives and professional practice of the first batch students to complete the programme? Table 15, which is the complied overview of the CMOCs from Phase 1 and 2 of the research with member checking comments and Figure 18 give an overview of the overall impact of the degree programme on the first batch as well indications of the mechanisms underpinning outcomes and the interactions between context and mechanism. These CMOCs are the programme theories which are revealed in this study as opposed to the initial programme theories identified in Phase 1.

VSO was a key partner in the development of the degree programme and their programme theory involved their whole mental health programme as well as the degree course. Specific programme theory for the degree course was not clearly articulated but could be inferred to be that educating OTs to degree standard would achieve two main aims: to raise standards of care and treatment in mental health and promote more equality between different health professionals (VSO, 2013). The motivation of both VSO and the EU to fund the degree programme was to improve mental health care. However, occupational therapy training is not divided up into mental health and physical health qualifications and recruitment onto the course

was not limited to OTs working in mental health. Seven of the interviewed students worked in mental health either full or part time. Although particular assessments used in mental health were mentioned by those working in that field, on the whole, the narratives from students in mental health shared much in common with those who did not. The five capabilities outlined in Section 8.1 and the CMOCs in Table 15 and Figure 18 were equally relevant to all fields of practice. If anything, the increased focus on mental well being particularly informed the practice of those working in the physical field who had previously not considered this aspect of their work as well as those who worked primarily in mental health:

> *'I learnt lot about the psychological aspect of people, because I have been working in the physical field throughout my career so I didn't get much opportunity to learn about mental health. So then I realised that mental health is part of physical disability, because when a person becomes physically disabled their mental health is also affected.'* S17

The degree programme raised awareness of mental health problems and frameworks for understanding and treating mental health problems for all the students regardless of their place of work. The move towards client centred practice was also recognised as contributing to patients' general mental wellbeing:

> *'We used to evaluate our service by counting numbers of patients we treated, but rather than that now we are thinking about the quality of the service we are doing for the people'* S10, member checking group 2

> *'They want to come to us [referring to 1ˢᵗ batch], they want to be our patients, to have our care...it is because of our behaviour'* S1, member checking group 3

Although VSO does not specify what exactly it means by equality between professions, the implication is that this will improve patient care by facilitating equal consideration of different perspectives, in particular an alternative to the medical model of care. When students in their interviews talk about their confidence, the fact that they are asked for and feel able to give their opinions, that their professional input is more respected and they feel able to practice as occupational therapists, this reflects a change in their relative power and influence within the workplace. This can be understood as indicating a more equal relationship with other professions and more potential to influence patient care.

The programme theories of the course architects were more grounded in the needs of the profession. Their aspirations to provide a career path for occupational therapists and to increase specific capabilities of occupational therapists were largely met. Their understanding of Sri Lankan society and the health service in particular meant that they appreciated that having a degree qualification in itself had the potential to improve the profession's status in the workplace and that other benefits would naturally develop from that. They also anticipated the development of a cadre of OTs who could continue to develop the profession in Sri Lanka.

My own early programme theories concerned outcomes of client centred practice, community practice and further scholarship (Table 11 and Figures 13-15). Although these theories are broadly supported, scholarship, client centred practice and community based practice can also be understood as specific outcomes within the bigger picture of students becoming occupational therapists and internalising the scope and practice of being occupational therapists.

Key mechanisms were identified as being the force behind the outcomes. In response to profession specific content, students changed their beliefs about OT, were able to reason more effectively in OT practice, understood the scope of OT, learnt to value being an OT and changed their beliefs about themselves as OTs. This supported a new professional identity. In response to course activities, students developed generic graduate skills which increased their confidence and self belief, both in the work context and their personal life. These two groups of mechanisms were supported by enabled research literacy and worked synergistically together to support outcomes. The Sri Lankan cultural context facilitated transfer into practice through the effect of the status of a degree on the students themselves and their work colleagues. However, specific contextual inhibitors of high caseloads, limited facilities and poor staffing inhibited some desired outcomes for some students, particularly community based work for those in rural locations.

In a sense the overall impact of the degree programme is more than the sum of the individual parts. The first batch is a group that strongly identify with each other and see achievements as being owned by the group as much as by individuals. This is evidenced by the frequent use of the term 'we' in the interviews instead of 'I'. Morley (2009) considers professional identity as a process of professional

socialisation as individuals acquire and internalise the values, norms, roles and skills that support being a member of a particular professional group. The first batch acquired and internalised the values, norms, roles and skills of occupational therapy as a group. They tested out their new found values with each other, presented their first case studies to each other and developed their skills together. As a group they have become advocates of occupational therapy in Sri Lanka. As early as Phase 1 and the first student and stakeholder interviews, stakeholders remarked that the first batch students were encouraging colleagues to sign up to be members of the second batch. In Phase 1 it was already evident that the first batch was starting to make a significant contribution to teaching in the profession. By the time of the member checking groups, evidence from the groups themselves and the course registers demonstrated the extent to which the first batch students were teaching on the degree course (Table 16) and all first batch students were supervising the third batch on their clinical placements. The development of a 4 year entry level degree programme in occupational therapy as well as the plan for a fourth batch for the post registration degree programme depends on the capability of the first batch to teach these courses. Education of occupational therapists in Sri Lanka is now sustainable without input from experts from HICs and this is a significant impact of the post registration degree course. The extent to which the first batch have moved into teaching and further scholarship, and their potential as role models in the profession extends the impact that they have and will have on future occupational therapists in Sri Lanka.

CHAPTER 9: CONCLUSIONS

This study supports the conclusion that the post registration degree programme for occupational therapists in Sri Lanka made a difference to the professional lives and professional practice of the first batch students who completed the course. It also made a difference to the profession as a whole in Sri Lanka, building capacity and capability within the profession such that future degree level education of occupational therapists can be sustained without resources from HICs. Evidence of attribution, that is, that the observed outcomes are due to the degree course, is revealed through the methodology of RIE and the narrative analysis of the student and stakeholder interviews within an RIE framework.

The post registration degree programme gave the students the capability to do what occupational therapists do, to think like occupational therapists think and to value the role of occupational therapists. They were therefore empowered to make choices in their practice that meant they could become occupational therapists. In doing so they changed their own working environments which became more enabling to their role development. The five key capabilities outlined in 8.1 above supported the development of client centred practice, evidence based practice and a community orientation in the contexts where it was supported. Specific assessments and techniques that individual students transferred into practice are in part client group dependent, the important point being that students were empowered to change their practice, that they had the capacity and capability to do so, and that they had learnt to value their profession so that they chose to change their practice.

9.1 Reflections on the research study

Throughout this study programme I aimed to engage reflexively with the literature, the data and the research process, examining my own responses and reflecting on action. In the three areas below I have given examples of this reflexive engagement.

9.1.1 Reflexive engagement with the literature
Two areas of the literature review caused me to reflect extensively on the literature itself and my response to it. Reflecting and recording my responses enabled me to work simultaneously on examining the literature whilst being mindful of my own

response to the literature, informed as it was by my previous experience as an educator, therapist and researcher.

The ICF and the Capability Approach

Whilst teaching the International Classification of Functioning, Disability and Health, (ICF) (WHO, 2013) to the second batch students in June 2016, I saw parallels between the ICF and frameworks within the literature for evaluating the impact of educational programmes. The ICF is used to understand functioning and performance and the environmental enablers and constraints on performance, when working with people with impairments. I found this similar to the issues involved in assessing the effectiveness of educational interventions. Indeed it seemed that the ICF could provide a useful framework in evaluation of education as it views human beings on a continuum with all of us carrying some relative impairment compared to others and all of us affected by our social, physical and personal environment in terms of our functioning and performance. Performance in the ICF describes what a person does do in their home or community environment which is equivalent to the concept of achieved functionings in the CA (Birkenbach, 2014). It was due to my familiarity with the ICF that I came to a consideration of the Capability Approach.

The focus of occupational therapy can be summed up in CA terms as increasing a person's capability set. Central to the value base of the profession is the concept of 'meaningful activity', in other words, a person may be able to perform a function, others may think that function important, but is it meaningful to the client? In other words is it a valued function? This is central to client centred practice in OT which is about enabling people to do what they want to do or need to do and generally this equates to activities they value. I was drawn to CA because of the familiarity of its concepts, but I also recognised the importance of meaning, value and personal agency in achieved functioning from my work as an OT and saw its relevance to the field of educational evaluation.

Frameworks for evaluating educational outcomes

In January 2017, whilst engaged in the critical analysis of the Kirkpatrick model as part of the literature review in Chapter 2, I found myself reflecting about my own experience teaching client centred practice on the degree programme under study as well as my previous experience as a therapist in mental health. The teaching

experience was still very clear in my mind due to the students' responses at the time. In addition, this element of the course had been identified by myself as the 'Most Meaningful Change' in a report required by VSO in 2012. This report forms part of the documentary analysis in Chapter 5.1.4 and is in Appendix 3.

In particular, the flaws in the Kirkpatrick model, identified in the literature, were also evident to me as an educator. Student reaction to some concepts was not always positive. In the 2012 report I recognised the fact that some students had found the whole idea of client centred practice a threat to their professional judgement. However, after developing the literature review I reflecting on this experience again and in particular the sequence of events which enabled the students to move towards client centred practice.

The concept of cognitive dissonance whereby a feeling of discomfort is experienced when there is a conflict of attitudes and beliefs is well recognised in the field of psychology (Hayes, 1994). Discomfort is caused by an encounter with ideas or beliefs that are unfamiliar and challenging to the individual. The discomfort is relieved when the conflict is resolved, often by changing attitudes or adopting new behaviours. This is recognised within the affective domain of Bloom's taxonomy in which the 'Value' level, includes the activities of *'Attaching value, expressing personal views, challenging, arguing'* and the subsequent 'Organise and develop level' which reflects a resolution of conflicts by *'Reconciling conflicts, developing value system'.* The first batch students were discomforted by the idea of client centred practice. It did not fit with their world view or the way they had been socialised professionally. As one student asked: *'What about our professional opinions? Our assessments? Are they not important?'* and this concern was echoed by other students. This revealed just how challenging these ideas were to the students' beliefs about their professional role. In the ensuing discussion it was clear that the idea that patients' priorities should be taken into account was confusing and threatening. They had been socialised within a healthcare system in which the professional knows best and this was the source of their status.

Kumagai and Lypson (2009) in their discussion of developing culturally competent medical teams for disaster relief, reflect on the need to develop a pedagogy of discomfort in order to enhance professional growth. They suggest that by facing

unfamiliar and uncomfortable ideas and turning a critical gaze on one's own values and assumptions, the ability to examine perspectives different to the student's own can be developed. My experience both as an educator and a therapist, supported by evidence within the field of cognitive behaviour studies also informed me that behaviour change sometimes is necessary before desired changes in attitude and beliefs can be developed. I taught students how to use a client centred assessment and outcome measure (COPM) and encouraged them to try it in their practice. Despite initial misgivings they followed my instructions and slowly but surely I could see their attitudes towards client centred practice being revised.

Reflecting on the process by which the students had changed their attitudes and behaviour regarding client centred practice led me to consider the process within Barr's modification of the Kirkpatrick framework (1999) (see Appendix 15). My analysis of this experience did not support the implicit causal relationships within the Kirkpatrick model. Initial learner reaction did not predict the eventual outcomes and attitude change did not precede the acquisition of skills and knowledge. In fact, the acquisition of a particular skill and associated resource led to changes in behaviour first and then results within the workplace. These results within the workplace reinforced changes in attitude and belief, acquisition of knowledge and changes in behaviour, a feedback loop suggested by Alliger and Janak (1989).

9.1.2 Reflexive engagement with the data

In engaging with the analysis of the data in this study I found it was necessary to listen to my internal voice and be mindful of the assumptions and values that I found there which could potentially influence my treatment of the data. For example, the power of the status of a degree in Sri Lankan society and in the health service in particular was a strong theme I did not anticipate. When I reflect on my response to this theme which first emerged in the Phase 1 stakeholder and student interviews I can recognise that I did not attach great value to it. My own assumptions about the value of a degree and higher education in general did not include ideas of status. These have been informed by my own experience in the UK where a bachelor's degree does not in fact confer a great deal of status but my assumptions were also informed by ideas about what the value of higher education

to the individual should be and 'status' did not seem a good enough reason for engaging in degree level education. It was only through critical self-reflection, a thorough engagement with the interview transcripts, and the narrative analysis within a RIE framework that I came to understand the true power of status within the Sri Lankan context.

Similarly I did not anticipate the power of the 'hidden curriculum'. I was not aware in the early stages of the course of the previous educational experiences that the students had had or what their level of generic work skills was.   Anecdotally students had mentioned some of the skills they appreciated having learnt such as preparing power point skills but I was not aware of the breadth and influence of the graduate generic skills which the students acquired during the programme until I conducted the interviews.

A particular challenge has been to ensure that I work within the particular data set of this research. Due to my involvement with this degree programme over 6 years I have access to a considerable amount of data, on an ongoing basis, which is not part of this research. For example whilst in the final stages of writing the discussion I was also marking the reflective journals of the 3rd batch of students. The reflections of these students resonated strongly with some of the outcomes of this research. I could not help but be interested in the fact that a very different group of students were giving accounts of similar experiences to the first batch. I found I had to adopt a strategy of noting these interesting connections but being alert and mindful of not allowing them to infiltrate into my discussion or add any weight to my conclusions.

9.1.3 Reflexive engagement with the research process

I first became aware of Realist Impact Evaluation as a tutor on an OU course, the Mary Seacole programme, a post graduate management course for NHS leaders (The Open University, 2013). It appealed to me as a framework that I thought I could work with. When I started the EdD I was therefore already favourably disposed to look further at RIE to assess its suitability for my study and again my experience as an OT influenced my response. Central to the way OTs work is an understanding of the person within their unique context and an examination of barriers to participation at the individual, social and physical level. It is not surprising therefore that RIE with its emphasis on the role of context as either an

enabler or barrier to the success of programme activities resonated with my professional belief system. In addition, the ontology and epistemology of critical realism reflects my own world view and I believe it would be difficult for any researcher to adopt a research strategy if this was not the case, a position endorsed by Maxwell (2013).

In addition, I was influenced by the fact that I am primarily an insider researcher, researching a programme that I was heavily involved in delivering and in a subject area, occupational therapy that I have worked in for over 30 years. My own reflections on the process of being an insider researcher led me to the belief that it is extremely difficult to ensure that one's own aspirations and biases do not influence the data collection and analysis. I was very conscious about the need to identify my own assumptions and biases in the first phase of this study and put them 'on the table' for examination and analysis in the same way as all other data sources. I have used primarily qualitative methods and abductive thematic analysis. Starting with an examination of the literature for relevant themes which informed the early deductive thematic analysis was part of a strategy to ensure that my own biases did not inform this first analysis of the interviews. Continuing with a more inductive analysis within a RIE framework then aided identifying novel or unanticipated themes. The means by which using RIE facilitated my own assumptions about underlying programme theory becoming part of the process of inquiry, are discussed in Chapter 4.

9.2 Strengths and limitations of the study

One of the strengths of this study is that in contrast to many evaluations of development partnerships aiming to build capacity in LMICs (VSO, 2015), this study gives voice to students and stakeholders of the host country who were directly involved and affected by the initiative. The perceptions of stakeholders and beneficiaries of the degree programme form the majority of the data set used to evaluate the impacts of the programme. This supports a relationship of equity between myself and the study participants. Because of my long term active engagement with the degree programme the study was also conducted in a climate of mutual trust and respect (Pinner and Kelly, 2017).

In RIE, quantitative data can be particularly useful for assessing outcomes whereas qualitative data can give insight into mechanisms (Santiago-Delefosse et al., 2016). RIE favours a mixed method approach and if possible a more equal mix of quantitative and qualitative data. Quantitative data from the course registers supported conclusions on teaching capability in the OT profession. However, limitations of the study include the lack of qualitative or quantitative data concerning service user benefit and lack of any baseline measurements before the course started. Evidence of outcome benefits to service users could only be inferred from the reports of the students and stakeholders.

There were aspects of this development initiative which were beyond the scope of this inquiry, notably the influence of being taught in English, for some a second language, and for a few their third language, and by primarily Western lecturers. Although all degree education in Sri Lanka is taught in English, as previously discussed in Chapter 3, profession specific models of OT are almost all developed in Western HICs in English. Some terms from these models were actually impossible to translate into Sinhala (the language most commonly used as a first language amongst the first batch) and it was therefore difficult to develop a common understanding of the concepts they described. This could have impacted on the students' understanding of some aspects of the models of practice and there were some indications that it influenced which course resources were used in practice. It is likely that some assessments and informational resources were more culturally transferable than others and this could be an area of further research.

9.3 Contribution to the field of professional education

The contribution of this research is firstly considered from a development perspective, secondly from the perspective of evaluating impacts of professional education, and thirdly, transferability of the findings are discussed, which leads on to a consideration of implications for future research.

The Development Perspective

McNess (2015) discussed the importance of the global intellectual context of research and the importance of sharing findings with similar communities. This

study has particular relevance to the LMIC context which has particular challenges in educating the healthcare workforce. As discussed in Chapter 3, there is a considerable challenge in educating the global health workforce (Campbell et al., 2013; WHO, 2016). Whilst much capacity development work is being done in the field of health (Pinner and Kelly, 2017), this tends to be skill training within specific initiatives rather than programmes that lead to internationally recognised qualifications. Although these may have positive short term impacts, there is a danger that this type of input effectively traps healthcare workers in LMICs into dependence on experts from HICs. This research demonstrates that the degree programme for occupational therapists in Sri Lanka built capacity and capability within the profession in Sri Lanka, impacting positively on clinical practice and crucially developed a cadre of occupational therapists who can sustain degree level education without the need for further input from health professionals from HICs. The degree programme therefore meets the criteria of being a sustainable development project (WHO, 2002), and could provide a model of how degree level education can be provided for health professionals in LMICs.

Evaluating educational outcomes

Within the literature review, Chapter 2, the considerable debate on the evaluation of educational outcomes with specific reference to health professional education was outlined. Researchers have identified the need for methods which address context and attribution (Attree, 2006; Yardley and Dornan, 2012). Research question 2 specifically examines the benefit of RIE to evaluating educational outcomes. This study shows how a realist impact methodology can explore the causal path between educational inputs and outcomes to develop programme theory which may inform future research. The use of RIE and its relationship with the Capability Approach has the potential to address some of the key issues in the literature on the difficulties of evaluating impact on practice. RIE is not without its challenges, Salter and Kothari (2014) found that many realist evaluations struggled to clearly define the core components of context, mechanism and outcomes, but investment by public bodies such as the NHS National Institute for Health Research (Wong, 2018) demonstrates a commitment to explore the potential of this methodology in evaluating complex programmes.

Transferability of findings

This study uses largely qualitative data and the aim of the study is not to generate findings which can be generalised to all settings. However, the study does aim to be credible and have truth value (Twining, 2017), and as such, have the potential to contribute to working hypotheses concerning possible outcomes in similar settings.

Many healthcare professionals within LMICs are not educated to degree level. This is particularly true of nursing and allied health professionals. It could be hypothesised that the findings of this study may be transferable to other LMICs. As well as providing a model for how degree level education could be provided as discussed above, the findings suggest that facilitating degree level education for a group of health professionals could be the first step in developing sustainable education for the whole professional group as well as improving professional practice. However, they also suggest that the status in which degree level education is held within a country may influence the impact of educating to degree level.

There may be some wider transferability to health professional education both within and outside of the development context. The key mechanisms identified in this study which appear to drive outcomes, resonate with themes within the literature on evaluating educational outcomes, particularly in professional fields. The development of a coherent set of beliefs about one's chosen profession, understanding the role and scope of one's chosen profession, growth in professional self belief and confidence, and perhaps most importantly the belief in the value of one's chosen profession all emerged as powerful mechanisms within CMO configurations. It could therefore be hypothesised that attention to both the context and programme activities within professional educational programmes which support such mechanisms could benefit transfer into practice. A consideration of transferability of findings naturally leads onto a consideration of how they may impact on future research and this is discussed in more detail in section 9.4 below.

9.4 Implications for future research

RIE is a theory driven approach which aims to evaluate initial programme theory and construct further theory from the data, in this case the CMOCs identified by the

study, in order to inform future research. This study demonstrates the use of RIE in evaluating educational outcomes and as such can inform future research in this area. In addition, Figure 19 could act as a heuristic in such research by drawing together the key elements that any research design needs to address. Key themes emerging from the study that would benefit from further research are discussed below.

The role of personal agency in transfer of knowledge into practice

Although individual learner factors have been identified as influential factors in the debate on educational outcomes the research tends to focus on factors such as interest, preparedness, ability and motivation. The role of individual reasoning and personal choice does not feature greatly in the academic literature. However, the use of RIE as the methodology and the CA as a theoretical perspective illustrates the importance of a focus on the individual learner in terms of their personal agency and on the reasoning and values that determine what skills and knowledge they choose to transfer into their work context. There is a presumption in the literature that learning will be transferred into practice in the absence of contextual constraints but this may not be the case. This research raises questions about personal agency, choices, values and volition. The mechanism of professional self belief and confidence, mentioned in section 9.3 above, is closely linked in this research to valuing the role of one's profession. Learners may choose not to transfer learning into practice due to personal reasoning involving more valued functionings in their professional and personal lives (Tao, 2013). This dynamic is currently not evident in the research literature.

The role of professional identity and professional confidence in personal agency in the work context

A strong and valued professional identity emerged as a key outcome underpinning transfer of knowledge and skills into practice. Research has already been done on the impact of profession specific content in curricula on professional identity. Further research in this area is required, in particular, the impact of professional identity and professional confidence on personal agency in the work context. Avenues for research could be theory driven in the RIE tradition, for example by

asking questions such as: In what contexts would embedding professional values into CPE activities increase transfer into practice? Or: 'Are professionals who value the core knowledge and skill base of their chosen profession more likely to transfer CPE into practice than those who do not?

The role of generic work skills in facilitating transfer of profession specific skills into practice

The development of generic work skills acted as a powerful mechanism in the first batch supporting transfer of professional skills into practice. This may be unique to the first batch students in Sri Lanka, however, there are indications in the literature that generic work skills support confidence and self-belief and underpin professional competencies. It may a be a useful avenue of inquiry to determine the skill and confidence of professionals with regard to generic work skills and whether a lack of them is negatively affecting transfer of professional skills into practice.

Culturally appropriate resources

Within the development context further research into the characteristics of professional resources from HICs which are most transferable into different cultures within LMICs would be a useful avenue of research. This would serve both as an interim measure for professional training and development until such time as culturally appropriate resources are developed within LMICs themselves and as a step towards more globally appropriate professional resources.

9.5 Final Remarks

As an occupational therapist the ultimate goal is to enable a person to do what they want or need to do, in order that they can be the person they want to be and become the person they have the potential to become. The B.Sc. degree programme in occupational therapy enabled the first batch of students to think and act in the way occupational therapists do, to be confident in being an occupational therapist, to value being an occupational therapist and to become the occupational therapist they had the potential to become.

The UNDP (2009) argue that:

> *'If something does not lead to change that is generated, guided and sustained by those whom it is meant to benefit, then it cannot be said to have enhanced capacity, even if it has served a valid development purpose.'* (UNDP, 2009, p. 6)

The findings of this study strongly suggest that the post registration degree programme has supported changes within the profession of occupational therapy, which benefit clients, occupational therapists, health services, educational institutes and communities in Sri Lanka, that are now generated, guided and sustained by the profession itself.

REFERENCES

Adams, K., Hean, S., Sturgis, P. and Macleod Clark, J. (2006) Investigating the factors influencing professional identity of first-year health and social care students, *Learning in Health and Social Care,* vol.5, no.2, pp. 55-68.

Alliger, G. M. and Janak, E. A. (1989) Kirkpatrick's levels of training criteria: thirty years later, *Personnel Psychology,* vol. 42, pp. 331-342.

Alochi, V. (2018) Occupational therapy training institutions in Africa, *World Federation of Occupational Therapists Congress: symposia presentation*: Cape Town, South Africa.

Amazigo, U., Okeibunor, J., Matovu, V., Zoure, H., Bump, J. and Seketeli, A. (2007) Performance of predictors: evaluating sustainability in community directed treatment projects of the African programme onchocerciasis control, *Social Science and Medicine,* vol. 64, pp. 2070-2082.

Association of Nepal's Occupational Therapists (n.d.) [Online] Available at: https://anotnepal.wordpress.com/ (Accessed 11 July 2018).

Atherton J. S. (2013) *Learning and Teaching; Bloom's taxonomy* [On-line] Available at: http://www.learningandteaching.info/learning/bloomtax.htm (Accessed 15 January 2016).

Attree, M. (2006) Evaluating healthcare education: issues and methods, *Nurse Education Today,* vol. 26, no. 8, pp. 640-646.

Bamberg, M. (2010) 'Narrative Analysis', in Cooper, H. (Ed), *APA handbook of research methods in psychology,* Washington DC, APA Press.

Barr, H., Freeth, D., Hammick, M., Koppel, I. and Reeves, S. (1999) Evaluating Inter Professional Education: A United Kingdom Review for Health and Social Care, *British Educational Research Association/Centre for the Advancement of Interprofessional Education*, London.

Bates, R. (2004) A critical analysis of evaluation practice; the Kirkpatrick model and the principle of beneficence, *Evaluation and Programme Planning,* vol. 27, pp 341-7.

Baxter, J. (2011) *Public sector professional identities: a review of the literature,* The Open University, UK.

Bickenbach, J. (2014) Reconciling the capability approach and the ICF, *ALTER, European Journal of Disability Research,* vol. 8, pp. 10-23.

Board of Investment of Sri Lanka (2016) [Online] Available at: http://www.investsrilanka.com/key_sector/education/education_overview (Accessed 22 March 2018).

Boehm, J., Tanner, B., Lowrie, D., Bonassi, M., Brown, N., Thomas, Y. and Cordier, R. (2015) Exploring emerging occupational therapy identity and the development of graduate attributes among occupational therapy students, *British Journal of Occupational Therapy*, vol. 78, no.8, pp. 499-507.

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology,* vol. 3, pp. 77-101.

British Educational Research Association (2011) *Ethical guidelines for educational research,* BERA: London.

Brooker, C. and Brabban, A. (2004) *Measured success: A scoping review of Evaluated Psychosocial Interventions Training for Work with serious Mental Health Problems*, National Institute for Mental Health England/Trent Workforce Development Consortium.

Brown, T., Crabtree, J.L., Mu, K. and Wells, J. (2015) The Next Paradigm Shift in Occupational Therapy Education: the Move to the Entry-Level Clinical Doctorate, *American Journal of Occupational Therapy,* vol. 69 (supplement 2).

Brown, T., Crabtree, J.L., Wells, J. and Mu, K. (2016) The entry-level occupational therapy clinical doctorate: The next education wave of change in Canada? *Canadian Journal of Occupational Therapy,* vol. 83(5), pp. 306-316.

Buchanan, A., Harris, C., Ashcroft, A., Rens, Z., Joosten, A., Dender, A. and Manning, K. (2018) An innovative education model to build capacity for the future of occupational therapy in developing countries: Vietnam case study. *World Federation of Occupational Therapists Congress: symposia presentation*, Cape Town: South Africa.

The Cabinet Office (2018) *Implementing the sustainable development goals,* Available at: https://www.gov.uk/government/publications/implementing-the-sustainable-development-goals/implementing-the-sustainable-development-goals (Accessed 8 June 1018).

Campbell, J., Dussault, G., Buchan, J., Pozo-Martin, F., Guerra Arias, M., Leone, C. et al. (2013) *A Universal Truth: No Health without a Workforce. Forum Report, Third Global Forum on Human Resources for Health, Recife, Brazil*. Geneva: Global Health Workforce Alliance and World Health Organization.

Chung, J. (2001) Active learning of geriatric rehabilitation: deliberations of an undergraduate occupational therapy programme, *Scandinavian Journal of Caring Sciences,* vol. 15, no.3, pp. 250-256.

Clark, E., Draper, J. and Rogers, J. (2015) Illuminating the process: Enhancing the impact of continuing professional education on practice, *Nurse Education Today,* vol.35, pp. 388-394.

Clarke, C., Martin, M., Sadlo, G., and de Visser, R. (2014) The development of an authentic professional identity on role-emerging placements, *British Journal of Occupational Therapy,* vol. 77, no. 5, pp. 222-229.

Clarke, C., Martin, M., de Visser, R. and Sadlo, G. (2015) Sustaining professional identity in practice following role-emerging placements: opportunities and challenges for occupational therapists, *British Journal of Occupational Therapy,* vol. 78, no. 1, pp. 42-50.

Clouston, T.J. and Whitcombe, S.W. (2008) The professionalization of occupational therapy: A continuing challenge, *British Journal of Occupational Therapy,* vol. 71, no.8, pp. 314–320.

College of Occupational Therapists (2006) *Developing the occupational therapy profession: providing new work-based learning opportunities.* London, COT.

Collier, S. and Valentin, C. (2018) Dispatches from Haiti: mental health training in a resource-limited setting, *The Lancet,* vol.5, pp. 297-8.

Colquhoun, H.L., Letts, L. J., Law, M.C., MacDermid, J.C. and Missiuna, C.A. (2012) Administration of the Canadian Occupational Performance Measure: Effect on practice, *Canadian Journal of Occupational Therapy,* vol. 70, pp. 120-128.

Cook, C., McCluskey, A. and Bowman, J. (2007) Occupational Therapists Report Increased Use of Outcome Measures after Participation in an Education Programme, *British Journal of Occupational Therapy,* vol. 70, pp. 487-492.

Cooper, H. and Spencer-Dawe, E. (2006) Involving service users in interprofessional education narrowing the gap between theory and practice, *Journal of Interprofessional Care,* vol. 20, no. 6, pp. 603-617.

Costley, C., Elliot, G. and Gibbs, P. (2013) *Doing Work Based Research: Approaches to Enquiry for Inside-Researchers,* London: Sage Publications

Cotterill-Walker, S. M. (2012) Where is the evidence that master's level education makes a difference to patient care? A literature review, *Nurse Education Today,* vol. 32, pp. 57-64.

Croft, F. (1991) Why a Degree? *British Journal of Occupational Therapy,* vol. 54, vol. 10, pp. 377-378.

Curtin, M. and Fossey, E. (2007) Appraising the trustworthiness of qualitative studies: Guidelines for occupational therapists, *Australian Occupational Therapy Journal,* vol. 54, pp. 81-94.

Dalkin, M. S., Greenhalgh, J., Jones, D., Cunningham, B. and Lhussier, M. (2015) What's in a mechanism? Development of a key concept in realist evaluation. *Implementation Science,* DOI 10.1186/s13012-015-0237-x

Dalmida, S.A., Amerson, R., Foster, J., McWhinney-Dehaney, L., Magowe, M., Nicholas, P.K., Pehrson, K., and Leffers, J. (2016) Volunteer service and service learning: opportunities, partnerships, and United Nations millennium development goals, *Journal of Nursing Scholarship,* vol.48, no.5, pp. 517-526.

Draper, J., Clark, L. and Rogers, J. (2016) The manager's role in maximising investment in CPE, *Nursing Management,* vol. 22, no. 9.

De Silva, M. J., Breuer, E., Lee, L., Asher, L., Chowdhary, N., Lund, C., and Patel, V. (2014) Theory of Change: a theory-driven approach to enhance the Medical Research Council's framework for complex interventions, *Trials*, vol.15, no. 267.

Ellis, L. and Nolan, M. (2005) Illuminating continuing professional education: unpacking the black box, *International Journal of Nursing Studies,* vol. 42, pp. 97-106.

Eraut, M. (1985) Knowledge creation and knowledge use in professional contexts, *Studies in Higher Education,* vol. 10, no. 2, pp. 117-133.

Freeman, C. (2015) *Can we address imbalances of power in cross-sector partnerships?* [Online] Available at: https://www.devex.com/news/can-we-address-imbalances-of-power-in-cross-sector-partnerships-86405 (Accessed 06 June 2018).

Gardner, M. H. (1998) *Influences on professional practice: what occupational therapists in community teams do and why,* Unpublished M.A. dissertation, University of Leeds.

Gijbels, H., O'Connell, R., Dalton-O'Connor, C. and O'Donovan, M. (2010) A systematic review evaluating the impact of post registration nursing and midwifery education on practice, *Nurse Education and Practice,* vol. 10, no. 2, pp. 64-69.

Grix, J. (2002) Introducing Students to the Generic Terminology of Social Research, *Politics,* vol. 22, no. 3, pp. 175-186.

Gray, D.M. (2014) *Doing Research in the Real World,* 3rd ed., Sage Publications.

Guba, E. G. (1981) Criteria for assessing the trustworthiness of naturalistic inquiries, *Educational Communication and Technology*, vol.29, no.2, pp. 75-91.

Guba, E. G. and Lincoln, Y. S. (1982) Epistemological and methodological bases of naturalistic inquiry, *Educational Communication & Technology Journal,* vol. 30, no. 4, pp. 233-252.

Hammell, K.W. (2004) Dimensions of meaning in the occupations of daily life, *Canadian Journal of Occupational Therapy,* vol. 71, pp. 296-305.

Hammell, K.W. (2009) Self-care, productivity, and leisure or dimensions of occupational experience? Rethinking occupational "categories", *Canadian Journal of Occupational Therapy,* vol. 76, pp. 107-114.

Hammell, K.W. (2015) Quality of life, participation and occupational rights; a capabilities perspective, *Australian Occupational Therapy Journal,* vol.62, pp. 78-85.

Hammell, K.W. (2018) Building globally relevant occupational therapy from the strength of our diversity, *World Federation of Occupational Therapists Congress: keynote speech,* Cape Town, South Africa.

Hammersley, M. (1992) Ethnography and Realism, (pp. 65-80) in: Huberman, A.M. and Miles M.B. (Eds) *The Qualitative Researcher's Companion,* Sage Publications.

Hammersley, M. (1993) On the teacher as researcher, in: Hammersley, M. (Ed) *Educational research: current issues,* London: Paul Chapman Publishing

Hansen, A. M. W. (2015) Crossing borders: a qualitative study of how occupational therapy educators and scholars develop and sustain global partnerships, *Occupational Therapy International,* vol. 22, no.3, pp. 152-162.

Hardwick, S. and Jordan, S. (2002) The impact of part-time post-registration degrees on practice, *Journal of Advanced Nursing,* vol. 38, no. 5, pp. 524-535.

Hayes, N. (1994) *Foundations of Psychology: an introductory text.* Routledge, London.

Health and Social Care Information Centre (2016) [Online] Available at: http://www.hscic.gov.uk/searchcatalogue?productid=20107&topics=0%2fWorkforce &sort=Relevance&size=10&page=1#top (Accessed 26 February 2016).

Health Care Professions Council (n.d.) [Online] Available at: http://www.hcpc-uk.co.uk/aboutregistration/professions/index.asp?id=6#profDetails (Accessed 26 February 2016).

Hellawell, D. (2006) Inside-out: analysis of the insider-outsider concept as a heuristic device to develop reflexivity in students doing qualitative research, *Teaching in Higher Education,* vol. 11, no. 4, pp. 483-494.

Hodgetts, S., Hollis, V., Triska, O., Dennis, S., Madill, H. and Taylor, E. (2007) Occupational therapy students' and graduates' satisfaction with professional education and preparedness for practice, *Canadian Journal of Occupational Therapy,* vol. 74, no.3, pp. 148-160.

Hogg, M.A. (2006) 'Social Identity Theory', in Burke, P.J. *Contemporary Social Psychology Theories,* Stanford University Press.

Holland, K.E., Middleton, L. and Uys, L. (2013) Professional confidence: conceptions held by novice occupational therapists, *South Africa Occupational Therapy International,* vol. 20, No. 3, pp. 105-113.

Holton, E.F. III, (1996) The Flawed Four-Level Evaluation Model, *Human Resources Quarterly,* vol. 7, no.1, pp. 5-20.

Hooper, B., King, R., Wood, W., Bilics, A., and Gupta, J. (2013) An international systematic review of educational approaches and teaching methods in occupational therapy, *British Journal of Occupational Therapy,* vol. 76, no.1, pp. 9-22.

Hutchinson, L. (1999) Evaluating and researching the effectiveness of educational interventions, *British Medical Journal,* vol. 318, pp. 1267-1269.

Ibarra, H. (1999) Provisional Selves: experimenting with image and identity in professional adaptation, *Administrative Science Quarterly,* vol. 44, pp. 764-791.

Ikiugu, M.N. and Rosso, H. M. (2003) Facilitating professional identity in occupational therapy students, *Occupational Therapy International,* vol. 10, No. 3, pp. 206-225.

Iwama, M.K. (2006) *The Kawa model: culturally relevant occupational therapy,* Edinburgh: Churchill Livingstone.

International Rescue Committee: Monitoring and Evaluation Technical Assistance (META), Introduction to monitoring and evaluation [Online] Available at: https://www.metasupport.org/courses/introduction-monitoring-evaluation/ (Accessed 1 April 2018).

Jagosh, J. (2015) *Exploring How to Theorize in Realist Evaluation and Synthesis,* Presentation for the Centre for Advancement in Realist Evaluation and Synthesis, University of Liverpool.

Kagwisa, N. J., Engelen, A., Murebwayire, E. and Musabyemariya, I. (2018) Occupational therapy: a new profession in Rwanda, *World Federation of Occupational Therapists Congress: symposia presentation*, Cape Town: South Africa.

Kates, W. R., Parris, T. M. and Leiserowitz, A. A. (2005) *Editorial: what is sustainable development? Goals, indicators, values and practice,* Environment, [Online] Available at: http://www.environmentmagazine.org/Editorials/Kates-apr05-full.html (Accessed 21 June 2018).

Khasnabis, C. and Heinicke Motsch, K. (Eds) (2010) *Community-based rehabilitation: CBR Guidelines, Towards Community-based Inclusive Development,* Geneva: WHO.

The Kirkpatrick Model. [Online] Available at: http://www.kirkpatrickpartners.com/OurPhilosophy/TheKirkpatrickModel (Accessed 6 September 2015).

Krefting, L. (1991) Rigor in Qualitative Research: the Assessment of Trustworthiness, *American Journal of Occupational Therapy,* vol. 45, no.5, pp. 214-222.

Kumagai, A. K. and Lypson, M. L. (2009) Beyond cultural consciousness: critical consciousness, social justice, and medical education, *Academic Medicine,* vol. 84, no. 6, pp. 782-787.

Kumara, A. (2016) *Personal communication on the education of occupational therapists in Sri Lanka.*

Leffers, J. and Mitchell, E. (2010) Conceptual model for partnership and sustainability in global health, *Public Health Nursing,* vol.28, no.1, pp. 91-102.

Lim, S.M., Stapleton, T., Connolly, D. and Chan, M.L. (2014) Evaluation of a newly established occupational therapy degree programme in Singapore: poster presentation, *Asia Pacific Medical Education Conference 2014.*

Lim, S. M. (2017) *Personal communication re evaluation of the occupational degree programme in Singapore.*

Manzano, A. (2016) The craft of interviewing in realist evaluation, *Evaluation,* vol. 22, no. 3, pp. 342-360.

Mark, M.M., Henry, G.T. and Julnes, G (2000) *Evaluation: An integrated framework for understanding, guiding and improving policies and programs,* San Francisco, Jossey Bass.

Mays, N. and Pope, C. (2000) Assessing quality in qualitative research, *British Medical Journal,* vol. 320, no. 2, pp. 50-52.

Maxwell, J. A. (2013) *Qualitative research design: an interactive approach.* Sage.

Maxwell, J.A. and Mittapalli, K. (2010) Realism as a Stance for Mixed Methods Research, (pp. 145-167) in: Tashakkori, A. and Teddlie, C. (Eds), *SAGE Handbook of Mixed Methods in Social and Behavioural Research,* 2nd ed. Sage.

McNess, E., Arthur, L. and Crossley, M. (2015) 'Ethnographic dazzle' and the construction of the 'Other': revisiting dimensions of insider and outsider research for international and comparative education, *Compare: A Journal of Comparative and International Education,* vol. 45, no. 2, pp. 295-316.

Merton, R. (1972) Insiders and outsiders: a chapter in the sociology of knowledge, *American Journal of Sociology,* vol. 78, pp. 9-47.

Mesfin, N., Lysaght, R., Donnelly, C., Aldersey, H., Joseph, A., Nega, A., Mekonnen, S., Fasika, S. and Finlayson, M. (2018) Establishing occupational therapy training in Ethiopia: the University of Gonda/Queen's University partnership, *World Federation of Occupational Therapists Congress: symposia presentation*: Cape Town, South Africa.

Miller, B. and Ishler, K. (2001) The Rural Elderly Assessment Project: a model for interdisciplinary team training, *Occupational Therapy in Health Care,* vol. 15, no. 3, pp. 13-34.

Milligan, L. (2016) Insider-outsider-inbetweener? Researcher positioning, participative methods and cross-cultural educational research, *Compare: A Journal of Comparative and International Education,* vol. 46, no. 2, pp. 235-250.

Morley, M. (2009) Contextual factors that have an impact on the transitional experience of newly qualified occupational therapists, *British Journal of Occupational Therapy,* vol.72, no.11, pp. 507-514.

Morrison, J. (2003) ABC of learning and teaching in medicine: evaluation, *British Medical Journal,* vol. 326, pp. 385-387.

O'Cathain, A., Murphy, E. and Nicholl, J. (2010) Three techniques for integrating data in mixed methods studies, *British Medical Journal,* vol. 341.

The Open University (2013) 'Section 3: Working with others to evaluate improvement', *Mary Seacole Programme: Unit 8: Leadership initiative: innovating and evaluating.* [Online] Available at: https://learn2.open.ac.uk/mod/oucontent/view.php?id=479728&section=4.2 (Accessed 7 August 2014).

The Open University in Scotland (2016) KG097 Foundations for self directed support in Scotland: An evaluation of use and impact [Online] Available at: https://oepscotland.files.wordpress.com/2016/09/ou-sds-report-final.pdf (Accessed 18 January 2017).

The Open University (2018), K240: Mental health and community [Online] Available at: https://learn2.open.ac.uk/course/view.php?id=205651 (Accessed 22 March 2018).

Oxfam (2016) *Accountability and ownership: the role of aid in a post 2015 world, Oxfam briefing paper*. Available at: https://www.oxfam.org (Accessed 15 June 2018).

Oxford University Press (2018) English Oxford Living Dictionaries [Online] Available at: https://en.oxforddictionaries.com/ (Accessed 1 April 2018).

Pawson, R., Greenhalgh, T., Harvey, G. and Walshe, K. (2004) *Realist synthesis: an introduction,* Methods Paper No. 2, ESRC Research Methods Programme.

Pawson, R. and Tilley, N. (1997) *Realist Evaluation,* London, Sage Publications.

Pawson, R. and Tilley, N. (2004*) Realist Evaluation,* British Cabinet Office.

Pinner, A. and Kelly, N.A. (2017) Health Volunteers Overseas: 30 years of leveraging international partnerships to strengthen health worker capacity, *Frontiers in Education,* vol. 2, pp. 1-5, https://doi.org/10.3389/feduc.2017.00030.

Professional Standards Authority (2016) Professional identities and regulation: a Literature Review [Online] Available at: http://www.professionalstandards.org.uk/docs/default-source/publications/research-paper/professional-identities-and-regulation-a-literature-review.pdf?sfvrsn=4 (Accessed 3 September 2017).

Ramsay, C. (2013) *Making sense of your information.* 'Section 4: Working with qualitative evidence', *Mary Seacole Programme: Unit 6 Developing options for action* [Online] Available at: https://learn2.open.ac.uk/mod/oucontent/view.php?id=508393&section=5.6 (Accessed 6 June 2014).

Reid, A., Dahlgren, L. O., Petocz, P. and Dahlgren, M. A. (2008) Identity and engagement for professional formation, *Studies in Higher Education,* vol. 33, no. 6, pp. 729-742.

Reilly, M. (1962) Occupational Therapy can be one of the great ideas of 20th-century medicine, *American Journal of Occupational Therapy,* vol. 16, pp. 1-9.

Reissman, C.K. (2002) 'Narrative Analysis', in Hubermann, A.M. and Miles, M.B. (2002) *The Qualitative Researcher's Companion,* Thousand Oaks, CA, Sage.

Roberts, B. and Hooper, B. (2017) The contextual influences on the initiation of occupational therapy education programmes in countries where few or no others exist. *American Journal of Occupational Therapy, poster session,* vol. 71, doi:10.5014/ajot.2017.71S1- PO2131.

Robeyns, I. (2005) The Capability Approach: a theoretical survey, *Journal of Human Development*, vol. 6, no.1, pp. 93-117, doi: 10.1080/146498805200034266.

Salter, K.L. and Kothari, A. (2014) Using realist evaluation to open the black box of knowledge translation: a state of the art review, *Implementation Science,* [Online] Available at: http://implementationscience.com/content/9/1/115 (Accessed 10 March 2018).

Santiago-Delefosse, M., Gavin, A., Bruchez, C., Roux, P. and Stephen, S.L. (2016) Quality of qualitative research in the health sciences: Analysis of the common criteria present in 58 assessment guidelines by expert users, *Social Science and Medicine,* vol. 148, pp. 142-151.

Save the Children Fund (n.d) Inclusive Development, [Online] Available at: https://www.savethechildren.org.uk/about-us/our-history (Accessed 15 June 2018).

Schaber, P. (2014) Conference Proceedings: keynote address: searching for and identifying signature pedagogies in occupational therapy education, *American Journal of Occupational Therapy,* vol. 68, S40–S44. http://dx.doi.org/10.5014/ajot.2014.685S08.

Schmitz, C., Esmail, S., McFarlane, L., Suleman, S., Hall, M., Paslawski, T., Bostick, G., Zarski, C. and Marin, B. (2018) Student and university roles in preparing occupational therapy students for practice: a model for work readiness. *World Federation of Occupational Therapists Congress: symposia presentation*, Cape Town, South Africa.

Schofield, J.W. (2002) 'Increasing the generalizability of qualitative research', in: Hubermann, A.M. and Miles, M.B. (2002) *The Qualitative Researcher's Companion*, Thousand Oaks, CA, Sage.

Sen, A. (1979) Equality or What?, *The Tanner Lecture on Human Values*, Stanford University, [Online] Available at: https://tannerlectures.utah.edu/_documents/a-to-z/s/sen80.pdf (Accessed 15 April 2019).

Sen, A. (2005) Human rights and capabilities, *Journal of Human Development*, vol. 6, no. 2, pp. 151-166.

Shenton, A. K. (2004) Strategies for ensuring trustworthiness in qualitative research projects, *Education for Information*, vol.22, pp. 63-75.

Silver, C. and Lewins, A. (2014) *Using Software in Qualitative Research: a step by step guide*, 2nd ed., Sage Publications.

Stern, E. (2015) *Impact Evaluation: A Guide for Commissioners and Managers*, Big Lottery Fund: Bond: Comic Relief: Department for International Development.

Stern, P. (2008) Using journal clubs to promote skills for evidence-based practice. *Occupational Therapy in Health Care*, vol. 22, no. 4, pp. 36-53.

Sweet, M., Dudgeon, P., McCallum, K. and Ricketson, M. D. (2014) Decolonising practices; can journalism learn from healthcare to improve indigenous health outcomes? *Medical Journal of Australia*, vol. 200, no 11, pp. 326-7.

Sykes, H. and Temple, J. (2012) A systematic review to appraise the evidence relating to the impact and effects of formal continuing education on professional practice, *Journal of Nursing Education and Practice*, vol. 2, no. 4, pp. 195-212.

Tao, S. (2013) Why are teachers absent? Utilising the capability approach and critical realism to explain teacher performance in Tanzania, *International Journal of Educational Development*, vol. 33, pp. 2-14.

Timmermans, S. and Tavory, I. (2012) Theory construction in qualitative research: from grounded theory to abductive analysis, *Sociological Theory*, vol. 30, no. 3, pp. 167-186.

Trede, F., Macklin, R. and Bridges, D. (2012) Professional identity development: a review of the higher education literature, *Studies in Higher Education*, vol. 37, no. 3, pp. 365-38.

Turner, A. and Knight, J. (2015) A debate on the professional identity of occupational therapists. *British Journal of Occupational Therapy,* vol. 78, no.11, pp. 664-673.

Twining, P., Heller, R. S., Nussbaum, M. and Tsai, C. (2017) Some guidance on conducting and reporting qualitative studies, *Computers & Education,* vol. 106, pp. A1-A9.

The United Nations Development Programme (2009), *Capacity Development: A UNDP primer,* [Online] Available at: http://www.undp.org/content/dam/aplaws/publication/en/publications/capacity-development/capacity-development-a-undp-primer/CDG_PrimerReport_final_web.pdf (Accessed 21 June 2018).

The United Nations (2015) *Transforming our world: the 2030 agenda for sustainable development.* Available at: https://sustainabledevelopment.un.org/post2015/transformingourworld (Accessed 6.June 2018).

Upvall, M. J. and Leffers, J.M. (2018) Revising a conceptual model of partnership and sustainability in global health. *Public Health Nurs*ing, vol. 35, pp. 228–237. https://doi.org/10.1111/phn.12396

Voluntary Services Overseas (2005) *Sri Lanka: Mental Health Programme Plan,* VSO, Sri Lanka.

Voluntary Services Overseas (2013) *'Sharing skills and experiences...' Good practices in mental health.* VSO: Sri Lanka.

Voluntary Services Overseas (2014) *'VSO's Global Theory of Change: bringing people together to fight poverty' VSO*: London.

Voluntary Services Overseas (2015) *The role of volunteering in sustainable development.* VSO International and the Institute of Development Studies.

Weld, H. (2015) Professional identity (trans)formation in medical education: reflection, relationship, resilience, *Association of American Medical Colleges,* pp. 701-6. [Online] Available at: http://journals.lww.com/academicmedicine/Fulltext/2015/06000/Professional_Identity_Trans_Formation_in_Medical.8.aspx (Accessed 10 September 2017).

Westhorp, G. (2014) *Realist Impact Evaluation: An Introduction,* London, Methods Lab: ODI.

Whitcombe, S. (2013) Problem-based learning students' perceptions of knowledge and professional identity: occupational therapists as 'knowers', *British Journal of Occupational Therapy,* vol. 76, no. 1, pp. 37-42.

Wilding, C. and Whiteford, G. (2009) From practice to praxis: reconnecting moral vision with philosophical underpinnings, *British Journal of Occupational Therapy Journal,* vol. 72, no. 10, pp. 434-441.

Wilkes, M and Bligh, J. (1999) Evaluating educational interventions, *British Medical Journal,* vol. 318, pp. 1269-72.

Willetts, G. and Clarke, D. (2014) Constructing nurses' professional identity through social identity theory, *International Journal of Nursing Practice,* vol. 20, pp. 164-169.

Wong, G., Westhorp, G., Pawson, R. and Greenhalgh, T. (2012) *Realist Synthesis RAMESES Training Materials.* [Online] Available at: http://www.ramesesproject.org/media/Realist_reviews_training_materials.pdf (Accessed 10 October 2015).

Wong, G., Westhorp, G., Greenhalgh, J., Manzano, A., Jagosh, J. and Greenhalgh, T. (2017) Quality and reporting standards, resources, training materials and information for realist evaluation: the Rameses II project. *Health Services and Delivery Research,* vol.5, no.28.

Wood, I. (1998) The effects of continuing professional education on the clinical practice of nurses: a review of the literature, *International Journal of Nursing Studies,* vol. 35, pp. 125-131.

The World Bank (2017) *World Development Indicators: 2017 maps.* Available at: https://data.worldbank.org/products/wdi-maps (Accessed 24 June 2018).

The World Health Organisation (2002) *Guidelines for conducting an evaluation of the sustainability of CDTI projects.* Available at: http://www.who.int/apoc/publications/guidelinesevalsustainabilitycorrectedversion sept04.pdf (Accessed 21 June 2018).

The World Health Organisation (2011) *World Report on Disability*, Geneva: WHO.

The World Health Organization (2013) *How to use the ICF: A practical manual for using the International Classification of Functioning, Disability and Health (ICF)* Geneva: WHO

The World Health Organisation (2016) *Global strategy on human resources for health: workforce 2030.* Available at: https://www.gov.uk/government/organisations/department-for-international-development (Accessed 7 June 2018).

Yappa, P.D. (n.d.) *Occupational Therapy in Sri Lanka,* Ragama: Sri Lanka.

Yardley, S. and Dornan, T. (2012) Kirkpatrick's levels and education 'evidence', *Medical Education,* vol. 46, pp. 97-106.

Young Asia Television (2014) *Interview with Ruvanthi Sivapragasam, Former Country Representative, Voluntary Services Overseas (VSO) Sri Lanka.* Available at: http://vimeo.com/108883407 (Accessed 15 October 2015).

APPENDICES

APPENDIX 1

SELECTED PORTIONS OF THE FIRST ACCREDITED CURRICULUM FOR A POST REGISTRATION DEGREE PROGRAMME IN OCCUPATIONAL THERAPY

UNIVERSITY OF KELANIYA, SRI LANKA, 2011

The objectives of starting this course are:

To structure the programme based on well-grounded occupational therapy theory.

To design the contents to reflect the latest developments in the profession.

To integrate the academic and clinical aspects of the programme with changing practices in the health, educational and political arenas.

To meet student, professional and community needs for quality education of occupational therapists at an international standard.

The curriculum units include theoretical and self directed learning, clinical practice experience, and research and skill development in variety of settings that include medical and rehabilitation in institutional level as well as community level.

Programme Aims and Learning Outcomes:

The overall aim of the programme is to upgrade therapists' knowledge and skills in order to provide more comprehensive services of a better quality, to people with physical and/or mental disabilities, both in the hospital and community setting. It also aims to enhance the ability of therapists to develop research methods to introduce new techniques, new methods of treatment and new approaches to professional practice relevant to Sri Lanka, and to share and contribute their professional experience with therapists from other parts of the world.

At the end of the programme and on qualifying, graduates will be able to:

Demonstrate specific knowledge and skills that are required for the competent practice of Occupational Therapy.

Integrate knowledge, skills and attitudes to practice Occupational Therapy competently.

Demonstrate skills in self-directed learning and positive attitudes towards continuing professional and personal development.

Identify individuals needing Occupational Therapy intervention with greater accuracy and efficiency, whilst understanding and recognising the limitations as well as the scope of OT practice.

Consolidate and demonstrate skills in assessing people with physical and/or mental disabilities and gain further knowledge in the assessment of people with physical and/or mental disabilities.

Refer individuals to other agencies for services, as appropriate, and to be proactive in communicating with these agencies.

Consolidate and demonstrate skills in planning and implementing intervention programmes as appropriate, and gain further knowledge in providing intervention to people with physical and/or mental disabilities.

Monitor and evaluate the efficiency and effectiveness of intervention programmes and modify or terminate such programmes as necessary.

Use appropriate methods of recording and communicating details of assessment, interventions, progress and outcomes, both for individuals and at a service provision level.

Promote good health and well being and prevention of illness and disability related to their area of knowledge, through educational and awareness activities for a range of participants in work and community settings.

Demonstrate activities which will lead to continuing personal and professional development and which will contribute to the advancement of the OT profession.

Demonstrate an awareness of basic research methods and processes which might be applicable in the field of OT.

Respect the rights of all individuals and abide by the code of professional ethics.

Work as an effective and contributing member of a multi-disciplinary team.

Contribute towards policy making in areas relevant to OT practice.

Selected from the original B.Sc. Occupational Therapy curriculum, University of Kelaniya by M.Gardner, October 2015.

APPENDIX 2

<div style="border:1px solid black;">

GROUND RULES

1. If one person is talking to the group we all listen.
2. All group members are equal
3. The group will support and encourage each other
4. All members of the group will take responsibility for the sustainability of the course
5. The group will respect everyone's contribution
6. Everyone in the group should 'pull their weight' in helping to make the course a success
7. Everyone in the group will work together to maintain a safe environment in which all can take risks/make mistakes and learn from them
8. If we don't understand something we will say
9. We will respect our colleagues and lecturers by being punctual
10. We will respect our colleagues and lecturers by keeping our mobiles switched off.
11. Staff will respect all group members equally and show no favouritism
.

</div>

APPENDIX 3
Most Meaningful Change

Title : Introduction of client centred practice

The initial situation:

OTs in Sri Lanka in common with other Health Professionals are trained to make assessments and prescribe treatments. The wishes and/ or priorities of the service user are not normally taken into account. There is a culture that the professional knows best and this is also expected by the service user.

What changed?

It is observable both in the way students respond in class and in their case study reports that many of the student group have adopted client centred practices since being on the degree course.

This has been facilitated by teaching psychology and sociology of health care provision, frameworks of client centred practice and specific tools of client centred practice such as the Canadian occupational performance measure (COPM).

Evidence of changing practice was seen in use of the COPM and case discussions and also in the final course evaluation:

'changed my mind towards mental health' 'makes me challenged when work with mental health problems'

How were constraints and challenges addressed:

Previous assumptions about how professionals should practice were challenged during class discussion. Professional expertise was acknowledged but students were asked to reflect on how that could be put to use to further service user/client priorities and how this in turn could lead to more effective engagement and rehabilitation.

Contributing factors (external and internal):

Students were motivated to learn and try new approaches.

What does the example illustrate?

Given the right theoretical and practical input, assumptions can be challenged successfully and practice changed.

Marjorie Gardner 11.5.12

APPENDIX 4
VSO FINAL REPORT (Extracts)

Summarise the volunteer's main activities and achievements since the last review.

Course leader and coordinator of the B.Sc. OT external degree programme at Ragama Medical Faculty, University of Kelaniya

Responsible for day to day organisation of the course timetable

Translation of the accredited curriculum into a deliverable course

Teaching a number of course modules including all of the Advanced Psychology module, OT in Mental Health module (with contributions from other VSO volunteers), Frames of practice in mental health work, Models of Practice in Occupational Therapy, Skills for practice including stress management, anxiety management, groupwork theory and practice, assessment techniques, theories of health belief and health behaviour, Social Model of Disability, social role valorisation, social exclusion, stereotypes, prejudice and discriminatory practice.

The introduction of the use of online resources developed by the Open University UK as part of the Health Promotion Module.

Teaching and promotion of client centred practice with particular reference to the Canadian Model of Occupational Performance and the Canadian Occupational Performance Measure

Development of the assessment and marking of the Advanced Psychology module, Mental Heath in OT module. Transfer of Skills and Health Promotion module. Second marker for the Learning Disability module and Neurology and Cardiac module.

Individual tutorials to all students to support their learning, identify strengths and weakness, explore possible research interests.

On-going course review and development with Prof…….. of a revised curriculum for the second presentation of the course.

Developing a framework and rationale for clinical practice

Refer to the latest version of objectives and indicators for the placement.

a) To what extent has each objective been met (compare achievement against indicators)?

In this section I refer to the 3rd object of the VSO programme:

Pre-service education of health professionals and non-medical support workers in at least 2 institutions promotes a rights-based approach to treating/caring for people with mental health problems

I can find no specific objectives or indicators for the placement only the course objectives in the placement documentation and the likely roles for a volunteer in the placement documentation. However, the implicit objective of the placement is:

To support the delivery both in terms of coordination and teaching of a degree programme for occupational therapists in Sri Lanka which:

Develops the skills and values of client centred practice

Addresses some of the weaknesses in the original Diploma programme particularly with regard to mental health theory and practice

Incorporates current theory and best practice including community based practice and the theory and practice of CBR

EVIDENCE IN SUPPORT OF BOTH OF THE ABOVE OBJECTIVES BEING MET

On 27th May 2011 the B.Sc. OT degree course at the University of Kelaniya was inaugurated. 35 students were interviewed and 20 were given a place. One student has dropped out due to ill health, 19 have finished the first year and are progressing to the second year of the course. This represents a major achievement for VSO who have supported this programme from the beginning, the Sri Lankan OTs themselves who have pushed for further professional development for so long and Ragama Medical Faculty, University of Kelaniya for supporting this programme of education.

A major component of the first year has been to improve students understanding of the theory and practice of rights based mental health care.

Students have been brought up to date with the current dominant frames of reference in mental health practice and how that relates to the practice of Occupational Therapy

In the delivery of the OT specific modules there has been an emphasis on Evidence Based Practice and students have gained confidence in both accessing and evaluating the evidence base of particular interventions.

The development of the skills and values of client centred care have been central to the programme.

In the evaluation of the first year programme students identified learning about client centred practice, social model of disability and models of practice in occupational therapy as particularly useful

The clinical practice in the second year has been redesigned to build students skills in

working with patient's families and community. Students are required to conduct 10 home visits from their workplace and spend 4 weeks investigating the potential role of occupational therapy in a community setting.

b) What were the main factors that contributed to or prevented the objectives being met?
Are there any lessons that can be learnt from this?

2 of the proposed likely roles identified for my placement were:

Work with local course coordinator to support delivery of the BSc (OT) course

Build the capacity of local staff in coordination and delivery of the BSc (OT course

These 2 likely roles were not possible to fulfil due to the fact that although there was administrative support there was not a local course coordinator to work with, neither were there local staff available with whom I could build capacity to deliver the course other than the OTs on the degree course itself. Of course it is true that the OTs on the course represent the cohort from which future staff will likely be recruited to deliver the OT course and in that sense, being on the OT degree is building their capacity to do this.

c) How were constraints and challenges addressed:

Particular OTs on the degree course with areas of expertise were encouraged to share these with the whole OT group. Despite initial reluctance students were encouraged to see that they all have their own area of expertise and the future of the profession in Sri Lanka relies on sharing skills.

It was necessary for my own role to develop to include far more course coordination, curriculum development and teaching than originally anticipated in the placement outline.

Lack of local course coordinator

Lack of local staff to work with to deliver the programme (although it is important to acknowledge the contribution of the medical faculty, Ragama, University of Kelaniya who contributed specific input)

Impracticability of the original plan to have a series of short term VSO volunteers to deliver modules on the course. Although one STV came to deliver a module completely outside my area of expertise, and a Fulbright scholar came to deliver another, the majority of the rest of the OT specific modules and the psychology and mental health education were delivered by myself.

Marjorie H Gardner

April 2012

APPENDIX 5
Case Study - one key success for the quarter: prepared for VSO Sri Lanka, 2013 (Extracts)

Successful completion of a two year B.Sc. Occupational Therapy programme in partnership with the University of Kelaniya

Background:

Informal talks between VSO, the University of Kelaniya and the Sri Lankan Association of Occupational Therapists started in October 2009 with the aim of establishing a two year 'top-up ' degree for Occupational Therapists (OTs) in Sri Lanka who hold a Diploma in Occupational Therapy. Sri Lankan OTs themselves had recognized limitations in their knowledge and skills particularly in the areas of Mental Health, Evidenced Based Practice, Community Based Rehabilitation and Client Centred Practice.

Applicants for the course were interviewed in April 2011, 20 candidates were selected, and on 27th May 2011 the B.Sc. Occupational Therapy Degree was formally launched by the University of Kelaniya, and teaching started the same day.

April –June 2013

This quarter saw the successful completion of this two year study programme which was delivered exactly to schedule. The final piece of assessed work, a Research Dissertation, was completed by students on 30th April 2013 and marked by 31st May 2013.

It is anticipated that 18 of the original 20 applicants will graduate with a degree in occupational therapy this year.

In addition recruitment began in May for the 2nd batch of students for a second presentation of the course, 21 students have been selected and the course started on 20th June 2013.

It is important to capture the impact of this activity and in order to do so students have been involved in evaluation of the course and identifying the impact it has made on their practice. Although the Mental Health Programme in VSO Sri Lanka closed on 31st March 2013. The success of this degree represents the fruition of years of concerted effort to meet one of the key objectives of the Mental Health Programme i.e. to support education of health professionals and non-medical support workers to promote a rights-based approach to caring for people with mental health problems.

Who is the target group? (description and numbers)

The target group for the degree course is Sri Lankan Occupational Therapists holding a Diploma in Occupational Therapy.

As of May 2013, there were 101 Occupational Therapists holding the Diploma. With the completion of the first course and the recruitment for the second, we can anticipate that this programme will impact on 40% of Sri Lankan Occupational Therapists.

All OTs work with a clinical caseload in the health service therefore ultimately the target group for improving the skills, knowledge and practice of OTs is their patients which will number many thousands.

What was the change we made for them? (focus on the impact, not activity reporting)

Personal: there has been considerable personal gain for the individual OTs who have gained a degree from this programme. They are experiencing the impact that the degree has had on their clinical practice. It has fulfilled their personal aspirations to be degree holders and opens the door to further academic study but more importantly, contributes to building a cadre of OTs in Sri Lanka who can be the next generation of teachers/lecturers and contribute to the sustainability of future degree programmes. In the same week that the degree programme was completed we heard the news that one of the students had won a scholarship to the USA to study in a centre of excellence for occupational therapy in the field of cerebral palsy. The student themselves attributes this success to the both the skills and knowledge she gained on the degree programme and the growth in her confidence to present these skills to a wider audience.

Service Delivery: Evidence from the reflective journals produced by the students, their course evaluation and discussions held with students and their heads of departments point to a change in attitude in service delivery. Students identified understanding the values of client centred practice as a key learning point. With specific reference to mental health issues students showed greater awareness and understanding of the role of Occupational Therapy: 'thought provoking' 'changed my mind towards mental health'. Other areas of the course that students have identified as being particularly important in changing their practice were: a greater understanding of the legal framework of health care and patient's rights, and the principles and practice of evidenced based interventions.

Community Awareness: the course required all students to complete a 4 week placement in the community. As there are no community occupational therapy services in Sri Lanka these were all in non traditional health care settings. Many were local NGOs or charities working within a Community Based Rehabilitation framework, others were special schools or consumer groups. None of these organisations had ever had input from an Occupational Therapist before. Significant gains were made through these placements. Students developed an understanding of the considerable need for rehabilitation services within

communities with little access to hospital based services and a respect for the skills and commitment within local volunteer programmes and consumer action groups. The community groups themselves developed a greater understanding of the potential of occupational therapy and in some cases have maintained ongoing contact with the student who was placed with them, as a source of advice and as a route to access hospital based services as required.

How did we do it? The programme was developed through partnership between VSO, the University of Kelaniya with full support from the Sri Lankan Society of Occupational Therapists. One VSO volunteer acted as course leader throughout the course programme and another VSO volunteer worked part time on the programme for one year.   The programme could not have been achieved without the commitment of the Dean of the Ragama Medical Faculty, University of Kelaniya and the staff within the Medical Faculty who delivered significant elements of the programme.

Donors –The European Union (EU) was the main donor for the Mental Health Programme which initiated this programme. Since March 2013 WHO has been the main donor to support sustainability of the degree programme

What was new or interesting about it? This was the first (and currently only) degree programme for OTs in Sri Lanka. It has increased the confidence and self esteem of OTs in Sri Lanka leading to better communication of their role within the work place. As well as the specific skills and knowledge gained, students themselves have identified the 'soft ' skills learnt as equally important e.g. confidence in presentation skills, professionalism at work, improved information technology skills, confidence in researching topics independently, problem solving skills, improved writing skills (reports and essays) and communication skills.

The cooperation between the many VSO volunteers in Sri Lanka during the first year of the programme in helping to deliver this programme was also note worthy and this extended to volunteers beyond the Mental Health Programme.

M.H.Gardner August 2013

APPENDIX 6

It turns new page of my Life…

I was born in Matara, one of the main coastal cities of Sri Lanka. My entire education was at St Mary's Convent, Matara. I have been very fortunate to have a loving family which offers great support, encouragement and good social back ground filled with humanistic spirit. I have worked at the National Institute of Mental Health and Lady Ridgway Children's hospital, Colombo before assuming duties as an Occupational Therapist at General Hospital, Matara in year 2005 which is situated in my native area. I was the first Occupational Therapist to be appointed to this hospital.

Year 2011 was a landmark year for me as I was selected for the first batch of OT degree course conducted by the faculty of Medicine, Ragama. I was delighted to be selected and was hopeful to do well. It was really enjoyable as I was learning new modules from different lecturers from different parts of the globe. First year was extremely challenging as I had to come to Ragama from Matara once a week. As I had already established therapy services for six days a week, I had to accommodate all my clients for four working days a week with difficulty and woke up early in the morning (2.30 a.m), to prepare meals for my family and to be present by 9.00 a.m for lectures at Ragama. Four hours of my train journey filled with studies.

This new learning opportunity became the turning point of my academic life as well as my skills, behaviour and attitudes. I learnt many concepts during the degree course. Firstly, I understand that the current dominant model of practice in OT promotes client centered practice enabling faster and safer recovery. Secondly I understand the impact of the social, physical and psychological environment on occupational performance including care environment. Thirdly I understand that the development of the identity and the importance of this to physical and psychological well being and how I could support an individual's identity. Fourthly I understand current theories of health promotions and that increasing awareness of health promoting activities amongst clients of OT in work and community setting would be useful. Fifthly integrating evidence based practice, critical thinking and reflective practice enhances the effectiveness of my clinical work. Sixthly I have learnt how to enhance my skills to work outside the hospital   to reach the home and the community and also to work efficiently in the team. Finally I have learnt to respect the rights of all individuals and to maintain the code of ethics.

In my practice, I usually apply best practice guidelines to justify my clinical reasoning. This makes me feel honest towards my personal weaknesses. It provides me opportunity to shift from ordinary practitioner to evidence based reflective practitioner. The experiences which I had during my degree had been extremely helpful for me to apply one of the international scholarships from USA. The professional competency that I gain through my practice after degree pushed me to

write two essays regarding my professional career which must need to win the above scholarship. I am happy to say that my two essays were elected as one of the top in the competition. As a result I will represent my country in the international research conference held in USA later this year. I use this opportunity to explore and to bring new vistas of knowledge to my motherland with aiming to maximize the betterment of my profession, my clients and their families. Furthermore I am looking forward to my future as an Occupational Therapist with a great sense of endowment, fulfilment and an obligation to provide standard patient care. To this end, I would like to enhance my knowledge and skills further by continuing Master's degree in OT. Finally I am very appreciative for how much I have learnt through my degree which uplift my future.

APPENDIX 7

UNIVERSITY OF KELANIYA: B.Sc. Occupational Therapy: Degree upgrade programme 2011-13

Evaluation of course impact

Interviews with occupational therapists who have completed the course.

It is now two years since you completed your degree in occupational therapy. Looking back to your practice before and after, do you think following the degree course has made any difference to you as a professional and/or to your professional practice?

These interviews are designed to be largely unstructured so the interviewer is not suggesting impacts to the participants. The aim is for participants themselves to generate the types of impact that they themselves consider important.

Prompting will be used to generate examples and explore attitudes, emotions. and what is significant to the interviewee. I am interested in the stories that participants tell about their practice and if and how their professional practice and professional lives are any different having completed the degree course.

Marjorie Helen Gardner

2/9/15

APPENDIX 8

UNIVERSITY OF KELANIYA: B.Sc. Occupational Therapy: Degree upgrade programme 2011-13: Evaluation of course impact

Interviews with stakeholders.

Since the start of the B.Sc. Occupational Therapy in 2011, you/your organisation has supported this initiative.

What was the rationale in supporting this initiative and were any outcomes anticipated?

Did you have any thoughts or expectations about how this programme might impact on the practice of the students as OTs?

Two batches* of OTs have now successfully completed the course and the third and final batch have been recruited. Are you aware of any outcomes of the course? Are there any particular types of evidence that are/would be important to you in assessing outcomes?

These interviews are designed to be largely unstructured so that I would not be suggesting any outcomes. I am interested in why these individuals/agencies supported the degree course and what they would consider a 'successful' outcome. What was the underlying rationale which supported their involvement?

Prompting will be used to generate examples and explore attitudes and issues significant to the interviewee.

Marjorie Helen Gardner

2/9/15

APPENDIX 9

EVALUATION OF A TOP UP DEGREE PROGRAMME IN OCCUPATIONAL
THERAPY FOR PRACTISING OCCUPATIONAL THERAPISTS IN SRI LANKA

Agreement to Participate

Name of participant: _____

Name of researcher: Marjorie Helen Gardner

I agree to take part in this research project.

I have had the purposes of the research project explained to me and have been given an information leaflet.

I understand that my participation will involve being interviewed. I agree to this interview being audiotaped and that the researcher may use the results as described in the information leaflet.

I have been I have been informed that participation is voluntary and that I may at any stage withdraw without giving a reason but would need to do so before 1st September 2016 when data analysis commences.

I have been assured that my participation or non–participation in this project will not affect my relationship with the researcher; furthermore my participation is not in response to financial or other inducements.

I have been assured that my confidentiality will be protected as specified in the leaflet provided and that the data generated will be stored electronically and in hard copy and destroyed after 5 years.

I agree that the information that I provide can be used for educational or research purposes, including publication.

I have been informed that a summary copy of the research findings will be made available to me.

I understand that if I have any concerns or difficulties I can contact Marjorie Gardner

m.h.gardner@open.ac.uk   or her supervisor, Professor Judith Lathlean
J.Lathlean@soton.ac.uk

Participant's signature   _____

Researcher's signature _____

Date_____

APPENDIX 10

INFORMATION SHEET

EVALUATION OF A TOP UP DEGREE PROGRAMME IN OCCUPATIONAL THERAPY FOR PRACTISING OCCUPATIONAL THERAPISTS IN SRI LANKA

Name of researcher: Marjorie Helen Gardner   m.h.gardner@open.ac.uk

Dear participant

As the major part of a Doctorate in Education with the Open University I am conducting an Evaluation of a top up degree programme in Occupational Therapy for practising Occupational Therapists in Sri Lanka.

This top up programme has been running at the Medical Faculty, Ragama, University of Kelaniya since May 2011.

Aim of the Research

To identify the types of impact that this programme of study has had on the professional practice and professional lives of students who have completed the course.

Method

Interviews with Occupational Therapists who have completed the course.

Interviews with a range of stakeholders who have an interest in the course's impact.

Interviews will be audiotaped and transcribed. This information will not be passed onto any third party and all information received will be analysed and included in the published research.

Within the published research, information and quotes from individual interview will be anonymised and identified by a unique code, not by participant's names.

However should participants wish their involvement and support of this research project to be acknowledged, this can be done, without reference to their particular interview, at the end of the report.

Thank you

Marjorie Helen Gardner

APPENDIX 11

EVALUATION OF A TOP UP DEGREE PROGRAMME IN OCCUPATIONAL
THERAPY FOR PRACTISING OCCUPATIONAL THERAPISTS IN SRI LANKA

Request to be named as a contributor to the research in any publications

Name of participant: _____

Name of researcher: Marjorie Helen Gardner

I understand that no collected data will be attributed to me personally but that my
contribution to the research will be acknowledged at the end of both the final report
(thesis) and a summary report.

I understand that if I have any concerns or difficulties I can contact Marjorie
Gardner

m.h.gardner@open.ac.uk or her supervisor, Professor Judith Lathlean
J.Lathlean@soton.ac.uk

Participant's signature _____

Researcher's signature _____

Date_____

APPENDIX 12

Coding template: Phase 1 students

Main Theme	Sub theme	Examples
A Knowledge acquired	A1 OT specific	Constrained Induced Movement Therapy S2 Home Visit rationale S1, S2, S3
	A2 Health /Rehabilitation specific	Social model of disability Evidence based practice S1, S2, S3
	A3 Society/culture specific	Legal framework S3
B Skills acquired	B1 OT specific	HV protocols S1, S2, S3
	B2 Health/Rehabilitation specific	Assessment and documentation S1, S2, S3
	B3 Generic work skills	Communication and presentation skills. S1, S2, S3
C Changes in attitudes/values/beliefs	C1 Attitudes towards patients/carers	Valuing patient's concerns, becoming client centred S1, S2, S3
	C2 Attitudes towards colleagues	Not fearful, more open S1, S2, S3
	C3 Attitudes towards self	Confident in own abilities S1, S2, S3
D Behavioural change in the workplace	D1 Towards patients/carers	Acting on patient/carer priorities S1, S2, S3
	D2 Towards colleagues	Improved communication with colleagues. Better MDT work S1, S2, S3
E Organisational impact	E1 Organisations activities	HVs introduced S1, S3
	E2 Organisational effectiveness	More effective team work S1,S2, S3
F Benefit	F1 Benefits to patients	Evidence based treatment S1, S3 Home visiting S1, S3
	F2 Benefits to carers	Information giving S1, S2
	F3 Benefits to self	Increased opportunities for personal development S1, S2, S3
	F4 Benefits to society	Society understands role of OT and can seek out services. S2
G Professional Identity	G1 Confidence in OT role	Presentations on role, education of patients, carers and colleagues. S1, S2, S3
	G2 Equal partner with other professionals	More effective team work S1, S2, S3

APPENDIX 13

Coding template: Phase 1 Course Architects

Main Theme	Sub theme	Example
H: Benefit	H1: Benefit to patients	Evidence based practice A2, A3 Development of community and home based services A1 A3
	H2: Benefit to OTs	Needs for training met. A1, A2, A3
	H3: Benefit to SL health services	Improved mental health services A 1
J. Development of the OT profession	J1: Career development	Access to a degree course A1 Gaining a degree and maintaining professional status A2, A3
	J2: Building capacity	Increase in teaching and clinical supervision potential A1, A2, A3
	J3: Improving practice	Evidence based practice Research orientation Improved organisation A2, A3
K: Organisational impact	K1: Changing role of OTs	Home Visiting A2, A3
	K2: More training in the workplace	Training cascades from OT graduates to other staff A2, A3

APPENDIX 14

INFORMATION FOR MEMBER CHECKING GROUPS

CONTEXT- MECHANISM-OUTCOME CONFIGURATIONS

(Pawson and Tilley, 2004)

I am using a research methodology called Realist Impact Evaluation.

It looks for patterns in the data called Context-Mechanism-Outcome Configurations

Here are some examples of what these terms mean:

CHARACTERISTICS OF CONTEXTS, MECHANISMS AND OUTCOMES

CONTEXT	MECHANISMS	OUTCOMES
Cultural norms and values Economic conditions Public policy Outcomes of any previous related programmes The physical, social and psychological environment The experiences and capabilities of individuals	The 'generative force' that leads to outcomes. Often hidden Sensitive to context How participants of a programme interpret programme resources and opportunities and how these act by: Increasing knowledge and understanding Enabling reasoning Changing reasoning Changing beliefs/norms Changing preferences Enabling choices Supporting changes in behaviour	Intended and unintended consequences of the programme. May be quantitatively or qualitatively measured May be evident in decisions taken, choices made, attitudes and behaviours demonstrated.

Adapted from: Jagosh (2015)

All of the interviews have been examined using this framework

M.H.Gardner,   February 2018.

APPENDIX 15

Reflective analysis using Barr's (1999) modification of Kirkpatrick's hierarchy.

Level 1 **Learner's reactions**	**Participant's views of their learning experience and their satisfaction with the programme.** Initial reaction to the concept of client centred practice was not positive, students felt challenged and threatened.
Level 2a **Modification of attitudes/perceptions**	**Changes in attitudes or perceptions towards patients/clients and their conditions, circumstances, care and treatment.** The attitudes of the students after being taught client centred concepts is best described in terms of Bloom's affective hierarchy as at the levels of 'respond' or 'value' as their responses were reactive, animated, and they challenged and argued against the concepts presented. After some weeks of using the client centred assessment tool COPM in their practice, their attitudes towards the concepts and their patients changed showing evidence of developing a new value system 'organise and develop'
Level 2b **Acquisition of knowledge/skills**	**Knowledge: acquisition of concepts, procedures and principles. Skills: acquisition of problem-solving, psychomotor or social skills.** The acquisition of the concept was resisted but the teaching of a particular assessment tool COPM, procedures for implementing that tool and the resources to apply the tool in practice were accepted.
Level 3 **Change in behaviour**	**Behavioural change transferred from the learning environment to the workplace, prompted by modifications in attitudes or perceptions, or the application of newly acquired knowledge/skills.** Students applied the COPM in their workplace prompted by acquired skills. After a period of time this change in practice had an impact on their attitudes
Level 4a **Change in practice**	**Wider changes in the organisation/delivery of care, attributable to an educational programme.** Not assessed at this point in time
Level 4b **Benefits to patient/carers**	**Any improvement in the health and well-being of patients/clients as a direct result of the education programme.** Students reported increased motivation and engagement in therapy within their clinical practice

M.H Gardner, 2018.