

**PREPAREDNESS OF GRADUATES IN OCCUPATIONAL THERAPY
FOR CLINICAL PRACTICE:**

Perceptions of Students and Supervisors in a KwaZulu-Natal

Case Study

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Perceptions of Students and Supervisors in a Kwazulu-Natal Case Study

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DECLARATION

I, **DESHINI NAIDOO**, Student number **9401555**, declare that,

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DEDICATION

I would like to dedicate this dissertation to my family.

The support of my family has enabled me to complete this dissertation

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OPERATIONAL DEFINITIONS

Academic supervisor: These are staff members appointed by the university to supervise students

Clients: a person, group, program, organization or community for whom the practitioner is providing services

Clinical performance: This is considered the display of professional behaviour and the ability the students demonstrate in implementing the OT process

Clinical practice: in the context of this study clinical practice refers to final year students having the knowledge and skill to assess, intervene, evaluate and make recommendations within remedial and rehabilitation programmes within a biopsychosocial, biomechanical, neurodevelopmental framework pertaining to occupational performance (HPCSA, 2009:8)

Clinical supervisor: an occupational therapist, registered with HPCSA, who provides supervision to occupational therapy students who are on clinical placement. (Fieldwork guide: UKZN Discipline of Occupational Therapy)

Community service: The mandatory year of service that new graduates of the health profession have to embark on prior to accepting work as an independent registered practitioner. These new graduates are qualified occupational therapists who are registered as community service therapists and are employed as a community service therapists by the Department of Health for the year of their community service. The placement of the new graduates are determined by the Department of Health and the new graduates do not have a choice in the location of their placements.

Educator: this term is used interchangeably to represent academic staff i.e. staff employed by the university to lecture to the students.

Fieldwork/practice education placement: This refers to the practical component of the curriculum which involves placement at a hospital or venue where OT services are required. The terms Fieldwork and Practice education placement will be used interchangeably

Graduate competencies: In the context of this study the knowledge, skills and attitudes that students gain through engagement in the undergraduate programme

Graduate Perceptions: In the context of this study, refer to final year students perceptions (technically not yet graduated) of their perceived competencies upon graduation.

HPCSA: Health Professions Council of South Africa is the governing body of health professionals such as occupational therapists and physiotherapists etc.

HPCSA Evaluation: A process of accreditation of an OT programme by a panel of evaluators appointed by the HPCSA Board of Occupational Therapy, Medical Orthotics and Prosthetics and Art Therapy.

HPCSA Evaluator: An educator that is deemed to be an expert by the Board of occupational therapy and is appointed to conduct an evaluation of OT programmes for the purpose of accreditation

Mid- terms: The formative assessment of students at the middle of their fieldwork placement that mimics the summative assessment at the end of the practical.

Minimum standards: are the minimum requirements for occupational therapists and occupational therapy assistants that qualify them for the delivery of occupational therapy services

Module: A course that forms part of a larger curriculum that is offered over one semester or two semesters. The modules that run over two semesters are considered a year module.

MOCK practical: A preparation session conducted, at the occupational therapy programme at the University of KwaZulu Natal, prior to commencement of the practice education placement that prepares students for their placements

New graduate: is a student who has recently graduated from university. The newly qualified therapist has worked for a year or less.

OT programme: This refers to the 4 year degree that is offered at UKZN for the professional development of occupational therapists

Preparedness: In the context of this study preparedness refers to the final year students being equipped with the required knowledge and skill to cope with clinical practice.

Registered practitioner: any individual registered to practice with the Health Professions Council of South Africa (HPCSA). Occupational therapists are registered with the Board of Occupational Therapy, Medical Orthotics and Prosthetics and Art Therapy.

Standards of practice: a set of minimum standards as part of clinical governance whereby practitioners are guided in all areas where services are delivered to patients /clients (HPCSA, 2006)

ABBREVIATIONS

HPCSA:	Health Professional Council of South Africa
OT:	Occupational therapist /occupational therapy
OTs:	Occupational therapists
OTASA:	Occupational Therapy Association of South Africa
SAAOT:	South African Association for Occupational Therapy
UKZN:	University of Kwa-Zulu Natal
WFOT:	World Federation of Occupational Therapists

ABSTRACT

Background: Investigating the development of competent occupational therapists through an academic programme and fieldwork placement is an emerging field in South African occupational therapy research. It is an essential aspect of educational research, as new graduates are often required to work autonomously during their community service.

Aim: The aim of this study was to explore the perceptions of the final year University of KwaZulu-Natal occupational therapy students and their clinical supervisors' regarding their undergraduate education and preparedness for independent clinical practice

Methods: Seventeen final year students and seven clinical supervisors participated in focus groups and semi-structured interviews. Document analysis was used to explore the Health Professions Council of South Africa evaluation report of the undergraduate programme and methods used to assess the final year students. The conceptual framework was based on the World Federation of Occupational therapist Minimum Standards for Training Occupational therapists and deductive reasoning was used to analyse the data.

Findings: Most final year students and clinical supervisors felt that students were partially prepared for clinical practice and lacked confidence. The students' level of confidence was linked to the areas of occupation therapy that they enjoyed and their positive experiences during fieldwork placements. Curriculum design and content were some of the areas highlighted as needing review.

Conclusion: The overall perception of both the clinical supervisors and the students was that the new graduates would be able to cope with basic clinical practice. However, there were aspects of the curriculum that could be improved to ensure that the new clinicians have more confidence and are equipped to deliver an occupational therapy service that specifically meets the need for diverse African healthcare settings.

CHAPTER ONE

INTRODUCTION

1.3 INTRODUCTION

Occupational therapy (OT) has been defined as a client centred health profession that promotes health and well-being through occupation(WFOT, 2012).The profession has been in existence for the past 90 years and occupational therapists (OTs) have adapted their practice to meet the needs of the communities they serve(Creek, 2007; WFOT, 2012). In South Africa, OTs need to graduate from an educational institution accredited by their professional body, the Health Professions Council of South Africa (HPCSA), and register with the HPCSA to practice as a therapist. The HPCSA is mandated by the Health Professions Act 56 of 1974 to register all students and graduated therapists who are engaged in the practice of OT (Van der Reyden, 2010).OT was first offered at the University of Durban Westville (later merging with the University of Natal to become the University of KwaZulu-Natal) in 1977.Since then student numbers have grown from 5 in the first year to 137 enrolling across all four years of the programme in 2012.

An accredited OT undergraduate programme is required to align its content to meet the requirements and competencies prescribed in the HPCSA Minimum Standards of Training of OTs document. The prescribed Minimum Standards of Training were developed to ensure that OT “*graduates are competent practioners who are able to deliver contextually appropriate services within local and international contexts*”(HPCSA, 2009:2).OT graduates are considered prepared for clinical practice when they have the required knowledge, skills and attitudes necessary for practice as prescribed by the HPCSA Minimum Standards of Training (HPCSA, 2009).Creek (2007) refers to clinical practice as collaboration with the client with regard to assessing the functional potential, developing interventions in terms of identifying and solving occupational performance problems, and adapting environments to increase function and social participation. To assess the preparedness of the University of KwaZulu-Natal (UKZN) OT graduates for clinical practice, that is final year students’ and clinical supervisors’

perceptions of whether the students are ready to cope with independent practice at the end of the year. This study investigated the perceptions of seventeen fourth year OT students and seven of their clinical supervisors using focus groups and semi-structured interviews.

1.4 BACKGROUND

The School of Health Sciences at UKZN is the sole provider of occupational therapy professional education in KwaZulu - Natal. The main purpose of the allied health professional course is to produce competent professionals through academic programmes. Educational institutions are challenged to ensure that the content of all their undergraduate programmes equips new graduates with knowledge, skills and attitudes that allow them to deliver a service that matches the needs of their prospective workplace (Adamson, Hunt, Harris and Hummel, 1998; Barnitt and Salmond, 2000; Gray, Clark, Penman, Smith, Bell, Thomas, Trevan-Hawke, 2012).

The World Health Organisation (WHO) as cited in the article Health professionals for a new century: transforming education to strengthen health systems in an interdependent world (2010) advocates that educational institutions should monitor the effectiveness of their programmes. The purpose of this monitoring is to ensure that their graduates are skilled professionals who are able to address the local health needs (Frenk, Chen, Bhutta, Crisp, Evans, Fineberg, Garcia, Ke, Kelly, Kistnasamy, Meleis, Naylor, Pablos-mendez, Reddy, Scrimshaw, Sepuleveda, Serwadda, Zurayk, 2010; Hocking and Ness, 2002b). Educational institutions in developing countries face the additional pressure of adapting their undergraduate programmes to meet the needs of decentralised health services through the introduction of primary health care and to work in newly established practices where there is little understanding among clients of the value of OT (Adamson et al., 1998; Brown, Bourke-Taylor and Williams, 2012; Frenk et al., 2010; Mulholland and Derald, 2005).

In addition, educational institutions are expected to offer an OT undergraduate programmes that meets both international and local prescribed standards for

training. The World Federation of Occupational Therapists (WFOT) is the international OT association that guides the standards for training and specifies the competencies required from an entry level occupational therapist (OT). It recognised that it was essential to have internationally acceptable standards of education and therefore developed the Minimum Standards for Education of OTs. The WFOT (2002) Revised Minimum Standards for the Education of OTs were designed to more accurately reflect the needs and cultures of different countries, and to ensure that member countries accredit their undergraduate programmes with the local professional bodies. The WFOT Minimum Standards address the following three areas i.e. the local context, the philosophy and purpose of the programme, and the educational programme (educators and facilities, fieldwork, curriculum content, graduate competencies which will be described in greater detail in Chapter 2. The standards prescribe “*critical aspects of the content, process and accountability mechanisms of OT educational programmes...forms the basis of accreditation processes developed by National OT Associations*” (Sinclair, 2002, pg.1).

In South Africa, HPCSA revised the local Minimum Standards for Training of Occupation Therapists in 2009. The purpose of this revision was to ensure that South African educational institutions adhered to the requirements outlined in the WFOT Minimum Standards of Training document, and to ensure that OT programmes trained new graduates to cope with the needs of the local South African context. This latter aspect of contextualising the programme to the South African context is addressed in the history of OT in South Africa. Both the HPCSA and WFOT Minimum Standards for Training documents require educational institutions to be audited every five years by evaluators appointed by the professional body to ensure that the undergraduate programme meets prescribed standards (HPCSA, 2006; Hocking and Ness, 2002a; Van der Reyden, 2010). On-going educational reviews ensure that programmes remain relevant in the face of new health care challenges, while systematic evaluation is important, as it provides feedback regarding the ability to prepare graduates for practice, thereby allowing educators to gauge the effectiveness of their students learning (Atkinson and Steward, 1997; Tryssenaar and Perkins, 2001).

The Discipline of OT at UKZN adheres to both the WFOT and the HPCSA Minimum Standards for its four year undergraduate training, and these will be used in the study to analyse the data collected and report the findings. The experience that the students gain on the undergraduate programme is should to equip them with the knowledge, skills and attitudes to implement and practice their clinical skills. The knowledge and skills required for clinical practice that the students acquire as a result of their experience in the undergraduate curriculum will be referred to in this report as graduate competencies. Both theoretical knowledge and practical fieldwork placements play an important role in developing professional behaviours and creative and critical thinking skills, which are essential for OT practice (Brown et al., 2012; Doherty, Stagnitti and Schoo, 2009; De Beer and Vorster, 2012; Hinojosa and Blunt, 1998; Hodgetts, Hollis, Triska, Steven, Madill and Taylor, 2007; Hummel and Koelmeyer, 1999; Nayar, Blijlevens, Gray and Moroney, 2011; Schell and Cervero, 1993). The students are expected to acquire core OT knowledge through OT theory and the foundation courses and to gain opportunity to practice learned skills during fieldwork components.

The core OT knowledge focuses around the theoretical content related to the implementation of the OT process i.e. assessment, treatment planning, treatment implementation and evaluation of the effectiveness of the service. The foundation courses offer them knowledge related to the body, body structures, and human development. The practical component allows students to apply the OT process which entails the ability to assess and treat clients. OT students are expected to complete between 60-80% of their 1000 hours of fieldwork in their third and fourth year of study as this component is considered essential to cultivate the clinical skills required to practice OT. The ability to implement these clinical skills i.e. to assess, plan treatment in collaboration with the client, implement treatment and the clinical reasoning that enables this process are key aspects of OT practice (HPCSA, 2009).

This study has investigated the students' perceptions around their ability to implement these above mentioned clinical skills. The current UKZN OT programme uses a combination of theoretical examinations and fieldwork examinations to assess whether the students possess the prerequisite clinical

skills for practice. Fieldwork assessment forms part of the continuous assessment mark and entails a written case study, an oral case presentation and the mark given by clinical supervisors for students' clinical performance during the fieldwork block. The assessment of clinical performance will be discussed in further details in Chapter 2. Students are also expected to learn management skills such as working with support staff in the form of OT assistants and OT technicians, be able to manage a department and complete tasks such as a writing motivation for equipment (UKZN Handbook School of Health Science, 2012). The ability to complete these administrative tasks was not included in the scope of this study.

The HPCSA and WFOT Minimum Standards prescribe a core theoretical component and a practical component i.e. a minimum of 1000 hours of fieldwork placement (HPCSA, 2009; Hocking and Ness, 2002a). An evaluation by a panel of external academics representing the HPCSA is completed every five years for accreditation purposes. The programme of the Discipline of OT at UKZN was last accredited in 2011. The evaluators found that the programme met the HPCSA Minimum Standards for Training of OT guidelines, however highlighted some aspects relating to student assessment and the curriculum that required attention. This HPCSA accreditation report was one of the documents used during document analysis as the HPCSA panel of evaluators represent experts who evaluated the OT programme at UKZN.

As mentioned previously fieldwork placement refers to the practical component of the curriculum, which in the UKZN OT programme, takes place in a hospital or an organisation that requires OT services e.g. a six week fieldwork placement at Addington Hospital that enables them to practice their new acquired skills in assessment and treatment. Fieldwork therefore provides an opportunity to integrate theoretical knowledge into professional reasoning and behaviours required for practice as an occupational therapist (OT). Defining and assessing the clinical competencies required of an entry level OT is a challenge for educators. Salvatori (1996) stated that the knowledge, skills and professional judgement used within the field of OT are three domains which are unique to the profession. A number of authors agree that setting minimum standards of performance associated with each domain will serve as a useful framework for assessment

(Hummel and Koelmeyer, 1999; Morley, 2006; Rugg, 1996; Salvatori, 1996; Tryssenaar and Perkins, 2001). Students' competencies over the four years are currently assessed during written tests as well as by clinical performance assessments during fieldwork placement. The WFOT and HPCSA guidelines clearly indicate the types of competencies and the expected professional behaviours that the students need to acquire during this period. According to Snyman (2012), each educational institution in South Africa has developed its own clinical performance assessment form. Students find constructive feedback from their supervisors on their clinical performance assessments during fieldwork as beneficial (De Beer and Vorster, 2012). A successful fieldwork placement plays an important role in enhancing the students' clinical reasoning skills to ensure that they develop problem solving and adaptive learning skills that are necessary for practice (Hinojosa and Blount, 1998; Holmes, Bossers, Polatajko, Drynan, Gallagher, O'Sullivan, Slade, Stier, Storr, Denney, 2010; Gray et al., 2012 Schell and Cervero, 1993).

Numerous studies have shown that the transformation from the role of student to that of a qualified practitioner can be a difficult experience. The students' experience during their undergraduate programme assists in preparing the student to embark on this journey (Morley, 2006). New graduate OTs are required to meet the challenge of transitioning from student to qualified practitioner, and to meet the challenge of coping with changing health needs. In the 21st century, the health needs have changed with the introduction of new infectious diseases, environmental and behavioural risks, and the presence of co-morbidities, such as high blood pressure and diabetes, and an increase in the complexity of cases seen. In addition, the rising costs of healthcare has necessitated that health care professionals are required to move clients more quickly through the healthcare system. This creates the need for the graduates to rapidly acclimatise to their new work environment and work proficiently to provide effective services (Frenk, et al., 2010). The students need to have the above mentioned work place experience during fieldwork blocks to cope with the demands of their first job.

By virtue of graduating from the OT programme students are deemed competent for clinical practice. However, the introduction of a mandatory year-long

community service in South Africa (SA) has thrust the newly graduated health professional into the role of an autonomous practicing clinician, without direct supervision from a more experienced occupational therapist, soon after graduation. During the community service year, the new graduate could be placed in areas where s/he may be the only occupational therapist, requiring them to function autonomously to deliver an OT service as expected from an accountable clinician (Frenk, et. al., 2010; Joubert, 2010). The new graduates are faced with several dilemmas for example, being able to deliver an OT service that addresses both the hospital and community based needs, and to deliver culturally appropriate health care as expected in the SA setting (Frenk et. al., 2010). Given the cultural and ethnic diversity in SA, and the discrepancies in the provision of health services to rural and urban communities, the newly trained SA occupational therapist faces a constant battle to transform from being a student to fulfilling the role of a qualified independent occupational therapist. This study will therefore investigate the extent to which the current undergraduate programme at UKZN prepares the new OT graduate for clinical practice. It will explore the perceptions of the final year OT students with regard to their readiness for clinical practice, and compare the views and experiences of these students with their clinical supervisors to identify problem areas that need to be addressed.

1.3 PROBLEM STATEMENT

The Discipline of OT at UKZN offers a course that currently trains OT students over a four year period. A newly graduated occupational therapist is expected to have developed the appropriate knowledge, skills, and attitudes for clinical practice after graduating from the undergraduate curriculum. The introduction of an obligatory community service year accelerated the need for students to practice autonomously often without direct supervision from a practicing occupational therapist upon graduation. The need for being able to cope with autonomous practice is important as these community service therapists are often sent to rural areas where they are the only occupational therapist. In this context, the new graduate needs to demonstrate independent functioning as they may be the only occupational therapist in the setting. A substantial adjustment is thus required from the new graduate to transition from being a student who practices under the

guidance of a supervisor to that of a practicing clinician i.e. unsupervised clinical practice.

As stated previously, the HPCSA specifies Minimum Standards for Training and Practice of OTs. Educational institutions therefore design their curricula according to the HPCSA guidelines (HPCSA, 2009) which prescribe the prerequisite new graduate competencies. The HPCSA furthermore conducts audits of training institutions to ensure that the training elicits competent and safe practices. However, there is no research to determine to what extent the experience of the current undergraduate OT programme at UKZN prepares OT students to transform into entry level OTs upon graduation. A preliminary literature review revealed limited evidence of research examining the issues of the South African new graduating therapist. No literature was found on the final year students' perception about their preparedness to commence OT practice during their community service year, nor was there any research on the supervising clinicians' perception of the UKZN undergraduate programme or the students' preparedness to adjust to independent clinical practice. In the absence of such research, it is not possible for the Discipline of OT to determine whether the training provided during the four years adequately prepares students to transition to independent OTs.

1.4 AIMS AND OBJECTIVES

The aim of the study was to investigate the extent to which the undergraduate programme at UKZN prepared the potential graduate for clinical practice, and explore the final year students and their clinical supervisors' perceptions with regard to the students' readiness for clinical practice at the end of the year.

This study explored the views and experiences of the OT students and their clinical supervisors to understand the aspects that the students and the clinical supervisors identify as problematic in terms of the students being prepared for clinical practice.

The study had the following objectives:

- To investigate the fourth year OT students' experience of the undergraduate OT programme,

- To determine the extent to which the fourth year students perceived that they were prepared for clinical practice prior to graduation,
- To establish the supervising OT clinicians perceptions regarding students' preparedness for clinical practice and
- To establish existing deficits in the current curriculum and to understand how final year students are assessed by analysing the 2011 UKZN OT evaluation report by the HPCSA panel as well as the documents used to assess final year OT students.

1.5 STUDY OUTLINE

Chapter 2 will outline the literature relating to the history of OT in South Africa, the HPCSA and WFOT Minimum Standards of Training documents, curriculum, fieldwork, student assessment and an overview of the preparedness for clinical practice. Chapter 3 presents the methods used and includes the research design, sample population, the conceptual framework, data collection, data analysis methods, trustworthiness of the study and ethical considerations. Chapter 4 describes the findings of the study and includes the students' experience of the undergraduate programme, students and clinical supervisors' perceptions around preparedness for practice and the document analysis of the HPCSA evaluators report and UKZN documents. Chapter 5 presents the discussion around the findings outlined and Chapter 6 describes the conclusions and recommendations that will be based on the students and supervisors perceptions and HPCSA report to ensure the preparedness of OT graduates for clinical practice.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The literature review will create a contextual background for the study and highlight relevant issues pertaining to the history of OT; the WFOT and HPCSA Minimum Standards of Training for OTs; the conceptual frame work used for this study; some criteria for curriculum development in OT; factors regarding curriculum implementation; fieldwork, and an overview of the literature relating to new graduates preparedness to practice. The conclusion of the literature review will reveal the potential gaps in the literature.

This literature review is divided into two sections:

- The theoretical constructs section which will outline the theory that informed the study. This will include an outline of the WFOT and HPCSA minimum standards for training and the conceptual framework used in the study and,
- A summary of related South African and international literature which includes a brief history of OT, criteria for curriculum development, factors influencing curriculum implementation, fieldwork, and an overview of new graduates' preparedness for practice.

2.2 THEORETICAL CONSTRUCTS RELEVANT FOR THE STUDY

This section outlines the theoretical foundations that were used in the study and the conceptual framework that was utilised in the development, data collection and data analysis phases of the study. The theory on the curriculum and some government policies/data on higher education will be discussed.

2.2.1 WFOT Minimum Standards for Training of OTs

The WFOT guidelines are the overarching framework through which all standards of training and practice are viewed as members of the WFOT organisation. The current version was adopted on 19th June 2002, and is referred to as the Revised Minimum Standards for the Education of OTs (referred to as the WFOT standards

hereafter). These WFOT standards form the basis for the development of the curriculum and training for OT students for every WFOT member country (Hocking and Ness, 2002a). The WFOT standards were developed to address the four aspects relating to the education and training of OTs:

- a. Local and international context of practice,
- b. Philosophy and purpose of the programme,
- c. The educational programme and
- d. Graduate competencies: knowledge, skills and attitudes.

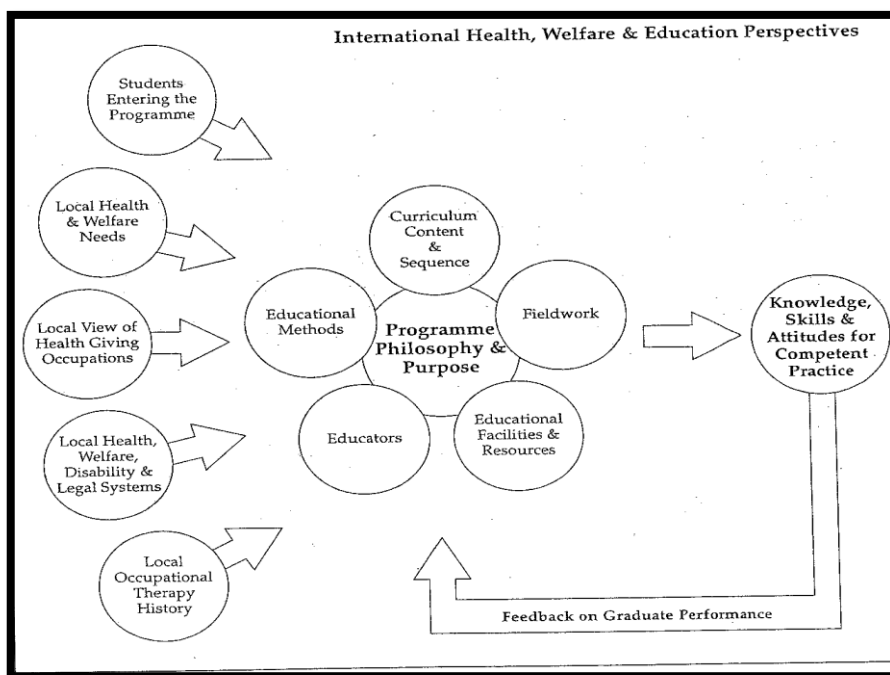


Figure 2.1 Overview of the WFOT Minimum Standards of Training for OT (Hocking and Ness, 2002a)

a. *Local and international contexts of practice:* This aspect of the document advocates for educational programmes to encompass a range of health and welfare needs, cultural background and health and welfare systems specific to that country, but also recommends that educational institutions take cognisance of international trends in OT practice. Local and international knowledge systems are included to ensure that students will have the knowledge and skills to cope with international OT practice and offer a service that is contextualised to the local health needs (Hocking and Ness, 2002b; Hocking and Ness, 2002a).

- b. *Philosophy and purpose of the programme*: educational programmes should reflect the programmes unique philosophical understanding of occupation. It is suggested that educational programmes address the nature and meaning of occupations and the kinds of problems and satisfaction that people experience in participating in occupations, with cultural influences taken into account. The standards indicate that the purpose of these programmes should reflect the work that graduates are being prepared to complete and the range of settings that they are expected to be able to work in (Hocking and Ness, 2002b; Sinclair, 2005).
- c. *The educational programme* section has five components: curriculum content and sequence, educational methods, fieldwork, educators, and educational resources and facilities, each of which is reviewed in Table 2.1 below.

Table 2.1 Aspects of the educational programme in WFOT Minimum Standards

ASPECT OF THE EDUCATIONAL PROGRAMME	DESCRIPTION
Curriculum content and sequence	The programme should have sufficient depth and breadth to support student learning and address all knowledge, skill and attitudes required by graduates for OT practice. 60 % of the programme should focus on occupation and OT, 10-40% on body structures and human development and social perspectives.
Educational methods	The standards advocate that the educational methods used should be consistent and congruent with the philosophy and purpose of the programme. A range of educational methods is recommended to be used to support development of graduates cognitive abilities as well as practise skills and attitudes. Some of the suggested methods include case studies, skills training, assignments, reflective practice, projects, problem-based learning etc. Assessments methods should fit in with the educational methods used.
Fieldwork	Fieldwork is considered central to the educational process. The standards have made a minimum of 1000 hours of fieldwork mandatory for OT students. Students are expected to be exposed to a variety of fieldwork experiences in diverse settings, to different health conditions, and to various service delivery systems such as individual, group and community approaches.
Educators	The document advocates that educators should have a mixture of professional backgrounds and experience to enable delivery of an educational programme that fits in with the purpose and philosophy of the programme.
Educational resources and facilities	The size of the student intake is in proportion with the number of educators, the facilities and resources. There should be sufficient resources e.g. library, internet, teaching material etc.

The above information is a summary of the educational programme aspect of the standards (Hocking and Ness, 2002a; Hocking and Ness, 2000b; Sinclair, 2005). The WFOT standards recommend that undergraduate programmes be run as a bachelor degree or a diploma offered at a higher education facility and be completed in a minimum of 90 weeks. The curriculum should be a coherent whole with each component of the programme fitting well with the other components. The WFOT Minimum Standards advocated that the experience of the programme should lead to the development of knowledge, skills and attitudes that new graduate OTs should possess (Hocking and Ness, 2002a).

- d. The final section of the standards document is *Graduate knowledge, skills and attitudes*. All new graduate OTs' are expected to have knowledge, skills and attitudes within the five identified areas presented in Table 2.2 after engaging in the educational programme.

Table 2.2 Areas of knowledge, skills and attitudes identified in graduates competencies

AREA OF KNOWLEDGE, SKILLS AND ATTITUDE	EXPLANATION
Person-occupation-environment relationship and the relationship of occupation to health	The person-occupation-environment and the relationship of these aspects with health conditions e.g. in South Africa, HIV, its sequelae, and its influence on people's occupations should be addressed at undergraduate level.
Therapeutic and professional relationships	The development of effective working relationships with those who make up the human environment of people receiving the OT service.
OT process	What OTs do when working with people receiving an OT service with reference to the context and the purpose of the intervention.
Professional reasoning and behaviour	Includes the research process, ethical practices, professional competency, and reflective practice as well.
The context of professional practice	Aspects of physical, attitudinal and social environmental factors that affect people's health and participation, and also impact implementation of OT.

(Hocking and Ness, 2002b; Sinclair, 2005)

These areas outlined above form the basis of the level of competence that entry grade OTs are required to acquire prior to graduation. Within the context of the

WFOT guidelines, the HPCSA developed locally relevant standards that need to be adhered by training institutions.

2.2.2 HPCSA Minimum Standards for Training OTs

The HPCSA Minimum Standards for Training of OTs (hereafter referred to as HPCSA Minimum Standards) was developed by the Professional Board for OT of South Africa, together with documents compiled by the Standards Generating Board of the Professional Board of OT Medical Orthotics and Arts Therapy in 2006 and adopted in 2009. The HPCSA Minimum Standards were based on the requirement specified by the WFOT in 2002, and modified for the local South African context. This document was ratified by the South African Qualification Association (HPCSA, 2009). Educational institutions in SA are expected to align their undergraduate OT curriculum to meet or surpass the Minimum Standards for Training criteria outlined by the HPCSA. These criteria form the basis of the evaluation form used by board appointed evaluators to monitor and accredit OT training programmes at institutions across the country every five years (HPCSA, 2009).

The HPCSA's Minimum Standards advocate that OT educational programmes should produce competent entry grade OTs that are able to implement culturally relevant and contextual treatment programmes with individuals or groups, and facilitate the clients' participation in occupational performance areas. The HPCSA Minimum Standards document has the following five sub-sections.

The information in the Table 2.3 below outlines a brief summary of the HPCSA Minimum Standards (HPCSA, 2009). These sections are aligned with the categories in the WFOT Minimum Standards of Training of OTs document (HPCSA, 2009). UKZN OT programme was accredited in November/December 2011 by a HPCSA board-appointed panel of experts. The evaluation report was included in the document review in the findings section (HPCSA, 2011).

Table 2.3 Subsections of the HPCSA Minimum Standards for Training of OT

SUBSECTIONS	EXPLANATION
Fundamental characteristics	This outlines the recommended general characteristics of the programme e.g. educational objectives should reflect the philosophy and purpose of the programme, must be by educators who are qualified and have relevant experience and should have 480 credits and be taught over four years.
Core theory content	Outlines OT specific content as well as the supplementary curriculum content e.g. 35 % of the programme should contain knowledge of occupation and OT and 10 % should contain knowledge of body and body structures.
Core practice content	Contains recommendations for fieldwork e.g. minimum of 1000 hours of fieldwork of which 60-80% should be third and final year, practical must be under the supervision of a registered OT, students should have a range of experience etc.
Examinations	Outlines the requirements for the examination e.g. the fourth year examination must show integration of the knowledge and skills of all four years, there must be an internal examiner and an external examiner for fourth year exams etc.
Accreditation of a training programme	Outlines the recommendations for accreditation e.g. the training programme is audited every five years by a board appointed evaluators etc.

(HPCSA, 2009)

2.2.3 Conceptual Framework used in the Study

A conceptual framework was created based on the theory outlined by Miles and Huberman (1994), and the deductive analysis process outlined by Fereday and Muir-Cochrane (2006). According to Miles and Huberman (1994), a conceptual framework can be theory driven or descriptive and is used to explain the main aspects to be studied. A conceptual framework was created using the WFOT and HPCSA Minimum Standards for Training of OTs documents, as the theoretical basis for defining the categories in the conceptual framework. These documents were chosen as the theoretical basis for the framework as they form the local and international standards for education of OT students.

The categories outlined in the WFOT and HPCSA Standards documents formed the basis of the categories of the framework, and the content of the HPCSA document was used to contextualise the framework to the South African setting. The categories in the conceptual framework are: philosophy and purpose of the

programme, the curriculum content of the programme, the educational methods used, the assessment of students, fieldwork, educators and facilities and graduate competencies. The categories are inter-related in that the philosophy and purpose of the programme influences the other categories e.g. the philosophy and purpose of the programme influences the curriculum content, the method that is used to teach and the focus of the assessment when listening to a case presentation or watching a treatment demonstration (Hocking and Ness, 2002a; HPCSA, 2009). When put together, the categories in the framework outline the aspects of the curriculum that influence students experience of the curriculum. This experience of the curriculum helps prepare the students for clinical practice. In addition, the knowledge, skills and attitudes necessary for entry graduate clinical practice are highlighted by graduate competencies.

The conceptual framework was used to guide the development of the questions for the focus groups and semi-structured questionnaires, and as a framework for the template used during the deductive analysis of the data collected. Miles and Huberman (1994) have advocated using a conceptual framework for thematic analysis when there were significant amounts of data that required structure in order to analyse the content. The data collected in this study i.e. students, clinical supervisors and the documents, were analysed thematically, and the themes were assigned to a category in the framework. According to Fereday and Muir-Cochrane (2006), thematic analysis entails a search for themes that the researcher recognises as being important to the case being studied through a process of carefully reading and re-reading of the raw data to identify units of information that form categories. Thematic analysis is therefore a form of pattern recognition from which the researcher generates categories and themes pertinent to the study (Braun and Clarke, 2006; Fereday and Muir-Cochrane, 2006). See Table 2.4 below for the categories and the inter-relatedness.

Table 2.4 Overview of the conceptual framework used in the study

		WFOT AND HPCSA MINIMUM STANDARDS		
		CATEGORY	DESCRIPTION	
INTER-RELATED	EDUCATIONAL PROGRAMME	Philosophy and purpose	This category pertains to the rationale for the content taught on the programme and the attitudes hoped to be conveyed in terms of OT practice and occupation. The educational objectives should reflect the philosophy and purpose of the programme. The purpose/philosophy of the programme should be around implementing contextually and culturally relevant programmes.	Graduate Competencies
		Curriculum content	This category outlines OT specific knowledge and the sequence of the programme as well as how each aspect fits together OT specific knowledge includes e.g. person-occupation-environment relationship and its relationship to health e.g. knowledge of activities of daily living; therapeutic relationship e.g. working with multidisciplinary teams, being able to interact with clients; knowledge of the OT process.	
		Educational methods	This category indicated that consistent educational methods should be used and that the educational methods should link to the philosophy and purpose. A range of educational methods e.g. didactic teaching, discussion etc. could be used and the assessment should match with these educational methods.	
		Assessment	This category outlines the assessment process for fourth year OT students. There should be a summative examination process which would have a theory and fieldwork assessment. There should be a continuous assessment component which needs to have a fieldwork aspect that is assessed.	
		Fieldwork	This describes the practical component of the curriculum i.e. fieldwork. There should be a minimum of 1000 hours of fieldwork and fieldwork should be supervised by a qualified clinical supervisor. Students should be exposed to a range of diagnosis and contexts.	
		Educators and Facilities	Educators should be adequately qualified and facilitate learning and supervise on fieldwork. There needs to be adequate facilities to facilitate learning e.g. lecture venues, library and transport to fieldwork venue.	

(Hocking and Ness, 2002a; HPCSA, 2009)

Against this backdrop of the outline of the educational programme curriculum and the requirements as set out by the WFOT and the HPCSA, relevant literature around the history of OT in South Africa, curriculum and new graduates preparedness for practice will be reviewed in the next section. This will create a context for the study.

2.3 SOUTH AFRICAN AND INTERNATIONAL LITERATURE

This section will provide an overview of the history of OT in SA, curriculum development and implementation, factors affecting fieldwork and an overview of new graduates' preparedness for practice from an international and South African perspective.

2.3.1 A Brief History of OT in South Africa

This section will discuss the development of OT educational institutions, its clinical governance and philosophical trends, as well as the current focus of the discipline. The first South African OT course commenced at the University of Witwatersrand in 1943 and at University of Durban-Westville in 1981 (Davy, 2003). The South African Association of Occupational Therapists (SAAOT) was established in 1945 as a professional association to represent all OTs, and this association had strong ties to the WFOT, SAAOT being one of its founding members. After the demise of apartheid and the implementation of a democratic government SAAOT's name was changed to the Occupational Therapy Association of South Africa (OTASA) (Davy, 2003).

The development of OT as a recognised profession and its clinical governance has been challenging, having been developed in an apartheid era with the origins of its theoretical frameworks being based on Eurocentric models. For 51 years, from 1943 to 1994, the rules and regulations that governed SAAOT i.e. OT training, practice and the curriculum content were governed by a council consisting of medical doctors and dentists (Joubert, 2010). The Health Professions Act 56 of 1974 (as amended) was gazetted in 1999, and allowed for the establishment of the HPCSA and the Professional Board of Occupational Therapy, Medical Orthotics and Prosthetics and Arts Therapy (The Board). The Board manages the registration and supervision of OTs, approves training schools, manages continued professional development and reviews OT educational programmes according to the minimum standards of training and competency issues by the Standards Generating Board (SGB) and the HPCSA (Van Der Reyden, 2010).

OT trends are evolving in the context of changes in South Africa's health needs and the country's political and legal perspective. Joubert (2010) proposed the

need to reach consensus amongst South African OTs regarding its core philosophies and theory underpinning the local profession. Joubert (2010) further suggests that a review of the OT curricula be conducted to ensure that occupational training and practice is more culturally relevant and aimed at meeting the needs of the diverse South African population (Joubert, 2010; Mocellin, 1992). Educational institutions are beginning to review their curriculum to explore their relevance in terms of teaching methods and philosophy in the new South African setting (De Beer and Vorster, 2012; De Jongh, 2009; De Jongh, Hess- April and Wegner, 2012). This will be expanded on in the section on issues around curriculum development in South Africa later in the literature review.

OTs are reviewing the methods, models, processes and cultural sensitivity that are used to deliver OT services as evidenced at the recent OTASA Conference in 2012. The presentations ranged from reviews of culturally appropriate therapy implementation to shifts in the service delivery from hospital based to primary health care (Ndlovu 2012; Vermark, 2012). The impact of culture on occupation was highlighted as a key element that influences effective OT intervention. While it is essential that the OT curriculum reflects international trends in OT practice, emphasis should be placed on students learning to deliver an OT service that meets the needs of the local population and takes cognisance of the diverse South African cultures (Joubert, 2010).

2.3.2 Curriculum Development

Curriculum development is an important aspect of an educational institution. Course developers are required to balance the content so that the curriculum reflects both academic and professional knowledge (practice skills), and an alignment of workplace and academic interests (Council Higher Education, 2011). For the purposes of this study, the principles around curriculum development mentioned in OT literature, such as curriculum alignment, matching curriculum content with the desired outcomes or graduate competencies, and the need for curriculum review, will be discussed as part of this curriculum development section. In addition, the literature on curriculum development in South Africa will be discussed in this section.

2.3.2.1 An overview of factors that influence curriculum development

Curriculum alignment and graduate competencies are considered important factors when engaging in curriculum review/evaluation. These factors ensure that the educational programme meets both international and local minimum standards (Brown et al., 2012; Council Higher Education, 2011). Biggs (1996) first introduced the theory of constructive curriculum alignment, which states that curriculum should be aligned vertically and horizontally using intended learning outcomes. In addition, the teaching and assessment methods used should align with the intended learning outcomes to ensure that students' learning is focused (Biggs, 1996). Vertical alignment ensures that the intended learning outcomes are graded across the year levels. Curriculum mapping can be used to ensure that the learning outcomes are adequately graded i.e. not too big a jump between years and limiting repetition in the curriculum over the years. Horizontal alignment consists of matching whether the intended learning outcomes are appropriate for that year level, and whether the planned teaching, learning and assessments meet the required outcomes for that year level. Horizontal alignment assists in ensuring that students are better equipped to meet the requirements of the next semester/course and the following years programme (Biggs, 1996; Brown et al., 2012; Council Higher Education, 2011).

Educational institutions have agreed that professional education programmes need to participate in a process of curriculum development, implementation and review, as the face of healthcare and the local context is continuously changing. Professional education has been criticized for not keeping pace with the challenges of the new client and health context, that the curricula is often out-dated, and that there is a mismatch between competencies taught and what is required by the local health context i.e. a focus of technical skills rather than the ability to understand and modify therapy delivery to match the clients' context (Brown et al., 2012; Council Higher Education, 2011; Frenk et al., 2010). It is important that a number of internal and external factors be taken into consideration to ensure that the curriculum is current, evidence-based, relevant to the various health care stakeholders requirements, (employers, clients etc.), meets the students' needs, and reflects the essence of the profession (Barnet and Coates,

2005; Brown et al., 2012, Merritt, Blake, McIntyre and Packer, 2012; Rodger, Clark, Banks, O' Brien, and Martinez, 2009).

Linking curriculum outcomes to the national competencies, or allowing the competencies to inform curriculum content and assessment of students, are two approaches suggested to match the curriculum content with the needs of the workplace. Deakin University used the Australian competency standards for entry-level OTs' together with the WFOT Standards for the education of OTs to direct the outcomes of the curriculum. The Deakin program constructed their coursework using the Australian competency standards as the central theme and as the framework for fieldwork assessment (Courtney and Wilcock, 2005; Merritt al., 2012; Nayar et al., 2011). Dalhousie School of OT recently reported on the findings of their investigation of their competency-based, outcome orientated curriculum. It used seven core competencies, based on national and WFOT competencies, to create end of programme learning objectives for each competency. This study illustrates how competencies can be linked to vertical and horizontal curriculum alignment (Merritt et al., 2012).

Another approach advocated for matching curriculum outcomes with the local health needs is transformative learning theory and instructional reforms (Frenk et al., 2010). The instructional reforms include introducing interdependence of learning across health professional groups, competency driven curriculum, improved social accountability and using information technology for learning. Transformative learning proposes a shift in thinking to allow for the developing leadership competencies to produce enlightened students who are able to influence policy and are aware of occupational justice. The theory supports attaining core competencies for effective teamwork in health systems and the creative adaption of global resources to address local priorities (Frenk et al., 2010). This sentiment that health professionals should be involved in more than just individual therapy sessions, is echoed by WFOT in its position paper on human rights and community based therapy, which was approved at a council meeting in Cape Town in 2004 (Kronenberg, Algado and Pollard, 2005; WFOT, 2006).

2.3.2.2 Factors influencing curriculum development in South Africa

Research into OT education appears to be a current topic in OT research in SA. Themes that emerged from the literature included discussion around the philosophy of OT programmes, specifically the cultural relevance of the curricula and definition of occupation from a South African perspective. In addition fieldwork, its relevance to the workplace realities faced by new graduate OTs, and the need to have a common method of assessment for professional behaviour were highlighted (Joubert, 2010; Lorenzo, Duncan, Buchanan and Alsop, 2006; Pollard, Algado and Kronenberg, 2005).

The changing purpose and philosophy of OT programmes were also addressed, as illustrated by De Jongh et al. (2012), who articulated the process of transforming the University of Western Cape's OT curriculum to reflect the belief that students should be able to respond to clients/communities occupational needs and occupational injustices within South Africa's diverse population group. Duncan and Alsop (2006) recommended implementing a socially responsive curriculum, as educators were becoming more aware of the widening gap between the privileged, middle class and the underprivileged. Social responsive curriculum calls for students to reach a larger population through their fieldwork and become agents of change in these communities by encouraging engagement of the community in occupation (Lorenzo et al., 2006).

Pollard et al. (2005) concurred and further stated that there are gender, class and sexuality issues that hinder therapists' ability to develop treatment programmes that looks at the client holistically. These issues stifle engagement in therapy from a political competency perspective i.e. engaging in preventing occupational deprivation and social injustice in previously disadvantaged communities (Joubert, 2010; Pollard et al., 2005).

Joubert, Galvaan, Lorenzo, and Ramuganado (2006) questioned the way OT's define occupation. The dilemma as to whether OTs are restricting the scope of the client's function by viewing occupation and therapy through western Eurocentric perspectives and middle class frames of reference was highlighted. An example of whether begging should be considered as an occupation, and the influences of

exposure to daily violence, abuse and gang culture on children was used to illustrate this dilemma. This debate demonstrates the diverse cultural and contextual circumstances in which students are expected to have competencies when meeting the needs of the community through group and individual approaches. This is in stark contrast to therapy that was limited to a small community that were hospitalised (Joubert et al., 2006).

This leads to the issue that the curriculum and teaching methods need to accommodate the changes in the context of fieldwork to reflect the work place realities that students will face upon graduation. Joubert et al. (2006) highlighted the need to teach students to be respectful of the traditions and nuances of the community in which they are placed when introducing occupational engagement during treatment. This is an important point given the Eurocentric history of OT development, and the fact that a large percentage of the students enrolled in OT programmes nationally are from middle class background and predominantly white (Amosun, Hartman, Janse van Rensburg, Duncan and Badenhorst, 2012).

This leads to issues about how practical implementation of the curriculum i.e. specifically fieldwork placements, need to reflect the students' future workplace realities. Buchanan and Cloete (2006) raised the point that students need to be prepared to face a variety of contexts, as they may not have had exposure to these environments e.g. crime, abuse, poverty and primary health care, scarce resources and disintegrating social systems. Lack of adequate preparation for these realities may render the students therapy ineffectual due to lack of understanding of the clients' context (Buchanan and Cloete, 2006). Buchanan and Cloete (2006) indicated that there is also a move toward encouraging students to expand their outlook on approaches used during treatment. Previously, students mainly used rehabilitation and remedial approaches at placement sites and were based in hospitals. However, students have started to utilize preventative and promotive approaches, as these approaches are indicated for the community outreach placements and role emerging placements.

Snyman (2012) highlighted the need to have consensus on the concept of professional behaviour and on how to assess it. She suggested that fieldwork has

the potential to develop these qualities in students, as this is a developed skill. The study highlighted that clinical supervisors need to be trained to ensure valid assessment, and that there is more consensus with regard to rating of students' performance. This study revealed that observation, rating scales and longitudinal assessments of students are some of the methods of assessing professional behaviour. However, there is a lack of consensus on the constructs of professional behaviour, which reduces the consistency of mark allocation i.e. allocation of clinical performance marks that students receive during fieldwork (Snyman, 2012).

Emslie (2012) used the perspective of the clinical educators/supervisors to explore fieldwork. The study emphasized that clinical supervisors' personal beliefs influenced the clinical performance assessment of the students placed in their department. The incongruence in terms of rating of student's performance was attributed to perceived insufficient collaboration between clinical supervisors and the university. These studies highlighted the need for educational institutions to review the implementation of curriculum and the ways in which educational institutions assess their students.

The emerging research reflects the change in perspective and focus that the profession of OT is undergoing in South Africa. Educational institutions are being challenged to review their curriculum to keep pace with the changes in ethos, to produce graduates that are able to cope with the South African health needs, and contribute to the positive transformation in the communities that they serve. Having outlined the current research related to curriculum development, the next section will deal with issues related to implementing the OT curriculum specifically how the model of curriculum should be used.

2.3.3 Models of OT Curriculum

This section deals with the models of curriculum used to interpret the OT content. There are numerous models of curriculum, but for the purposes of this literature review, the researcher will outline five: the social behaviourist model, the experiential model, the developmental model/framework, the occupation centred model and the more socially responsive model.

- a. The social behaviourist model advocates that the knowledge used to develop curriculum should be current, based on identifying behaviours that make students successful in the workplace and relevant to contemporary students (Schubert, 1996). This perspective recommends that the curriculum is evidence based and that there is a link between curriculum and instruction methods. Curriculum planners need to be aware of what is relevant today as well as the behavioural and the theoretical knowledge that facilitates this success to ensure efficacy of the curriculum and student success. There could be an advisory panel e.g. regulatory bodies, who advises on what success means and the characteristics of successful behaviour. From a health science perspective this would refer to regulatory bodies such as the HPCSA (Schubert, 1996). Through research, the curriculum planners can construct a programme which has a curriculum with systematically aligned learning activities, instructional strategies and assessments that are aimed at eliciting behavioural objectives (Schubert, 1996).

- b. Experiential learning model suggests that knowledge is gained through experience and intimates that formal learning contexts are often contrived. This perspective advocates that student's previous life experience should be taken into account together with the interests and the concerns of the students when delivering the content of the curriculum (Schubert, 1996). The experiential learning perspective recommends that the educator should engage students in sharing concerns and interests. In this way the educator can facilitate an active discussion around the subject content and hopefully elicit a deeper understanding of the topic as well as connection to other bodies of knowledge. This collaborative learning could be facilitated through group discussions around a topic where students are encouraged to share life or work experiences so that each could share their perspectives thus building on the body of knowledge and perhaps perspectives that have not even been previously considered by the educator (Schubert, 1996).

- c. The developmental model/framework is based on the developmental nature of the human individual. The OT content is therefore arranged around the life stages i.e. infancy, childhood, adolescence, middle age and old age.

Developmental tasks associated with each age group, together with potential clinical problems, form the basis for the focus of the programme (Madigan, Loomis and Seefeldt, 1985).

- d. The occupation centred model proposes that occupation should be the key component and organising construct in OT (Hooper, 2006). The occupational centred curriculum is touted as a vehicle in which OT practice can reflect the cornerstone of the profession i.e human occupation (Ashby and Chandler, 2010; Hooper, 2006; Whiteford and Wilcock, 2001). It has been heralded as “an imperative for the new millennium” (Whiteford and Wilcock, 2001; pg.82).
- e. An emerging model is that of social responsiveness. This type of curriculum commits to treating the person as a whole. This approach is based on critical thinking around human rights and community development, to allow for the implementation of intervention that enable occupation and address occupational deprivation and occupational injustice (Kronenberg, Algado and Pollard, 2005). Kronenberg et al. (2005) refer to a socially responsive curriculum as politically relevant education that addresses the need to develop graduates who are able to look at the country’s health and social needs. In this way, OTs can address the bigger picture, and deliver a service that is culturally appropriate and contextually relevant, and thereby effect social change (Kronenberg et al., 2005).

Having outlined some models of curriculum used in OT, the educational methods used to convey the theoretical and practical content of the curriculum will now be reviewed in the next section.

2.3.4 Educational methods

Academic instruction traditionally consists of two components, theory and practice, with students in the higher years spending more time in clinic setting to enable them to integrate and contextualise their theory. The intention of the fieldwork is to prepare the students for independent practice upon completion of their degree. This section outlines the educational approaches used to convey the theoretical content of the curriculum and the issues relating to educational approaches used

to accommodate the South African student population. Historically South Africa has a diverse population who have had different exposure to educational institutions; therefore there is a need to discuss educational methods that can accommodate South African students.

2.3.4.1 International perspective on educational methods

As mentioned in the WFOT Minimum Standards, the educational methods should match the philosophical underpinning of the curriculum (Hocking and Ness, 2002a). For example, in an occupational science based curriculum, the educators would need to emphasise the focus on occupation when teaching treatment interventions (Hooper, 2006). While numerous teaching approaches are used, for the purpose of this review, the researcher will focus on two approaches: problem based learning (PBL) and case based learning.

- a. PBL is a popular teaching approach currently adopted by professional education disciplines. In PBL, students are presented with the problem at the start of the learning process and other curriculum inputs follow, such as problem based learning tutorials or skills laboratories. PBL proposed that a student centred approach that uses carefully considered problems to elicit self-directed learning, critical thinking, evidenced based decision making and team working helps students to integrate theory and practice and apply knowledge and skills to develop a solution to a defined problem (Barrett, Labhrainn and Fallon, 2005; Bell, 2012; Salvatori, 1999). The effectiveness of problem based learning is controversial. Those in favour of the approach state that it helps students develop ownership of his/her learning and helps develop the skill of analysing knowledge and clinical reasoning (Barrett et al, 2005; Bell, 2012; Hammel, Royeen, Bagatel, Chandler, Jensen, Loveland and Stone, 1999; Newman, Corner, Evans, Ambrose, Morris-Vincent, Quinn, Vernon and Wallis, 2011; Salvatori, 1999; Scaffa and Wooster, 2004). Educators who question the efficacy of this method report lower level of student satisfaction with teaching and suggest that there is no conclusive evidence that this learning strategy is effective (Colliver, 2000; Cox, Lee, Varley and Morris, 2012).

- b. Case based learning proposes that it helps students improve their clinical reasoning skills and attain a deeper understanding of the learned content through the content of the case (written in a narrative form and containing detailed contextual information) and discussion with the class (Blackmon, Hong and Choi, 2007; Mitchell and Batorski, 2009). The French, Cosgriff and Brown (2007) study into the learning style preference of Australian OT studies revealed that these students prefer practical input and case-studies where they can brainstorm the various options and deduce an answer with guidance from the educator. A variety of teaching methods, such as small and large group discussions, skills laboratory, journal writing, and interactive lectures can evolve from the case content (French et al., 2007, Hooper, 2006).

There is no literature that supports the use of one method over the other, or the use of traditional methods e.g. lecturing versus emerging methods such as web based case-studies. The more common methods are lecturing, case-studies, practicing skills in a laboratory, assignments, learning in a group, seminars and presentations (Hooper, 2008; Madigan et al., 1985; Mitchell and Batorski, 2009; Smits and Fergusson, 2000; Strydom, Bassoon and Mentz, 2010; Taylor, 2010).

There is growing support for teaching methods that promote more integration of the knowledge and practice required to acquire the skills needed for professional development. These include simulated treatment scenarios, role-playing, using reflective journals with feedback from academic staff to guide learning and analysis, and synthesis of information or case-study assignment using reflective journals to guide clinical reasoning development (Joubert and Hargreaves, 2009; Lindstrom-Hazel and West-Frasier, 2004; Lysaght and Bent, 2005; Sviden, 2000; Taylor, 2010; Tryssenaar, 1995). Writing in the form of case studies, daily logs and reflective journals can help students to identify gaps in their knowledge, and force them to reflect on the therapy situation and their own performance. Debriefing after a fieldwork can transform the learning experience from trial and error learning to a reflective learning opportunity. Academic staff can facilitate identifying developing competencies, professional behaviour and reflective behaviour by allowing the students to share their experiences and their interaction

with clients with the academic staff and other students (Nicholls and Mackenzie, 2006).

2.3.4.2 Educational approaches used to accommodate the South African student population

As indicated in 2.3.4, a need has been identified to use adapted educational approaches to accommodate the diverse South African students' population. Failure to do so, may lead to students' not coping with the expectations of the tertiary institution. The department of education recognised that students have difficulty coping with the demands of higher education. The Council for Higher Education issued the Higher Education Monitor six : a case for improving teaching and learning in South African Higher Education and the Green Paper on Post-School Education and Training 2012 to outline educational approaches that can be used to support student learning (Scott, Yeld, Henry, 2007; Department of Education, 2012).

This section therefore addresses student engagement in education, issues around social differences in the student population and their diverse educational backgrounds. Student engagement refers to the amount of time and effort students spend on academic endeavours, and the methods used to allow for more active student participation in their education. Strydom, Basson and Mentz, (2010) compiled the South African Survey of Student Engagement which outlined the level of academic challenges, active and collaborative learning experiences, and student-staff interaction are areas that influence student engagement . These areas will be outlined further in the paragraphs below.

The main point regarding the level of academic challenge is to find a balance between academic tasks and creative methods used to deliver lectures and assess students to maintain their interest in the subject (Strydom et al., 2010). Students who engage more actively in class tend to retain more information. Methods used to engage students in active learning could include discussions in class, case-based method and presentations. Collaborative learning refers to learning in groups or from their peers, and is entrenched in both case-based and problem based learning. This is also in keeping with the current generation of

students who are accustomed to social networking and value the advice of their peers and working in groups (Ashby and Chandler, 2010; Hills, Ryan, Smith and Warren-Forward, 2012; Salvatori, 1999; Strydom et al., 2010). Student-staff interaction is facilitated through debate and discussion during lectures. The educators can facilitate learning during a lecture session with prompts, allowing students to access the educators via email or in person to clarify issues (Gray, 2008; Strydom et al., 2010). Educational programmes are being forced to embrace the technological age through web-based instruction and communication strategies such as using e-learning platforms and podcasts (Gray, 2008; Thomas and Storr, 2005).

The literature suggests that the motivation to engage in academic pursuits should come from the student. If the teaching and the motivation to learn is directed by the academic staff, there is a risk of creating a student culture that is dependent and self-indulgent e.g. "it's not my fault, it's because I did not get the email." According to Pew (2007), it is essential that academic staff foster and encourage a spirit of self-reliance in students, thereby weaning them from external dependencies and providing an environment that mimics the real world (Esdaile, 2000; Pew, 2007). According to Taylor (2010), this can be achieved by setting class expectations, creating an ethos of preparing for and attending class, increasing classroom learning activity and engagement and ensuring that the students see the link between the subject taught and their performance in their role as a qualified professional (Taylor, 2010).

Perceptions around social class were highlighted as another challenge amongst the student population. Studies indicate that there is a predominance of middle class students in health science programmes e.g. OT programmes (Amosun et al., 2012). The professional behaviour requirements such as self-efficacy, modes of communication, priorities etc. are based on the middle class values of one sector of the population (Beagan, 2007). There are inter-class barriers that need to be taken into account by academic staff i.e. people in low economic class may not receive the respect or be invited to join social groups that are made up of other classes (Beagan, 2007). It is important for academic staff to be aware of their own assumptions, and to create opportunities for students to share their diverse

heritage and experiences. This would give other students who have not had this exposure an opportunity to gain cultural sensitivity and foster a culture of mutual respect and co-operation in the class.

Disparity in education levels and socio-economic backgrounds results in challenges for students entering educational institutions. In addition, students from rural areas have to cope with the demands of the tertiary institution life as well as living in a different social environment (Scott et al., 2007). According to literature, students' often report having difficulty coping with the academic literacy requirements and meeting the expectations of the tertiary institution (Janse van Rensburg, 2011). Curriculum reform and strategies to assist with student retention need to be explored in order to improve the graduate throughput in South Africa (Scott et al., 2007). Having completed a discussion around the educational methods used with the theoretical content of the curriculum, the practical component or fieldwork and the strategies used to implement this component will now be reviewed.

2.3.5 Fieldwork

Fieldwork is discussed as a separate section due to the emphasis placed on this aspect of the curriculum in the WFOT and HPCSA Minimum Standards documents, and the prevalence of literature on this topic. The following six aspects are discussed in this section: the purpose of fieldwork, fieldwork placements sites, student and supervising clinicians' perceptions of the usefulness of fieldwork, assessing students' fieldwork performance, and the methods used to facilitate clinical reasoning and professional behaviour. As indicated previously, fieldwork forms an important part of the undergraduate curriculum. This is especially relevant to final year OT students who are near the end of their studies and are preparing to enter their community service year.

2.3.5.1 The Purpose of fieldwork

There is substantial literature which acknowledges that fieldwork plays an important role in the professional preparation of entry grade OTs. Fieldwork is seen as the bridge that links theoretical inputs into service delivery settings. This is achieved by providing students with an opportunity to demonstrate their ability to

apply the theory underpinning the profession in a supervised and more controlled 'real life' practice setting. In addition, fieldwork gives students an opportunity to view how OT fits in with other health professional services (Bonello, 2001; Chiang, Pang, Li, Shih, Su, 2012; Duke, 2004; Emslie, 2012; Ferns and Moore, 2012; Fisher and Savin-Baden, 2002; Hays, 1996; Hummel, 1997; Kasar and Muscari, 2000; Kramer and Stern, 1995; Martin, 1996; Mulholland and Derdall, 2007; Sequeira, 2011; Snyman, 2012; Tompson and Ryan, 1996; Westcott and Rugg, 2001).

Fieldwork plays an important role in helping students to develop their professional identity, practice technical skills and develop the necessary professional behaviours and clinical reasoning skills to practice OT (Bonello, 2001; Holmes, Bossers, Polatajko, Drynan, Gallagher, O'Sullivan, Slade, Stier, Storr, Denney, 2010; Johnson, Koenig, Pierrsol, Santalucia, Wachter-Schutz, 2006; Kirke, Layton and Sim, 2007; Rodger, Fitzgerald, Davila, Millar and Allison, 2011; Scheerer, 2003).

2.3.5.2 Fieldwork Placement Sites

There is an on-going challenge to find suitable fieldwork placements and clinicians who are willing to supervise students both internationally and nationally (Adamson, 2005; Brown, Boyle, Williams, Molloy, McKenna, Palermo, 2011; Prigg and Mackenzie, 2002; Overton, Clark and Thomas, 2009). A new trend is emerging with regard to fieldwork of non-traditional, role-emerging and project fieldwork placements as well as new supervision strategies. According to Wood (2005), non-traditional placements are under the supervision of an OT but not in a hospital setting, whereas role-emerging placements are in places where there is currently no OT service and where the role of OT is still being established (Li-Tsang, Choi, Sinclair and Wong, 2009; Overton et al., 2009; Wood, 2005). Project placements refer to a placement where the students complete a project at a placement site under the supervision of OTs which may or may not involve direct hands on therapy (Prigg and Mackenzie, 2002). In South Africa non-traditional and role-emerging fieldwork placements are seen as opportunities to engage in learning, to bring about social change as well as ensure that students are exposed to clients with diverse backgrounds (Galvaan, 2006).

2.3.5.3 Students' Perspectives about Fieldwork

Preparation of students prior to fieldwork and clear expectations of the students for fieldwork was cited as being important by a number of authors. This entails having background knowledge of the placement site and requirements, and having work readiness skills such as to be able to document cases. The students should also have adequate practical skills e.g. manual handling skills and insight into ethical behaviour. Students need to be informed of the expectations for fieldwork placement, and the academic supervisor needs to visit the site at least once a week (Chiang et al., 2012; Cook and Cusick, 1998; Kirke et al., 2007; Mulholland and Derald, 2007; Mackenzie, Zakrzewski, Walker and McCluskey, 2001; Rodger, et al., 2011).

The placement environment positively or negatively influences the experience of the student. Students appreciated a placement site where the clinicians were prepared for their arrival and there was a briefing or orientation in which they were given clear expectations in terms of expected tasks to be completed as well as the organisation's rules. This helped to alleviate anxiety over the fieldwork placement. Students valued being welcomed, being part of the team and being given the opportunity to interact with members of the team (Johnson et al., 2006; Kirke et al., 2007; Krusen, 2011, Mulholland and Derald, 2007; Rodger et al., 2011; Thomson and Ryan, 1996).

According to the literature, students identified the supervisor's feedback as playing a vital role in ensuring learning. Supervisors who were friendly, approachable and able to develop a rapport with the student were valued (Hummell, 1997; Kirke et al., 2009; Rodger et al., 2011; Thomson and Ryan, 1996). There was discussion over the quality of feedback received and consensus from the literature that both positive and negative criticism were needed, but that supervisors need to give feedback face-to-face and with tact. Consistent expectations and congruency between academic supervisor and the supervising clinician was seen as beneficial. Students indicated that it was important to have a set time for supervision/feedback (Hummell, 1997; Kirke et al., 2009; Rodger et al., 2011; Thomson and Ryan, 1996).

Students believe that they benefited from supervisors who were confident and knew how to assess and treat clients. In addition, good supervisors allowed the students to observe sessions providing models for appropriate behaviour when handling clients, and were able to explain their rationale for treatment which assisted with the student's clinical reasoning process. In contrast, supervisors who were disinterested and showed a lack of enthusiasm for the profession were seen as ineffective supervisors (Kirke et al., 2007; Mulholland and Derald, 2007; Rodger et al., 2011). In a South African study, De Beer and Vorster (2012) found that there was a link between less empathetic clinical supervisors who had clear expectations and students having higher clinical performance rating.

2.3.5.4 Clinical Supervisors Perspectives about Fieldwork

Clinical supervisors felt that students needed to play their role in order to contribute to a positive practice education. Clinical supervisor's value students who are organised and come to the placement prepared to work. This is in contrast to the student who believes that they are still students and are therefore not expected to meet the same guidelines as qualified clinicians. Clinical supervisors also valued students who showed a willingness to learn, were able to be a self-directed learner when looking for resources, and were prepared to try new techniques learned i.e. hands-on with the clients (Hummell, 2007; Kirke et al., 2007; Mulholland and Derald, 2005; Rodger et al., 2011).

According to Tanner (2011), clinical supervisors have identified three areas that students need to master to gain competency in clinical practice and show evidence of professional behaviours, these being client centred practice and therapeutic use of self; developing professional self-identity, and being able to practice in the real world. In addition, students seem to have an idealistic view of how organisations function and then get disillusioned when the realities of the real world and the limitations that the clients' context and the organisational policies place on service delivery. Some students struggled with displaying appropriate professional behaviour due to their belief that they are only students versus the clinical supervisors' expectation of the student displaying the accountability of being a future colleague (Rodger et al., 2011; Snyman, 2012; Tanner, 2011).

2.3.5.5 Assessing Student Fieldwork Performance

It is essential that student performance on fieldwork be assessed in order to ascertain their level of competence. It is assumed that students will acquire these skills by the end of the 1000 hours of fieldwork. According to the literature, there is a lack of consensus in terms of how to assess competence and professional behaviour. In Northern America, the schools of OT had devised a standardised fieldwork tool and in Canada, the educators use the Competency-based Fieldwork Evaluation (Duke, 2004; Sequeira, 2011; Westcott and Rugg, 2001). Alternative approaches to assessment include educational institutions creating their own assessment criterion-based form to assess student performance on placement. This criterion based evaluation forms the basis for the mark that clinical supervisors allocate to students to evaluate their performance during the placement. There is much debate over the validity of these assessments, as the tools are seen as subjective and there is little inter-rater reliability. There is consensus over the fact that educators need to use multiple methods to assess professional behaviour and clinical skills (Duke, 2004; Ferns and Moore, 2012; Hamilton, Coates, Kelly, Boore, Cundell, Gracey, McFetridge, McGonigle and Sinclair, 2007; Westcott and Rugg, 2001).

Educational programmes often have a formative assessment at midway during the placement, and a summative assessment for the final at the end of the placement. According to the literature, most educational programmes use a combination of criterion-based assessment and other means such as written case-studies, reflective journals, presentations and demonstrations (Duke, 2004; Ferns and Moore, 2012; Hamilton et al., 2007; Westcott and Rugg, 2001).

According to Duncan and Joubert (2006), student assessment should gauge the improvement in their knowledge as well as assess their ability to demonstrate the application of knowledge, skills and attitudes, and to implement intervention that is relevant to the placement's context. They have also emphasized the need for consistency and objectivity when assessing the student's performance. Duncan

and Joubert (2006) have suggested using flexible presentation and case study guides in conjunction with practical demonstration of an intervention session. Students would complete a verbal presentation and a case-study report in which they select aspects of their intervention programme that they have developed while on placement (Duncan and Joubert, 2006). Alternative assessment methods suggested were the use of logs, journals and portfolios, self-assessment, use of videos and posters (that would comply with conference standards) to convey the needs of the client/group, the actions taken with consideration of the context, and the reflection on the students' learning (Duncan and Joubert, 2006). Having outlined the practice in other institutions, the assessment practice at the UKZN OT programme needs to be reviewed in the next paragraph.

The curriculum at the UKZN OT programme is divided into modules from year one to year four i.e. semesterised courses that are completed in six months or a year and each module has set requirements to allow entrance into the summative examination. A review of the UKZN Handbook for School of Health Sciences (2012) indicated that students are assessed using continuous assessment mark (CAM) and a summative examination process. Students need to achieve a duly performed (DP) of at least 40% in the class mark to gain access to the summative examination process. The class mark is based on performance in theory tests and upon successful completion of a fieldwork block i.e. achieving at least 55% on their clinical performance mark. The fieldwork block for the CAM consists of a practical demonstration of a therapy session, an oral presentation, and clinical performance mark, which looks at professional behaviour and is based on a mark generated by the clinical performance booklet that clinical supervisors are required to fill out. Students must have successfully attained at least 50% in the summative examination process, which consists of a fieldwork component (oral presentation of a case and a practical demonstration of a therapy session) and theory component to pass. These are the requirements for all the modules, namely psycho-social, physical, paediatrics and community modules. The fundamentals module is a theory paper and the research module mark is generated by an oral presentation of their honours level research project and a mark from the written dissertation. All the modules are externally moderated (UKZN Handbook for School of Health Science, 2012).

While the literature offers examples of the methods used by educational institutions, there is a lack of consensus about the efficacy of the assessment methods as well as the objectivity of the clinical supervisors. It is clear that this is an area that requires further investigation, and there may need to be a collaborative effort between universities to generate a standardized evidence based tool for OT in South Africa.

2.3.5.6 Developing Professional Behaviour and Clinical Reasoning during Fieldwork

Students need to acquire professional behaviour and clinical reasoning in order to systematically apply the critical thinking and practice skill necessary to gain the outcomes in OT i.e. identify an intervention plan and be able to evaluate the effectiveness of the intervention (Ajjawi and Higgs, 2008; Lederer, 2007; Lui, Chan and Hui-Chan, 2000; Neistadt, 1996). Scheerer (2003) indicated that OTs need to have strong professional behaviour in order to cope with the demands of the current service delivery environment (Scheerer, 2003). This sentiment was echoed by Kasar and Muscari (2000) who stated that “*professionalism required specific knowledge, attitudes and values, manifested by professional behaviour*” (Kasar and Muscari, 2000, pg. 43).

Professional behaviour is an acquired skill that requires facilitation on the part of the clinical supervisors and academic staff to be instilled in students (Collier, 2012; Kasar and Muscari, 2000; Scheerer, 2003; Steinhert, et. al., 2005; Snyman, 2012). Ethics, cultural competency, empathy and therapeutic use of self were highlighted as important aspects (Davidson, 2011; DeMars, Fleming and Benham, 1991, Kasar, Clark, Watson, and Psfister, 1996). A number of authors indicated that ethics should be incorporated into assessments in written papers and treatment plans, and be illustrated during case discussion on fieldwork placement (Davidson, 2011; DeMars et al., 1991; Forwell, Whiteford and Dyck, 2001; Jamieson, Krupa, O’Riordan, O’Connor, Patterson, Ball and Wilcox, 2006; Kinsella, Park, Appiagyeyi, Chang and Chow, 2008). This approach is meant to raise the students’ awareness of these issues, and to facilitate their ability to identify ethical issues and have the ability to deal with them. Cultural competency is seen as an essential aspect of

client centred practice i.e. the need to take clients lifestyle, background and values into account when planning treatment. Students' ability to use therapeutic use of self, i.e. their ability to foster rapport with their client, was seen as a vital skill for effective treatment. Davidson's (2011) study highlighted the need to focus on skills such as the ability to deal with conflict, negotiate with clients, and deal with aggression as well as empathy and positive regard. Feedback from academic staff about professional behaviour was thought to be most effective when completed face-to-face and the reasons for the given marks explained (Collin, Harrison, Mason and Lowden, 2011; Scheerer, 2003; Velde, Wittman and Vos, 2006).

Clinical reasoning is said to develop over a period of time with experience and interaction with clients' in that OT students tend to focus on clients deficits rather than on their client's disability in the context of their performance in occupational performance areas and their environment (Lui et. al., 2000; Neistadt, 1996; Schell and Cervero, 1993). There has been debate in the literature as to the most effective teaching methods to facilitate student acquisition of professional behaviours and clinical reasoning. Clinical supervisors and academic staff are powerful tools who can model the desired behaviour both in fieldwork and in the classroom. Academic staff can model critical thinking by being open-minded, critically analysing and synthesising information, and looking at problem solving specific to a context and not a one size fits all approach. An example illustrating how the students watch the professional behaviour of the academic staff was highlighted through a student questioning having to conform to being punctual when the academic staff assessing her was always late for work (Cahill and Madigan, 1984; Collin et al, 2011; Lederer, 2007; Scheerer, 2003). Role-playing, practical demonstrations, simulated patient scenarios etc. were also identified as learning opportunities, especially when the academic staff or the clinical supervisor explained their clinical reasoning or the reason for their decisions (Davidson, 2011; Forwell et al., 2001, Neistadt, 1996; Paterson and Adamson, 2001). Developing professional behaviour and clinical reasoning is essential to prepare students to work independently in clinical practice.

2.3.6 Overview of Final Year Students Preparedness for Practice

The students' ability to integrate knowledge and practice is essential if they are to work in the health environment after graduating, and their adjustment to the workplace will require appropriate attitudes to their new environment. Undergraduate curricula generally teach both knowledge and skills to ensure a competent workforce; there are those who believe that curriculum documents need to be interrogated to determine the extent to which the undergraduate programme prepares students to function efficiently in the workplace setting (Adamson et al., 1998, Barnitt and Salmond, 2000; Gray et al., 2012; Mulholland and Derald, 2005; Nayar et al., 2011; Robertson and Griffiths, 2009; Smith and Pilling, 2008; Toal-Sullivan, 2006; Tryssenaar and Perkins, 2001). The extent to which university education prepares graduates for the requirements of the workplace has become an important issue in health science literature (Adamson et al., 1998, Barnitt and Salmond, 2000; Mulholland and Derald, 2005). Research from Britain, Australia and New Zealand has captured the perceptions of new graduate OTs and their transition from students to clinicians (Courtney and Wilcock 2005; Gray et al., 2012; Nayar et al., 2011; Sutton and Griffin, 2000). It is recognised that the transition/change from student to qualified therapist is a difficult experience. In fact, research indicates that the first six month-period after qualifying is the most crucial in becoming a competent therapist (Barnitt and Salmond, 2000; Morley 2005).

The transition from OT student to OT clinician is well documented, as this is an issue for the profession. An opinion paper by Tickle, Davys and McKenna (2010) suggested that this difficulty with transition may be due to the gap between theory and practice, and a feeling that the new graduates perception around their lack of competence with practical skills. The quality of clinical supervision and the diversity of fieldwork experiences play an important role in enabling students to feel competent in their skills and knowledge (Gray et al., 2012; Hodgetts et al., 2007; Hummell and Koelmeyer, 1999; Smith and Pilling, 2008; Seah, Mackenzie and Gamble, 2011). New graduates are faced with the need to make quick decisions that are often based on previous experience, as they balance increased administration responsibilities with needing to manage a case-load, this increased workload often undermines the new graduates' self-confidence (Hodgetts et al.,

2007; Nayar et al., 2011; Robertson and Griffiths, 2009; Seah et al., 2012; Tryssenaar and Perkins, 2001).

New graduates need time to adjust to practice in the workplace environment. Studies found that the educational programme should do more to address their ability to cope with the realities of the new work environment such as organisational politics, communicating with other health professionals, administration skills, time management and dealing with stress (Gray et al., 2012; Seah et al., 2011; Smith and Pilling, 2008; Toal-Sullivan, 2006; Tryssenaar and Perkins, 2001). In addition, the new graduates indicated the need for orientation programmes to assist with adjusting to the expectations of the new work place. New OTs are required to adapt the new environments using a sink or swim approach, as many expectations are unspoken (Krusen, 2011; Lee and Mackenzie, 2003; Mulholland and Derald, 2005, Morley, 2006; Rugg, 1996; Sutton and Griffin, 2000; Smith and Pilling, 2008; Toal-Sullivan, 2006; Tryssenaar and Perkins, 2001).

Furthermore, the health care environment undergoes constant change which impacts on the quality of the service delivery of new graduates, as they struggle with learning how to be OTs, adapting to the needs of the local population, meeting employer expectations and navigating organisational politics. This changing environment and the employer's expectations that they start work and cope with organisational politics, has implications for health science education programmes in terms of preparing graduates for the real world context (Adamson et al., 1998; Hummell and Koelmeyer, 1999; Mulholland and Derald, 2005; Robertson and Griffiths, 2009; Smith and Pilling, 2008; Toal-Sullivan, 2006; Tryssenaar and Perkins, 2001).

Nayar et al. (2011) summarised the importance of students' attitudes by stating that:

“A competent and prepared new clinician cannot be predicted only on the strength of their academic performance during training, but other dimensions, such as personal characteristics such as attitudes, ethical values. The inculcation of a professional with appropriate skills, values and attitudes forms an important part of academic programs and

professional socialisation processes necessary to become an occupational therapist" (Nayar et al, pg.1).

In the South African context, there is a paucity of information on the extent to which the undergraduate programme prepares new graduates' for clinical practice. The SA literature indicated the role and guidance of the HPCSA as previously discussed (HPCSA, 2006). Emslie (2012) investigated the lived experience of clinical supervisors supervising OT students in Stellenbosch. She stated that future research is needed to ascertain whether the OT training aligns with the needs of the current health system as there is no published research on this topic (Emslie, 2012).

2.4 CONCLUSION

The literature review has created a contextual background by reviewing the history of OT in South Africa and the Minimum Standards of Training expected by the South African professional body. Issues about the complexity of curriculum development and models of curriculum have been discussed. An overview of the difficulties and guidelines with regard to curriculum implementation has been highlighted. This included issues pertaining to educational methods, fieldwork and facilitating acquisition of clinical reasoning and professional behaviour which are cornerstones of professional practice. Finally, issues around the newly graduated OTs perception about their preparedness to practice were highlighted. The literature review has revealed that research into OT education appears to be an emerging field with no published research from a South African perspective about students and clinical supervisors' perception around whether the students are prepared for clinical practice. The next chapter will outline the research design and methodology used in the study.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

A qualitative study design was used to obtain information regarding whether the fourth year OT students were prepared for clinical practice. This consisted of four components as outlined in the four objectives:

1. Understanding the students' experience of the curriculum,
2. Understanding the students' perceptions about their preparedness for clinical practice,
3. Understanding the supervisors' perceptions about the UKZN OT programme students' preparedness for clinical practice and
4. Analysing the HPCSA accreditation report submitted by the HPCSA appointed panel of evaluators following their evaluation of the Department in 2011 as well as documents from the Discipline of OT used during the evaluation regarding the clinical skills taught and assessed (vision and mission statement, overview of the curriculum, marking rubrics, clinical fieldwork guide and terminal competencies).

This chapter outlines the research design, the study population, the data collection tools, the pilot study, and how the data was collected, managed and analysed. Both the trustworthiness of the methods used and the ethical issues that were considered during the conception and execution of the study are addressed.

3.2 RESEARCH DESIGN AND METHODS

An interpretivist approach and an instrumental case study design were used when designing the study. Qualitative research was used to allow the researcher to gain an understanding of the perception, and concerns of the participants' though building a holistic picture to explore the perceptions related to the OT students' preparedness for clinical practice (Carpenter and Suto, 2008; Henning, 2004). The researcher's use of an interpretivist approach was aimed at understanding how the participants' interpret their experiences. According to Denzin and Lincoln (1998)

all research is interpretivist at heart, in that it is guided by a set of beliefs that guide actions and feelings about how the world should be understood and studied. This study used a range of interconnected data collection methods to gain a better understanding of the research aim (Denzin and Lincoln, 1998).

According to Srivastava and Thompson (2009), the type of methodology used must be in line with the aims and objectives of the study. In this study, both the qualitative research design and the interpretivist approach are aligned to the purpose of this study, as the researcher seeks to understand the perceptions of the students and the supervising clinician's in terms of their beliefs about the student's ability to cope with clinical practice. It also enabled an exploration of the perceptions around the UKZN OT programme by both participant groups.

Creswell (2007) defined case study research as a design in which the researcher explores a bounded system through detailed, in-depth data collection involving multiple sources of information. Stake (1998) as cited in Denzin and Lincoln, described an instrumental case study as a study in which the researcher focuses on an issue or concern and uses one bounded case to illustrate the issue (Cresswell, 2007; Denzin and Lincoln, 1998; Winston, 1997). These descriptions of case study research and an instrumental case study were aligned with the context and the approach used in the study. The OT programme at UKZN was the bounded system for this study. The 2012 cohort of fourth year OT students forms the unit of analysis for this study, and the findings facilitated an understanding of the context and will allow for recommendations that pertain directly to the OT undergraduate programme at UKZN.

In addition, one of the key features of a case study is that multiple methods of data collection are required in order to draw on multiples sources of information e.g. interviews, observations, documents etc. This is done to understand the case that is being studied (Cresswell, 2007).The data collection plan for this study called for focus groups, semi-structured interviews and document analysis, which meet the criteria for multiple sources of information using multiple methods of data collection.

3.3 POPULATION AND STUDY SAMPLE

This study focused on the 2012 cohort of fourth year undergraduate OT students and the registered OTs who supervised them during their clinical placements. This is in keeping with Holloway and Wheeler (2010), who state that case studies focus on individuals such as patients or a group, which might consist of individuals with common experiences or characteristics (Holloway and Wheeler, 2010). Purposive sampling has been used to obtain participants for the study. Creswell (2007) maintains, there is an array of purposive sampling that can be used to select cases that show different perspectives on the problem, but he may also choose to select accessible cases (Creswell, 2007).

3.4 SELECTION AND RECRUITMENT OF PARTICIPANTS

The study participants consisted of the 2012 fourth year OT students and their clinical supervisors, with their selection and recruitment being detailed below.

3.4.1 Student Sample

Purposive sampling was used to recruit the fourth year OT students. A class list was obtained from the Discipline of OT at UKZN to ensure that the entire cohort of students could be invited to participate in the study via email. The recruitment of participants for the study started after receiving ethical approval from the Health and Social Science Ethical Committee.

The process of recruitment of the student sample was as follows:

- a) A letter was sent to the Dean of Health Sciences to grant permission for the study to be completed and the students to be contacted (See Appendix 2).
- b) The Faculty postgraduate officer sent a letter confirming that permission was granted and that the student could be contacted.
- c) An email was then sent to potential participants to invite volunteers to participate in the study, explaining the purpose of the study and offering two dates for the focus groups.
- d) The potential participants were sent information letters and consent forms, (See appendix 4 and 6), as attachments on email. This was to provide them

with adequate details regarding the study to enable them to make an informed decision with regard to their participation.

- e) The first call for participants did not result in any volunteers, and a second email requesting participants was therefore sent. This resulted in seven participants for the first focus group. Participants who volunteered were accepted into the study on a first come first serve basis.
- f) A third email was sent to the remainder of the class who had not volunteered for the first focus group to recruit participants for the second student focus group, to which seven students responded positively. This was followed by a telephone call to these students asking whether there should be a change of date and to ensure that there was a representative sample of the class.
- g) An email was sent to participants the day before the focus group to ensure that the participants remembered to attend.

One group of seven students and a second group of seven students volunteered to participate in the two focus groups. On the day of the second focus group one student did not participate for unknown reasons.

Four additional students were recruited to participate in the semi-structured interviews. These students were selected from the remainder of the class group who had not participated in the focus groups. The students who volunteered, and had attained an aggregate in the top 25%, middle 25% and the bottom 25% of the first semester examination results, were selected to participate in the semi-structured interviews. This was done so that the sample reflected the different levels of academic ability in the class. Seventeen students out of a class of 21 participated in the study. The researcher tried to attain a representative sample of the gender and racial groups of the class in order to have a representative sample of the class.

3.4.1.1 Inclusion and exclusion criteria

The inclusion criterion was:

- A registered fourth year OT student at UKZN.

The exclusion criterion was:

- If the student started OT programme at another university and transferred to UKZN mid-programme.

3.4.2 Clinical Supervisors

Purposive sampling was used to recruit the clinical supervisors. A list of the OTs who supervised the 2012 cohort of OT students during fieldwork was obtained from the discipline of OT at UKZN. The researcher used the list to recruit clinical supervisors from the various fields of OT namely physical, psychiatric, paediatric and the community field via email or phone call. This included existing practitioners from private and public health institutions, as well as therapists in the education department who had supervised OT students for at least two years and had supervised the 2012 fourth year OT cohort at UKZN. The UKZN OT academic staff who had supervised students was excluded due to potential bias as they lectured on the undergraduate programme being studied.

The process of recruitment of the clinical supervisors was as follows:

- a) An email was sent to the Assistant District Officer and/hospital manager or school principal with a letter requesting permission to contact the OT at the hospital or school and the information document for the clinicians (See appendix 3 and 5). This was done to obtain permission to contact the therapist and for the gatekeepers to give permission for the supervising clinicians to participate in the study.
- b) Once permission had been obtained, an email was sent to the clinical supervisors to recruit participants. The email had the informational document and the letter of consent (See appendix 5 & 7) as an attachment so that the potential participant could make an informed decision about participation.
- c) This was followed by a telephone call to the various OT departments explaining the purpose of the study and requesting that clinical supervisors consider attending the focus groups.
- d) The researcher sent a reminder email and a telephone call was made the day before the focus group to ensure that participants who had volunteered would remember.

Eight of the clinical supervisors volunteered to participate in the focus group. However, one clinical supervisor did not present on the day of the study for unknown reasons. The clinical supervisors who participated in the study had knowledge of the 2012 cohort of fourth year OT students' academic and clinical skills, as they had supervised this cohort of students. In addition, the clinical supervisors had prior exposure to the UKZN OT academic programme and clinical supervision as they had at least two years' experience with fieldwork supervision for UKZN. The bias of the students giving opinions about their own undergraduate programme was reduced through interviewing the OT students' clinical supervisors and exploring their opinions about the undergraduate programme.

The sample of clinical supervisors should have had representatives who supervised students on their community fieldwork, but only two OTs had been clinical supervisors on this fieldwork block. One OT had only supervised students for six months and the other was a member of the academic staff and therefore did not fit the criteria for inclusion in the study

3.4.2.1 Inclusion and exclusion criteria

The supervisors' inclusion criteria were:

- Registered with the HPCSA and trained in South Africa,
- Had been practicing for 2 years or longer and
- Had supervised final year students for at least 2 years.

The exclusion criteria were:

- Therapists who have trained overseas,
- Therapists who were not registered with the HPCSA,
- Supervisors who were academic staff at UKZN and
- Supervisors who had less than two years' experience of supervision.

3.5 Pilot Study

The questions for the student focus group were initially piloted with three academic staff in the Discipline of OT. The pilot revealed the ambiguousness in some of the

questions as well as the difficulty with the structuring i.e. not having a table in the middle of the room. The questions for the fourth year OT cohort focus groups were revised and then piloted on a group of eight students from the third year OT cohort. This group was chosen as it was the later part of the year and these students would have had sufficient experience to be able to understand and answer the questions. There was a revision of the questions based on the responses on the students after an analysis of the audio-tape of this pilot group.

The questions for the clinical supervisors focus group was piloted with a group of four academic staff who lecture in different fields of OT i.e. paediatrics, psychiatry, community and physical, to enable them to comment on whether they felt the questions would elicit pertinent information about the OT programme at UKZN. The pilot revealed that the questions were appropriate, and an analysis of the audio-tape showed that the focus group yielded valuable information. Some suggestions were given to reduce the ambiguousness of certain questions and sequence of questions. The focus group questions were altered accordingly.

3.6 Data Collection

The study used a variety of data collection methods which had evolved as the study continued and this was in keeping with the qualitative approach. Data for case studies can be collected from multiple sources namely documentation, archival records, interviews, direct observations, participant observation and physical artefacts (Yin, 1994).

3.6.1 Research Assistant Orientation

The researcher sourced two research assistants to conduct the focus groups and semi-structured interviews with the students. This was to prevent the researcher bias effect, as the researcher lectured the students and it was felt that this would restrict the students' ability to freely express their opinions.

There was a primary facilitator for each of the student focus groups and a co-facilitator, the latter's role being mainly to take notes and record the observations

from the group as well as change tapes if necessary. Each research assistant conducted semi-structured interviews on a one to one basis with the two participants.

The researcher identified two potential research assistants based on the fact that they were OTs and thus would have the necessary insight into the terminology and concepts under discussion. They had also not lectured the students in their fourth year and that they were not permanent members of the Discipline of OT at UKZN. The research assistants were sent copies of the focus group questions to comment on and given information on how to run a focus group. The researcher then had meetings with the two research assistants to clarify any issues that they had. The research assistant allocated to be the facilitator for the OT fourth year student focus group was given the audio recording of the student pilot group to review as an example of the way in which the focus group had to be conducted. The research assistant allocated to be the co-facilitator was given a copy of the field notes format and the researcher explained the observation that would need to be recorded. The day before the first focus group, a meeting was held with the research assistants to explain points that the researcher felt were important in terms of the questions and probes, as well as to clarify any queries that the research assistants may have.

3.6.2 Data Collection Methods

Data was collected using focus groups, semi-structured interviews and a document review. An overview of the methods used to collect the data will follow in the paragraphs below. Table 3.1 below outlines the methods used to collect data in this study according to the four research objectives.

Table 3.2 provides an overview of the objectives and aspects assessed using the data collection tools.

Table 3.1: Overview of methods used to collect data

OBJECTIVES	METHOD	SAMPLE	DATA COLLECTION TOOL	DATA COLLECTION	ANALYSIS
1. To investigate the fourth year OT students' experience of the undergraduate OT programme, 2. To determine the extent to which the fourth year students perceived that they were prepared for clinical practice prior to graduation and 3. To establish the supervising OT clinicians perceptions around the UKZN OT programme and students' preparedness for clinical practice.	Two Focus Groups	13 students of the 2012 OT4 cohort (Purposive)	Focus Group schedule (Appendix 8 and 9)	Research assistant	Thematic analysis
	Semi-structured Interviews	Four Students (Purposive)	Interview Schedule (Appendix 10)	Research assistants	
	Focus group	Seven Clinical Supervisors	Focus Group Interview Schedule (Appendix 11)	Researcher and a Research assistant	
4. To establish existing deficits in the current curriculum and to understand how final year students are assessed by analysing the 2011 UKZN OT evaluation report by the HPCSA panel as well as the documents used to assess final year OT students.	Document review	<ul style="list-style-type: none"> • 2011 HPCSA Accreditation report of UKZN, • HPCSA Minimum Standards of Training and Standards of Practice, • Documents related to assessments of students (marking rubrics and guidelines), • Vision and mission statement and • OT Curriculum Handbook of Health science (UKZN). 	Framework for Analysis	Researcher	

Table 3.2 Overview of the objectives and aspects assessed using data collection tools

OBJECTIVES	CATEGORIES FROM THE FRAMEWORK
1. To investigate the fourth year OT students' experience of the undergraduate OT programme.	Philosophy and purpose
	Curriculum content
	Educational methods
	Assessment
	Fieldwork
	Educators and facilities
2. To determine the extent to which the fourth year students perceived that they were prepared for clinical practice prior to graduation.	Graduate competencies: <ul style="list-style-type: none"> • Expected clinical skills, • Students ability to assess clients, • Students ability to plan treatment, • Students ability to implement treatment and • Factors that influence preparedness for clinical practice.
3. To establish the supervising OT clinicians perceptions about the UKZN OT curriculum and the students' preparedness for clinical practice.	Philosophy and purpose
	Curriculum content
	Educational methods
	Assessment
	Fieldwork
	Educators and facilities
	Graduate competencies: <ul style="list-style-type: none"> • Expected clinical skills, • Students' ability to assess clients, • Students' ability to plan treatment and • Students' ability to implement treatment.
4. To establish existing deficits in the current curriculum and to understand how final year students are assessed by analysing the 2011 UKZN OT Accreditation report by the HPCSA panel as well as the documents used to assess final year OT students	Philosophy and purpose
	Curriculum content
	Educational methods
	Assessment
	Fieldwork
	Educators and facilities

3.6.2.1 Objective 1. To investigate the fourth year OT students' experience of the undergraduate OT programme.

The research assistant conducted two focus groups, one with seven and the other with six participants from the 2012 fourth year OT student cohort using a schedule of questions that was based on issues raised in the literature review pertaining to the research objectives and the categories in the conceptual framework(See Appendix

8and 9). The focus groups were approximately 90 minutes in duration. According to Creswell (2007), focus groups are advantageous when the interaction among interviewees is likely to yield the best information and interviewees are co-operative with each other. In addition, focus groups have value when time to collect information is limited, and individuals interviewed one-on-one may be hesitant to provide information (Creswell, 2007). The focus groups were run first as it was anticipated that a group would be less intimidating for the students and yield more information. In this way, students did not feel singled out as they were in a group. The focus group questions were refined after the first focus group to obtain information about issues raised in the first focus group. This is in keeping with the evolving nature of qualitative research. A second focus group was held to ensure that there is a saturation of information. The focus group was held at UKZN to enable all students to attend as this was a central venue. The participants in the focus group were required to sign an informed consent document before the discussion began (See Appendix 6). The research assistant initiated and directed the discussion to insure that it addressed the topics under investigation.

The questions for the focus group were aligned with the aim of this study, and were directed around issues to explore the students' perceptions with regard to the extent to which the students felt prepared for clinical practice (See Appendix 8 and 9 for schedule of questions). The co-facilitator notes were used for member checking at the end of the group where they summarised the information obtained and ask the group participants to verify the data. The co-facilitator summarised and paraphrased the participant's words which provided an account of the views expressed in the focus group. This was viewed as member checking as per method described by Holloway and Wheeler (2010). The focus group was audio taped and field notes were taken in order to ensure that there was a back-up procedure in place should the digital voice recorder/Ipad experience technical problems. Dawson, Manderson and Tallo (1993) stated that the simplest method of recording the focus group discussion is for the observer of the focus group to take notes of the session and getting as much detail as possible. This may be making a summary sentence of each response from each participant, or jotting down key words and then writing down verbatim any striking and important comments (Dawson et al., 1993).

The participants of both focus groups were required to sign a letter of consent (see appendix 5) and were given labels with alphabet letter (pseudonyms) in order to maintain confidentiality, while the participants' demographic details were also entered in a table with pseudonyms. These labels became the coding system that was adopted (instead of their names) to identify the various group participants and this coding system has been used throughout the data collection, analysis, writing up of results and in the data dissemination. This was to ensure that personal information was kept confidential at all times. In addition, four semi-structured interviews were conducted. The process for the semi-structured interview is discussed under Objective 2 below.

3.6.2.2 Objective 2. To determine the extent to which the fourth year students perceived that they were prepared for clinical practice prior to graduation.

The research assistants conducted the semi-structured interviews with four OT students from the 2012 fourth year cohort. Yin (1984) stated that interviews are an essential source of case-study evidence, as most case-studies are about human affairs. These human affairs should be reported and interpreted through the eyes of specific interviewees, and well informed respondents can provide insights into a situation (Yin, 1984).

The semi-structured interviews question schedule was generated using the common themes and information that emerged from the focus group with the OT students. The questions from the focus group were expanded and some additional questions were generated to explore the students' perception of their preparedness to practice in greater detail (See Appendix 10). The interviews took place at UKZN as this was the location that the students deemed most central, and were approximately 45 minutes. The research assistant held one on one interviews with the four participants. The interviews were audiotaped and field notes were taken to ensure that there was a record of the interview if the audio recording failed. The students were required to sign a consent form prior to beginning the interview. The research assistant explained the purpose of the study again and asked the questions outlined in the schedule of questions (Appendix 10). The content of the interview was summarised by the research assistant to verify that she had correctly interpreted the

students' comments. The participants were given pseudonyms to allow for anonymity. According to Yin (1984), a second type of interview is a focused interview in which a respondent is interviewed for a short time period, a major purpose of such an interview might be to corroborate facts obtained elsewhere (Yin, 1984). The two focus groups were also used to collect data related to this objective as mentioned in 3.6.2.1.

3.6.2.3 Objective 3. To establish the supervising OT clinicians perceptions regarding students' preparedness for clinical practice by means of a focus group.

The supervising clinician's focus group was approximately 90minutes in duration. The researcher was the facilitator of the group and a research assistant was the co-facilitator. The reason a focus group format was chosen to obtain information was that the researcher felt that this would yield more information in the form of common or diverse views of the clinician's in terms of their perception of the student's skills and abilities. The questions followed a similar format to the student focus group questions i.e. around issues to explore the clinical supervisor's perceptions with regard to the extent to which the students were prepared for clinical practice (see Appendix 11 for schedule of questions). The group participants were asked to sign a letter of consent (see Appendix 7) and were also given labels with arbitrary names (pseudonyms) to enable an anonymous data coding system that was used throughout the data collection and data analysis phases. The focus group took place at UKZN and was held in a lecture venue away from the Discipline of OT at UKZN. The participants' were seated around a table for the focus group. The researcher initiated and directed the discussion after having explained the purpose and significance of the research, and the need for honesty and openness. The discussion was recorded and on completion, they were thanked for their participation and again assured of their confidentiality and anonymity.

3.6.2.4 Objective 4. To establish existing deficits in the current curriculum and to understand how final year students are assessed by analysing the 2011 UKZN OT evaluation report by the HPCSA panel as well as the documents used to assess final year OT students.

Documents from the discipline of OT that related to the undergraduate programme and assessment of students were collected. These documents were read and were included for the document analysis if they related to preparing OT fourth year students for clinical practice. A total of eleven documents were used for the document analysis.

The documents were divided into 3 groups namely:

- 1) The HPCSA documents (Minimum Standards of Training for OT and Standards of Practice for OT),
- 2) The 2011 HPCSA report on the accreditation of the OT training at UKZN has been used as data to obtain expert appraisal of the degree and
- 3) Documents from UKZN relating to evaluator assessments of students during the OT programme (vision and mission statement, the terminal competencies, clinical performance booklet, the rubric that describes the allocation of marks for the clinical performance booklet, rubric for marking treatment demonstration and the oral case presentation, clinical fieldwork guide and paper descriptors of the curriculum content obtained from the Handbook of Health Science.

Table 3.3 below outlines the documents used in the review, the purpose of the document and the reason for inclusion.

Table 3.3 Outline of documents used for document analysis and their purpose

DOCUMENTS	DOCUMENT NAME	PURPOSE OR USE	REASON FOR INCLUSION
1. HPCSA governing documents	a)HPCSA Minimum Standards	Sets out minimum standards for training for educational institutions in South Africa	Outlines the curriculum content for OT programmes and the entry grade competencies that are relevant to OT in South Africa.
	b)HPCSA Standard of Practice for OT	Prescribes standards of service delivery for OTs	Describes the competencies that the new graduate OTs need to possess in terms of standards of practice.
2. HPCSA evaluation document	a)HPCSA Accreditation report on UKZN Discipline of OT	Evaluation of the OT programme at UKZN in terms of accreditation of the programme with HPCSA	A review of the OT programme that was completed by an expert panel of three evaluators that was sent by HPCSA to evaluate the OT programme for accreditation.
3. UKZN documents	a)Mission and vision statement	Purpose and philosophy of the programme	This was necessary in order to understand the purpose of the OT programme at UKZN.
	b)Curriculum content overview from the handbook School of Health Sciences	Set of aims and curriculum content of the OT programme/degree B. OT	Contains paper descriptors of the modules that form the curriculum and was necessary to attain an overview of the curriculum in terms of content, assessment methods, teaching methods and fieldwork placement components for each module.
	c)Clinical performance booklet	Outlines behavioural outcomes for fieldwork	One of the methods used to assess students clinical performance on practice fieldwork education.
	d)Rubric Guide for allocation of percentages for clinical performance	Outlines common methods to understand the scoring	Indicates the level of performance in terms of knowledge and skill that the students need to achieve in order to be allocated a specific percentage for the clinical performance mark on practice education placement.
	e)Case presentation marking guide	Outlines what students are assessed on: assessment, treatment planning and implementation of treatment programmes	A marking rubric used to assess students during oral case presentation and contains the areas assessed in terms of knowledge and clinical reasoning.
	f) Treatment demonstration marking guide	Outlines what students are assessed on in terms of implementation of a treatment session	A marking rubric used to assess students during oral treatment demonstration and contains the areas assessed in terms of skills in treatment implementation and clinical reasoning around treatment.
	g)Terminal competencies	Outlines competencies needed to be attained from first to fourth year	This guides the expectations for each year in terms of outcomes for students regarding the knowledge and skill needed to be achieved by each level i.e. 1 st to fourth year.
	h)Clinical fieldwork guide	Outlines the expectations for Fieldwork	This guides the students and clinical supervisors in terms of behavioural expectations and explains the assessment procedure for fieldwork.

3.7 DATA ANALYSIS

Each of the four categories of data were analysed independently and then collectively to establish any patterns and similarities between them. A thematic analysis was used to analyse the data collected from the focus groups, the semi-structured interviews and the documents collected. The analysis was done using the conceptual framework as set out in Chapter 2, with the criteria set out by the WFOT and HPCSA being the seven guiding themes (philosophy and purpose, curriculum content, educational methods, assessment, fieldwork, educators and facilities and graduate competencies). These categories formed the basis for the template used in the data analysis process. The categories were used to create a codebook which was used when analysing the data collected. This method was as per the framework analysis protocol outlined by Fereday and Muir-Cochrane (2006:4-6) and each category had:

- a) A code label,
- b) A definition of the theme and
- c) A description of how to know when the theme occurs.

The name of each category was considered the code label. The description of the code was written according to the outline of the WFOT and HPCSA documents description of the category, and the description of how to know when the theme occurs was based predominantly on the HPCSA Minimum Standards of Training for OT document to contextualise the framework for the South Africa setting (see appendix 12). This template was therefore part of the deductive reasoning process that was used to analyse the data collected. The analysis for each of the four objectives of the study will be reviewed.

3.7.1 Objective 1: To investigate the fourth year OT students' experience of the undergraduate OT programme.

3.7.1.1 OT Fourth Year student Focus groups

The data from the audio-tapes for focus group one and focus group two were transcribed verbatim. The researcher read and re-read over the transcription to familiarise herself with the data. Initial themes were identified through summarising

the data. The template was applied to identify meaningful units of information. Each of the transcriptions was coded using the categories in the framework as a reference. Different highlighters were used to represent each code i.e. philosophy and purpose, curriculum content, educational methods, assessment, fieldwork, educators and facilities and graduate competencies. The themes within the data group clustered around a topic were identified as a theme. The themes were checked against the framework used in the document analysis in order to name and define the theme (Wharton, 2012). The themes were separated to answer the two objectives that were answered with the student data. The themes around philosophy and purpose, curriculum content, educational methods, assessment, educators and facilities were allocated to answer the Objective 1, to investigate the fourth year OT students' experience of the undergraduate OT programme. The themes around graduate competencies were allocated to answer Objective 2 i.e. to determine the extent to which the fourth year students perceived that they were prepared for clinical practice prior to graduation in terms of expected clinical skills, the students' ability to assess clients and the ability to plan and implement treatment. In addition, the data was given to the research assistant to code separately and the themes were checked with the research assistant. This was done to ensure dependability of the data and to prevent researcher bias. The coded themes were then double-checked and the findings were confirmed.

3.7.1.2 OT Fourth Year student Semi-structured interviews

The audio-tape from the four semi-structured interview were transcribed. The researcher used the same data analysis method as outlined in Objective 1 above for the student focus group interviews.

3.7.2. Objective 2: To determine the extent to which the fourth year students perceived that they were prepared for clinical practice prior to graduation.

3.7.2.1 OT Fourth Year student Focus groups

The researcher read and re-read over the transcription to familiarise herself with the data. Initial themes were identified through summarising the data. The template was applied to identify meaningful units of information. Each of the transcriptions

was coded using the category in the framework of graduate competencies as a reference. A highlighter was used to represent this code. The themes within the data group clustered around a topic were identified as a theme. The themes were checked against the framework used in the document analysis in order to name and define the theme. The themes around graduate competencies were allocated to answer the Objective 2, to determine the extent to which the fourth year students perceived that they were prepared for clinical practice prior to graduation in terms of expected clinical skills, the students' ability to assess clients, the ability to plan and implement treatment. In addition, the data was given to the research assistant to code. Separately and the themes were checked with the research assistant. This was done to ensure dependability of the data and to prevent researcher bias. The coded themes were then double-checked and the findings were confirmed.

3.7.2.2 OT Fourth year students' Semi-structured interviews

The researcher read and re-read the transcriptions in order to familiarise herself with the data. The researcher used the same data analysis method as outlined in Objective 2 above for the student focus group interviews.

3.7.3 Objective 3: To establish the supervising OT clinicians perceptions regarding the UKZN OT curriculum and the students' preparedness for clinical practice by means of a focus group.

3.7.3.1 Supervising Clinician's Focus Group

The audio-tape from the supervising clinician's focus group was transcribed. The researcher familiarised herself with the transcription through reading and re-reading the data. The template was applied to identify the meaningful units of information. The researcher again used different coloured highlighters to denote the codes that corresponded with the categories in the framework as mentioned earlier. The themes within the data group clustered around a topic were identified as a theme. The themes were checked against the framework used in the document analysis in order to name and define the theme. The themes were separated to answer the supervising clinicians' perception of the undergraduate programme and objective 3, to establish the supervising OT clinicians' perceptions regarding students' preparedness for clinical practice in terms of the expected clinical skills, students'

ability to assess clients, plan treatment and implement treatment. The data was also given to the research assistant to code separately and the themes were checked with the research assistant. This was done to ensure dependability of the data and to prevent researcher bias. The coded themes were then double-checked and the findings were confirmed.

3.7.4 Objective 4. To establish existing deficits in the current curriculum and to understand how final year students are assessed by analysing the 2011 UKZN OT evaluation report by the HPCSA panel as well as the documents used to assess final year OT students.

The outline by Fereday and Muir-Cochrane (2006) was used for the document analysis. Data was summarised and initial themes identified through a process of summarising the data in each of the documents. The template/framework was applied to identify meaningful units of text. Each document was coded using the framework as a reference with different highlighters to represent each code i.e. philosophy and purpose, curriculum content, educational methods, assessment, fieldwork, educators and facilities and graduate competencies. The codes were connected and the themes identified. The themes within the data group clustered around a topic were identified as a theme. The themes were checked against the framework used in the document analysis in order to name and define the theme. The themes around philosophy and purpose, curriculum content, educational methods, assessment, fieldwork, educators and facilities described UKZN OT's implementation of the guidelines from the HPCSA in the OT programme, while the data around the theme graduate competencies described the students' preparedness for clinical practice. The data was given to the research assistant to code. The data was coded separately and the themes were checked with the research assistant. This was done to ensure dependability of the data and to prevent researcher bias. The coded themes were then double-checked and the findings were confirmed. The themes for each category were discussed in the findings section.

3.7.5 Final Data Analysis

In order to address the aim as outlined in Chapter 1, the data was then analysed with respect to the categories identified under Graduate Preparedness:

- Expected clinical skills,
- Students ability to assess clients,
- Students ability to plan treatment,
- Students ability to implement treatment and
- Factors that influence preparedness for clinical practice.

3.8 DATA MANAGEMENT

All paper records were stored in a locked cupboard that only the research assistant and researcher had access to. Data was secured on a password protected computer and will be discarded five years after the research has been completed through shredding of the records. All electronic recordings and computer data were stored on rewritable CD/DVDs or flash drives which have been stored in a locked cupboard that only the researcher or the research assistant had access to. These will be erased after five years.

3.9 TRUSTWORTHINESS OF THE STUDY

The reliability and relevance of the questions for the focus group and the semi-structured interview were assessed by piloting the focus group questions on academic staff at the university, then on a group of third year students. This ensured that the questions were relevant and easy to understand. In qualitative research, Creswell (2007) introduced the concept of qualitative reliability which indicated that steps had to be implemented that ensured that the approach during the research process was consistent and reliable (Creswell, 2007). Qualitative reliability was improved through ensuring that errors did not occur when transcribing the raw data by going over the audiotaped interviews more than once, comparing it to the final transcribed data, and by having gone over the tapes given to the research assistants to transcribe. The data was analyzed and the codes identified and cross checked to ensure accuracy. The data was given to the research assistant to check the accuracy of the transcription and verify the codes in order to improve the dependability of the data. This also reduced the potential for bias as the researcher

is a member of staff in the discipline of OT. According to Schwandt (2001), if procedures that have been performed are documented for checking and re-checking, the bias or distortion of the data would be reduced.

Rolfe (2006) cited Lincoln and Guba, who stated that trustworthiness was enhanced by introducing criteria of credibility, transferability and dependability. Credibility/reliability of data was ensured through use of triangulation of data sources in order to explore the same theme. According to Denizen and Lincoln (1998), triangulation is a process of using multiple perceptions to clarify meaning, and serves to clarify meaning by identifying different ways the phenomena is seen. The sources of data were the fourth year OT students prior to graduation, the clinical supervisors, and the documents used in the document analysis. In addition, multiple methods of data collection were used, namely focus group interviews and semi-structured interviews and document analysis.

A description of the research context and the assumptions that were central to the research were outlined to ensure transferability. Dependability had been addressed by ensuring that theoretical notes and methodological decisions were kept on record. Recorded tapes from the focus groups and interviews, transcripts of the interviews, findings of the study and conclusions were kept safely on a password protected computer. All this had ensured that there was evidence of decisions taken during the research process and that there was evidence of where conclusions were formed from. In addition, the data was checked and coded separately by the research assistant to improve the dependability of the data and reduce the researcher bias. This evidence formed part of the audit trail, which was stopped once the data had been analysed (Holloway and Wheeler, 2010).

In addition, the participants were asked to verify the fieldwork notes after each of the focus groups and interviews through listening to the co-facilitator read the summary. This was done to improve the dependability of the data. According to Lincoln and Guba (1985) it is important to check the understanding of the data. The researcher did this “by summarising, repeating the participants’ words” then asking whether the participants felt that the interpretation was true, this was called member checking (Holloway and Wheeler, 2010, pg.305).

3.10 ETHICAL ISSUES

To ensure that there are no ethical issues that arise during the process of this study, a number of principles were implemented which consisted of:

- a) Permission to conduct this study at the Discipline of OT was sought from the Dean of the School. A letter which indicated the period of the study, number of participants expected to participate was given to the Dean.
- b) Information documents were handed to the prospective participants prior to them agreeing to participate in the study (appendix 4 and 5). This was an invitation letter which outlined the purpose of the study and emphasised that participation in the study was voluntary. The participants were given a letter of consent to sign prior to having participated in the focus group or interviews.

The following ethical principles according to the OT Code of Ethics and Ethics Standards (Reed et al., 2010) were implemented in order to maintain high standards of conduct:

3.10.1 Beneficence

The research was designed so that it could benefit the OT students at UKZN. Recommendations that have arisen from the study will be given to the Discipline of OT.

3.10.2 Autonomy and Confidentiality

The participant's autonomy was respected at all times as each person had a right to different views and beliefs. This was achieved by giving them pseudonym names which could not be traced back to them. An information letter had been distributed containing all details regarding the study. Participants were allowed to refuse to partake in the study as well as withdraw from the study at any time. All information obtained from the participants has been kept confidential and anonymous through the use of pseudonyms for participants' names when recording field notes. During the data analysis and the study write up anonymity will be ensured by referencing the name of the focus group attended by the student and the page of the transcript in

which the quote appears. In addition, confidentiality during focus groups was discussed prior to starting the discussion.

3.10.3 Non-maleficence

Trained research assistants or the researcher facilitated all sessions and focus group discussions in order to ensure no emotional distress was caused and the participants were not being put at risk. When it was required, the research assistants stayed after the focus group or interview to debrief students who had become emotional or needed to talk further. The research did not disadvantage any undergraduate participant by holding the interviews and focus groups during lunch break or after hours.

3.10.4 Declaration of Potential Biases

It is important to note that the researcher is a member of the academic staff in the discipline of OT at UKZN. Some inherent biases may have been encountered due to this position in the department and these have been addressed by:

- a) Ensuring that the data was reported verbatim from the statements of the participants. No data negative or positive has been left out,
- b) Having a research assistant conduct the data collection with the students to prevent the researcher effect due to the researcher being member of staff,
- c) Having a co-facilitator/research assistant in the focus group to record observation for the member checking as this person did not have a bias and
- d) Having a research assistant to check the data so that transcriptions are accurate.

Some biases may be encountered in the focus groups and interviews and these have been controlled by:

- a) The researcher had a co-facilitator during the focus group to be able to write down issues discussed so that the facilitator could reflect the information back to the group to ensure accuracy and
- b) Some members of the focus group were more dominant than others and it was the researcher's role to mediate and maintain the focus of discussion.

The participants were assured that their perceptions or responses were not influenced by the researcher by ensuring that the students focus groups were conducted by a research assistant and by being impartial when conducting the clinical supervisors focus group. This was achieved by using interviewing skills gained during the researcher's undergraduate training. *"If this goal is attained then the interviewer's presence has no effect on the perceptions or answers of the participants"* (McMillan and Schumacher, 2001,pg.268).

3.11 SUMMARY

This chapter has provided an overview of the research design, the study population, the data collection tools used in the study. The choice of research assistants, the method used to conduct the pilot studies, and how the data was collected, managed and analysed was elaborated on. Both the trustworthiness of the methods used and the ethical issues were discussed.

The next chapter will outline the findings of the study.

CHAPTER FOUR

FINDINGS

4.1 INTRODUCTION

This chapter contains the findings obtained from the data analysis. As previously mentioned, the data was collected using document analysis, focus groups and semi-structured interviews, and then processed using the categories from the framework template described in the methodology chapter (philosophy and purpose of the programme, educational methods, assessment students, fieldwork, educators and facilities and graduate competencies). The data from the document analysis was used to explore the UKZN curriculum in terms of training the OT students and how this had prepared them for clinical practice. The HPCSA accreditation report was used as a panel of three experts' opinion on the undergraduate programme. The evaluators were considered experts as these OTs were appointed by the HPCSA to interrogate the programme for accreditation purposes.

The students' experience of the undergraduate programme was reported across all the categories of the framework. The students and clinical supervisors' perceptions around preparedness to practice was explored in the graduate attribute category only. The information from the document analysis was used to highlight positive and negative aspects of the programme, and will be reported together with the students and clinicians data around perceptions of the undergraduate programme.

Students and clinical supervisors' quotes have been referenced according to the data collection method i.e. focus group or semi-structured interview, and the page in which the quote can be located in the transcripts in order to preserve anonymity of the students and clinical supervisor. Where academic staff names were mentioned, these were changed into an alphabet letter to ensure anonymity of the academic staff member.

An overview of the data collected and the research objectives are outlined in Figure 4.1 below.

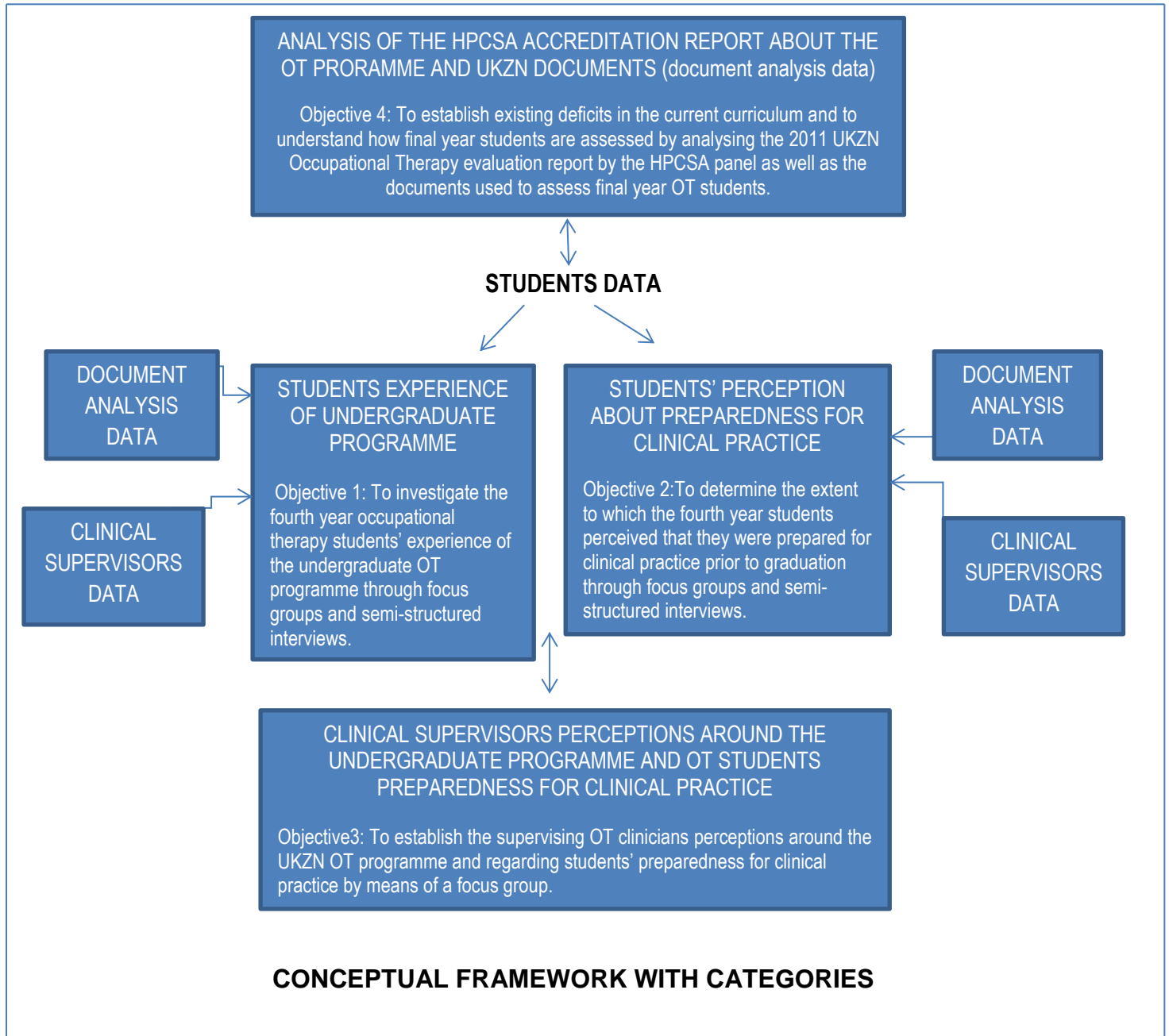


Figure 4.1 Overview of the inter-relatedness of data and the research objectives.

The findings in this chapter are presented with response to each of the four research objectives and according to the categories in the framework as outlined below:

1. Investigating the fourth year OT students' experience of the undergraduate OT programme:

- Philosophy and purpose
- Curriculum content
- Educational methods
- Assessment
- Fieldwork
- Educators and Facilities

2. Determining the extent to which the fourth year students perceived being prepared for clinical practice prior to graduation:

Graduate competencies:

- Expected clinical skills
- Students ability to assess clients
- Students ability to plan treatment
- Students ability to implement treatment
- Factors that influence preparedness for clinical practice

3. Establishing the supervising OT clinicians perceptions of the UKZN programme and the students' preparedness for clinical practice

- Philosophy and purpose
- Curriculum content
- Educational methods
- Assessment
- Fieldwork
- Educators and Facilities
- Graduate Competencies
 - Expected clinical skills
 - Students ability to assess clients
 - Students ability to plan treatment
 - Students ability to implement treatment

4. Establishing the existing deficits in the current curriculum and the analysis of the 2011 UKZN OT accreditation report by the HPCSA panel as well as the documents used to assess final year OT students:
 - Philosophy and purpose
 - Curriculum content
 - Educational methods
 - Assessment
 - Fieldwork
 - Educators
 - Graduate competencies that students need to demonstrate upon graduation

Graduate competencies are the knowledge and skill that the student acquires through engagement in the programme as discussed previous. For the purposes of this research study (as mentioned in Chapter 1 and 2), graduate competencies refer to the clinical skills that the fourth year OT students are required to attain. The students' theoretical knowledge is covered under the students' experience of the curriculum under the other categories in the framework.

4.2 DEMOGRAPHICS OF THE PARTICIPANTS

Seventeen fourth year OT students out of a cohort of 21 students participated in the focus groups and semi-structured interviews. While each of the four race groups were represented, eight of the participants were white, five were Indian, three were African and one was coloured (two African and two white students did not participate in the study). The sample was predominantly female with only one participant being a male with ages ranging from 21 to 27 years. The demographics of the sample are representative of the demographics of the 2012 fourth year cohort. The participants' details are represented in the Table 4.1

Seven clinical supervisors participated in the focus group of which three were white and four were Indian. The sample was predominantly female with only one male and their ages ranged from 23 to 46. The number of years of clinical experience ranged from two to twenty three. The clinical supervisor sample comprised of clinicians that worked in hospitals/facilities that represented the psychiatric, physical and paediatric

area of OT practice, and all the participants had graduated from the discipline of OT at UKZN. The clinical supervisors' demographics are provided in Table 4.2 below.

Table 4.1 Demographics of the student sample

GENDER	AGE	RACE	FOCUS GROUP 1	FOCUS GROUP 2	SEMI-STRUCTURED INTERVIEWS
F	27	White		X	
F	22	White	X		
F	22	White	X		
F	21	White	X		
F	23	White	X		
F	21	Indian		X	
F	21	White	X		
F	24	African	X		
F	22	Indian		X	
F	23	African			X
F	22	White	X		
M	23	African		X	
-F	23	Indian			X
F	22	Coloured			
F	22	Indian			X
F	21	White		X	X
F	23	Indian		X	

Table 4.2 Demographics of the Clinical supervisor sample

FACILITY/HOSPITAL AREA OF WORK IN OT	GENDER	AGE	RACE	YEARS' EXPERIENCE	UNIVERSITY ATTENDED
Psychiatry	F	25	I	4	UKZN
Psychiatry	F	26	I	5	UKZN
Physical	F	42	W	18	UKZN
Physical	F	30	W	6	UKZN
Physical	F	23	W	2	UKZN
Psychiatry	M	46	I	23	UKZN
Paediatric	F	31	I	7	UKZN

4.3. INVESTIGATING THE FOURTH YEAR OT STUDENTS' EXPERIENCE OF THE UNDERGRADUATE OT PROGRAMME.

The students' perceptions about the undergraduate OT programme are presented in this section. The findings will be presented according to the categories of the framework as outlined in Table 4.3 below.

Table 4.3 Overview of findings around students' experience of the undergraduate programme

CORE HEADINGS	STUDENT EXPERIENCES
Philosophy and purpose	<ul style="list-style-type: none"> UKZN OT programme identified purpose and philosophy
Curriculum	<ul style="list-style-type: none"> Aspects that require review Problems with the organization of the curriculum
Educational methods	<ul style="list-style-type: none"> Students experience of educational methods Factors that influence effectiveness of the educational methods
Assessment	<ul style="list-style-type: none"> Perceptions around assessment Perceived inconsistency in marking
Fieldwork	<ul style="list-style-type: none"> Students and clinical supervisors experience of fieldwork Perceptions around supervision
Educators and facilities	<ul style="list-style-type: none"> Students perceptions about educators

4.3.1 Philosophy and Purpose

The student data did not refer to the philosophy and purpose of the programme directly however, it noted that the students displayed strong ethical values. Ethics was reported to be taught indirectly through the entire course by the students, as indicated by the quote below.

"I think we actually were taught ethics indirectly through our whole course" (Student Focus Group 2, P. 27).

4.3.2 Curriculum

There were two main issues that emerged, these being aspects of the curriculum that required review and the problems with the organisation of the curriculum.

4.3.2.1 Aspects Of The Curriculum Content That Requires Review

One of the main concerns raised by the students was the perceived lack of knowledge about models of practice in OT, frames of reference and approaches used in OT to guide clinical reasoning around treatment planning.

“...with regards to our approaches and our models we use for treatment; it’s a critical part of our treatment, with our clients... we don’t have enough knowledge and don’t know why we are using the models” (Student focus group 2, P.20).

The other aspects of the curriculum that require review are outlined in Table 4.4 below.

Table 4.4 Aspects of the curriculum that were perceived to require review

ASPECT OF CURRICULUM	STUDENT QUOTES
Vocational rehabilitation	<p>The majority of students' felt that they do not receive sufficient theoretical information thus tended to avoid this aspect of the profession.</p> <p><i>"Yes. Like, um, we've got this part of, of Vocational Rehab. Vocational Rehab is very, um, crucial in the OT point of view. But, um, we tend to exclude it." (Student focus group 2, P. 20).</i></p>
Occupational performance areas	<p>Some students expressed concern that they feel they lack the ability to assess and treat occupational performance areas effectively e.g. use occupation based activities to treat strength.</p> <p><i>"Supervisor that says "OK, but now how can you treat that functionally other than let's say, you wanted to dress him. How can you treat the dressing aspect with the muscle strength aspect?" You don't think about those performance areas until then"(Student focus group 1, P. 21).</i></p>
Paediatrics	<p>The majority of the students felt that paediatrics should be introduced earlier in the curriculum, views ranged from commencing a paediatric module in 1st year to 3rd year and that the range of paediatric diagnosis taught should be increased.</p> <p><i>"Paeds should not be done in fourth year...umm...introduce Paeds like at a third year level where you learn about like how you learnt Psych and Physical notes and then you go on a prac...do it in third year level or you know...make some sort of changes to...uh...accommodate for it" (Semi-structured interview 2, P.22).</i></p>
Physical	<p>Some students noted that they would like more in-depth information on burns, hand conditions, head injuries, treatment of perceptual deficits and splinting.</p> <p><i>"Our head injury notes were so vague and they really didn't prepare us for head injury patients, which we see so many of in our physical settings, so that definitely could do with some work" (Student focus group 1, P. 21-22).</i></p>
Psychiatric	<p>Some students' expressed having difficulty with adapting treatment plans for group intervention. They also required more in-depth information about socialisation, behaviour modification and role playing.</p> <p><i>"Like even like socialisation or social skills. It's like, insight, that's very important but we've got the theory; they say the program is there, the information is there, but like we've never ever put an actual program together to say, "OK, I can use that theory now to actually put a program together" (Student Focus group 2, P.20).</i></p>
Community	<p>The majority of the students reported that one day of fieldwork, limited the effectiveness of the intervention.</p> <p><i>"I don't feel I have learnt as much from CBR cause it's like you know, we go on CBR on a Thursday only" (Semi-structured interview 3, P. 11).</i></p>

4.3.2.2 Problems with the Organisation of the curriculum

Students felt a need to be orientated to the organisation of the entire curriculum. The feeling was that this orientation to the curriculum would assist them to understand the rationale behind the OT subjects taught from 1st to fourth year. The students reported that there was insufficient grading of expectations across the years from first to fourth year and that the curriculum was overfull. Concern was raised about discrepancies with the time allocated for lectures and that missed lectures were not always made up.

“ It’s only suddenly when you’re in fourth year it amalgamates everything because it all makes sense as to why you did things in the first year, why you’re doing things in second year – only then does it all make sense when you’re eventually in fourth years“(Student Focus Group 1, P. 2).

“It almost seems like over December we had to gain so much information and we had to function on a completely... different level, which we weren’t expected to in 3rd year” (Student focus group 2, P. 2).

4.3.3 Educational Methods

4.3.3.1 Students experience of educational methods

There were two issues that were raised regarding educational methods, these being the students’ experience of educational methods and other factors that influence the effectiveness of the educational methods. The students reported that some teaching methods were perceived to enhance learning while other methods were found to be less beneficial. Students indicated that they valued more interactive teaching methods. This was perceived to help solidify their learning and helped to integrate theory and practice. Self-study methods such as being given topics to research and present, as well as being given assignments, were found to enhance learning. Feedback from academic staff about these tasks was important. The following quotes illustrate how the students expressed their preference.

“Generally if there’s a demo, if the example is given, if the lecturer brings the content more alive, you respond a lot more and the learning is better” (student focus group 1, P.38).

“So, even though we are practicing it, it is still like someone is going around and correcting you and checking” (Student focus group 2, P. 29).

Students found it difficult to pay attention during long PowerPoint presentations or when the lecturer read their notes to the class. Rushed lectures and constant negative feedback was perceived to decrease the student's learning ability as illustrated by the quotes below.

"PowerPoint's are a bit too long and they become a bit monotonous and we don't really concentrate on what's happening" (Student Focus group 2, P. 29).

"when they are like keeping on telling you are going to fail, by hearing those voices and you end up being petrified and not even performing well" (Student focus group 2, P. 4).

4.3.3.2 Factors that influence effectiveness of educational methods

The students indicated that there were several factors that influenced their ability to learn. These included adjusting to the demands of a tertiary institution, stress, time management, different learning styles (being proactive about learning and being able to think laterality), segregation of the class and having different personalities i.e. introverted versus extroverted. The quotes below illustrate the student view on these points.

"even though the fact that I had just come out of high school and you know the workload of...of varsity is not the same" (Semi-structured interview 3, P1).

"Stress and overload, in terms of the amount of work that you have to cope with; you are very overwhelmed at times and that affects your performance" (Student focus group 2, P.43).

"I am very structured and I have to follow notes and that has to be told to me to do it like this. I think that makes it very difficult for me to be able to manage" (Student focus group 2, P. 25).

"The thing is there's such dynamics in our class where there's a lot of segregation" (Semi structured interview 2, P.28).

"One of the biggest things that we felt in our class is lots of separation...separation on race, separation on knowledge" (Semi-structured interview 4, P. 5).

"you must be able to think out of the box because that's what our lecturers always tell us ... an outgoing person, you must be confident, you must believe in what, in what you doing" (semi-structured interview 3, P.1).

4.3.4 Assessment

This category describes the perceptions around assessment of the fourth year OT students. There were two issues that emerged namely: perception around assessment and perceived inconsistencies in marking.

4.3.4.1 Perceptions around assessment

The students reported that too much emphasis was placed on the summative examination marks. The students stated that being placed at a different venue from their fieldwork for the examination places them at a disadvantage. Another point raised was the disparity between the psychiatric and physical examination i.e. the final psychiatric practical examination was based on a group process, whereas the physical practical examination was on an individual client.

“Or for instance with Psych being at Ekhulengeni and being at Newlands Park; they’re completely different and I don’t think that being at Newlands and doing your finals at a Ekhulengeni you’re not actually prepared” (Student focus group 1, P.6).

“Psych I think like it’s...it’s very differently orientated from the others, like I mean our exam at the end is practically a group situation, whereas Physical you treat one on one” (Semi-structured interview 4, P.24).

4.3.4.2 Perceived inconsistencies in marking

The students perceived that the method used to assess their clinical performance on fieldwork was too subjective. They felt that the process resulted in inconsistencies in the allocation of marks. The students indicated that most clinical supervisors/academic staff have different preferences which influence their expectations during fieldwork assessments. They suggested using two academic staff members for assessments to ensure greater consistency in marking.

“I think on the front of that booklet there is 1, 2, 3, 4, 5 and it’s explained. Like 1 is very poor and whatever, but they need to explain what the ‘very poor’ means. So it’s not – it’s not, although they’ve got it they can say, “Number 3. They are meeting my expectations and that’s why I’m giving them a 3 but what is ‘meeting their expectations’? Like, they need to actually brief them on what is very poor. What is meeting expectations” (Student focus group 1, P.33).

“If we had a moderator for all exams then it would be a little bit more consistent. Like we wouldn’t feel like, “OK, she didn’t like my work this time,” but I did the exact same thing last year and that supervisor loved it” (Student focus group 2, P.11).

4.3.5 Fieldwork

There were two main issues that emerged namely student experience of fieldwork, and the perceptions around supervision.

4.3.5.1 The students experience of fieldwork

The students expressed concern on the need for more comprehensive preparation during mock practical in the fourth year prior to commencement of fieldwork. Recapping of models and approaches, and more comprehensive input on treatment planning was mentioned. During fieldwork, continuous blocks were seen as beneficial, as being able to treat clients on a daily basis allowed students to see progress in their client's level of functioning. Fieldwork was seen as an opportunity to integrate theory and practice. It was seen as a challenge to assimilate the volume of theory and integrate this into practice. The students valued the midterm assessments for guiding their learning. Students voided that their previous fieldwork experiences influenced their confidence and their ability to work on the next fieldwork block. The students' expressed these experiences as illustrated in the quotes below:

"Now recapping would be nice on those mock practical if for example, you recap appropriate approaches that you would use in your necessary blocks. So for example, only on your prac block will your supervisor say, "Oh, so you've used this approach so these are the principles and they'll make the link. But that would be very nice to have that refresher before you even go on prac...(Student focus group 1, P.40).

"Like at least if you're there every day, you can plan and you know you're a bit more prepared, whereas with that gap you get there on the Friday and like they're gone or whatever the case may be" (Student focus group 1, P.3).

"...the clinical fieldwork placements are valuable because you are exposed to quite a variety of conditions and...umm...with regards to your expectations that each hospital is different so you also learn about working with different MDT's,...umm...it helps with your people skills once again" (semi-structured interview 1, P.3).

"...like looking at clinical performance at midterm. They show you where you need to improve and what areas and then by finals it's up to you to make those improvements" (Student focus group 1, P.31).

"...if you have a bad prac previously and then you get to fourth year and you are like, OK, no...It's going to be bad again and you have this mind-set that it is always going to be that way" (Student focus group 2, P. 4).

4.4.5.2 Perceptions around supervision

The students received supervision during fieldwork from academic supervisors and the clinical supervisors, and the feedback about both supervisors has been combined for the purposes of exploring this theme.

The students felt that the role of the supervisor was to promote further learning. In fourth year, the students preferred less supervision and wanted more autonomy. Students identified the following characteristics that contributed toward their perception of a good supervisor:

- a) Be clear about their expectations and remember they were once students,
- b) Be friendly, listen to the students and attempt to understand student's clinical reasoning,
- c) Be able to give constructive feedback and demonstrate a treatment session to model appropriate handling skills with clients and
- d) Supervisors need to watch student's treatment sessions and give feedback on the treatment write-ups.

Students felt that that the clinical supervisors in the Durban hospitals did not have sufficient time to supervise them, as the clinicians also carried their own case loads. The students' views are indicated by the quotes below.

"Where you are depends more on who your supervisor is and if they're going to make it learning experience with you" (student focus group 1, P.6).

"Firstly a good supervisor is one who acknowledges they were once a student... they have expectations which we know we need to meet certain objectives for our module in our curriculum but their expectations sometimes is...is too high, a good supervisor is one who actually listens...um...who takes in what you say, sees this is our clinical reasoning and gives us credit for that instead of you know, just shutting us out... it's...it's someone who gives us that reinforcement" (Semi-structured interview 2, P.5).

"here in Durban and the clinicians...have a lot of um workload on their own. So it's, it ends up becoming problematic to the students as well because they never get time to be supervised" (student focus group 2, P.7).

Feedback from supervisors was seen as a crucial element to successful fieldwork. Constant negative feedback was reported to have detrimental effect on the students' perception of their clinical ability. The students acknowledged

that negative feedback was valuable to assist in creating insight that required improvement however, students requested for feedback to be constructive and believed it would assist them with rectifying their problems. Negative feedback needed to be balanced with appropriate positive feedback if possible. Rather than following the guidelines for fieldwork, students reported aiming to please their academic supervisor's expectations as each had different expectations. Students also perceived disparity between the marking styles of different academic supervisors, with some marking leniently and other being very strict. Also, there was a perceived difference noted between academic supervisors' expectation and clinical supervisors' expectations. Some students reported feeling intimidated by their academic supervisor. The students' experiences are illustrated in the quotes below

"...if somebody just gives you only negative feedback it will also like affects...it impacts on negatively on your self-esteem because you think, 'Oh my God, I'm not doing anything right.' I'll also think like a supervisor, who also gives positive feedback so that you know okay, at least I am doing something right" (Semi-structured interview 3, P.4).

"I think clinicians ... unapproachable manner which they deal with things, which makes students feel stupid or like this is not supposed to be a learning process but rather you should be knowing how to do this (Semi-structured interview 3, P.4).

"But in the end there can be such big discrepancies in your experience and in your marks when different supervisors will expect you to present differently or to have different treatment handling. We have guidelines, but it doesn't seem as though any supervisors ever really stick to the guideline" (Student focus group 1, P. 8-9).

"Unfortunately...I was intimidated by my supervisor before I even got to the venue...and yes it affected my treatment and stuff" (Semi-structure interview 4, P. 22).

"...where your academics come in once a week and they are telling you something completely different to what your clinical supervisor is telling you" (Student focus group 2, P.31).

4.3.6 Educators and Facilities

The main theme that emerged was the predominantly positive perceptions related to educators however there were some negative views expressed. Students found most academic staff to be approachable. Academic staff was seen as role-models and were expected to model appropriate behaviour. However, some

academic staff often presented late for lectures, which was seen as modelling negative behaviour by the students. Students voiced that the educators needed to update their notes especially where terminology had changed. Students expressed that they had experienced great varieties as academic staff used different approaches to teaching. Some were thorough with their presentations while others would skim through the notes and others were fairly rigid with their expectations of answers in exams. The students reported having a negative learning experience when academic staff became defensive and refused to answer student's queries.

"Hmm...what I also like is by the time you get to fourth year you almost on a personal level with most of the lecturers so it's not almost student-lecturer, which you feel like you can approach them about anything almost" semi-structured interview 1, P.2)

"I guess also a lot of it comes from what you see from your lecturers or your supervisor, some of us may have had good supervisors, some of us may not have had good supervisors so I...so I had a good supervisor so I may be more inclined to do things according to that supervisors way so that will also play a role in the ethical practice" (Semi-structured interview 1, P.13).

"they have like made new notes that are like more up to date and stuff, but some of them are still old-fashioned...they need to like make their note more relevant and up-to-date"(Student focus group 1, P. 19).

"I had some lecturers who had gone through everything so thoroughly and they'll go through the notes with you and they'll also make it practical. Other lecturers come in and it's skimmed through and you get told to read over the rest." (Student focus group 1, P.19)

"I think none of us actually understands what...what X says...says in lectures ...and you know when you answering questions in the exams, X wants exactly what is in the booklets that X gave you. You know like if you write the notes in your own understanding you might actually end up getting two out of ten, you know" (Semi-structured interview 3, P.7).

4.4 DETERMINING THE EXTENT TO WHICH THE FOURTH YEAR STUDENTS PERCEIVED BEING PREPARED FOR CLINICAL PRACTICE PRIOR TO GRADUATION.

The students' perceptions around preparedness for clinical practice aligns with the graduate attribute category from the framework as previously mentioned. This section outlined:

- Expected clinical skills
- Students ability to assess clients
- Students ability to plan treatment
- Students ability to implement treatment
- Factors that influence preparedness for clinical practice

4.4.1 Expected clinical skills

The students expressed their views about the clinical skills that new graduate OT's should have to be able to cope with independent practice. The quotes in Table 4.5 below illustrate the views expressed by the students.

Table 4.5 Expected clinical skills: Students views

EXPECTED CLINICAL SKILLS	STUDENT QUOTES
The ability to assess clients effectively and be able to use standardised assessments.	<i>"...other essential skill is the assessments...uh even though I'm in fourth year, I've...I am learning more and more about how to assess" (semi structured interview 2, P1).</i>
Professional relationships i.e. the ability to handle clients, build rapport with their clients and accommodate for different personality.	<i>"Your basic handling with your patients, like your rapport, the way you handle yourself with your patient and the relationship you have with them. That's also important. Also relationships with other team members" (student focus group 1, P1).</i>
Knowledge of conditions was seen as an essential component to facilitate effective intervention with clients.	<i>"The other skill is to actually know the condition... when I get to know a lot about the condition, you know how it presents, what doctors do because it actually helps you with your OT intervention" (semi-structured interview 2, P. 2).</i>
OTs need to be able to plan treatment and have the technical skills to implement treatment.	<i>Hmm...you've got to be equipped with the correct tools...umm...which you'd obviously get from campus...um...like with your treatment planning when you do that and the treatments" (semi-structured interview 1, P.1).</i>
The ability to integrate theory and practice, having a passion for OT and being able to think creatively were considered skills and abilities that the students considered important for OT practice.	<i>"Uh...and also you must be...I think also you must have a creativity cause that's what OT requires, you must be able to think out of the box because that's what our lecturers always tell us" (semi-structured interview 3, P.1).</i>

The students suggested that the expected clinical skills for a new graduate should include the ability to assess, plan treatment and implement treatment.

4.4.2 The Students' Ability to Assess Clients

Most students generally felt sufficiently skilled to complete the basic assessment, and expressed that their knowledge of treatment assisted with focusing on their assessments. Some students reported having some areas of difficulty. These were with psychiatric assessments, the use of standardised assessments and the ability to accurately translate assessment findings into prioritised problems. Students were confident of their ability to choose an assessment appropriate for the diagnosis. They were also able to screen and identify the client's difficulties. The students noted that they required more training in paediatric assessment, especially the area of baby assessments. The quotes below illustrate the students view:

"Well for me like I feel confident in assessing in...Psych and Physical" (Semi-structured interview 3, P. 6).

"in second year you have one patient that you do every single physical assessment that there is on him [laughter] and this year like I've learned OK, if I see patient A I'm going to use assessment 1, 2 and 3. But if I see patient B I'm going to use another" (Student focus group 1, P. 15)

"there's so many like definite assessments that need to be conducted and done and like by the time you get to fourth year most of us did screening and it was okay, you could see what the problem was" (Semi-structured interview 1, P. 5)

"with Paeds sometimes like you know you get a small baby like five months old and you like, 'Oh my word! Okay, where...where do I start with this kid" (Semi-structured interview 3, P. 6).

4.3.3 The students ability to plan treatment

Some students were confident in their knowledge to engage in treatment planning however others expressed having difficulty with this aspect. The students voiced that in fourth year the treatment programmes have to be specific to their clients. Students' perception of their ability to plan treatment ranged from being confident to being apprehensive about the prioritisation and sequencing of treatment session. Students perceived their ability to plan appropriate treatment was linked to their exposure to the diagnosis and the context of the setting i.e. acute versus chronic practice education placements. Most students expressed having some confidence in

their ability to plan client treatment programmes however they noted that this skill needed to be practiced and improved as illustrated by the quotes below.

"It's almost like we learned our treatment plan after our midterm, like for me it was like a lot of what you did leading up to midterms was a bit wrong in 'oh, way off track' and then after midterm you just felt like...OK, now you've only got like 3 weeks or something to now quickly rectify and change your whole way of treatment planning" (Student focus group 1, P.40).

"I always had this...this problem and of prioritising and saying okay, this is what my patient needs at this point in time and since their functioning at this level." (Semi-structured interview 3, P.9)

"I guess that would depend on the field that I'm in. If it was Psych...um...I'd feel much more prepared than being in Physical, however Physical is also...I would be okay setting up a treatment programme but it would be for conditions like spinal cord or a CVA because those are the only conditions I've been exposed to over prac " (Semi-structured interview 1, P. 8).

4.4.4 The Students' Ability to Implement Treatment

The students reported having the basic skills to implement treatment in the physical and psychiatric fields of OT. Their perception of their ability to implement treatment ranged from being competent and confident to feeling unprepared to treat. Feelings of competence and confidence were linked to exposure to diagnosis and setting. Students noted that they had learned about the process of treatment and that their perception of their abilities to implement treatment was linked to the field of OT that they preferred and their experience on fieldwork. Students indicated that they would be able to research treatment of some of the conditions that they are required to treat next year as there should be continuous learning about treatment.

More training in technical skills, such as splinting and group work, was perceivably required to implement treatment sessions more effectively. The students noted that the methods module gave them good orientation to pressure garments and wheelchairs e.g. how to measure a client for a wheelchair. Students reported that their treatment approach was more performance component based rather than occupational performance area based. The quotes below illustrate the students' perceptions around their ability to implement treatment.

"But for now I would say I have the ...fundamental skills to start...working" (semi-structured interview, P. 6).

“I’m suddenly starting to feel like an OT. I suddenly feel like this is 1 – 4 years of work that accumulated to and this is what I’m going to do for the rest of my life. I suddenly feel like I’m finding myself as an OT, which is nice” (Student focus group 1, P.24).

“For physical I feel more confident because I’ve seen a wider range of conditions being at a more acute setting as well, but with psych, being at a drug rehab, it’s very limiting... I feel less confident in terms of psych” (student focus group, P.16).

“I feel I’m more confident in treating patients in the Psych area, um...purely because I enjoy Psych and I like Psych and I’ve had quite a good experience with Psych” (semi-structured interview 1, P.6).

“...continuously learning, I think I have like, I don’t know maybe 50% of what’s required of me” (Semi-structured interview 2, P.10).

“the varsity has provided us with to some extent, yes but with regards to some of the conditions ...I’d probably need to do research on that’ (Semi structured interview 1, P6).

“...like physical splinting is difficult and we didn’t have enough practice” (Student focus group 2, P42).

4.4.5 Factors that affect the student preparedness for clinical practice

The students noted a number of issues that affected their preparedness to cope with clinical practice. These included their level of confidence, attaining satisfactory clinical performance marks, being allowed to be more autonomous, the type of fieldwork placement they were engaged in and participation in the community rehabilitation block. The students expressed their perceptions on this topic illustrated in the quotes in Table 4.6 below.

Table 4.6 Factors that influence preparedness to practice

FACTORS	ILLUSTRATIVE STUDENTS QUOTES
Students perception that they would be able to cope being a clinician during community service but lack confidence	<i>"I don't think you'll ever feel fully prepared like but I feel that I could go into a hospital next year and still be able to find my way and you know" (Student focus group 1, P. 12).</i>
Attaining satisfactory marks during practice education placement and feedback received during the placement appear to positively influence students' perception of their ability to cope with being an OT alone.	<p><i>I mean a part of you do feel confident and I mean, especially once you've had feedback on the prac, especially in fourth year. It's quite nice to hear that you're doing what's expected of you" (Student focus group 1, P.11).</i></p> <p><i>"I feel confident in the blocks that I've done well in, weirdly enough. Like I understand marks don't really mean that much. It's just, it is, I mean like if you get a good clinical performance mark, I generally feel more confident because then I know where I'm going" (Student focus group 2, P.11).</i></p>
Being allowed to be more autonomous in treatment sessions in fourth year and being allowed to adapt sessions appeared to assist the students in being more prepared to cope on their own.	<i>"So we would almost work like as – working as OT's because they weren't seeing their patients and stuff. We were seeing it all and we were on our own very much. So I think that freedom was quite nice even though we weren't too sure what we were doing. We were in that situation and we had to just figure out what to do and do our best and I think that's exactly what community service will be like next year" (Student focus group 1,P.12).</i>
Acute hospital settings were perceived as being more beneficial for preparing the students for community service.	<p><i>But I think that definitely the prac blocks and being in an acute setting for physical, even though it was a topsy-turvy block, I still feel that that really – like I learned a lot from them. It prepared me a lot" (Student focus group 1. P. 12).</i></p> <p><i>"Most of us have seen chronic cases and then when it comes acute and if you're a, assessing the patient and not going to be in that institution it becomes very hard setting up a treatment program" (Student focus group 2, P.1).</i></p>
Students reported that community practice education placements helped prepare students for establishing community engagement.	<i>"Positively what's helped is the CBR lectures for community so it's almost given us that...um... opening on how to go into the community and do home visits and what to expect when you need to start up and campaign stuff within the community so that's really helped quite a bit" (Semi-structured interview 1,P.5).</i>

4.5 ESTABLISHING THE SUPERVISING OT CLINICIANS' PERCEPTIONS REGARDING STUDENTS' PREPAREDNESS FOR CLINICAL PRACTICE.

This section outlines the clinical supervisors' perceptions around the UKZN OT curriculum in terms of students' knowledge and their preparedness for clinical practice. The perceptions around the curriculum are reported in the philosophy and purpose of the programme, the curriculum content, educational methods, and assessment, fieldwork, and educators and facilities categories. The students' preparedness for practice is reported in the graduate attribute category i.e. clinical skills.

4.5.1 Philosophy and Purpose

The clinical supervisor data does not refer to the philosophy and purpose of the programme directly however, it noted that the students displayed strong ethical values.

"I find them ethically strong." (Clinical supervisors focus group, P. 24)

4.5.2 Curriculum Content

There were two main areas of concern namely the aspects of curriculum that the clinical supervisors perceived required review and the organisation of the curriculum.

4.5.2.1 Aspects of curriculum the clinical supervisors perceived required review

The clinical supervisors felt that the students were confused about the OT models of practice especially around the use of the Model of Human Occupation and the students use of generic treatment principles. Majority of the clinical supervisor's reported that the students had difficulty with applying the models to their clients. It appeared that the student repeated verbatim from the model of practice notes, hence were not able to answer questions about the client's ability according to the model of practice that the student had indicated he/she had during the case presentations.

"I think they don't have theoretical knowledge especially with the model of human occupation they did not have the theoretical knowledge. They were thoroughly confused with the theory so they couldn't translate obviously into practical" (Clinical supervisor: Focus Group 1, P. 13).

“I found that especially with Paeds what had happened was that they had generic principles, if I can call it generic and they’d use it throughout” (Clinical supervisor: Focus Group 1, P. 12).

The clinical supervisors’ perceptions around other aspects of the curriculum that require review is demonstrated by the quotes in Table 4.7 below.

Table 4.7 Clinical supervisors' perceptions around aspects of the curriculum

Aspects of the curriculum content	Supervising clinicians responses and illustrative quotes
Vocational rehabilitation	<p>The majority of the clinicians reported that the students tended to neglect vocational rehabilitation. The students appear to have difficulty with understanding the process of reintegrating the clients back into the occupation of work.</p> <p><i>"...when you ask them about work, now suddenly at the presentation they get a shock. They like maybe, the open labour market; I'm not too sure like. They haven't thought though, where they are actually taking this patient?"(Clinical supervisor Focus Group 1, P.9).</i></p>
Occupational performance	<p>Most clinical supervisors' views were in agreement that students tend to focus on tasks rather than focus on the client's engagement in occupation i.e. chooses task based activities rather than functional activities such as activities of daily living tasks.</p> <p><i>"And I think also students tend to uhm concentration too much on activity selection instead of focusing on what the patient actually needs. So they are focusing on what activity they are going to do and they want more a task centred activity when there's activities in daily living that could be done, and you can still treat the problems" (Clinical supervisor' focus group 1, P.3).</i></p>
Paediatrics	<p>Some clinician supervisors concurred with the sentiment that the students need to be able to assess and treat a wider range of paediatric conditions and ages that is from baby to older children and not just school going children.</p> <p><i>"Now coming from a physical hospital assessing, when they come in they don't know when to start because they haven't had that background of what goes into hospital. They only know school based assessments" (Clinical supervisor Focus Group 1, P.5).</i></p>
Physical	<p>Most clinical supervisor voiced that the students have basic knowledge around conditions however the students show a superficial understanding of the effect the condition has on the clients' ability to engage in occupation and accurately gauging client's potential to engage in occupation. Students also have difficulty with aspects such as perception, hand conditions, splinting and transfers.</p> <p><i>"They can't see the person of a particular spinal level, can do x, y and z. Uhm, especially when you're talking about quadriplegics and incomplete quadriplegics, they don't see that there is a chance that this person can actually do their activities of daily living independently (Clinical supervisor: Focus Group 1, P. 15).</i></p> <p><i>"Even with the CVA's, I also found that perception was a huge area that was missing" (Clinical supervisor: Focus Group 1, P. 15).</i></p>
Psychiatric	<p>Some clinical supervisors expressed that the students need to improve their knowledge of group facilitation and further suggested that students need more in-depth understanding insight, self-esteem, socialisation, insight</p> <p><i>"...in terms of the student getting the service users together seated in the circle, that kind of basic information is there.. Looking at how you can actually take one session and re-frame for the next session is a problem" (Clinical supervisor Focus Group 1, P.17).</i></p>
Community rehabilitation	<p>The clinicians expressed concern that students appeared not to understand the purpose of community based rehabilitation and were having difficulty with the community based assessment and treatment programs. Hence, a review of this aspect was suggested.</p> <p><i>"...they struggling to see the purpose of it. It's one day a week does very little. Uhm, way back when we did a six week community block, you actually felt you could implement something at the end of those six weeks and come out having achieved uhm, which made you like community" (Clinical supervisor Focus Group 1, P.29).</i></p>

4.5.2.2 Organisation of the curriculum

Most of the clinical supervisors agreed that the students experienced difficulty in linking aspects of the curriculum. Clinical supervisors reported that the modularisation of the courses have created a situation in which the students tend to view information in silos.

“I think it’s because the courses are semesterised and obviously we can’t help that they, okay, first semester is physical and I’ll concentrate on physical now second semester is psych and they ignore, the holistic aspect of the patient” (Clinical supervisor Focus Group 1, P.4).

4.5.3 Educational Methods

There were two issues raised namely the methods that the clinical supervisors found to enhance student learning and factors that influence students learning during fieldwork. These are illustrated by the quotes below.

4.5.3.1 Methods clinical supervisors found to enhance student learning

Majority of the clinical supervisors reported that students’ appear to learn better through the use of interactive methods and peer-learning as demonstrated by the quotes below. Students were expected to utilise self-study methods. Negative feed-back received on a previous fieldwork blocks were seen to influence the students’ perceptions around their clinical practice abilities.

“Practical demonstrations. They seem to be able to pick that up more and you see it flowing through their treatment after that” (Clinical supervisor Focus Group 1, P. 20).

“I also found that getting them to sit in on in each other’s sessions helps” (Clinical supervisor Focus Group 1, P. 19).

And there’s also a lot of negative feedback that goes from one prac to another and that kind of impacts on the students’ level of competency”(Clinical supervisor Focus Group 1, P.3).

4.5.3.2 Factors influencing students learning during Fieldwork

The majority of the clinical supervisors expressed that time management affects the students’ performance and further suggested that the students appear to lack confidence which negatively impacts on their ability to access assistance from their clinical supervisors.

“The other thing we’re doing is, there’s no all-nighters in terms of case studies or... We’re not allowing that at Fieldwork site N. I know that now and then have to do it because they haven’t done their work thoroughly. But generally we try to discourage the all-nighters before the presentation. Asking them to do some planning on the weekends” (Clinical supervisor Focus Group 1, Page 20).

“They lack confidence when approaching their supervisor to ask for help” (Clinical supervisor Focus Group 1, Page 5).

4.5.4 Assessment

There were two main issues namely the clinical supervisors’ perceptions around assessment of students and perceived inconsistency in marking.

4.5.4.1 Perceptions around student assessment

Majority of the clinical supervisors agreed that there was a disparity between the psychiatric and physical examination process. They suggested having group interventions assessed during fieldwork blocks in both psychiatric and physical fieldwork blocks.

“With psych in fourth year...Now all along you’ve only being seeing individuals and getting marked like that, in fourth year your exam, your main exam is a group” (Clinical supervisor focus group 1, P. 8).

“You do your individual, you do your group, and maybe it’s weighted differently to whatever and you do your project. And maybe it should be a three aspects of the CAM mark” (Clinical supervisor focus group 1, P.8).

4.5.4.2 Perceived inconsistencies in marking

The majority of the clinical supervisors’ felt that there are discrepancies between the expectations of different academic supervisors. One clinical supervisor also mentioned that having two supervisors to assess students would achieve more consistent marking.

“I feel from an academic, from the academic supervisors, I feel there’s too much discrepancy between the different supervisors as to what they expect. There’s a lack of consistency and a lack and way, too many differences in the way in which different academia mark” (Clinical supervisor focus group 1, P.26).

“Z, sat in on my students presentations and I sat in on hers. And then you come to a consensus, so that has also assisted” (Clinical supervisor’ focus group 1, P.27).

4.5.5 Fieldwork

There were two main issues that emerged namely the clinical supervisors' experience of supervising fourth year OT students and the need for clinical supervisors' to be prepared for fieldwork. These are illustrated by the quotes below

4.5.5.1 Clinical supervisors' experience of supervising fourth year OT students

The clinical supervisors found the experience of fourth year student supervision to be positive. Students were found to be dependent on the clinical supervisor to direct their learning experience, and required repeated feedback to gain insight into their ability to complete assessment, treatment and treatment write ups. The clinical supervisors' found students' progressing after midterms, and were better able to integrate assessment and treatment after this point. It was noted that the students' ability to evaluate their treatment session improved when using the guidelines given by the OT department. However, the clinical supervisors found that the students' needed to start with the positive aspects of their treatment session, as they tended to be over-critical. The clinical supervisors' experiences are illustrated by the quotes below

"I also find from my point of view when I'm liaising with the academic supervisors, they have different expectations for the same prac. And I think that should be standardised more." (Clinical supervisor focus group P.26)

"It's the same thing with the feedback, they don't seem to take it, you have to repeat it quite a lot. And then also with the treatment like they treat daily write-ups". (Clinical supervisor Focus Group 1, P. 6)

"Up until mid-term you do find a lot of like they not sure, they very uncertain. And I think it is definitely a shock to their system because midterms almost like, like a prep exam and they realize how much they actually need to do. And then they get much better after mid-term" (Clinical supervisors Focus Group 1, P. 7).

"I think there's a huge amount of spoon feeding that happens at the varsity level, that almost feeds on from a high school level. Uhm, I would like to see them taking more responsibility and be more accountable for supervision" (Supervising clinicians Focus group 1, P. 5).

"So then you follow the guideline that campus is actually given, I found that it's very good. Following the guideline, provided that the guideline is used correctly obviously" (Clinical supervisor Focus group, P.22).

4.5.5.2 Need for preparation prior to students being placed for fieldwork

The need to be briefed about the expectations of the fieldwork to standardise expectations was expressed by some of the clinical supervisors e.g. expectations around allocating clinical performance marks to achieve more congruency in terms of understanding the behavioural outcomes that warrant a 1 or 3 on the clinical performance booklet.

4.5.6 Educators and facilities

There were two issues that emerged namely that educators need to be more consistent with their expectations during fieldwork and inconsistency of the university transport

4.5.6.1 Educators

The clinical supervisors' indicated that there should be more consistency between academic supervisors' expectations so that the clinical supervisors are more aware of the student requirements and there is more standardization of what is expected from the students.

"I also find from my point of view when I'm liaising with the academic supervisors, they have different expectations for the same prac. And I think that should be standardized more" (Clinical supervisor focus group P.26).

4.5.6.2 Facilities

The clinical supervisors indicated that the university transport was not reliable and students who used this service were disadvantaged.

"You'll get a student leaving the department and sitting for two hours waiting for transport, unacceptable. Yet the other student who has her own, her own vehicle is able to stay the extra time, you know, you want to know why is that one, you know moving in leaps and bounds and the other one isn't" (Clinical supervisors' focus group, P.30).

4.5.7 Graduate competencies

The clinical supervisors' perceptions around students' preparedness for clinical practice aligns with the graduate attribute category as previously mentioned. This section outlined:

- Expected clinical skills
- Students ability to assess clients
- Students ability to plan treatment
- Students ability to implement treatment

4.5.7.1 Expected clinical skills

The clinical supervisors' expectations of the students' clinical skills are presented in Table 4.8. The clinical supervisors' indicated that students should be able to evaluate the effectiveness of their treatment sessions and be able to adapt and modify treatment as indicated.

Table 4.8 Clinical supervisors' views on new graduate expected clinical skills

EXPECTED CLINICAL SKILLS	CLINICAL SUPERVISORS QUOTES TO ILLUSTRATE VIEWS ON EXPECTED SKILLS
Need to be able to assess clients and interpret the findings of the assessment through drawing up a problem list.	<i>"...an ability to assess" (Clinical supervisor' focus group 1, P.2). "...draw up a problem list" (Clinical supervisor' focus group 1, P.3).</i>
Need to be able to treat clients through engagement with occupation such as activities of daily living tasks.	<i>"So they are focusing on what activity they are going to do and they want more a task-centred activity when there's activities in daily living that could be done, and you can still treat the problems" (Clinical supervisor' focus group 1, P.3).</i>
Need to be able to evaluate the effectiveness of their treatment sessions, be able to grade activities and modify the activity if they see it's not working	<i>"...grading from that activity. What's the result of that activity? To change from where they are to if they are seeing it's not working or it's not appropriate or it's not right to then move from that" (Clinical supervisor' focus group 1, P.4).</i>
Treatment planning needed to demonstrate a link between assessments to the problem list to treatment.	<i>"...link between the assessment to the problem list to treatment" (Clinical supervisor' focus group 1, P.3).</i>
Activity analysis ensured that the new graduate can get the best out of the activity and that the activity meets the requirements for the client's need.	<i>"So it's also an activity analysis. Being able to analyse the activity so they can get the best out of the activity, what is needed for the patient" (Clinical supervisor' focus group 1, P.3).</i>
The clinical supervisor reported that the new graduates need to be able to integrate theory and practice effectively	<i>"It's basically being able to apply the information they already have" (Clinical supervisor' focus group 1, P.4).</i>

4.5.7.2 Students ability to assess clients

The clinical supervisor agreed that the majority of the students were able to assess clients. However, the clinical supervisors found that some students completed assessments that were relevant to the context of the client but the others did

superficial assessments. Another point raised was that some students had difficulty with drawing up a problem list from observing the client completing a task, and that they needed improved knowledge on standardised assessment, for example, the Work Ability Screening Profile. Clinical supervisors noted that students tended to focus on either physical or psychiatric aspects of the assessment rather than completing a holistic assessment. The quotes below illustrate the experiences of the clinical supervisors.

“You get certain students that do very thorough assessment.. And you see it in their aims list, the aims list is very realistic uhm, and you, you know they’ve done thorough assessment. Then you get other students as well that just skim through their assessment and uhm, then their treatment and their programs are not realistic” (Clinical supervisor focus group 1, P. 15).

“Also the standardised assessments, the WASP, things like that. They have no training on how to do that” (Clinical supervisor focus group 1, P. 3).

“Again I found that uhm, in a physical setting they omit the psych even if the patient was an alcoholic and that really impacts on his life uhm, and progress and prognosis” (Clinical supervisor focus group 1, P. 15).

4.5.7.3 Students ability to plan treatment

The clinical supervisor felt that the students were only able to complete basic treatment planning i.e. make the link between the problem list and treatment after mid-terms. The students had several difficulties with the use of theory to guide their treatment planning process, especially with the use of models of practice and choosing appropriate specific treatment principles. The students tend to choose activities first rather than allowing the theory to guide their practice, and had difficulty with sequencing of treatment and with ensuring the treatment encompassed a holistic view of the client. Students tended to focus on tasks when choosing intervention strategies rather than on the client’s engagement in an occupation i.e. choose task based activities rather than functional activities such as activities of daily living tasks. The students had difficulty prioritising the treatment programme as a result of problems understanding the impact of the client’s condition on the client’s engagement in occupation. In addition, the students had difficulty gauging the client’s potential to improve.

“But after midterms ...you can see the integration between the problem list and the treatment” (Clinical supervisor focus group 1, P. 6).

“It’s, it’s everything, it’s the condition, it’s the CP level it’s, there’s so many things you have to consider when you formulating principles for your say for a patient for a treatment session. But you’ll find they probably only focus on the activity and forget about the CP level of the patient yet the condition of the patient you know and just the general considerations of that patient” (Clinical supervisor focus group 1, P. 11).

“You know, we’re trying to get that whole sequence right from the beginning. And then, we find it works out better that way, then everything they do is more realistic and makes more sense and they not stressing about okay now I have all these activities, what program am I gonna fit it under? You know doing it in that order” (Clinical supervisor’ focus group 1, P21).

“And I think also students tend to uhm concentrate too much on activity selection instead of focusing on what the patient actually needs. So they have an activity that they want to do, okay with us it’s more of a psych background, so it’s a lot of activities that we see. So they are focusing on what activity they are going to do and they want more a task centred activity when there’s activities in daily living that could be done, and you can still treat the problems” (Clinical supervisor’ focus group 1, P.3).

“you’re talking about quadriplegics and incomplete quadriplegics they, they don’t see that there is a chance that this person can actually do their activities of daily living independently” (Clinical supervisor’ focus group 1, P.9).

4.5.7.4 Students ability to implement treatment

The clinical supervisors reported that the students had the basic skills required to implement treatment. Clinical supervisors indicated that the fourth year students started to see the holistic view of the OT process. The students were reported to have good handling skills and were able to develop a relationship with their clients. In addition, the students were noted to have skills with empathising with their clients and were able to interact well with their clients. The students were able to interact and work as part of a team and follow the protocol of the department. Some students only gain confidence to interact with other team members as the placement progresses. Most clinical supervisors noted that the students have knowledge on how to make a splint, transfer etc. however the students lack the confidence to implement these skills. The majority of the clinical supervisor reported that the students have difficulty with grading activities and having the ability to modify/adapt the treatment session according to effectiveness of the treatment.

“..But we personally enjoy forth year students; we really enjoy having them there. Because by fourth year you sort of see the picture coming together”(Clinical supervisor’ focus group 1, P.7).

“But obviously it’s both ends of the spectrum you just get those that are strong and then those that are not” (Clinical supervisor focus group 1, P. 15).

“So I’m in my hospital I make a few splints particularly the hand splints. And the one functional splint the student made was not very functional. So they seem to be lacking their confidence there as well” (Clinical supervisor focus group, P.16).

“Uhm, they need to learn two person transfers so they can learn to help each other coz there there’s very seldom only one student in a prac. Uhm, But they need to also become comfortable in asking for help with transfers and not just holding back so that the patient doesn’t get outta bed because they too scared to transfer (Clinical supervisor focus group 1, P. 17).

“Some of them have some really nice handling skills; they able talk to their patients. The patients have a good relationship with them and some of them do really nice, use the right amount of assistance needed, so I found some, that’s really good” (Clinical supervisor focus group 1, P.18).

“I think it also depends on the time, certainly between the beginning and the prac like and the end in a multi-disciplinary environment, it takes them quite a few weeks to adjust to the different roles of different people” (Clinical supervisor focus group 1, P.25).

“Ya, they struggle with the grading and even adapting, they afraid to change especially if it’s not working at that point because they planned this and they going to stick to that” (Clinical supervisor focus group 1, P.4).

4.6. ESTABLISHING EXISTING DEFICITS IN THE CURRENT CURRICULUM AND ANALYSIS OF THE 2011 UKZN OT ACCREDITATIONREPORT BY THE HPCSA PANEL AS WELL AS THE DOCUMENTS USED TO ASSESS FINAL YEAR OT STUDENTS.

This section summarises findings from the document analysis. The findings will be reported according to the categories from the framework. An outline of the occurrence of the categories found in the documents is represented in Table 4.3 below. The documents were grouped according to HPCSA documents (Documents 1, a - b), the HPCSA accreditation report (Document 2), and the UKZN documents that pertain to students (Document 3 a - e). The documents are reported according to this format in the findings below.

Table 4.9 Overview of the occurrence of the categories from the framework in the documents used for document analysis

Category	HPCSA documents 1		Evaluators document 2	UKZN documents that pertain to the curriculum and students 3							
	Minimum Standards for training of OT (a)	Standards for practice	Accreditation report (a)	Vision and mission (a)	Curriculum Handbook of health science (b)	Clinical performance booklet (CPB) (c)	Rubric guide for % for CPB (d)	Case presentation marking guide (e)	Treatment demonstration marking guide (f)	Terminal Competencies (g)	Clinical Fieldwork Guide (h)
Philosophy and purpose	X P 2-3		X P 9	X P 1	X P 237-243					X P 1	
Curriculum	X P 3-8		X P 9-15		X P 128, 237-243					X P 1	
Educational methods			X Page 1		X P 237-243						
Fieldwork	X P 4		X P10,15,24,25		X P 237-243					X P 1	
Assessment	X P 4-5		X P 9,17-23		X P 237-243		X P 1	X P 1	X P1		X P 1-3
Facilities and educators	X P 3		X P 5, 16, 23								X P 10-23
Graduates Competencies	X P 8-11	X P 3-9	X P 5 & 19			X P 2-5		X P1	X P1		X P 3-6

❖ Legend P: pages

X : information pertaining to the category in that document

4.6.1 Philosophy and purpose

The HPCSA document [Document 1a and UKZN documents [Document (a), (b) and (c)] contained information about the philosophy and purpose of an OT programme (see Table 3.3 in methodology for the purpose of the documents).

The vision and mission statement (document 3a) positions the undergraduate curriculum to prepare students for OT “scholarship” (research) and be a socially responsible training service that provides programme relevant to the SA context however there appears to be a lack in policy to guide how the philosophy and purpose should be implemented. This sentiment was echoed in the HPCSA accreditation report (document 2a) as evidenced by the following quotes.

“...to be a leader in OT scholarship” (Vision and Mission statement, P1)

“...a dynamic and socially responsible training service and research facility” (Vision and Mission statement, P1)

“...there appears to be no departmental teaching or learning policy that provides guidance and principles to realise the vision and mission” (Evaluators report, P.9).

4.6.2. Curriculum

The HPCSA Minimum Standards Training document (document 1a), requires an OT programme to have core OT modules. These OT modules are divided into the theory modules containing knowledge components that entry grade OTs require, and fieldwork components that ensures new graduates have an opportunity to practice clinical skills acquired. The HPCSA evaluators noted that the programme content met the guidelines. This is illustrated by the following quotes

“The programme appears to meet the minimum requirements as laid down in form 123B Minimum Standards” (HPCSA accreditation report, P.9)

UKZN documents b (curriculum outline UKZN Handbook of School of Health sciences) and g (terminal competencies) provided an overview of the graded increase in knowledge and skill required from first to fourth year and how the content of each module meets the requirement. The HPCSA accreditation report (document 2a) noted that the curriculum was too full.

“...planning and implementation of intervention for different situations, large numbers and levels of care” (Terminal competencies, document 3 (g), P. 1).

“Concern was expressed by a number of stakeholders that the course was overfull and new information was added without old information being excluded. The credit value of the course is over the 480 minimum requirements” (HPCSA Accreditation report, Document 2, P10).

4.6.3 Educational Methods

The WFOT Minimum Standards states that the educational methods used should reflect the philosophy and purpose of the programme (Hocking and Ness, 2002a). UKZN documents 3b, 3e, and 3f as outlined in Table 4.3. The curriculum overview from the handbook of health science, treatment demonstration and case presentation marking guide) outlined the teaching methods used by the UKZN academic staff reported in the prospectus.

Didactic teaching and experimental learning through fieldwork were mentioned as the predominant teaching methods used. Some module outlines mention teaching laboratories and tutorials to practice some of the skills taught in the curriculum. Evaluation is obtained during case presentations and treatment demonstration, when students are asked to reflect on the effectiveness of their treatment programmes or sessions.

“Some class room one-on-one practice will occur with some of the signs/symptoms described above” (curriculum overview from the handbook of health sciences, UKZN document 3 b, pg. 238)

The HPCSA accreditation report acknowledged that there is a “strong teaching culture” however, there is no consistent teaching method used by academic staff. It was recommended that a common teaching methodology be adhered to (HPCSA evaluators report, 2011).

“The department has a strong teaching culture and an academic staff with diverse skills and qualifications that can be harnessed to improve the learning environment”(HPCSA Accreditation report, document 2, P. 25)

4.6.4 Assessment

The HPCSA evaluators were present at the final examination of the fourth year students in 2011 and provided some insight into the assessment of the students. They reported that the discipline of OT at UKZN follows the guidelines for the exam process. Concern was raised over the CAM to Summative exam ratio, and the fact that the theory papers tested mainly factual, procedural and conceptual knowledge and allowed for little choice

“It is suggested that the year mark should contribute at least 50% and the qualifying examination should contribute at least 40%. The current ratios for each of the qualifying modules in the final year are 70:30” (HPCSA Accreditation report, Document 2, p. 9).

“Questions on the whole were, procedural and more “medically” orientated than “occupationally” oriented...Thus it appears that questions are designed to test breadth of knowledge rather than depth” (HPCSA Accreditation report, Document 2, P.19).

Another issue raised by the HPCSA evaluators was the perceived difficulties that the students reported in terms of fieldwork assessment during their inspection. Students felt that there were differences in expectations between clinical supervisors and that the marking guides were not used consistently. Lack of consistency in student assessment is another area of concern with students perceiving some clinicians as too lenient whilst others are over critical (HPCSA Accreditation report, document 2, pg.6).

4.6.5 Fieldwork

The HPCSA accreditation report illustrated that the UKZN OT programme actually exceeds the minimum hours of 1000 hours in that students spend 1052 hours of supervised fieldwork and are exposed to a variety of conditions or diagnosis. Concerns were raised about the fact that placement sites are not well staffed thereby reducing the clinical supervisors' ability to supervise students and limiting the venues where students can be placed.

“The general concern about clinical sites is the low numbers of staff to provide adequate supervision and guidance” (HPCSA accreditation report, Document 2, P. 24)

4.6.6 Educators and Facilities

The HPCSA evaluators noted that there were adequate venues for lectures, adequate library facilities and wireless connectivity for internet use, and that the students had a high regard for the academic staff. Concern was raised over students' perception of safety when using university transport as illustrated by the quote below.

“Students feel unsafe while using university buses because of the behaviour of drivers who do not have much regard to road rules”(HPCSA Accreditation report, Document 2, P.25).

“Students have a high regard for their OT lecturers, some for their theoretical expertise and others for their clinical practice competencies” (HPCSA Accreditation report, Document 2, P. 6).

4.6.7 Graduate competencies

The document review covered two issues namely the expected skills identified by the documents and the methods used to assess students' clinical skills.

4.6.7.1 Expected clinical skills

The data from document analysis outlined the requirement in terms of HPCSA Minimum Standards of Training document (Document 1) and UKZN documents (Documents 3, c, g and i) which were the clinical performance booklet, guidelines for clinical fieldwork, and terminal competencies that outlines the abilities the students are expected to exhibit when implementing the OT process.

Examples of the expected skills as outlined by the documents are described in Table 4.10 below

Table 4.10 Expected clinical skills from the documents

DOCUMENT	ILLUSTRATIVE EXTRACT FROM THE DOCUMENTS
The HPCSA Minimum Standards of Training document describes in detail the abilities the entry grade OT's need to possess in terms of the five areas identified by WFOT namely person-occupation-environment relationship and its relationship to health, therapeutic and professional relationship, the OT process, professional behaviour and reasoning and the context of practice	<i>“ Knowledge and skill to analyse, adapt and grade activities” (HPCSA Minimum Standards For Training For OT, P. 8)</i>
The HPCSA Standards of Practice describe the clinical skills that OT's require and the steps to complete the OT process.	<i>“Implements the intervention plan through the use of specified purposeful therapeutic methods that are meaningful to the client and are effective for enhancing occupational performance”(HPSCA Standards of practice, P.5).</i>
The terminal competencies, guidelines for clinical fieldwork and clinical performance booklet outline the abilities the students are expected to exhibit when implementing the OT process.	<i>“Planning and implementation of intervention for different situation, large numbers and different levels of care” (terminal competencies, P1).</i>

4.6.7.2 Methods used to ascertain the students’ clinical skills

The document analysis revealed the process used to assess students’ clinical skills. The UKZN Curriculum Handbook of Health Science (document 3b) outlines the methods used to assess students’ clinical skills. These methods include a CAM and a fieldwork assessment that forms part of the summative examination processes (see assessment) i.e. an oral case presentation and a treatment demonstration.

Figure 4.2 below outlines the links between the sections in the clinical performance booklet, the clinical skills described in the HPCSA Minimum Standards of Training and the Standards of Practice, to provide an example of all the behavioural outcomes that are used to assess students’ clinical skills.

STANDARDS OF PRACTICE

CLINICAL PERFORMANCE BOOKLET

MINIMUM STANDARDS OF TRAINING

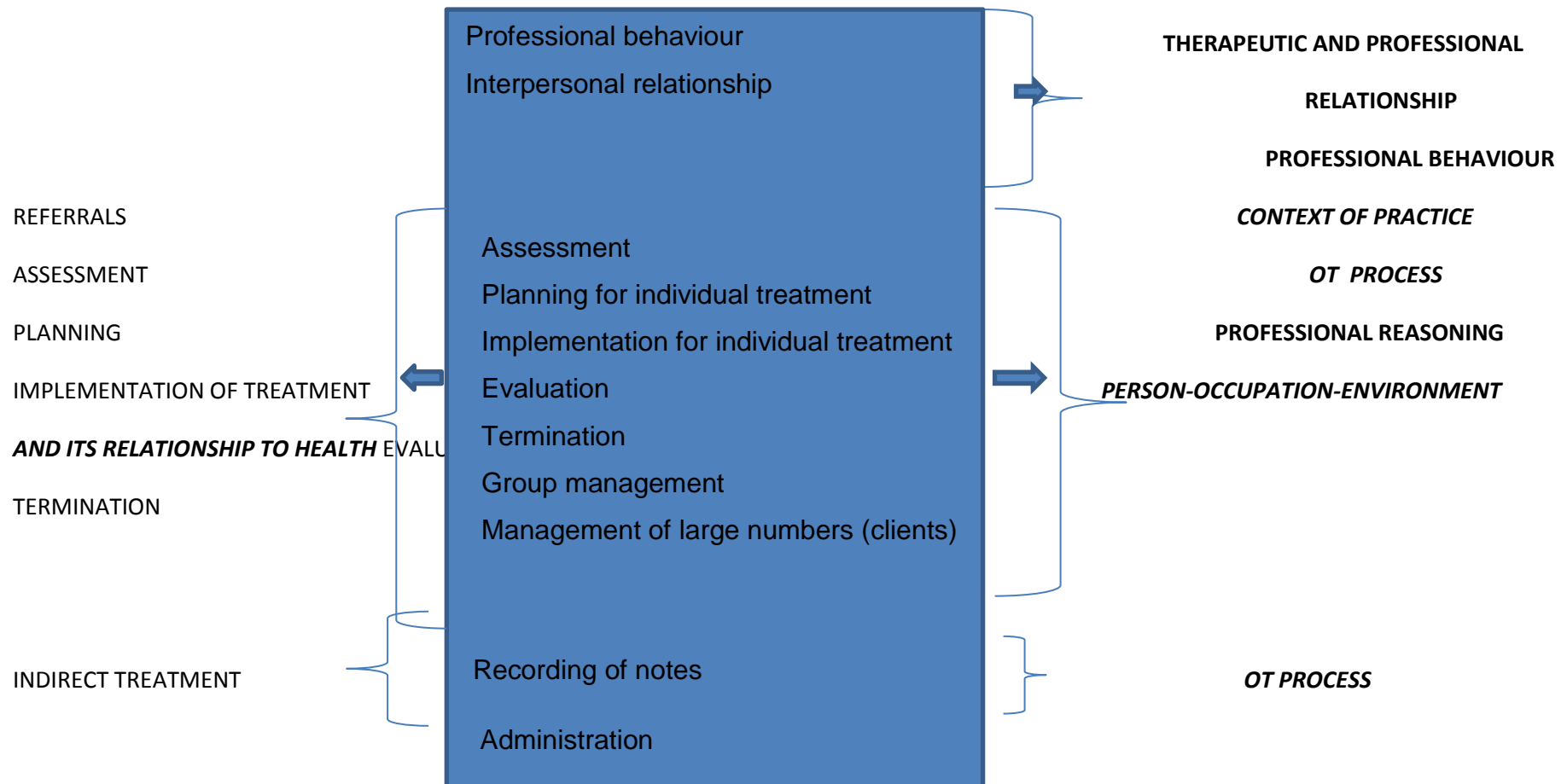


Figure 4.2 Links between the areas assessed using the clinical performance booklet and the clinical skills required

4.7 SUMMARY

The above findings have outlined the data around the students' experience of the curriculum and the students' perceptions around their preparedness for practice. The clinical supervisors perceptions related to the UKZN OT programme have been highlighted and their perceptions related to the 2012 fourth year OT students readiness for clinical practice has been explored. The data from the documents has revealed guidelines around the OT curriculum and illustrated with reference to the HPCSA's report how the OT programme at UKZN had been implemented.

The next chapter will outline the discussion related to the above findings.

CHAPTER FIVE

DISCUSSION

5.1 INTRODUCTION

This chapter discusses the findings outlined in Chapter four regarding the students' experiences of the UKZN OT curriculum, their perceptions about their preparedness for clinical practice, as well as the clinical supervisors' perceptions of the UKZN OT programme and their perceptions about the students' ability to cope with clinical practice in 2013. The document review revealed the national and international core components and guidelines expected within the OT curriculum and the UKZN OT programme's strategies for implementation of the guidelines.

The discussion is presented according to objectives of the study that:

1. Investigated the fourth year occupational therapy students' experience of the undergraduate OT programme through focus groups and semi-structured interviews,
2. Determined the extent to which the fourth year students perceived that they were prepared for clinical practice prior to graduation through focus groups and semi-structured interviews,
3. Established the supervising OT clinicians' perceptions regarding students' preparedness for clinical practice by means of a focus group, and
4. Established the existing deficits in the current curriculum and analysed the 2011 UKZN OT accreditation report by the HPCSA panel of evaluators as well as the documents used to assess final year OT students.

The organisation of the discussion chapter will allow for inferences from the findings to answer the research objectives and enable relevant recommendations to be made. The findings will be discussed in context of the literature and the conceptual framework.

5.2 THE FOURTH YEAR OCCUPATIONAL THERAPY STUDENTS' EXPERIENCE OF THE UNDERGRADUATE OT PROGRAMME.

This section discusses the findings outlined in Chapter four regarding the student's experiences of the UKZN OT curriculum, their perceptions about their preparedness for clinical practice.

5.2.1 Philosophy and purpose

The students noted that ethics was taught directly and indirectly throughout the course. Ethics was consistently mentioned as an aspect of the curriculum that was continually assessed and reinforced during theory and fieldwork. This was a positive finding which indicates that the students have a good foundation in aspects of social accountability and was considered a positive aspect of the curriculum. Social accountability and research are the two areas emphasised in the official philosophy and purpose of the Discipline of OT at UKZN. The researcher suggests that ethics forms part of the hidden curriculum. "The hidden curriculum is expressed in terms of the distinction between "what is meant to happen", that is the difference between the curriculum officially stated and what learners actually experienced on the ground" (Sambell and McDowell, 1998, pg. 392). The researcher is of the opinion that ethics is part of the hidden curriculum as both the students and the clinical supervisors have indicated that ethics is re-enforced indirectly throughout the course. The clinical supervisors mentioned that the students exhibit strong ethical behaviour which indicates that the students have internalised this behavioural outcome. This leads to a discussion on the current curriculum content.

5.2.2 Curriculum content

The main aspects of the curriculum content that most students felt needed review, included the students' ability to apply theoretical constructs of the profession, use of a more occupation based approach to treatment, including dealing with work or vocation, and needing additional technical skills, such as splinting and group work. According to the literature, students' often have difficulty integrating theory and practice. Students reported not knowing enough or having difficulty translating the theoretical models into practice. They also struggled with programme planning, as well as evaluating the effectiveness of their programme (Gray et al; 2012; Nayar et

al., 2011; Robertson and Griffiths, 2009). This has implications for the curriculum content and the educational methods used to deliver the theoretical information. A review of the current teaching methods is suggested in order to ensure that the students are able to comprehend the subject matter and apply the models appropriately during fieldwork e.g. theoretical models.

It was interesting to note that the literature indicates that graduates with at least two years' experience after graduation reported that they use theory inherently to guide their decisions, but that not a single specific theory directs their practice (Hodgetts, et al., 2007; Nayar et al., 2011; Gray et al; 2012). There is also some scepticism and debate about the relevance of the use of the Eurocentric models in guiding the practice of OT in South Africa, as well as about which models should be used, for local clients (Joubert, 2010).

Students' perceptions of a lack of knowledge and technical skills, such as group facilitation, splinting etc. are well-documented (Doherty et al., 2009; Gray et al., 2012; Meredith, 2010; Nayar et al., 2011; Sutton and Griffiths, 2000). Tryssenaar and Perkins (2001) stated that students will always perceive gaps in the curriculum, and that it is not possible to address every skill that may be required for OT practice. According to the literature, a prevalent feeling amongst students is that the curriculum content of professional degrees should equip them with concrete strategies for treatment and technical skills. Students are disappointed when they realise that they do not have all the skills they perceived they required for clinical practice (Doherty et al., 2009; Gray et al., 2012; Hodgetts et al., 2007; Lee and Mackenzie, 2003; Nayar et al., 2011; Robertson and Griffiths, 2009). This feeling of inadequate theoretical and practical preparation is often influenced by feedback from clinical supervisors on fieldwork (Doherty et al., 2009). Paediatrics was another aspect that students believed to be inadequately covered. New graduates reportedly often form support networks to gain information about paediatric practice to overcome this inadequacy in their preparation (Doherty et al., 2009; Gray et al., 2012; Lee and Mackenzie, 2003; Robertson and Griffiths, 2009; Tryssenaar and Perkins, 2001).

Another point raised was around the alignment of the curriculum, missed lectures and the time allocated for lectures. The curriculum alignment will be discussed in section 5.5.2. The researcher suggests that the missed lectures are related to an administrative function that pertained mainly to the time-table, monitoring and implementation of the curriculum. Measures need to be put in place to ensure that the lectures which are missed or cancelled are re-scheduled. Having discussed the curriculum content, it is now necessary to discuss the methods used to convey the curriculum content.

5.2.3 Educational methods

Some out-dated teaching approaches, such as having decreased interaction with the students, and lack of participatory teaching methods would hinder learning. This is in contrast to the expected teaching role of the academic staff outlined in the literature. Academic staff are expected to facilitate the development of problem solving, self-awareness and productive thinking skills in students to prepare them for practice as an OT (Doherty et al., 2009; Kasar and Muscari, 2000; Neistadt, 1996; Robertson and Griffiths, 2009). The challenge for academic staff is to stimulate students to comprehend the theoretical knowledge and acquire the clinical reasoning that will prepare the student for practice (Doherty et al., 2009; Robertson and Griffiths, 2009).

The findings have outlined the teaching methods that the students reported to enhance their learning, the methods that were deemed less effective as well as other factors that influenced their learning. The students favoured more interactive teaching methods such as demonstrations, discussion in class with academic staff, group or peer learning etc. Lectures where the academic staff did not explain the slides or where the content was read to the students were found to be less beneficial. This is supported by a considerable body of literature around teaching methods in OT. The researcher will highlight a few relevant aspects. However, the aspects discussed are not a complete catalogue of all the literature, as that was beyond the scope of this discussion.

The literature around teaching and student engagement claims that active learning allows for a higher rate of learning acquisition (Biggs, 1999; Hooper, 2006; Smits and

Ferguson, 2000; Strydom et al., 2010). Passive learning tends to elicit surface learning i.e. students learn in order to reproduce material taught for academic assessment and as a result tend to memorise the information, rote learn and rely on academic staff to define learning tasks for them. Active learning approaches are reported to elicit a deeper engagement with learning as students try to comprehend the material taught. This learning approach is associated with active questioning, interrelating ideas and knowledge and comprehension (Biggs, 1999; Davidson, 2011; Hooper, 2006; Sviden, 2000).

The literature reports that there are several active teaching methods that help with integrating theory and practice and promote clinical reasoning. These include case-based discussions or analysis, interaction between academic staff and students, using reflective journaling, academic staff giving examples or stories from their own clinical experience, role-playing, assignments and demonstrations. Teaching methods that linked reflective practice with evidence based learning was seen to improve professional thinking. Experiential learning, such as fieldwork, was seen to help integrate knowledge and practice (Ajjawi and Higgs, 2008; Bannigan and Moores, 2009; Davidson, 2011; French et al., 2007; Hooper, 2008; Joubert and Hargreaves, 2009; Lui et al., 2000; Lysaght and Bent, 2005; Neistadt, 1996; Paterson and Adamson, 2001; Smit and Ferguson, 2000; Sviden, 2000; Strydom et al., 2010; Tryssenaar, 1995).

Smit and Ferguson (2000) outlined a learning approach named "*integration tutorials and seminars*", which emerged as a modified learning model. This model includes four processes namely: concrete experience, reflective observation, abstract conceptualisation and finally active experimentation. In this approach, the students meet weekly to apply the OT process guidelines to a case-study, and use reflective observation during discussion groups about the case-study as well as student e-mail discussion. The students are then given seminars to present to complete the abstract conceptualisation and the experimentation stages i.e. case-presentations on clients. The modified learning approach was aimed to help integrate knowledge and practice and create self-directedness in student learning (Smit and Ferguson, 2000).

Hooper (2006) suggested that active learning needs to be paired with additional classroom processes, such as interjecting orienting remarks or structuring the class content in particular sequences especially when adopting an occupation based curriculum e.g. *"I want you to understand the relationships of muscles to a group of muscles and what those muscles allow someone to do, or what happens to daily function if someone is having trouble moving a certain group of muscles"*(Hooper, 2006, pg.555). Academic staff can create "linked opportunities" for students and in this way, may best bring to life an occupation-centred curriculum (Hooper, 2006; Whiteford and Wilcock, 2001).

The more recent educational methods involve the use of technology i.e. web-tutorials, interactive video client simulations, online assignments for case analysis, as well as encouraging more active literacy skills when students conduct research for evidence based practice (Boruff and Thomas, 2011; Mitchel and Batorski, 2009; Perlman, Weston and Gisel, 2008; Thomas and Storr, 2005; Tomlin, 2005). There is however, no consensus in the literature with regard to the most suitable teaching methods to employ when engaging OT students. The literature highlighted the variety of methods used to teach OT. The findings suggest that a review of the teaching methods utilized is required. The researcher suggests that the teaching methods used by the Discipline of OT is adequate however a review of which specific teaching methods is most suitable for the various sections of the curriculum is required and various learning outcomes as well as how this links to the model of curriculum adopted. This leads to a discussion around the other influences on the effectiveness of educational methods.

Factors that influence the effectiveness of learning was another area of concern raised in the findings. The students identified several factors that influenced their ability to learn i.e. adjusting to the demands of a tertiary intuition, stress, time management, having different learning styles, being proactive about learning and being able to think laterally, and being made up of different personalities i.e. introverted versus extroverted. The majority of the students viewed stress as arising from two main sources i.e. stress associated with completion of the course workload and with events that occur during fieldwork. The literature supports the notion that there is anxiety associated with fieldwork, and that the students are predominantly from middle class homes and may not have been exposed to the situations that they

are exposed to on placement. This can cause emotional stress (Duncan and Lorenzo, 2006; Mitchell and Kampfe, 1990). The UKZN employs academic development officers to assist students with emotional support as well as to help students resolve issues such as having difficulty with time-management.

Some students expressed that the fourth year OT cohort segregated into groups based on perceived academic strengths, race, social class etc. This segregation hindered sharing of information in the class. Literature suggests that students tend to segregate into groups according to many factors. Social class and ethnic similarity were factors mentioned in this study and also reported elsewhere (Beagan, 2007; Pattman, 2011; Phillips, 2011). Pattman (2011) suggested the use of collective memory work, where students are requested to write a story about cross racial mixing to allow opportunities for students from different social and cultural backgrounds to engage with and learn about each other (Pattman, 2011). The researcher proposes that the discipline of OT may have to engineer opportunities for students to learn about each other and foster a greater sense of class solidarity.

Some students expressed difficulty with adjusting to a tertiary institution and some reported having had different learning approaches i.e. some were self-directed and others required direction from the academic staff. Educational programmes are expected to take the above mentioned factors into account to accommodate students who originate from different schooling environments and those schools which had different scholastic expectations (Scott et al., 2007; Strydom et al., 2010). The Council for Higher Education suggests that there need to be policies in place to accommodate the different learners and allow for more effective throughput of graduates. The researcher suggests that there is a diverse student population at UKZN i.e. socio-economic group, ethnicity, previously disadvantaged schooling systems etc., which may require the implementation of a foundation course for students who have difficulty with adjusting to the tertiary environment (Scott et al., 2007).

5.2.4 Fieldwork

The students reported that they found fieldwork placements an invaluable experience. It offered them an opportunity to integrate theory and practice. They

felt it was essential to experience a wide range of settings and be able to treat a variety of diagnoses. There is substantial literature which acknowledges that fieldwork continues to play a pivotal role in the professional preparation of entry grade occupational therapists, as these placements allow students to develop their professional identity, the necessary professional behaviours and clinical reasoning skills to practice occupational therapy (Chiang et al., 2012; Duke, 2004; Emslie, 2012; Ferns and Moore, 2012; Hummel, 1997; Kasar and Muscari, 2000; Kramer and Stern, 1995; Lorenzo et al., 2006; Mulholland and Derald, 2007; Sequeira, 2011; Snyman, 2012; Tompson and Ryan, 1996; Westcott and Rugg, 2001).

The students indicated that they would have appreciated exposure to a wider range of fieldwork sites. They thought that the limited exposure to a variety in diagnoses impacted on their ability to identify, diagnose and treat patients as the settings were too similar. The researcher suggests that the students need to understand that the essential principles of treatment remain the same despite the change in settings. Academic staff need to facilitate this transfer of learning and adaptability in the students. However, finding suitable fieldwork sites remains a problem in academia (Adamson 2005, Brown et al., 2011; Hunt and Kennedy-Jones, 2010; Overton et al., 2009; Prigg and Mackenzie, 2002; Rodger, Thomas, Fitzgerald, Dickson, McBryde, Edwards, Broadbridge and Hawkins, 2008; Sunnybrook, Sunnybrook, and Sunnybrook, 2001). This difficulty has resulted in educational programmes starting to explore non-traditional placements and role-emerging placements.

Non-traditional placements have been defined as being under the supervision of an occupational therapist (OT) but not in a hospital setting, whereas role-emerging placements are in places where there is currently no occupational therapy service (Li-Tsang et al., 2009; Overton et al., 2009; Wood, 2005). The role-emerging placements, as well as the non-traditional placements, can be seen as an opportunity for the students to assess community needs and practice being an agent for social change. This would entail implementing social change in their allocated placement sites to address a problem in the community which is in keeping with the new focus in the profession i.e. social responsiveness (Galvaan, 2006).

Another key finding was the students' views around the characteristics that they considered constituted a good clinical supervisor. They named competencies such as good communication/interpersonal skills, being able to model appropriate behaviour and demonstrate treatment. They also considered the ability to give constructive feedback as a good characteristic and hoped for supervisors to be friendly. The students also wished for consistent expectations from the academic supervisors and the clinical supervisors and that supervisors would acknowledge learning is a process in which they had also engaged in as students.

These findings are consistent with the literature around students' expectations of their clinical supervisors as discussed in the literature review (Hummell, 2007; Johnson, Kirke et al., 2007; Johnson et al., 2006; Krusen, 2011; Mulholland et al., 2007; Rodger et al., 2011; Thomson and Ryan, 1996). The students reported that some academic staff and clinical supervisors' gave constant negative feedback and were unapproachable or intimidating. This approach is in contrast with the literature, and would hinder students acquiring clinical reasoning skills and the positive reinforcement that is essential for the development of professional behaviour. Feedback from clinical supervisors on fieldwork was seen as crucial to facilitate the development of professional behaviours, creative thinking skills in students which are essential for development of the clinical reasoning required for clinical practice in the workplace (De Beer and Vorster, 2012; Doherty et al., 2009; Gray et al., 2011; Hinojosa and Blunt, 1998; Hodgetts, et al., 2007; Hummel and Koelmeyer, 1999; Nayar et al., 2011; Robertson, Smellie, Wilson and Cox, 2011; Schell and Cervero, 1993).

Lastly, the students reported the need to be more adequately prepared for fieldwork placement. The students requested review of the theoretical input, and more information about treatment planning and treatment programmes. They highlighted the need for the academic supervisors to inform the clinical supervisors of the expectations and outcomes that students are to achieve during the placement prior to the commencement of the fieldwork experience. This does, in fact occur annually, but not all clinicians are able to attend. This finding suggests that the format and content of the current clinical supervisors meeting need to be reviewed. According to the literature, a workshop for clinical supervisors on the expectations for the

placement and developing a learning agreement, as well as how to facilitate reflective thinking was seen as beneficial for effective supervision (Chiang et al. 2012; Cook and Cusick, 1998; Mulholland and Derald, 2007; Kirke et al., 2007; Mackenzie et al., 2001; Rodger et al., 2011). In addition, a review of the students' current preparations prior to embarking on fieldwork is needed.

5.2.5 Educators

Most students reported having a good relationship with the academic staff and considered them their role-models. Doherty et al.'s (2009) study similarly showed that students viewed academic staff that were approachable and friendly as a positive influence in their curriculum. Scheerer (2003) and Ledet, Esparza and Peloquin (2005) also reported that students viewed their interaction with the academic staff as valuable for feedback, and that the academic staff were seen as role-models. The students wanted consistent standards of professional behaviour, as evident in the literature, for example, a student questioning having to conform to being punctual when the academic staff who was supervising her was frequently late for work (Scheerer, 2003).

The researcher suggests that academic staff should be aware of the effect of their presence as role models on the students, and be careful to model appropriate behaviour. Students noted that the academic staff's willingness to be open to ideas encouraged them to ask questions to clarify concepts. According to the literature, the approach that the academic staff use during lectures is important in encouraging active learning and allowing for opportunities to develop clinical reasoning in students. Allowing students to raise questions without intimidation, the fact that lecture content can be challenged, fostering debate and lateral thinking around case studies were given and mentioned in studies (Neistadt, 1996; Strydom et al., 2010).

5.3 THE EXTENT TO WHICH THE FOURTH YEAR STUDENTS PERCEIVED BEING PREPARED FOR CLINICAL PRACTICE PRIOR TO GRADUATION.

This section outlines the students' preparedness for clinical practice in 2013. The purpose of an educational programme, especially professional degrees, is to produce graduates who are able to work effectively in the workplace (Barnitt and

Salmond, 2000; Mulholland and Derdall, 2005). The students need to demonstrate clinical skills in the form of professional behaviours such as empathy, clinical reasoning, dependability etc. which are essential skills required to provide quality client service (Brown et al., 2012 Crusick, McIntosh and Santiago, 2004; Kasar and Muscari, 2000). The graduate competencies will be discussed in this section and consist of expected clinical skills, students ability to assess clients, plan treatment, to implement treatment and the factors that influence preparedness for clinical practice. The students' perception about their preparedness for clinical practice was a complex issue. Creek (1997) refers to clinical practice as a collaboration with the client with regard to assessing the functional potential, developing interventions in terms of identifying and solving occupational performance problems, and adapting environments to increase function and social participation.

5.3.1 Students expected clinical skills

The majority of the students reported that being able to assess a client, plan treatment and have sufficient technical skills to implement treatment were essential skills to have as a new graduate. Furthermore, the ability to demonstrate effective therapeutic relationship skills i.e. being able to handle and build rapport with their clients' is of integral importance. The graduate competencies mentioned above reflects the priorities of the fourth year OT students in terms of the knowledge and skill that they feel needs to be acquired to cope with clinical practice. Studies have highlighted that new graduates often feel that their undergraduate programme did not equip them with sufficient knowledge and technical skill (Hodgetts et al., 2007; Robertson and Griffiths, 2009). Students' transition into more competent OT practitioners when they become more confident in their abilities and clinical role and start to utilise the skills taught to them at an undergraduate level (Doherty et al., 2009).

5.3.2 Students ability to assess

The students reported that they have the basic ability to assess clients. The students' perceived difficulty with assessment was specifically related to more specialised assessments such as using standardised tests and paediatric assessments. In addition, some students had difficulty with translating assessment

findings into prioritised problem lists. Completing a comprehensive assessment and creating a prioritised problem list to base contextualised treatment planning for a client, are skills that require clinical reasoning and clinical decision making skills. These skills are reported to develop with experience and over time (Duke, 2004; Neistadt, 1996; Sinclair, 2007). Doherty et al. (2009) noted that as soon as students master the clinical decision making process, they feel more confident in the treatment they provide to clients.

5.3.3 Students ability to plan treatment

The students generally felt that they have the basic ability to plan treatment. Treatment planning requires clinical reasoning to integrate the assessment findings with appropriate theory such as model of practice and principles of treatment to create a relevant, prioritised and contextualised treatment plan for the client. According to OT literature, new graduates' have basic clinical reasoning skills, but that these skills are often negatively influenced by the students' difficulty with being able to respond adequately to information presented (Ajjawi and Higgs; 2008; Neistadt, 1996; Sinclair, 2007). These clinical reasoning skills improve through working as a clinician i.e. the new graduates' ability to clinically reason was enhanced by experience gained through working and observing the reasoning that colleagues used during treating complex cases. This is in keeping with the clinical reasoning matrix developed by Sinclair in which the continuum of clinical reasoning is outlined from novice to expert clinician (Sinclair, 2007). From the OT programme perspective, teaching students on fieldwork placement, reasoning about complex cases and encouraging students to engage in informal discussions about clients were found to be beneficial in raising awareness of the students' clinical reasoning abilities (Ajjawi and Higgs, 2008).

5.3.4 Students ability to implement treatment

The students reported they felt they had the basic skills required to implement treatment but that they lacked some of the technical skills to implement treatment effectively. These findings are supported by the OT literature in terms of students feeling that they need to have all the technical skills and treatment strategies perceived to be essential for OT practice prior to leaving educational institution, but that they were not as skilled as experienced therapists. The students feelings of

competence improves when they acknowledge that they are not required to know everything, and that there is a need for continued professional learning in order to hone their technical skills (Doherty et al. 2009; Gray, et al., 2012; Nayar et al., 2011; Toal-Sullivan, 2006; Tryssenaar and Perkins, 2001). The fact that time and experience influences the students ability to plan and implement treatment was illustrated by the clinical supervisors reporting that the students' performance improve after the midterm assessment. This finding was echoed in a study by Holmes et al. (2010) as to the whether the WFOT stipulated 1000 hours of practice education placement helps produce competent OTs. The researcher suggests that students need to acknowledge that they are novice therapists and need to engage in life-long continuous professional development in order to acquire the vast amount of knowledge that is required to understand the complexities related to treatment in various areas of OT.

5.3.5 Factors that influence the preparedness to practice

Other factors mentioned in terms of influencing preparedness to practice were: the students' perception around being prepared for community service, level of confidence, feedback and marks from fieldwork, and the settings the students were placed in during their fieldwork. The students were mainly positive toward the idea of a community service year, as they felt that their community based rehabilitation module had prepared them to establish services in communities and that community service offered an opportunity to explore their identity as a therapist. This is in contrast to the literature, where students expect to be supervised and prefer to work in a hospital (Morley, 2006; Robertson and Griffiths, 2009; Tryssenaar and Perkins, 2001).

Some students' lack of confidence was another factor. These students felt only partially prepared to face the challenges of potentially being the sole OT at the sites at which they were placed. This finding was confirmed by the literature, that professional confidence is an issue for students prior to graduation and in the first six months in their new job (Doherty et al., 2009; Hodgetts et al., 2007; Holland, Middleton and Uys, 2011; Toal-Sullivan, 2006; Tryssenaar and Perkins, 2001).

Feedback from fieldwork, especially validation from the clinical supervisors, appears to be an important factor toward building or breaking students' perceptions of their

abilities. In addition, students appear to link their level of skill with their marks for their clinical performance on fieldwork placement. The potentially positive or negative influence of clinical supervisor's feedback was highlighted by some students which is in keeping with the documented impact of supervisor feedback on the students perceptions of their abilities in the literature (Hodgetts et al., 2006, Kirk et. al., 2007; Scheerer, 2003;).

The last aspect was the impact of the site of placement on the students' perception of their ability to cope. Most students felt that acute hospital settings prepared them better for community service more than chronic hospitals. Both Toal-Sullivan (2006) and Doherty et al. (2009) reported that although students need varied and plentiful fieldwork experience, they also needed to learn how to adapt the skills acquired to the different practice settings. The challenge for academic staff is to inculcate the concept of adaptability of learning in the students i.e. learning how to respond to different situations rather than requiring the exposure to a variety of settings in order to understand how to treat in that setting (Toal-Sullivan, 2006, Doherty et al., 2009).

5.4 THE CLINICAL SUPERVISORS' PERCEPTIONS REGARDING STUDENTS' PREPAREDNESS FOR CLINICAL PRACTICE.

This section discusses clinical supervisors' perceptions around factors that influence student learning which will include the philosophy and purpose of the curriculum, the curriculum content, fieldwork, assessment and educational methods and educators and facilitates. The clinical supervisors' perception around the students' preparedness for clinical practice will be discussed, namely: students' expected clinical skills; students' ability to assess clients, students' ability to plan treatment and students' ability to implement treatment.

5.4.1 Philosophy and purpose

The clinical supervisors' did not report directly about the philosophy and purpose of the programme. Two areas were mentioned namely the ethical characteristics of the students and the need to focus on occupation in treatment. The clinical supervisor indicated that the students displayed ethical behaviour especially in term of being responsible for their client. This echoes the students' perception about ethics being taught throughout the course and this supports the theory that ethics is part of the

hidden curriculum in the UKZN OT programme. The clinical supervisors' perception around occupation is supported by literature related to occupational science. Both locally and internationally there is growing support for the philosophy and purpose of OT to focus on the client's engagement in occupation (Hooper, 2006; Whiteford and Wilcock, 2001). In South Africa, engagement in occupation on an individual and community basis is seen as the intervention strategy to help alleviate occupational injustice (De Jongh et al., 2012; Kronenberg et al., 2005).

5.4.2 Curriculum content

The majority of the clinical supervisors suggested that aspects of the curriculum required review such as theory around models and vocational rehabilitation. The clinical supervisors are engaged in current practice in environments that emulate the community service work place environments. It is important to obtain feedback from various stakeholders and sources to ensure that the undergraduate programme prepares students for their first job and to ensure fitness for purpose (Barnitt and Salmond, 2000; Strong, Baptiste and Salvatori, 2003).

5.4.3 Educational methods

The clinical supervisors' noted a number of methods that appeared to enhance students' ability to grasp clinical subjects during fieldwork. These included self-study methods such as asking students' to read around a condition they were treating, demonstrating a treatment session while explaining their clinical reasoning and allowing students to sit in on each other's sessions i.e peer learning. These findings were validated by studies which indicated that students perceive practical input and case-studies better prepare them for working with clients (French, Cosgriff, and Brown, 2007; Kirke et al., 2007). Practical demonstrations and clinical supervisors' modelling appropriate clinical skills had been attributed to positively influence students' clinical reasoning and increase their repertoire of treatment strategies especially if the clinical supervisor explains the rationale for the treatment session (Neistadt, 1996; Kirke et al., 2007; Rodger et al., 2011). Martin and Edwards (1998) reported that peer learning can provide an opportunity for students to share knowledge and reflect on experience. The clinical supervisors' findings around educational methods highlighted the need for integration between theory and practice.

5.4.4 Assessment

The clinical supervisors indicated that there was disparity between the physical and psychiatric fieldwork assessment. Fourth year OT students are required to assess and treat a group for their final examination and fieldwork assessment. This was seen as a disadvantage when compared to the physical fieldwork and final examination assessment which required students to assess and treat an individual client. The clinical supervisors suggested that group work is allocated a larger percentage on physical fieldwork practical as a possible solution. The researcher is of the opinion that group work skills should be assessed during fieldwork assessment only and that the students are assessed on their ability to assess and treat an individual client during the summative examinations. The literature around assessment of students advocate the use of multiple methods to assess students' abilities however there did not appear to be literature around whether each field of OT had to be assess in a similar method. The Discipline of OT currently uses a variety of assessment methods for continuous assessment mark (CAM) and the summative assessment mark; however greater clarity is needed to ascertain which assessment methods are most effective for which particular learning outcome. The researcher suggests that the Discipline of OT at UKZN needs to review fieldwork and summative examination assessment to ensure that this aligns with the learning outcomes of the modules and uses the most suitable assessment for the learning outcome.

5.4.5 Fieldwork

The clinical supervisors wanted students to engage in self-study about the various conditions that they are likely to encounter and be better prepared for treatment sessions during their fieldwork placement. This is in accordance with the literature, which states that supervisors prefer students who are organised, come to the placement prepared to work and who showed a willingness to learn (Kirke et al, 2007; Mulholland et al., 2007; Rodger et al., 2011). In addition, students who had the confidence to be self-directed learners when looking for resources and were prepared to try new techniques they have learned i.e. hands on with the clients were valued (Hummell, 2007; Kirke et al., 2007; Mulholland et al., 2007; Rodger et al., 2011). This was in contrast to some of the characteristics displayed by some of the

students from UKZN, who were reported to have decreased confidence and be dependent on the clinical supervisors to direct their learning experience. In the literature and in the focus groups, supervisors stated that they would prefer it if the students were able to ask for assistance, and be more adventurous with trying out new techniques and be able to modify their treatment session dependent on the clients' needs. The researcher is of the opinion that some students' lack of confidence may hinder their ability to divert from their planned activities and may contribute toward the students' perceived lack of enthusiasm to try out new treatment techniques. In addition, the clinical supervisors reported that they have had to mentor the students to build up their confidence (Chiang et al., 2012; Cook and Cusick, 1998; Mulholland and Derald, 2007; Kirke et al., 2007; Rodger et al., 2011). The clinical supervisors indicated that the students need to build a spirit of self-reliance. According to the literature, this self-reliance can be fostered by setting expectations at the commencement of fieldwork and expecting the students to complete self-study tasks, thereby weaning students from external dependencies and providing an environment that mimics the real world (Pew, 2007; Taylor, 2010). The researcher suggests that greater emphasis should be placed on students becoming self-reliant and researching evidence-based practice during fieldwork placements to improve the students' sense of autonomy and hopefully their level of confidence. Clinical supervisor's suggested improved communication between the university and the clinical supervisor to ensure consistency in marking and that the clinical supervisors understand the level of practice expected of the final year students (Higgs and Macalister, 2005).

5.4.6 Educators and facilities

The clinical supervisors' noted that students' who use the UKZN transport were at a disadvantage due to the irregular times of drop off and pick up from fieldwork placement site. The students who use this transport service would be waiting for the transport while students who had their own transport could stay later at the fieldwork site. The researcher believes that the transport issue needs to be brought to the attention of the School of Health science by the discipline of OT and perhaps the times for students to be at fieldwork need to be more strictly enforced so that students with their own transport do not have an unfair advantage. This problem has consistently been addressed with the relevant University authorities and because of

various logistical problems seems impossible to change. Revisiting other options should perhaps be considered to improve the efficacy of the service.

The clinical supervisors' perception around the students' preparedness for clinical practice, namely: students' expected clinical skills; ability to assess clients, ability to plan treatment and implement treatment will be discussed in the paragraphs below.

5.4.7 Graduate Competencies

5.4.7.1 The students' expected clinical skills

The clinical supervisors' reported that the students need to be able to assess clients and accurately translate the findings into a problem list. The students should be able to plan and implement contextualised, prioritised treatment and have sufficient technical skills to implement treatment. Furthermore, the students should be able to evaluate the effectiveness of their treatment sessions and be able to adapt and modify treatment as indicated. The researcher suggests the level of skill that is expected by the clinical supervisors may exceed the ability of a novice clinician. According to Sinclair's (2007) clinical reasoning matrix the skills required to accomplish the above mentioned tasks develop over time and with experience as clinical reasoning and clinical decision making skills range on a continuum from novice to expert. Duke's study (2004) highlighted the difficulty that clinical supervisors have in defining competence which further complicates their ability to assess competence in the students (Duke, 2004).

5.4.7.2 The students' ability to assess

The clinical supervisors agreed that the students have the basic ability to assess clients but could improve their skills in terms of holistic assessment, use of standardised assessment and with some students, improve their ability to interpret assessment. As stated in the paragraph above, the researcher believes that there needs to be greater clarity on differentiating between the expectations of undergraduate course content versus a post-graduate content. Tryssenaar and Perkins (2001) stated that there are differences between the novice and expert practitioner, and that professional performance of skills improves with growth of knowledge and experience (Tryssenaar and Perkins, 2001; Robertson and Griffiths, 2009).

5.4.7.3 The students' ability to plan treatment

Majority of the clinical supervisors noted students' ability to plan treatment. However, students had difficulties using theory to guide their treatment planning processes, especially with the use of models of practice and choosing appropriate specific treatment principles. The students also had difficulty with sequencing of treatment, and tended to choose activities first instead of looking at a holistic view of the client. This has implications for the UKZN OT programme, as students' ability to plan treatment needs to be enhanced through facilitating the students' use of theoretical models and treatment principles to guide their treatment planning. This may foster insight into increased skills in clinical reasoning and insight into prioritisation and sequencing of treatment. In addition, the students need to focus more on occupational based activities rather than task based activities. The current methods used to teach this aspect of the curriculum may need to be reviewed as indicated earlier. The findings complement occupational therapy literature on new graduate ability to apply theoretical principles and employ clinical reasoning in practice (Crusick et al., 2004; Doherty et al., 2009; Gray et al., 2012; Robertson and Griffiths, 2009; Toal-Sullivan, 2006).

5.4.7.4 The students' ability to implement treatment

The majority of the clinical supervisors felt that the students were able to implement basic treatment with clients. The students were noted to display good therapeutic relationship skills, such as handling and interaction with clients, and interaction with the multi-disciplinary team to varying degrees. However, the clinical supervisor felt that the students' required improved technical skills such as splinting and transfers. The difficulties coping with the above mentioned skills were attributed to the students' lack of confidence with these skills. The literature indicates that there is no perfect curriculum which would equip the final year students with all the skills that are perceived to be necessary (Gray et al., 2012; Nayar et al., 2011; Robertson and Griffiths, 2009).

Gray et al. (2012) and Nayar et al. (2011) noted that a competent clinician is characterised by more than academic performance i.e. has personal competencies, skills, values and attitudes that reflect professional behaviours. The clinical

supervisors noted that the OT students showed empathy, responsibility for their clients and good therapeutic handling of their clients, which are all essential skills required to effectively treat people. According to Holland, Middleton and Uys (2011), professional confidence includes an understanding of the role, scope and significance of the profession, and is based on the clinicians'/students' ability to fulfil this role. This professional confidence is boosted by positive experiences. The students' lack of confidence could come from many sources, with feedback from clinical supervisors and having positive experience on fieldwork being mentioned as factors that fostered enjoyment of a field of OT practice i.e. physical, psychiatry etc. This corresponds with the literature on professional confidence and has implications for fieldwork supervision i.e. the feedback given to students and facilitating opportunities for success on fieldwork, which can be done prior to the midterm to enable the student to practice with more confidence and autonomy after midterm.

5.5 THE EXISTING DEFICITS IN THE CURRENT CURRICULUM AND ANALYSED THE 2011 UKZN OCCUPATIONAL THERAPY ACCREDITATION REPORT BY THE HPCSA PANEL AS WELL AS THE DOCUMENTS USED TO ASSESS FINAL YEAR OT STUDENTS.

This section discusses the recommended guidelines for an OT curriculum obtained during the document analysis. The differences and similarities between the guidelines and the current practice at the UKZN OT programme are highlighted using data from the document analysis and the student data. The areas discussed were the

- Philosophy and purpose of the programme,
- Curriculum content,
- Educational methods
- Assessment,
- Fieldwork,
- Graduate competencies

The literature around these issues is discussed.

5.5.1 Philosophy and Purpose of the Programme

The WFOT Minimum Standards of Training suggest that the philosophy and purpose of an OT programme should reflect the individual programmes perspective on occupation as engagement in occupation forms the foundation for OT intervention (Hocking and Ness, 2002a). The HPCSA Minimum Standards support this statement and further suggest that the educational objectives should reflect the philosophy and purpose of the programme (HPCSA, 2009). The Discipline of OT has identified two aspects to their current philosophy and purpose namely, to be at the forefront of OT scholarship and to be socially responsible. However, according to the HPCSA accreditation report and the findings, there does not appear to be a teaching policy/method or a discipline policy that defines how this is implemented in the curriculum. The findings revealed that ethics was taught indirectly throughout the course which indicates that the students have some aspects of social accountability.

According to the literature, the focus of OT is changing to a more socially responsive focus, with the concept of occupational science having gained favour in the OT profession. The WFOT issued a position paper on Human Rights with regard to the opportunity to participate in occupation being considered part of clients' Human Rights. This position paper outlined the professional responsibility of OT's and OT associations to identify occupational injustices and limit the impact that these have on clients through engagement in occupation and working collaboratively with other organisations. In addition, the position paper further charged OT's to address cultural sensitivity and develop cultural competencies when implementing OT intervention (WFOT, 2006).

This echoes the trends in South African OT, in which OT programmes are moving toward more community based projects and interventions. This is indicated as a two pronged approach of looking at the big picture and the root cause in the community, and offering interventions at that level as well as an intervention plan for individuals (Kronenberg et al., 2005). This trend of being an agent of social change is reflected in the transformation of the University of Western Capes curriculum to reflect the belief that students should be able to respond to clients/communities occupational needs and occupational injustices within South Africa's diverse population group. This is opposed to focusing purely on an individual's problems and intervention plan (De Jongh et al., 2012). A review of the current curriculum offered at South African

educational institutions has been suggested to ensure that occupational training and practice is more culturally relevant and aimed at meeting the specific needs of the diverse South African population (Joubert, 2010; Pollard et al., 2005).

The WFOT position paper of Human Rights (2006) has placed occupation as the central focus for occupational therapy intervention. This paper defines occupation as “everyday activities that people do as individuals in families and with community to occupy time and bring meaning and purpose to life. Occupation includes things people need to do, want to do and are expected to do” (WFOT, 2006: pg.2). This focus on individuals as occupational beings is central to the concept of occupational science. Whiteford and Wilcock (2001), and Merritt et al. (2012) stated that occupation is the central role of occupational therapy, and that enabling occupation should be the focus of the philosophy and purpose of the OT programme for the new millennium (Merritt et al., 2012; Whiteford and Wilcock, 2001). These authors have asserted that curricula that have an occupational science focus would help OT graduates understand the belief that the profession has around occupation and health. This is thought to improve graduates’ insight into how occupation and health inform delivery of OT intervention, and would enable the graduates to apply these beliefs in their daily practice of OT. It has been suggested that it is essential to apply an African perspective to occupational science in order to gain guided sustainable service delivery output in South Africa e.g. development in the townships (Joubert, 2010; Pollard et al., 2000; Whiteford and Wilcock, 2001). The researcher suggests that a review of the philosophy and purpose of the programme is required to assist with focusing the curriculum content and teaching methods used at the Discipline of OT at UKZN. This will be discussed further in curriculum content

5.5.2 Curriculum Content

The HPCSA evaluators report revealed that the curriculum of the UKZN OT programme meets the guidelines stipulated by the HPCSA Minimum Standards for Training (HPCSA accreditation report, 2011). However, there are some exceptions namely, not having anatomy and physiology in the same year, and the absence of sociology/anthropology from the course. Some students noted that they would prefer to have anatomy and physiology in the same year. The Discipline of OT at UKZN has terminal competencies which outline the programmes learning outcomes

according to the year of study. The UKZN Handbook for School of Health Sciences outlines the learning objectives, the content and assessment methods used for each module offered in the programme. There is limited evidence of how the curriculum is organised as a whole and how the terminal competencies are linked to the modules which suggests that the curriculum alignment to the learning outcomes may need to be reviewed. This leads to the discussion around organisation of the curriculum.

From the literature, there are two main aspects around organisation of the curriculum i.e. the model of curriculum and the curriculum alignment. Firstly, it was apparent from the findings related to the philosophy and purpose of the programme that the UKZN OT programme has not adopted a specific model of curriculum that reflects the philosophy of the programme. This will be discussed in the paragraphs below.

The model or approach used as the foundation for the curriculum should link strongly with the philosophy and purpose of the programme (Leonardelli and Gratz, 1986). While there are many schools of thought around models of curriculum, traditionally there are four main models described in the literature namely: the intellectual traditionalist, the social behaviourist, the experientialist and the critical reconstructionist (Schubert, 1996). The two models that the researcher suggests pertains to the UKZN OT programme are the social behaviourist and the experientialist. The social behaviourist perspective advocates that the knowledge used to develop curriculum should be current, based on identifying behaviours that make students successful in the workplace and relevant to current trends in the profession through evidence-based practice. Through research, the curriculum planners can construct a programme which has a curriculum with systematically aligned learning activities, instructional strategies and assessments that are aimed at eliciting behavioural objectives and allow the philosophy of the programme to resonate with one of the current focus in occupational therapy e.g. social responsiveness (Schubert, 1996). The experiential learning perspective suggests that knowledge is gained through experience and suggests that formal learning contexts are often artificial and not representative of the real world. This perspective advocates that student's previous life experience should be taken into account, together with the interests and the concerns of the students when delivering the content of the curriculum which would allow the students to share cultural information

and assist with the shift to create awareness of a more culturally appropriate OT service delivery (Schubert, 1996).

The researcher suggests that the occupational therapy curriculum is on a continuum between social behaviourist and experiential perspectives. Social behaviourist perspective links with OT as there is a constant strive to ensure that the students are meeting the health needs of the local population. Health Sciences have regulatory bodies that recommend best practice and standards that are mandatory in terms of training and practice of the profession. In addition, the focus of the profession changes with new research, hence the current trend in OT philosophy being a move toward a more social responsive and occupation centred model of curriculum, (as outlined in (d) and (e) in 2.3.3), that addresses community needs and concepts such as occupational justice (Pollard et al., 2005; Whiteford and Wilcock, 2001). This leads to a discussion on how the curriculum is structured i.e. curriculum alignment.

The effectiveness of the alignment of the curriculum was questioned by the students and the documents. The findings revealed that the curriculum is overfull i.e. there is too much content to fit into the four years that the students have. The students expressed concern related to the grading of expectations between the years, especially the graded increase of expectations between third and fourth year, which reflects potential adjustment may be required with the vertical alignment of the programme. The concept of curriculum alignment, particularly constructive alignment, was introduced by Biggs and Tang (2007). Constructive alignment theory proposes that there be a match between the intended learning outcomes, the teaching and learning activities, and the assessment of students (Biggs, 1996, Biggs and Tang, 2007). Biggs reported that the intended learning outcome at a programme level should be a statement of what graduates from that programme should be able to do, whilst the intended learning outcome at course level should be a statement of what the students should be able to do after completion of the course/module (Biggs, 1999; Biggs and Tang, 2007; Macdonald and Vander Horst, 2007; Walsh, 2007). Biggs was cited in Macdonald and Van der Horst (2007) states, “ *a good teaching system aligns the teaching methods and assessment to the learning activities stated in the objectives, so that all aspects of this system are in accord in supporting appropriate student learning*” (McDonald and Van der Horst, 2007,pg.3).

Curriculum alignment is necessary to ensure that the OT programme results in the necessary outcomes in terms of graduate competencies. Brown et al (2012) stated that curriculum alignment is one method of ensuring that the material taught in the curriculum elicits the graduate competencies required by the professional bodies. This alignment also ensures that the expectations from year to year (vertical alignment), and across each year (horizontal alignment), generates the appropriate knowledge and skills in the students (Brown et al., 2012; Merritt et al., 2012).

Joseph and Juwah's (2012) study explored constructive alignment theories ability to develop nursing skills curricula, and found that the constructive alignment approach helped identify skills required, for nursing educators to focus on fitness for purpose, and adapting the curriculum for organisational changes in the clinical setting. These findings were echoed in the previously mentioned Dalhousie study, where the OT curriculum planners created end of programme learning objectives for each competency identified by the Canadian OT Association. The course objectives were constructed and matched to seven competencies and associated end-of programme objectives. Finally, the course and end-of programme objectives were analysed to ensure the progression of learning across the programme was appropriate (Merritt et al., 2012). This illustrates curriculum mapping and practical application of the concept of constructive alignment in OT. This leads to a discussion of how the students are taught the content of the curriculum.

5.5.3 Educational methods

The main point raised in the documents was that the educational methods applied should reflect the philosophy and purpose of the programme. According to the UKZN Handbook of School of Health Sciences (2012), a range of teaching methods such as didactic teaching, tutorials, practical laboratories etc. are in the programme. The HPCSA accreditation report stated that there is a strong teaching culture in the programme. However, there was no unified teaching approach with academic staff using whichever method they most favoured to teach. WFOT advocates congruency between philosophy, educational methods and the assessment methods used (Hocking and Ness, 2002a). In an occupation- centred curriculum, occupational science forms the main underpinning philosophy of the curriculum. The teaching methods used would then need to align to an occupation-centred curriculum. Some

suggested teaching approaches are problem based learning or case based learning where the educator can create opportunities to link the functional implications of disability e.g. gaining student understanding that decreased muscle strength in the clients' hand would affect hand function thus performance in self-care tasks. (Hooper, 2006) These findings indicate that the educational methods used in the OT programme require review.

5.5.4 Assessment

Biggs (1999) states that assessment has two functions, i.e. to inform the academic staff whether the students have managed to achieve the learning outcomes or not, and to convey to the students the aspects that the academic staff want them to learn (Biggs, 1999). From a UKZN OT perspective, there are two types of assessments firstly, the summative assessments that form part of the final examination process and secondly, the continuous assessment mark which consists mainly of performance based assessments during fieldwork and tests of student's ability to integrate theory. The HPCSA accreditation report stated that the UKZN OT programme followed the guidelines prescribed by HPCSA for the summative examination process. As stated previously in the discussion around assessment, there is no consensus about the ideal assessment of students. This aspect was included in this section in order to build on the understanding of how the programme prepares students and ensures that students have the pre-requisite knowledge and skills for practice. As stated by Biggs (1999), assessment in practice has the ability to convey to the students what the academic programme wants the student to learn.

The findings revealed that the marking rubrics (the case study guide, the treatment demonstration guide and the case–presentation guide) are used to observe whether students possess the clinical skills to practice the profession during fieldwork. These marking guides interrogate the students' ability to prepare for treatment, assess a client, plan for treatment and treatment programmes, and implement treatment and their ability to employ clinical reasoning during the treatment planning stage. The clinical performance mark is a continuous assessment that rates the students' ability to implement the OT process during fieldwork placement over a six to seven week period in the different fields of OT. The links between the sections in the clinical performance booklet and the clinical skills described in the Minimum Standards of

Training and the Standards of Practice were demonstrated in Figure 4.2 in the findings chapter. This indicated that the Discipline of OT at UKZN was assessing the pre-requisite areas required for clinical practice of OT. The findings were in keeping with assessment methods outlined in the literature i.e. the use of a variety of methods to assess the skills and knowledge of the students, such as direct observation of treatment, case-presentation and supervisor ratings (Duncan and Joubert, 2006; Salvatori, 1996).

However, the findings further revealed that the students did not have a clear understanding of how the cumulative marks were calculated, which can lead to misconceptions about the weighting of the components, such as treatment demonstrations. In addition, the students' perception's about difficulties with summative assessment revolved around allocating placement sites for the practical component, and the perceived disparity between the psycho-social module assessment that requires students to demonstrate competence in assessing and treatment of groups, versus the physical module assessment, which focuses on individual client assessment and treatment. Lastly, the HPCSA evaluators found that the knowledge tested in the final exam encompassed factual, procedural and conceptual knowledge, and offered reduced opportunities for the students to display their clinical reasoning.

There appears to be a paucity of literature around assessment of students from an occupational therapy perspective, or students' views of the assessment process. Duncan and Joubert (2006) stated that assessments need to be both performance and competency based, due to the complexity of occupational therapy. Performance based assessment referred to direct observation or a direct measurement of performance, whereas competency based assessment relies on the use of professional judgement in discerning the level of understanding that the student has achieved. According to the literature, most educational programmes use a combination of criterion-based assessment and other means, such as written case-studies, reflective journals, presentations and demonstrations as part of the summative assessment (Ferns and Moore, 2012; Hamilton et al., 2007; Sinclair, 2007; Westcott and Rugg, 2001). Salvatori (1996) offered another approach to assessing competence when she cited Norman's (1991) simple hierarchical model of

“*know-can-do*”. A student *knows* how to complete tasks in theory, therefore written tests can test this level of competence. The next level of competence, “*can*” refers to demonstration of ability in a real or simulated environment. Practical examinations and direct observations are used to assess this level of competence while “*do*” refers to a student’s ability to display professional behaviour, such as critical thinking, clinical reasoning, accountability etc. In occupational therapy, the clinical supervisor is required to complete an assessment of this level of competence after the student has completed his/her fieldwork placement.

With fieldwork assessment, Joubert and Duncan (2006) have suggested using a flexible presentation guide and case study guides in conjunction with practical demonstration of a treatment session. Students would complete a verbal presentation and a case-study report in which they select aspects of their intervention programme that they have developed while on placement. In this way, the academic staff can gauge the students’ level of competence in dealing with an individual and the population, as well as give an estimation of the students’ level of critical thinking and clinical reasoning necessary for successful engagement of occupational therapy practice in a local health setting (Lorenzo et al., 2006). This is in keeping with the methods used by the Discipline of OT at UKZN to assess the students when on fieldwork placement as per the document analysis.

As mentioned previously, subjectivity of the marking of clinical performance during fieldwork placement was the main problem expressed by the students. Assessment of student’s performance during fieldwork placement is completed using a criterion based form which reviews the students’ ability to display professional behaviour (Randolph, 2003). This task is generally allocated to the clinical supervisors for fourth year OT students. Some educational institutions have created their own assessment using a form, based on behavioural criteria, to assess student performance. There is much debate over the validity of the clinical performance assessments, as the tools are subjective and there is little inter-rater reliability (Duke, 2004; Ferns and Moore, 2012; Hamilton et al., 2007; Westcott and Rugg, 2001). From a South African perspective, Snyman’s (2012) study into professional behaviours assessment at the University of Stellenbosch’s findings were similar to those above i.e. there was a lack of consensus of the outcomes that constitute professional behaviour and poor inter-rater reliability amongst clinical supervisors

(Snyman, 2012). This literature supports the concerns expressed related to the inconsistencies in allocation of marks for clinical performance.

The literature suggested that having a “think tank” to achieve consensus on the aspects to be assessed and the meaning of each level of the rating scale would allow for a common understanding of the concept. This would reduce the perceived inconsistencies in the marking (Steinert, Cruess, Cruess, and Snell, 2005). Ledet et al. (2005) proposed an alternative method for fieldwork assessment in which the students complete a self-assessment of professional behaviour. This would entail the students completing a form to rate themselves using the designated rating scale i.e. 1-4 with 3 meaning meeting standards. The students would also have to generate a professional development plan in terms of aspects of professional behaviour or skills that they feel they need to develop. The academic staff would have to talk to the students if the rating was unrealistic. Academic staff could complete a certificate that recognised to acknowledge the students professional behaviour during the placement. Academic staff may need to identify students who require development of professional behaviour and thus issue a verbal warning, an early concern note, collaboration on professional development plan and finally referral to student affairs or wellness (Ledet et al., 2005.) There is no consensus in terms of the preferred/ideal method of assessment. Each institution is left to decide on the most appropriate method to be used to assess students in summative assessments and during fieldwork.

5.5.5 Fieldwork

Both WFOT and HPCSA have prescribed guidelines for fieldwork, i.e. a minimum of 1000 hours of fieldwork must be completed for a student to be eligible for graduation (HPCSA, 2009; Hocking and Ness, 2002a). The HPCSA accreditation report stated that students in the UKZN OT programme exceeded to fulfil this requirement, with the 2011 final year students having engaged in 1052 hours of supervised fieldwork. The only concern raised by the HPCSA evaluators related to the low numbers of clinical staff at the fieldwork placement sites and the negative effect that this may have on student supervision. Holmes et al. (2010) studied the graduate outcomes after 1000 hours of fieldwork and found that most of the desired outcomes in terms of clinical skills were achieved. However, the students were not always able to

display reflective thinking. The authors felt that the clinical supervisors needed to create opportunities to elicit clinical reasoning during fieldwork placement (Holmes et al., 2010).

5.5.6 Educators and Facilities

The HPCSA evaluators stated that the students had a high regard for the academic staff and raised concern over the university transport. This is in keeping with the literature which suggests that students consider academic staff as role models as previously discussed.

5.5.7 Graduate Competencies

WFOT and HPCSA have prescribed skills that new graduates are expected to possess upon graduation of an OT programme. This is outlined in the WFOT Entry Level Competencies for Occupational Therapists as well as in the HPCSA Standards of Practice and the Minimum Standards of Training for Occupational Therapists (HPCSA, 2006; HPCSA, 2009; WFOT, 2009). The students, clinical supervisors and the documents outlined similar graduate expectations, that the graduate should be able to assess, plan treatment and implement treatment. In action, the clinical supervisors and the documents reported that students should be able to evaluate their treatment sessions, and be able to adapt and modify treatment as indicated. This was in keeping with the literature, which states that the skills considered most essential were theoretical and practical clinical skills which included assessment, priority setting, treatment and evaluation of treatment effectiveness (Barnitt and Salmond, 2000; Creek, 2007). Other essential competencies noted were the ability to work autonomously, ability to communicate effectively and the ability to write reports (Barnitt and Salmond, 2000; Creek, 2007; Gray et al., 2012; Robertson and Griffiths, 2009). The views expressed by the students were consistent with the literature, which inferred that the students were aware of the abilities they needed in order to practice as an OT. However, the aspects that were omitted were the role of OT's as agents of social change need to be culturally relevant and to be evidence based. This indicates that the philosophy and purpose of the programme may not have permeated into the students conscious thought about OT practice.

5.6 CONCLUSION

In relation to the literature and findings, this discussion has described the students' experience of the undergraduate programme and the students and the clinical supervisors' perceptions around the students' preparedness for practice. The guidelines and information provided from the data analysis of the HPCSA evaluators report and document from the discipline of OT at UKZN were outlined. The discussion highlighted that the UKZN OT programme's current curriculum has positive and negative aspects such as meeting the HPCSA guidelines but being overfull. There is thus a need for a review of the curriculum. The educational methods used appeared adequate but could be enhanced for clinical reasoning and to include a focus on occupation based practice. The overall perception of both the clinical supervisors and the students was that the new graduates would be able to cope with basic OT practice in 2013 however, there are aspects that could be improved to ensure that the new clinicians' have more confidence and are equipped to cope with their first job. The next chapter will discuss the conclusions and the recommendations from the study.

CHAPTER SIX

CONCLUSION

6.1 INTRODUCTION

This study explored the perceptions of the final year UKZNOT students and their clinical supervisors regarding their undergraduate education and preparedness for independent practice in 2013.

This chapter will outline the conclusions that the researcher has drawn from the findings and the discussion around the study. The recommendations will be discussed in two sections i.e. recommendations for the programme and recommendations for future research.

“The opportunity to engage in occupational therapy education, to learn, experiment and grow, is a tremendous privilege, giving its participants’, whether students or teachers, scope to explore, develop, and achieve our personal potential” (Werner,2005, pg. 414).

The findings from this study provided valuable insights into the experiences and the perceptions of the final year OT students as they develop their clinical practice skills and begin to explore their identity as occupational therapists as epitomised by the quote above. Overall, the perceptions of final year students and their clinical supervisors, suggest that the students were partially prepared for the challenges of clinical practice during community service in 2013. Most students were particularly lacking in confidence upon graduation and anxious about embarking on clinical practice. Both the students and the clinical supervisors indicated that they perceive that the final year students have the fundamental skills required to assess, plan treatment and implement treatment with clients however further knowledge and skills are required for the students to cope effectively and confidently with clinical practice. This included the final year students being able to show improved application of theory, improved clinical reasoning and more technical skills and treatment strategies during clinical practice. The clinical supervisors have highlighted knowledge and skills that they feel the students need to acquire to be more adequately prepared. However, it is the opinion of the researcher that the supervising clinicians’ may have slightly unrealistic expectations as a new graduate

is still a novice therapist and cannot be expected to function as an experienced clinician. This sentiment is substantiated by the fact that the clinical supervisors in the study assessed the current cohort of final year OT students to be competent by allocating a passing clinical performance mark during fieldwork.

The literature related to the progression from student to novice therapists emphasised that the students' skills in the areas mentioned above, as seen in practice, would improve in time as they gain more experience and develop their own abilities through continuous engagement in continuing professional development activities.

The researcher felt that the findings highlighted the presence of two aspects of the students' engagement in the OT programme i.e. the well-established skills and the students' enthusiasm to embark on the challenge of community service despite their lack of confidence and perceived lack of skills. The positive competencies that the students' had a good foundation in were empathy, therapeutic handling skills and responsibility to their clients. This reinforces the perception that the students have attained a good ethical background and are aware of aspects of social accountability. Most students had an overall positive attitude toward community service stating that it was an opportunity to learn to become their own therapists' and that they would research treatment strategies' for any condition they felt they did not have sufficient experience to treat. The graduating students will have to face the challenge of treating clients holistically and be able to move between different contexts/settings i.e hospital based intervention to primary health care clinic during their first job placement for their community service year.

The study also interrogated the effectiveness of the UKZN OT curriculum in preparing the students for clinical practice. The HPCSA accreditation report indicated that the programme met the required standards in the HPCSA Minimum Standards of Training. The findings also suggest the need for curriculum review. The researcher was concerned about the finding which revealed that the final year OT students feel the curriculum is overfull and feel less prepared to apply theoretical approaches such as models of practice and approaches and implement vocational rehabilitation, as these are key areas of knowledge that are required to practice occupational therapy. A review of the how these subjects are taught both in theory

and reinforced during fieldwork would be necessary to enable the students to comprehend the subject matter and apply the knowledge during clinical reasoning for treatment planning.

Not only was the issue of content overload highlighted, but also issues around implementation such as the use by some lecturers of more innovative teaching methods and interactive instructional methods, expectations of students in clinical settings and support given to students. Field placements were found to be valuable and generally offered the students an enjoyable learning experience and positively influenced the students' perceptions of their clinical ability. Supervising clinicians were seen as positive role models for clinical practice and the constructive feedback given to students appeared to contribute to a positive fieldwork experience. Problems were identified with the student assessment process; however the value of using more than one supervisors and improved preparation of the clinical supervisors before fieldwork placement was thought to address this shortcoming. The researcher has some reservations about being able to use more than one supervisor for assessment given the current difficulty in sourcing both academic and clinical supervisors at present.

It was evident from the findings that the discipline of OT at the University of KwaZulu Natal is adequately preparing students for basic clinical practice. This study has given the researcher insight into the teaching methods used for lectures and her ability to be an effective supervisor who elicits clinical reasoning and creates opportunities for the students to grasp the importance of enabling the clients' ability to participate in occupation. The need for a philosophy and purpose for the OT programme was highlighted. This need resonated with the researchers belief that the OT programme at UKZN needs to modify the current focus of the curriculum to reflect the trends in OT philosophy and meet the needs of the Kwa-Zulu Natal health setting during the suggested curriculum review.

It is evident from the findings that the undergraduate OT programme needs to be reviewed to improve the effectiveness of preparing the graduates for the trial of clinical practice during their community service year and to accommodate changes in the professions identity in South Africa i.e. being an agent of social change, relevant to the African context and occupational science.

6.2 SIGNIFICANCE OF THE STUDY

Findings from this study contribute to our understanding of the extent to which the current curriculum at the UKZN offers education and training relevant to the requirements in the workplace in terms of clinical practice needs. The study has also provided an in-depth understanding of the strengths and weaknesses of the undergraduate programme to allow for the contextualised review of the curriculum.

The aspects that require review such as the philosophy and purpose, the curriculum alignment and the need to match the learning outcomes with teaching methods and assessment methods have been illustrated. The study has given insight into the students and clinical supervisors' perceptions around the assessment methods used to assess students and the process of student assessment. The researcher feels that the basic principles of assessment are present in the current curriculum, however refinement of this process is required to ensure more consistency in marking and alignment with the learning outcomes. Hopefully, this will lead to better student understanding of the assessment process. The educational methods that the students and the clinical supervisors found to enhance student learning was highlighted and this will assist with reviewing the current teaching practices in the UKZN OT programme. The benefits of fieldwork were explored and issues around the design of the fieldwork component such as placement sites and the need for preparation of students and clinical supervisors' were discussed. Identification of these areas for revision will inform the review of current practices to ensure that students attain the maximum potential from this essential component of the curriculum and thereby improve the quality of the learning experience for the OT students and ultimately their effectiveness as clinical practitioners.

6.3. RECOMMENDATIONS

A number of recommendations are made as a result of the study findings, and are provided as recommendations for the UKZN OT programme, and recommendations for future research

6.3.1 Recommendations for the UKZN OT programme

The following recommendations are made to address the issues raised by the study with respect to the OT programme at UKZN:

6.3.1.1 Philosophy and Purpose

A review of the philosophy and purpose of the programme so that the Discipline of occupational therapy's vision of the potential graduate could be more clearly defined and that the philosophy and purpose of the programme be in keeping with the identity of the profession and the African continent

6.3.1.2 Curriculum theory and content

A review of the content of the curriculum is required with specific focus on reducing the overfull curriculum. The content of certain aspects need to be reviewed as per student and clinical supervisor recommendation e.g. the theoretical models and treatment planning.

6.3.1.3 Curriculum Alignment

A constructive alignment approach, as outlined by Biggs (1996), should be used during the curriculum review process. This would entail identifying programme outcomes and aligning each module to these outcomes. In addition, the discipline needs to ensure that there is vertical and horizontal alignment to ensure that there is graded expectations between the years and within a year of study. The programme outcomes may be based on the graduate competencies outlined in the HPCSA Minimum Standards of Practice.

A curriculum map could be completed to ensure that the grading of expectations across the years is correct and that the modules are aligned to the programme outcomes. This would allow the curriculum planners to construct a programme which has a curriculum with systematically aligned learning activities, instructional strategies and assessments that are aimed at eliciting behavioural objectives that would prepare the students for independent practice.

6.3.1.5 Teaching methods and strategies

A review of the teaching methods used in the programme is recommended. This would require that the intended learning outcomes match the teaching and learning activities and assessment methods. Another factor would be to examine how the

teaching methods would complement the intended philosophy and purpose of the programme e.g. in an occupation centred curriculum how occupation can be incorporated into the various lectures

6.3.1.6 Fieldwork requirements and expectations

The preparation of the students prior to fieldwork placement should be reviewed in order to include the aspects that the students mentioned i.e recap of theory and treatment programme planning. This may contribute toward the students' feeling more adequately prepared prior to commencing their fieldwork block.

The academic staff needs to encourage the students to engage in self-initiated research of diagnoses and their treatment strategies in order to ensure that students use evidence-based practice and become more independent learners. Another option may be to offer a bridging course or to allow students to complete the course at a slower pace in order to accommodate for students coming from diverse educational backgrounds.

A review of the expectations on the physical and psycho-social fieldwork placements should be completed so that the expectations are similar i.e. group intervention and individual client intervention.

6.3.1.7 Fieldwork supervisors

A review of the yearly meeting held with the clinical supervisors and the academic supervisors. This would hopefully lead to greater consensus about allocation of clinical performance marks and a more standardised approach to the expectations of the practice education placement blocks. In addition, the rating scale for marking the clinical performance could be discussed as well as the role of the clinical supervisors and the expectation of the clinical supervisors in terms of student supervision.

6.3.1.8 Fieldwork assessments

A review the process of evaluating the students' clinical performance, case presentations and treatment demonstrations during their fieldwork placement needs to occur so that the method is clearly communicated. This may contribute toward

more transparency and consistency with the mark allocation. This will hopefully lead to a better understanding of the students of the marking process.

6.3.1.9 Fieldwork placements

Final year OT students should be placed predominantly in acute settings and the community based fieldwork module needs to be reviewed i.e. allocated a block rather than one day a week. This will hopefully allow the students to feel for confident with independent practice in the community and acute settings

6.3.1.10 Students

It is recommended that the academic development officer design a programme to address students' issues such as time-management and stress, as well as hold debriefing sessions with the OT students in order to alleviate any potential distress caused by a fieldwork placement experience.

Furthermore the programme may have to engineer opportunities during lectures and fieldwork to allow for student groups to mix in order to create more cohesion amongst the diverse student cohorts.

6.3.2 Recommendations for future research

The following recommendations are made regarding areas of future research:

- Conduct a study focusing on the perceptions of the new graduate OT's around the effectiveness of their service delivery during their community service year.
- A study exploring the needs of the South African employers with regards to provision of OT service needs to be undertaken so that the current needs of the South African healthcare system and clients can be explored. According to anecdotal evidence, this was last completed when the HPCSA standards of practice was being compiled.
- Another area of research would be designing a clinical performance assessment that is standardized for South African OT programmes.
- Finally, research needs to be conducted into the reasons surrounding the segregation of the OT class and potential methods to create more cohesion.

6.4 STUDY LIMITATIONS

The main limitation of this study relates to the context in which the study had been conducted thereby limiting the findings only to the OT undergraduate programme at UKZN and thus limiting the generalisability to other institutions. However, it is hoped that the full description provided of the setting, programme and students will allow others to compare and extract meaningful lessons for their use. Another limiting factor relates to the clinical supervisors' focus group which did not have a representative from the supervisors assigned to the community-based rehabilitation aspect. However, it was felt that the data was obtained from the students and the other clinical supervisors were able to reveal insight into the students' experience of this aspect of the curriculum. Another potential limitation was the absence of the academic staff voice from the findings. The researcher piloted the clinical supervisors' questions on the academic staff to allow the academic staff an opinion on the relevance of the questions being asked. Finally the research informants were limited to final year students prior to their end of year examination. It would have been beneficial to interview graduates of the programme however the students were interviewed just before their final examinations as these students were perceived to be potential new graduates.

6.5 CONCLUSION

The study served to collect the experiences of the final year OT students and their clinical supervisors around the effectiveness of the undergraduate curriculum in preparing the potential graduates for clinical practice. The perceptions of these participants and the document review of the external HPCSA evaluation suggests that the Undergraduate OT programme at UKZN does prepare the students adequately for basic clinical practice however, the programme requires review to improve the effectiveness of the programme to prepare the graduates more adequately for community service in the South African context. The OT curriculum has many strengths which include the ethical foundation of the students. Further refinement of the curriculum could potentially produce graduates who are capable of delivering an occupational therapy service that specifically meets the need for diverse African healthcare settings, and reflects the changing identity of the profession in South Africa.

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APPENDIX 1

ETHICAL CLEARANCE DOCUMENT

APPENDIX 2

LETTER TO DEAN OF SCHOOL OF HEALTH SCIENCES FOR PERMISSION TO ACCESS OT STUDENTS

Professor S. Essack
Dean of School of Health Sciences
University of Kwa-Zulu Natal
Date

Re: Permission to access the fourth year OT students for research and to access documents pertaining to the curriculum

Dear Professor Essack,

I am a student studying toward her master's degree in Occupational therapy. As part of fulfilment of this qualification, I am undertaking a study to explore the extent to which the undergraduate programme at UKZN, prepares students for clinical practice.

I am requesting permission to send an email to the current fourth year OT students and their clinical supervisors to invite the current fourth year students and their supervisors to participate in the study. It is anticipated that I will conduct focus groups with 6-8 students. I will follow up with one on one interviews with 3 students to clarify issues that emerge in the focus group.

I am requesting permission to gain access to curriculum documents form the discipline. I am attaching my research proposal for your perusal. I can be contacted on 031-2608407 or 0788007679. I hope my application for permission is viewed favourably.

Regards,
Deshni Naidoo

APPENDIX 3

EXAMPLE OF A LETTER TO HOSPITAL MANAGER/PRINCIPAL OF THE SCHOOL FOR PERMISSION TO ACCESS CLINICAL SUPERVISORS

Mr Gwala
Hospital Manager:
Clairwood Hospital
Kwa-Zulu Natal
Date

Re: Permission to access the occupational therapist with regard to fourth year student performance on practical fieldwork block

Dear Mr Gwala

I am a student studying toward her master's degree in Occupational therapy. As part of fulfilment of this qualification, I am undertaking a study to explore the extent to which the undergraduate programme at UKZN, prepares students for clinical practice.

I am requesting permission to interview the occupational therapist that supervises fourth year occupational therapy students on their practical fieldwork block at your hospital. It is anticipated that I will hold a focus group which the occupational therapist will be requested to attend. This will be to discuss fourth year occupational therapy students' performance during their fieldwork block and their preparedness for clinical practice

I am attaching my research proposal for your perusal. I can be contacted on 031-2608407 or 0788007679. I hope my application for permission is viewed favourably.

Regards,
Deshni Naidoo

APPENDIX 4

INFORMATION DOCUMENT (STUDENT)

STUDY TITLE

“Exploring the extent to which the undergraduate programme at the University of Kwa-zulu Natal prepares new graduate occupational therapist for clinical practice “

INTRODUCTION

My name is Deshini Naidoo and I am a post graduate student on the Master of Occupational Therapy Programme. I am conducting a study to explore how students experience the undergraduate programme in OT and the extent to which the Undergraduate OT curriculum prepared students for competent clinical practice. To verify students' competence in special areas, I may need your supervisors' insight

PURPOSE OF THE STUDY

The aim of the research is to explore the extent to which the OT undergraduate programme at UKZN prepares OT students to cope with clinical practice and to explore student and clinical supervisor's perceptions around this subject.

STUDY PROCEDURES

If you agree to participate you will be asked to participate in a focus group and/or an interview which will be conducted by myself (researcher) and which is estimated to last between 60 to 90 minutes. The focus groups and interviews will take at the UKZN campus or at your place of work. The focus groups and interviews will be audio-taped and additional observations and notes will be recorded by the researcher/and or research assistant.

Six months after you graduate from the programme I may request to interview you as part of a follow-up study to understand the challenges you may face in the work place setting. I would need to interview stakeholders in your work place as well in order to obtain an overall view of your workplace and the challenges you may face.

RISKS

There are no known risks to you or the people you work with for taking part in the study.

BENEFITS

There are no direct benefits for participants. However, this study may provide you with an opportunity to contribute towards improving the undergraduate programme at UKZN.

VOLUNTARY PARTICIPATION

Participation in the study is completely voluntary. You may refuse to participate or may withdraw from the study at any time.

CONFIDENTIALITY

The information collected in the study will be used for research purposes only. The study will be completely confidential and your name will not appear anywhere in the study. A pseudonym will be used instead of your name and efforts will be made not to disclose your identity. Your participation and input will be strictly confidential. The audiotapes will be destroyed at the end of the research. The transcripts will remain in the property of the researchers and will be kept private and strictly confidential.

CONTACT DETAILS OF RESEARCHER

If you have any questions about the study, please contact me at:

Researcher: Deshini Naidoo 078 800 7679 or 031 2608407

Supervisor: D r J. van Wyk 031-2601111

Co-Supervisor Prof Robin Joubert 031 2607310

Health and Social Science research Ethic committee:

Ms PhumeleXimba 031 2603587/8350

ximbap@ukzn.ac.za

APPENDIX 5

INFORMATION DOCUMENT (CLINICAL SUPERVISOR)

STUDY TITLE

“Exploring the extent to which the undergraduate programme at the University of Kwa-zulu Natal prepares new graduate occupational therapist for clinical practice “

INTRODUCTION

My name is Deshini Naidoo and I am a post graduate student on the Master of Occupational Therapy Programme. I am conducting a study to explore how students experience the undergraduate programme in OT and the extent to which the Undergraduate OT curriculum prepared students for competent clinical practice. I would like your insight on student’s competence in clinical practice and your opinion regarding the undergraduate OT curriculum at UKZN.

PURPOSE OF THE STUDY

The aim of the research is to explore the extent to which the OT undergraduate programme at UKZN prepares OT students to cope with clinical practice and to explore student and clinical supervisor’s perceptions around this subject.

STUDY PROCEDURES

If you agree to participate you will be asked to participate in a focus group and/or an interview which will be conducted by myself (researcher) and which is estimated to last between 45 to 90 minutes. The focus groups and interviews will take at the UKZN campus or at your place of work. The focus groups and interviews will be audio-taped and additional observations and notes will be recorded by the researcher/and or research assistant.

RISKS

There are no known risks to you or the people you work with for taking part in the study

BENEFITS

There are no direct benefits for participants. However, this study may provide you with an opportunity to contribute towards improving the undergraduate programme at UKZN

VOLUNTARY PARTICIPATION

Participation in the study is completely voluntary. You may refuse to participate or may withdraw from the study at any time.

CONFIDENTIALITY

The information collected in the study will be used for research purposes only. The study will be completely confidential and your name will not appear anywhere in the study. A pseudonym will be used instead of your name and efforts will be made not to disclose your identity. Your participation and input will be strictly confidential. The audiotapes will be destroyed at the end of the research. The transcripts will remain in the property of the researchers and will be kept private and strictly confidential.

CONTACT DETAILS OF RESEARCHER

If you have any questions about the study, please contact me at:

If you have any questions about the study, please contact me at:

Researcher: Deshini Naidoo 078 800 7679 or 031 2608407

Supervisor: Dr J.Van Wyk 031 2607310

Co-Supervisor: Prof Robin Joubert 031 2607310

Health and Social Science research Ethic committee:

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APPENDIX 6

LETTER OF CONSENT: OT STUDENT

PURPOSE OF THE STUDY

This study intends to provide a better understanding of the extent to which the undergraduate OT programme prepares students for clinical practice. The primary research question that will guide the study is “What are the OT students and their clinical supervisors perception of the whether the under graduate prepares OT students to cope with clinical practice.

PARTICIPANTS UNDERSTANDING

- I hereby confirm that I have been informed by the researchers and/ or research assistant about the nature, conduct, benefits and the risks of the study.
- I have also read and understood the information letter regarding the study.
- I understand that my participation is voluntary.
- I understand that all data collected will be limited to use in research or other research related usage.
- I understand that I will not be identified by name in the final product.
- I am aware that all records will be kept confidential in the secure possession of the researcher.
- I am aware that the findings of the study will be published in a research report and will be sent for possible publication in scientific journals.
- I am aware that the researcher may give the findings to another researcher to validate the interpretations.
- I understand that I may, at any stage, devoid of prejudice withdraw my consent and participation in the study.

Participant's name: _____ (Please print)

Participant's signature: _____ Date: _____

Researcher's name: _____ (Please print)

Researcher's signature: _____ Date: _____

APPENDIX 7

LETTER OF CONSENT: CLINICAL SUPERVISOR

PURPOSE OF THE STUDY

This study intends to provide a better understanding of the extent to which the undergraduate OT programme prepares students for clinical practice. The primary research question that will guide the study is "What are the OT students and their clinical supervisors perception of the whether the under graduate prepares OT students to cope with clinical practice.

PARTICIPANTS UNDERSTANDING

- I hereby confirm that I have been informed by the researchers and/ or research assistant about the nature, conduct, benefits and the risks of the study.
- I have also read and understood the information letter regarding the study.
- I understand that my participation is voluntary
- I understand that all data collected will be limited to use in research or other research related usage
- I am understand that I will not be identified by name in the final product
- I am aware that all records will be kept confidential in the secure possession of the researcher
- I am aware that the findings of the study will be published in a research report and will be sent for possible publication in scientific journals
- I am aware that the researcher may give the findings to another researcher to validate the interpretations
- I understand that I may, at any stage, devoid of prejudice withdraw my consent and participation in the study.

Participant's name: _____ (Please print)

Participant's signature: _____ Date: _____

Researcher's name: _____ (Please print)

Researcher's signature: _____ Date: _____

APPENDIX 8

SCHEDULE OF QUESTIONS FOR THE STUDENT FOCUS GROUP 1

A. Welcome

Thank you for agreeing to attend this focus group. My name is -----, for the purposes of ease of asking questions please wear your name label.

B. The topic

The topic is directed at exploring your experience as a student in the OT course. So, I would like you to share your experiences and knowledge with me.

C. Introduction

I will be asking a series of questions around the topic these questions are just guides. Please feel free to discuss events or incidents that you have experienced during your training. If the questions did not raise all your issues, there will be an opportunity at the end for you to bring up your point. Please relax and answer freely there is no right or wrong answers. This group is scheduled to be an hour and we will try to keep on time.

D. Ground rules

- Kindly switch off your cellphones or keep on silent as this interview is audio recorded and this may disturb the recording.
- While I have a few set questions I want to ask you, please note that this is an open discussion, feel free to add anything that you feel is appropriate for this discussion.
- Please try to ensure that only one person speaks at a time as we need to listen to one another and for the recording.
- A co-facilitator will be taking written notes, just in case there is some technical problems with our audio recording device.
- My role (group leader/moderator) is to guide the discussion and to ensure we are keeping within the limits of this discussion and to time limits.

E. Questions

1. Explain what you think are the essential skills for OT practice?
2. Describe your experience as an OT student during OT training?
3. In terms of your experience in clinical fieldwork placement,
 - a. Did you experience any positive or negative factors (Probe)?
4. If you had an opportunity to change anything about fieldwork what would you change?
5. How comfortable and competent would you feel about being on your own as a qualified clinician in 2013?
6. How confident do you feel about your ability to make clinical decision on your own?
7. How do you feel about assessing clients in the various fields of OT?
8. How confident do you feel about treating patients in the different fields of OT?
9. What are your feelings about theoretical content taught on the undergraduate programme (Probe: Can you identify any topics that are covered sufficiently and taught well? What topic or areas should receive more focus?)
10. Are there specific teaching methods that benefited from the most (rate first, second and third)?
11. What is your opinion of the assessment of your fieldwork component?

E. Summary

In summary, if you had a chance to change the programme, where would you change it and why? Speak to any potential changes to one of the four fields, i.e. physical, psych, paediatric and community. Why?

F. Verification of data

Summarise important points from the discussion using the co-facilitator's notes and ask "Is this an accurate representation of what happened"?

G. Final question

The purpose of this interview was to explore whether you feel prepared to cope with clinical practice. When you heard about this study you would have had an idea of the questions that would be asked. Is there anything you anticipated me asking that I did not? Please feel free to bring up any topic that might have been missed.

APPENDIX 9

SCHEDULE OF QUESTIONS FOR THE STUDENT FOCUS GROUP 2

A. Welcome

Thank you for agreeing to attend this focus group. My name is -----.

B. The topic

The topic is directed at exploring your experience as a student in the OT course at UKZN. So, I would like you to share your experiences of being a student with me.

C. Introduction

The procedure for the group will be as follows. I will be asking a series of questions around the topic but these questions are just guides. Please feel free to discuss events or incidents that have you have experienced during your training. If the questions did not raise all your issues, there will be an opportunity for you to bring them up at the end. Please relax and answer freely there is no right or wrong answers. For the purposes of anonymity, you have been requested to wear a label with an alphabet and you will be called by this for the duration of the group. This group is scheduled to be an hour and we will try to keep on time.

D. Ground rules

- Kindly switched off your cellphones or keep them on silent as this interview is audio recorded and it may disturb the recording.
- Please try to ensure that only one person speaks at a time as we need to listen to one another and for the recording.
- A co-facilitator will be taking written notes, just in case there is some technical problems with our audio recording device

My role is to guide the discussion and to ensure we are keeping within the limits of this discussion and to time.

E. Questions

1. In your opinion what are the essential skills for OT practice?

2. What has your experience been of the OT programme during your training
(Probes: negative or positive experiences)?
3. Do you think that clinical fieldwork placements are valuable and why?
(Probes: Did you have any positive or negative experiences? What do you feel makes a good supervisor? If you had an opportunity to change anything about fieldwork what would you change? * ask if necessary i.e if students have not brought it up)
4. How comfortable and competent would you feel about being on your own as a qualified clinician in 2013?
5. How do you feel about assessing clients in the various fields of OT?
6. How confident do you feel about treating patients in the different fields of OT
(Probe:Do you feel that you have the technical skills or practical knowledge to treat clients)?
7. What are your feelings about theoretical content taught on the undergraduate Programme (probes)?
(Probe: Can you identify any topics that are covered sufficiently? What topic or areas should receive more focus?)
8. Do you feel prepared for planning treatment programmes and sequencing of treatment session (Probe:What would assist with this)?
9. Are there specific teaching methods that benefited you the most? (rate first second and third)
10. One of the aims of UKZN is to produce students with good ethical practice. What is your opinion of this statement?
11. What is your opinion of the way you are assessed/marked on fieldwork blocks?

F. Summary

In summary, if you had a chance to change the programme, where would you change it and why? Speak to any potential changes to one of the four fields' i.e physical, psychiatry, pediatrics and community.

G. Verification of data :

Summaries important points from the discussion using the co-facilitator's notes and ask "Is this an accurate representation of what happened"?

H. Final question: The purpose of this interview was to explore whether you feel prepared to cope with clinical practice. When you heard about this study you would have had an idea of the questions that would be asked. Is there anything you anticipated me asking that I did not? Please free to bring up any topic that might have been missed

APPENDIX 10

SCHEDULE OF QUESTIONS FOR THE STUDENT SEMI- STRUCTURED INTERVIEWS

A. Questions

1) In your opinion what are the essential skills for OT practice?

1. What has your experience been of the OT programme during your training?

Probes: negative or positive experiences

2. Do you think that clinical fieldwork placements are valuable and why (Probe :Please give examples of positive experiences that contributed to your learning ? Did you have any negative experience)?

* What do you feel makes a good supervisor?

3. If you had an opportunity to change anything about fieldwork what would you change? * ask if necessary i.e if students have not brought it up

4. How comfortable and competent would you feel about being on your own as a qualified clinician in 2013?

5. How do you feel about assessing clients in the various fields of OT

6. How confident do you feel about treating patients in the different fields of OT

7. Do you feel that you have the technical skills or practical knowledge to treat clients

8. What are your feelings about theoretical content taught on the undergraduate programme (Probes Can you identify any topics that are covered sufficiently?

What topic or areas should receive more focus)?

9. Do you feel prepared for planning treatment programmes and sequencing of treatment sessions?

What would assist with this?

10. To what extent does the course enable you to be culturally relevant and fit in with the local health needs?

11. Do you have enough knowledge of local legislation that governs local health?

12. What has your experience been of the community programme?

13. To what extent does the training assist you with the ethical practice especially relations with other healthcare team members?
14. Do you feel you are able to evaluate the outcome of your treatment intervention?
15. Do you feel prepared to be able to manage your own department during community service i.e be effective with treatment, plan new services and control the budget for your department
16. What do you feel are your strengths and weakness currently?
17. Are there specific teaching methods that benefited you the most (rate first, second and third?)
18. One of the aims of UKZN is to produce students with good ethical practice. What is your opinion of this statement?
19. What is your opinion of the way you are assessed/marked on fieldwork blocks?
20. In summary, if you had a chance to change the programme, where would you change it and why? Speak to any potential changes to one of the four fields' i.e. physical psych, Paeds and community.

B. Summary question: Summaries important points from the discussion using the co-facilitator's notes and ask "Is this an accurate representation of what happened?"

C. Final question: The purpose of this interview was to explore whether you feel prepared to cope with clinical practice. Is there anything you anticipated me asking that I did not? Please free to bring up any topic that might have been missed

APPENDIX 11

SCHEDULE OF QUESTIONS FOR THE FOCUS GROUP WITH THE SUPERVISING CLINICIANS

A. Welcome

Thank you for agreeing to attend this focus group. My name is Deshni and I will be the facilitator, my co-facilitator is Vanessa.

B. My topic is directed at exploring your experience as supervisors on the OT course. So, I would like you to share your experiences with me.

C. Introduction

I will be asking a series of questions around the topic these questions are just guides. Please feel free to discuss events or incidents that have you have experienced during your training. If the questions did not raise all your issues, there will be an opportunity at the end for you to bring up your point. Please relax and answer freely there is no right or wrong answers. This group is scheduled to be an hour and we will try to keep on time.

D. Ground rules

- Kindly switched off your cellphones or keep on silent as this interview is audio recorded and this may disturb the recording.
- Please try to ensure that only one person speaks at a time as we need to listen to one another and for the recording.
- A co-facilitator will be taking written notes, just in case there is some technical problems with our audio recording device
- My role (group leader/moderator) is to guide the discussion and to ensure we are keeping within the limits of this discussion and to time limits. This group should be 45 minutes and I will try to keep on time.

E. Questions

As introduction, can you please tell me about what sites you have supervised students and for how long?

1. What do you think are the critical competencies that new graduates need to have (Probe: think back to your first job what did you need to be able to do)?
2. Can you share some of your experiences supervising fourth year students (Probes – specific highlights / difficulties experienced)?
3. Some people say that OT students have difficulty translating their theoretical knowledge into practice? What has your experience been (Probe: Give specific examples)
4. In your opinion, do you think that the students have sufficient knowledge of conditions and principles of treatment i.e. sufficient knowledge of undergraduate theoretical OT content(Probe: Do you think anything should change, be specific)?
5. From your experiences with the fourth year student, what's your opinion about the level of skill they demonstrate when assessing clients (Probe: do they interpret the data from the assessment accurately into functional implication and context)?
6. Do you feel that the students have the ability to planning treatment with clients by the end of the fourth year? (i.e show clinical reasoning around client and their problems)
7. Do the OT students demonstrate sufficient technical/practical skill when implementing treatment and handling clients (what are the difficulties or what do they do well)
8. What do you see as the specific strong skills of the fourth OT students (Probe: what do the students do well? In your opinion, what do you feel the students have difficulty with? Give examples)
9. During fieldwork, what type of strategies have you used to assist students in learning?
10. During evaluation of their treatment practice, to what extent are the students able to reflect on their performance?
11. It is the aim of UKZN to produce students with good ethical practice. What has your experience been with fourth year OT students?
12. How effective do you think is the way the students are assessed on fieldwork?
13. In your opinion, what is the student's ability to work as part of a team?

14.If you were in the position to make changes to the OT programme i.e the content and the way the course is taught. What changes would you make?

F. Summary question: Summaries important points from the discussion using the co-facilitator's notes and ask "Is this an accurate representation of what happened"?

G. Final question: The purpose of this interview was to explore whether you feel prepared to cope with clinical practice. When you heard about this study you would have had an idea of the questions that would be asked. Is there anything you anticipated me asking that I did not? Please free to bring up any topic that might have been missed

Thank you for your participation in this group, your input has been very valuable.

APPENDIX 12

CODE BOOK USED IN THE DATA ANALYSIS

A. Code 1

Label: Philosophy and purpose

Definition: This category pertains to the rationale for the content taught on the programme and the attitudes hoped to be conveyed in terms of occupational therapy practice and occupation.

Description: Information that reflects that philosophy and purpose of the programme. The educational objectives link to the philosophy and purpose of the programme. The purpose/philosophy of the programme should mention e.g. Implementing contextually and culturally relevant programmes.

B. Code 2

Label: Curriculum content

Definition: This category outlines OT specific knowledge and the sequence of the programme as well as how each aspect fits together.

Description: Information about OT specific knowledge includes e.g. person-occupation-environment relationship and its relationship to health e.g. knowledge of activities of daily living; therapeutic relationship e.g. working with multidisciplinary teams, being able to interact with clients; knowledge of the OT process.

C. Code 3

Label: Educational methods

Definition: This category indicated that consistent educational methods should be used and that the educational methods should link to the philosophy and purpose.

Description: Information outlining the educational methods used. A range of educational methods could be named e.g. didactic teaching, discussion etc. could be used. Information outlining the link between the assessment methods and the educational methods.

D. Code 4

Label: Assessment

Definition: This category outlines assessment process for fourth year OT students.

Description: Information about the summative examination process which would have a theory and fieldwork assessment and the methods used to assess the continuous assessment component which need s to have a fieldwork aspect.

E. Code 5

Label Fieldwork

Definition This describes the practical component of the curriculum i.e. fieldwork

Description Information about fieldwork experience, range of placement sites and diagnosis etc. Information about supervision on fieldwork and benefits of fieldwork

F. Code 6

Label	Educators and facilities
Definition	This described the perceptions about educators and the facilities at the educational institution
Description	Educators should be adequately qualified and facilitate learning and supervise on fieldwork. There needs to be adequate facilities to facilitate learning i.e. lecture venues, library, and transport to fieldwork venue.

G. Code 7

Label	Graduate Competencies
Definition	Knowledge, skill, and attitudes required to implement the OT process i.e assess, plan treatment, treat and evaluate effectiveness of treatment
Description	Information about the students' ability to assess, plan treatment, implement treatment and evaluate effectiveness of the treatment. Information about clinical skills such as in treatment therapeutic relation e.g. handling of client and any factor that influences the students' ability to carry out the OT process.

: