Interpretive description of recreational therapy within selected health care professions in South Africa

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Thesis submitted for the degree Doctor Philosophiae in Recreation Sciences at North-West University

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Graduation: October 2019

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Acknowledgements

The completion of this study would not have been possible without my support system and some special people in my life. I wish to express my sincere appreciation to the following people:

- To my promoter, colleague and friend, Dr. Theron Weilbach, words cannot express my appreciation towards you. I have learned so much from you during this process and I would not have been able to complete this study without your input. Thank you so much for the guidance, support and encouragement throughout this process.
- To my co-promoter, Prof. Linda Caldwell, what a privilege to have worked with you. Thank you for being part of this study, for all your time and input. I'm looking forward to working with you in the near future.
- Cornelia Schreck, thank you for taking the time to assist with my co-coding, it is much appreciated.
- Francois Watson, thank you for the assistance with the development of the interview schedule and research advice.
- The participants who took time off to take part in the interviews.
- Valerie, I asked you to assist with the audio transcriptions and you said yes without knowing what you were getting yourself into. Thank you so much for taking the time to assist me.
- My language editor, Helen, thank you for the time you put into this study.
- Natasha, thank you for being just a phone call away and for assisting with the technical editing of my study.
- Anneke Barnard, for assisting with the references.
- The late Prof. Charlé Meyer and Anél van Rooy, you are not with us anymore, but I would like to thank you for the role you played in my life and for exposing me to the world of recreational therapy. I missed you so much throughout this process.
- My parents, André and Merie, this would not have been possible if you had not taught me to dream big. Thanks for the support and endless opportunities in my life.
- My children, my dearest boy, Riaan and my unborn baby. Even though you made no direct contribution to the completion of this study, you motivated me by my being a parent, highlighting the importance of setting a good example. Believe in yourself, always do your best and finish what you have started.
- To my dearest husband, Pieter, no words can express my gratitude for your love and support. Thank you for your words of encouragement, for always listening and trying to help.

- Our heavenly Father for giving me the ability to complete the study and for being present throughout this process.

I wish I could write the name of every friend (this includes my colleagues) and family member who meant something to me during the production of this study. Thank you for blessing me with your love, support, friendship and encouragement.

Cindy Kriel

The author
February 2019

Abstract

Clients participating in recreational therapy/therapeutic recreation (RT/TR)-related programmes stand to gain physical, emotional/psychological and social benefits. However, RT/TR as a profession in South Africa (SA) ended when “Remedial gymnastics and recreational therapy” was removed from the register of the SA Medical and Dental Council (now Health Professions Council of SA) in June 1978, resulting in a loss of recognition of the practice of RT/TR. There are currently three professions registered with the HPCSA – biokinetics, physiotherapy and occupational therapy – with definitions in their scopes of practice with similarities to the international definition of RT/TR. Despite the potential of leisure to have a positive influence on the SA population, whether the health professions in SA, in the absence of formal RT/TR, have used opportunities to provide RT/TR-based services, was unclear. Therefore, a research question was posed: “How can RT/TR-related training and services and be interpreted and described within selected healthcare professions in SA?”

A qualitative research approach was used, with a qualitative interpretive descriptive design, using inductive and deductive content analysis, as well as thematic analysis of semi-structured telephonic interviews. The document: *Certification Standards: Information for New Applicants 2018*, published by the United States’ National Council for Therapeutic Recreation Certification, was subjected to inductive content analysis to develop a control sheet of concepts, which was then used to complete a deductive analysis. The yearbooks of seven SA universities, each presenting qualifications in all three professions of biokinetics, physiotherapy and occupational therapy, were analysed deductively. Thirty semi-structured telephonic interviews were conducted with biokineticists, physiotherapists and occupational therapists from across SA and data analysis resulted in the identification of three categories: 1) professional activities, 2) professional approach and 3) professional bodies, each with its own set of themes and sub-themes and one distinct standalone theme, RT/TR in SA.

The study concluded that biokineticists, physiotherapists and occupational therapists are not trained or educated to provide RT/TR-related programmes and that similarities in their training to that of RT/TR is mostly in terms of the foundational knowledge required to work within the healthcare sector. Occupational therapists receive more RT/TR-related training than biokineticists and physiotherapists, and they also provide programmes with the most similarity to those of RT/TR. Although biokineticists, physiotherapists and occupational therapists provide functional interventions, their programmes are not RT/TR-orientated. Therefore, a clear gap exists that could be filled by RT/TR in SA, especially in terms of leisure education and recreation participation.

The study not only contributes to the body of knowledge of RT/TR in SA, but provides information on gaps in the services of the currently available healthcare professions. Recommendations include short- and long-term operationalisation guidelines which can contribute to the development of RT/TR in the future. The study concludes with a proposed continuum that indicates which services are currently provided and where RT/TR can fit in within the current healthcare sector.

[Keywords: Biokinetics, occupational therapy, physiotherapy, profession, therapeutic recreation, therapeutic recreation specialist**]**

Opsomming

Kliënte wat aan rekreasieterapie/terapeutiese rekreasie (RT/TR)-verwante programme deelneem kan fisiese, emosionele/psigologiese en sosiale voordele verkry. RT/TR as professie in Suid-Afrika (SA) het egter geëindig toe "Remediërende gimnastiek en rekreasieterapie" in Junie 1978 uit die register van die SA Geneeskundige en Tandheelkundige Raad (nou die Raad vir Gesondheidsberoepe van SA) verwyder is en het gevolglik tot die verlies aan erkenning van die praktyk van RT/TR gelei. Daar is tans drie beroepe by die HPCSA geregistreer – biokinetika, fisioterapie en arbeidsterapie – met definisies wat ooreenkomste met die internasionale definisie van RT/TR toon. Ten spyte van die potensiaal van vryetydsbesteding om 'n positiewe invloed op die SA-bevolking te hê, was dit onduidelik of die gesondheidsberoepe in SA die geleentheid gebruik het om RT/TR-gebaseerde dienste te lewer, in die afwesigheid van formele RT/TR. Daarom is die navorsingsvraag gestel: "Hoe kan RT/TR-verwante dienste en opleiding binne geselekteerde gesondheidsberoepe in SA geïnterpreteer en beskryf word?"

'n Kwalitatiewe navorsingsbenadering, met ŉ beskrywende kwalitatiewe interpreterende ontwerp is gebruik. Die ontwerp het bestaande uit induktiewe en deduktiewe inhoudsanalise, sowel as die tematiese analise van semi-gestruktureerde telefoniese onderhoud. Die dokument: *“Certification Standards: Information for New Applicants 2018*”, gepubliseer deur die Verenigde State se “National Council for Therapeutic Recreation Certification”, is aan induktiewe inhoudsanalise onderwerp om 'n kontrolelys van konsepte te ontwikkel, wat gebruik is om 'n deduktiewe analise te voltooi. Die jaarboeke van sewe SA universiteite, wat kwalifikasies in al drie professies, naamlik biokinetika, fisioterapie en arbeidsterapie aanbied, is deduktief ontleed. Dertig semi-gestruktureerde telefoniese onderhoude is met biokinetici, fisioterapeute en arbeidsterapeute van regoor Suid-Afrika gevoer en data-ontleding het gelei tot die identifisering van drie kategorieë: 1) professionele aktiwiteite, 2) professionele benadering en 3) professionele liggame, elk met sy eie temas en subtemas, en een duidelike, alleenstaande tema, RT/TR in SA.

Die studie het bevind dat biokinetici, fisioterapeute en arbeidsterapeute nie opgelei en onderrig word om RT/TR-verwante programme te voorsien nie en dat ooreenkomste in hul opleiding ten opsigte van RT/TR meestal in terme van die grondslagkennis is wat benodig word om binne die gesondheidsorgsektor te werk. Arbeidsterapeute ontvang meer RT/TR-verwante opleiding as biokinetici en fisioterapeute en bied ook programme wat ooreenstem met dié van RT/TR. Alhoewel biokinetici, fisioterapeute en arbeidsterapeute funksionele intervensies aanbied, is hulle programme nie RT/TR-georiënteerd nie. Daarom bestaan daar 'n duidelike gaping wat deur RT/TR in SA gevul kan word, veral ten opsigte van vryetydsopvoeding en rekreasie-deelname.

Hierdie studie dra nie net by tot die kennis rakende RT/TR in SA nie, maar voorsien inligting wat verband hou met die gapings in die dienste van die gesondheidsberoepe wat tans beskikbaar is. Aanbevelings sluit kort- en langtermyn operasionaliseringsriglyne in wat kan bydra tot die ontwikkeling van RT/TR in die toekoms. Die studie sluit met 'n voorgestelde kontinuum af, wat aandui watter dienste huidiglik voorsien word en waar RT/TR binne die huidige gesondheidsberoepe kan pas.

[Sleutelwoorde: Arbeidsterapie, biokinetika, fisioterapie, professie, terapeutiese rekreasie, terapeutiese rekreasiespesialis**]**

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List of abbreviations

The following table lists the abbreviations and acronyms used throughout the thesis. The definition and page on which they are first used are also given.

APIE	Assessment, planning, implementation and evaluation……..	9
BASA	Biokinetics Association of South Africa……..	4
CTRA	Canadian Therapeutic Recreation Association……	3
CTRS	Certified Therapeutic Recreation Specialist……..	37
DRTA	Diversional Therapy Association of Australia……	4
DSRSA	Department of Sport and Recreation South Africa……..	24
HPCSA	Health Professions Council of South Africa……..	4
HREC	Health Research Ethics Committee……	47
LARASA	Leisure and Recreation Association of South Africa……	27
LAM	Leisure Ability Model……...	6
MCF	Mosaic Certification Framework……..	20
NCTRC	National Council for Therapeutic Recreation Certification……...	3
OTASA	Occupational Therapy Association of South Africa……..	4
PTSD	Post-traumatic stress disorder……..…..	94
RECSA	Sport and Recreation South Africa……..	27
RT	Recreational therapy……..….	1
RTS	Recreational therapy specialist……	1
SA	South Africa/South African……	1
SAQA	South African Qualification Authority……..	38
SASP	South African Society of Physiotherapy……	4
TR	Therapeutic recreation ……	1
TRS	Therapeutic recreation specialist……	1
US/USA	United States/United States of America……	2
WHO	World Health Organization……	16

Chapter 1

Problem statement

1.1 INTRODUCTION

In recreational therapy (RT), also known as therapeutic recreation (TR), specialists aim to enhance the lives of individuals with illness or disability through leisure activities, which will subsequently lead to the restoration, remediation and rehabilitation of functioning, to improve individual health and well-being (ATRA, 2018; Robertson & Long, 2007:4; Stumbo & Peterson, 2004:18). It is important to note that the definition of the word “rehabilitation” differs from country to country (Blouin & Echeverri, 2010:2) and that the terms treatment, therapy, intervention and rehabilitation are often used interchangeably, all of which imply a “planned process to bring positive change in behaviour” (Stumbo & Peterson, 2004:41).

According to Robertson and Long (2007:5), two main characteristics distinguish RT/TR from other therapies. The first refers to the intervention or services being purposeful; this indicates that the RT specialist (RTS) or TR specialist (TRS) directs the programme towards achieving specific outcomes (Kunstler & Daly, 2010:7). The second and most important characteristic is that RT/TR takes place within the leisure context, and is based on individual choice and freedom (Robertson & Long, 2007:7). Kunstler and Daly (2010:5) mention that the quality of an RT/TR programme improves as clients participate in intervention programmes and simultaneously receive the opportunity to experience leisure.

Despite the conflicting views regarding the naming of the services (recreational therapy vs. therapeutic recreation) and the essence of how these services should be delivered (Carbonneau *et al.*, 2015:7; Goncalves, 2012:52; Peterson, 1989:26; Skalko & West, 2010:203; Sylvester *et al.*, 2001:19), this study takes a neutral stance on these issues. Currently, no clear context for the delivery of RT/TR services in South Africa (SA) exists and a neutral approach is important, as any bias from the researcher may negatively impact research design, data collection and the interpretation of data. Therefore, both the terms RT and TR are used throughout this study as either can be applied in the SA context.

1.2 PROBLEM STATEMENT

RT/TR aims to increase independence in all life activities by minimising restrictions and limitations individuals experience during the execution of these activities, and to improve their overall health,

well-being and quality of life (ATRA, 2018; Stumbo & Peterson, 2004:18). The benefits associated with participation in RT/TR programmes can be classified into three categories, although they are overlapping and interconnected: physical, emotional/psychological and social (Stumbo & Peterson, 2004:6). Studies have found that RT/TR programmes, specifically gardening, held physical benefits for older adults and that RT/TR programmes could be used in treating passivity behaviours within this population (Austin *et al.*, 2006:54; Buettner *et al.*, 2006:45). In addition, participants mentioned that they could sleep more easily after participating in physically demanding activities (Dustin *et al.*, 2011:335). Other researchers found that youth at risk were able to follow directions when listening to instructions, after participating in RT/TR programmes (Tiger, 2016:289) and that participating in physical activity programmes led to an increase in physical activity after the programme had concluded (DeVries, 2016:322; Martin *et al.*, 2014:223). The emotional and psychological benefits of RT/TR programmes included feelings of gaining a sense of normality among participants, as well as the ability to express and regulate emotions, and the acquisition of healthy coping skills (Dustin *et al.*, 2011:335; Tiger, 2016:289). Due to the social nature of RT/TR programmes, participation in group activities resulted in participants establishing and maintaining healthy relationships and creating positive role models (Dustin *et al.*, 2011:334; Martin *et al.*, 2014:211; Tiger, 2016:289). Programmes also supported the development of communication, teamwork, mutual respect, social connections and support groups (DeVries, 2016:323; Martin *et al.*, 2014:224; Woodford *et al.*, 2017:264). Woodford *et al.* (2017:264) also concluded that RT/TR programmes assisted in the process of community reintegration, with participants more willing to leave rehabilitation centres. Additionally, Mobily and MacNeil (2002:1) stated that RT/TR is used to treat secondary symptoms and conditions associated with primary diagnosis, such as in cancer patients who feel self-conscious about hair loss, as well as to address impairments associated with chronic conditions.

Regardless of the potential benefits associated with RT/TR, as a profession RT/TR in SA ended in June 1978, when “Remedial gymnastics and recreational therapy” was removed from the register of the SA Medical and Dental Council (SAMDC) (Strydom, 2005a:119). At that time, there were six registered members of the profession and only three were living in SA. Given that some of those registered members had retired and others had passed away, and that no institution or person in SA could provide training within this field of expertise (Strydom, 2016), the decision to remove the profession from the SAMDC register had to be taken. Since then, RT/TR in SA has failed to evolve or establish itself as a professional field, leaving this profession currently unrecognised in the country (Young, 2015:35).

Conversely, RT/TR in the United States of America (USA) has grown remarkably over the past two decades, with more than 27,000 RTSs/TRSs employed (Kunstler & Daly, 2010; NCTRC, 2014:130) and where it fulfils an important role in promoting the health and quality of life of various population groups (Stumbo & Peterson, 2004:2). The USA was the first country to implement

RT/RT, but this was not without conflict between different professional organisations that had different approaches to the delivery of RT/TR services, resulting in a fragmented and blurred profession there (Dieser, 2013:309). Approaches towards RT/TR service delivery in the USA include the therapy/medical approach and the leisure/social approach (Carbonneau *et al.*, 2015:7; Dieser, 2013:308; Goncalves, 2012:52; Mobily *et al.*, 2015:47; Peterson, 1989:26; Skalko & West, 2010:203).

The therapy approach refers to not merely leisure, but treatment, with the treatment similar to that of a medical doctor or an occupational therapist (Dieser, 2013:308; Goncalves, 2012:52). According to Mobily *et al.* (2015:48), proponents of the medical model, which is aligned with the RT perspective, see the client as a person who "owns" defects, which should then be "cured" or "fixed" by using recreational activities (Carbonneau *et al.*, 2015:7). When conceptualising the use of the therapy/medical model, one of the main causes of the conflict between RT and TR within the USA is the element of freedom of choice, which is one of the requirements to experience leisure (Mobily, 2015:58). In TR, which has its foundation within the leisure/social approach, leisure is theorised as enjoyment and that the therapy and improvement or change that follow are by-products of the enjoyment (Dieser, 2013:308; Goncalves, 2012:52). A TRS who follows this approach does not deny or try to "fix" the disability, but rather sees the disability as impairment and prefers to value the person's well-being and potential (Carbonneau *et al.*, 2015:7; Mobily, 2015:48). The TRS would consider the environment, social institutions, attitudes and narratives of the person, to address the difficulties the person faces (Mobily *et al.*, 2015:48). These different approaches also lead to another point of contention that relates to terminology. Within the national, regional and state organisations in the USA, not everyone uses the same title for RT/TR services (Compton, 1989:488). Some prefer to refer to TR and others RT, due to the different approaches to these services.

Although RT/TR has developed into a healthcare profession in the USA, it is also important to discuss the development of RT in other countries; examining only the approach/model used in the USA might limit the insight that could be gained from exploring how RT/TR has successfully been implemented in other countries. According to Dieser (2013:307), Canada was the first country to develop an RT/TR organisation outside the USA, through the Canadian Therapeutic Recreation Association (CTRA) and in partnership with its US counterpart, the National Council for Therapeutic Recreation Certification (NCTRC). This was not without problems in some provinces. The steps towards professionalisation within the Canadian provinces and organisations have been debated for years, with little movement to date (Hebblethwaite, 2015:20).

Dieser (2002:364) argued that the US credentialing model could not be replicated in all countries, because a model should "be based on the attitudes and beliefs of a country's own culture,

knowledge about their own cultures, and articulate multicultural skills within their own culture". As an example, RT/TR in Japan functions within restricted limits and focuses on delivering RT/TR services for the elderly (Nishino *et al.*, 2007:120), while the ideals developed for RT/TR in the USA do not always have the same influence on Japanese people, due to the difference in cultures and the different perceptions of recreation (Nishino *et al.*, 2007:130). Australians developed RT/TR with their own culture in mind, naming it "diversional therapy" rather than RT/TR because of the occupational context in non-medical settings (Pegg & Darcy, 2007:133). Although Australians refer to RT/TR as diversional therapy, the application is similar to RT/TR in the USA. The Diversional Therapy Association of Australia (DRTA) was established in 1976 and has gained recognition within various healthcare settings (Stumbo *et al.*, 2004:86), and diversional therapy practitioners "work with people of all ages and abilities to design and facilitate leisure and recreation programmes" (DRTA, 2018b). In Finland, RT/TR is mostly based on facilitating groups, but is also available for individual clients (Aho *et al.*, 2007:142). RTSs/TRSs in Finland often work in collaboration with occupational therapists and operate in a variety of settings such as hospitals, old age homes, health centres and prisons (Aho *et al.*, 2007:142).

Based on the previously discussed literature, it appears that RT/TR differs from country to country and does not necessarily fall within the scope of healthcare; therefore, it is important that if RT/TR is to be delivered, it should be tailored to meet the needs of the specific country and to prevent the duplication of services and scopes of practice of other health professions. From an SA perspective, there are currently three professions registered with the Health Professions Council of South Africa (HPCSA) that offer RT/TR-related services. These are biokinetics, physiotherapy and occupational therapy; their definitions of practice show some similarities to the broad international concept of RT/TR, as previously discussed. According to the SA governing body for biokinetics, the Biokinetics Association of South Africa (BASA), the profession is "concerned with health promotion, the maintenance of physical abilities and final-phase rehabilitation, by means of scientifically-based physical activity programme prescription" (BASA, 2018). Similarly, the Occupational Therapy Association of South Africa (OTASA) helps individuals to become independent and assists clients with rehabilitation and the improvement of motor function, sensory function and interpersonal skills (OTASA, 2016). Lastly, physiotherapists registered with the South African Society of Physiotherapy (SASP) work with adults and children to empower them to become as independent as possible in their lives, in the workplace, at home and during recreational activities (SASP, 2018). They are also concerned with the community and promoting health for all age groups (HPSCA, 2017b; SASP, 2018). The scope of these professions within the SA health sector currently overlaps with the international concept of RT/TR.

As RT/TR in SA no longer formally exists, almost four decades after "Remedial gymnastics and recreational therapy" was removed from the HPCSA (previously SAMDC) register, it is important to explore whether other health professions in SA have used the opportunity to provide RT/TR-

based services, as the use of leisure as a form of treatment might currently be underutilised in SA. Based on the discussion so far, the research question of this study is: “How can RT/TR-related training and services be interpreted and described within selected health care professions in SA?” The study’s aim is to provide information on the nature of RT/TR within the academic training of selected healthcare professions in SA, if RT/TR services are provided in practice by selected healthcare professions.

Benefits from the study are threefold. Firstly, this study provides an indication of the nature of RT/TR services in SA. Secondly, the study provides much needed information on the status of RT/TR services within SA by providing insight into whether they are provided by the existing different healthcare professionals. Thirdly, based on the results, recommendations for guidelines for the operationalisation of RT/TR in SA are made. Fourthly, based on the findings, a continuum indicates which services are currently provided and where RT/TR can possibly fit within the current healthcare sector. Lastly, the results inform of gaps in existing RT/TR services in SA, which can, in the long term, be used to advocate for the development of RT/TR as a unique profession, specifically tailored to the SA context.

1.3 OBJECTIVES

The objectives of this study were:

Objective 1	To interpret and describe RT/TR training within the curricula of biokinetics, physiotherapy and occupational therapy.
Objective 2	To interpret and describe RT/TR within the scope of practice of biokinetics, physiotherapy and occupational therapy.

1.4 CENTRAL THEORETICAL STATEMENT AND CONCEPTUAL FRAMEWORK

This study was based on a qualitative research approach, with a qualitative interpretive descriptive design (Sandelowski, 2000:339). Two separate data collection methods were used: qualitative content analysis and semi-structured telephonic interviews, each with its own data analysis methods, content analysis and thematic analysis (sections 3.2 and 3.3).

This study was based on the following central theoretical statement:

Through a qualitative interpretive descriptive research design, information about RT/TR within the scope of practice and training of selected health care professions is provided. As a theoretical departure point, the study makes use of the Leisure Ability Model (LAM) (see section 2.3.1.1) to describe the context of TR/RT, while Neulinger's leisure states of mind model (see section 2.3) will form the basis for differentiating between leisure, as well as RT/TR, and other forms of activity interventions. In addition the conceptual framework of either certification/credentialing or accreditation (see section 2.4.7.3) of RT/TR professionals, institutions or organisations is also used.

1.5 STRUCTURE OF THE THESIS

This thesis is structured according to a traditional format. The references are set out according to the guidelines of North-West University (NWU)'s 2012 reference guide for quoting sources: *NWU Referencing Guide* (NWU, 2012).

Chapter 1 provided background information and an overview of the current research, and also identified shortcomings in the research field.

Chapter 2 is a review of the relevant literature, titled: The potential for recreational therapy in South Africa

Chapter 3 provides the research methodology and processes followed to fulfil the objectives of the study.

Chapter 4 provides the results of the analysis conducted to fulfil the first objective, followed by a discussion of the results in relation to the objective.

Chapter 5 provides the results of the analysis conducted to fulfil the second objective, followed by a discussion of the results in relation to the objective.

Chapter 6 summarises the entire study, and draws conclusions based on the answers to the research questions. Limitations and recommendations for future studies are discussed.

Chapter 2

Literature review: The potential for recreational therapy in South Africa

2.1 INTRODUCTION

As discussed in chapter 1, the purpose of this study was to determine how recreational therapy (RT) and therapeutic recreation (TR) can be interpreted and described within selected healthcare professions in South Africa (SA). This chapter reviews literature on the themes relevant to the study, beginning with an introduction to leisure and followed by an introduction to recreation and RT/TR and its benefits. In addition, a brief history of RT/TR is provided, to highlight the different approaches to service delivery. This is followed by a discussion of the implementation of RT/TR in other countries, a brief overview of recreation in SA and a discussion of SA's unique healthcare situation. The major health professions relating to RT/TR in SA – physiotherapy, occupational therapy and biokinetics – are then discussed, and the chapter concludes with a summary.

2.2 INTRODUCTION TO LEISURE

The word "leisure" provokes a variety of thoughts and perspectives, and means different things to different people (Edginton *et al.*, 2004:6; Kelly, 2012:18; Leitner & Leitner, 2012:3; Parr & Lashua, 2004:1). Leisure has particular characteristics and is discussed here accordingly. Leisure takes place when a person participates in a form of activity or activities (Kelly, 2012:20; Parr & Lashua, 2004:2). An activity itself, however, does not qualify as "leisure" as, for example, one person may cook for the purpose of eating, and the next person may cook for pleasure and hence experience leisure. However, moving away from attempting to define leisure by specific activities and rather focusing on categorising the nature of activities, Dumazedier (as quoted by Kelly, 2012:21) argues that leisure is the use of activities free from obligation, and for self-fulfilment or self-expression.

A second characteristic of leisure is defined by the time in which an individual's leisure experience takes place; according to Leitner and Leitner (2012:4), as well as Russell (2017:16) and Kelly (2012:18), leisure takes place during one's free time. Free time is described as time free from work and work-related activities, and excludes the time a person spends on life-maintenance activities such as sleeping, eating or personal care (Leitner & Leitner, 2012:4; McLean *et al.*, 2008:35-36; Russell, 2017:16).

Thirdly, leisure provides an individual with a sense of perceived freedom; when an individual feels free to participate in any activity that they find interesting, they gain the opportunity to be their true self (Bannon & Bannon, 2017:22; Caldwell, 2005:18; Edginton *et al.*, 2004:8; Kelly, 2012:20; Mobily, 2015:58; Robertson & Long, 2007:5; Russell, 2017:22; Stumbo & Peterson, 2004:19). Caldwell (2005:18) describes leisure as one of the "free" components of a person's life, because a person *chooses* to participate in an activity, which consequently leads to the fourth characteristic of leisure – intrinsic motivation.

When a person takes part in an activity that is interesting and initiated by their own feelings of enjoyment, satisfaction and fulfilment, or when the activity has intrinsic meaning, they are intrinsically motivated (Bannon & Bannon, 2017:23; Caldwell, 2005:18; Edginton *et al*., 2004:8; Robertson & Long, 2007:5; Russell, 2017:23). Edginton *et al.* (2004:8) as well as Stumbo and Peterson (2004:21) state that a person can only feel engaged during an activity if they perceive themselves to be competent to do so, the fifth characteristic of leisure.

The diverse characteristics of leisure make it difficult to clearly define. However, for the purpose of this study, leisure is defined as "that portion of an individual's time that is not directly devoted to work or work-connected responsibilities or to other forms of maintenance or self-care. Leisure implies freedom and choice and is customarily used in a variety of ways, including to meet one's personal needs for reflection, self-enrichment, relaxation, pleasure, and affiliation. Although it usually involves some form of participation in a voluntarily chosen activity, it may also be regarded as a holistic state of being or even a spiritual experience" (McLean *et al.*, 2008:39). Leisure is therapeutic in nature, and has been utilised as a means of preventing, coping with and transcending negative life events (Caldwell, 2005:8). Although individuals can choose to partake in negative leisure activities (Leitner & Leitner, 2012:13), leisure is more commonly associated with health, wellness and quality of life, as well as recreation, which is also a vital part of the delivery of TR/RT services.

2.3 INTRODUCTION TO RECREATION AND RECREATIONAL THERAPY

Although the terms leisure and recreation are often used as synonyms, recreation is distinctly different, as it is concerned with the restoration of persons to a state of wholeness, and presupposes an activity or event (e.g. work, or some form of loss) that created a need for restoration (Kelly 2012:28). Recreation is described as a process that restores and recreates an individual and takes place during an individual's leisure time (Edginton *et al.,* 2004:9,11; McLean *et al.*, 2008:45; Rossman & Schlatter, 2008:10). According to McLean *et al.* (2008:45), recreation is regarded as an individual's emotional state resulting from participation.

Whether recreation activities can have a negative effect on people is the subject of some debate. For example, Rossman and Schlatter (2008:11) explained that recreation is associated with morality and consequently cannot have any negative effect on the participant. They stated, “Therefore the notion of ‘recreational drug abuse’ is not possible.” (Rossman & Schlatter, 2008:11). Due to its restorative nature, recreation is thought to have therapeutic properties, as it promotes health, growth and development. Although recreation refers to the activity, the outcome or change to a person as a result of participation or experience are more important than the activity itself (Austin, 2009:223; Rossman & Schlatter, 2008:4). What differentiates the RT/TR profession is that RT/TR professionals focus their efforts on individuals who have a disability, illness and/or other life condition who often need assistance in gaining the therapeutic value of recreation or leisure participation. Thus, many believe that the term RT/TR should be reserved for the clinical application of leisure and recreation (Austin, 2009:175), as RT/TR programmes are developed specifically to have a therapeutic outcome.

Life events such as loss may generate a need for restoration and RT/TR services. Loss encompasses a variety of events that individuals may experience, for example, loss of function, loss of a loved one or the loss of social roles (Janke & Jones, 2016:293). According to Janke and Jones (2016:293), loss can be unexpected (e.g. loss due to an accident), but it can also be anticipated (such as the loss of a loved one who was sick for a while), and relates to the concept of rehabilitation. RT/TR specialists assist individuals who require specialised care due to some form of loss (e.g. illness, disability or social condition) through the enhancement of their *leisure time*, which will subsequently lead to the restoration, remediation and rehabilitation of functioning, to improve overall individual health, well-being and quality of life (ATRA, 2018; Robertson & Long, 2007:4; Stumbo & Peterson, 2004:18; Sylvester *et al.*, 2001:17).

The aim of RT/TR activities is to increase independence in all life activities by minimising the restrictions and limitations individuals experience during leisure and recreation activities (ATRA, 2018; Stumbo & Peterson, 2004:18). According to Dieser (2013:308), RT/TR is based on four elements. Firstly, RT/TR follows a systematic process consisting of assessment, planning, implementation and evaluation (APIE) (Long, 2007:80). Secondly, RT/TR is based on health and well-being. Thirdly, RT/TR is based on leisure and recreational theory and modalities (e.g. the flow theory and leisure education). Lastly, RT/TR is based on the population it serves, which includes persons with mental and physical disabilities (Dieser, 2013:308).

According to Robertson and Long (2007:5), two main characteristics distinguish RT/TR from other therapies. The first refers to the intervention or services being purposeful. Without an explanation of this statement the difference is unclear, as all types of therapy or treatment should be purposeful. In RT/TR, an RT specialist (RTS) or TR specialist (TRS) directs the programme with the aim of achieving specific outcomes (Kunstler & Daly, 2010:7). These outcomes are more than

just the creation of an outcome-driven intervention (Robertson & Long, 2007:6), as this alone cannot be classified as RT/TR. The RT/TR process should essentially be followed to ensure that outcomes are reached. Figure 2.1 provides an illustration of client outcomes.

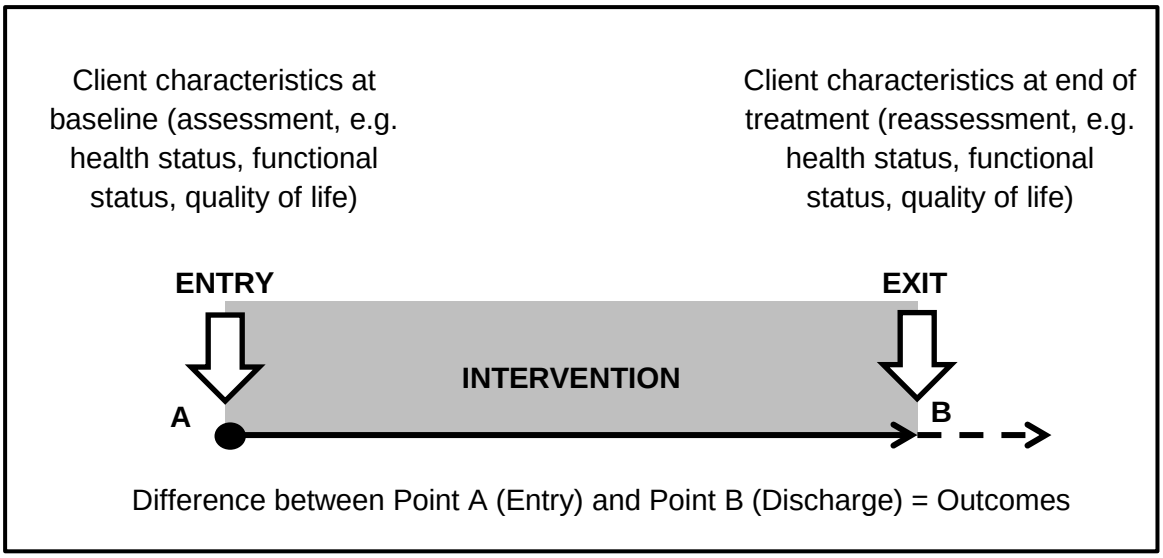

Figure 2.1 Illustration of client outcomes (Stumbo, 2003:5).

Stumbo (2003:4) defines outcomes as the "difference(s) noted in the client from entry into compared to exit from clinical services"; therefore, therapists anticipate that such differences are positive and result from their treatment plans (Stumbo, 2011:7). Hence, it is critical that the outcomes are measurable, to determine the difference from entry to exit (Stumbo, 2011:9; Stumbo, 2003:87). In addition, a clear distinction should be made between primary and secondary outcomes and benefits (Macera *et al.*, 2003:124). For example, an RTS/TRS can focus on improving a client's communication skills while they participate in an outdoor rock-climbing programme, and although the primary outcome is an improvement in communication skills, secondary outcomes include the enhancement of the client's physical activity from hiking up the mountain to get to the rock-climbing site, and an increase in their upper body strength and agility from the rock climbing itself. This distinction is essential; the client may not necessarily realise that they are participating in a physical activity programme, or that they had the opportunity to experience leisure when stopping and admiring the landscape with significant others (e.g. friends or family).

The second and most important characteristic that distinguishes RT/TR from other therapies is the concept of *leisure*. Removing *leisure* from the definition of RT/TR makes it indistinguishable from other therapies that also use activity-based therapy, such as occupational therapy (Sylvester *et al.*, 2001:25). The following seven essential justifications for RT/TR are quoted from Sylvester *et al.* (2001:26) and are rooted in leisure theory:

"1. Leisure affords opportunity for activity, which has been credited as an effective means for meeting the adaptive needs of human beings;
2. Leisure contributes to a greater sense of well-being;
3. The opportunity for leisure is necessary for meeting the creative-expressive needs of clients;
4. Leisure is a flexible medium for helping persons with illnesses and disabilities to reintegrate into community life;
5. The social institution of leisure is an avenue for addressing structural deficiencies that affect the health and well-being of individuals;
6. Leisure is a significant contributor to quality of life, which is being recognised as the overarching goal of rehabilitation;
7. All people, including persons receiving healthcare, have the right to leisure with the purpose of health, well-being and quality of life."

Thus it can be seen that leisure, along with the restorative nature of recreation, are essential components of RT/TR. Leisure provides individuals with freedom from obligations, to explore and achieve something, and offers them freedom to participate in freely chosen activities (Raymore, 2002:39; Rossman & Schlatter, 2008:6,7), while recreation provides a context for achieving positive, restorative outcomes.

Neulinger, (as cited by Bannon & Bannon, 2017:22), created the leisure state of mind model in 1981 in which characteristics of leisure are elucidated. According to Neulinger, the model categorises the type of leisure experienced by individuals based on the amount of freedom of choice (Bannon & Bannon, 2017:22). These types of leisure are referred to as "states of minds" and are then classified according to the amount of perceived freedom as well as degree of intrinsic reward. Intrinsic reward is defined as "doing something for its own reason" and extrinsic meaning as "doing something for another reason, such as for status or a reward" (Bannon & Bannon, 2017:22). The different states of mind are classified in Figure 2.2.

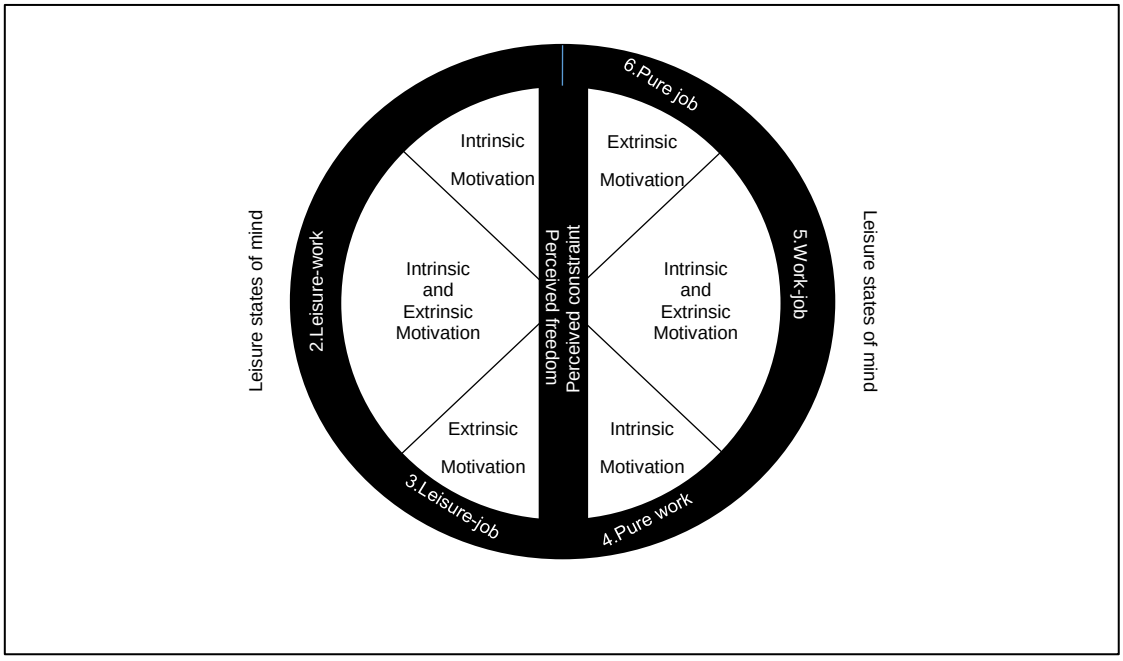

Figure 2.2 Neulinger's leisure states of mind (Neulinger, as cited by Bannon & Bannon, 2017:22).

The six states of minds are described by Bannon and Bannon (2017:24) as:

1. State of mind 1: The first state of mind is referred to as "pure leisure" and refers to a situation where an individual takes part in a leisure activity for its own sake. Therefore the individual is free from external control and participation provides intrinsic reward.
2. State of mind 2: This is known as "work-leisure" and is both intrinsically and extrinsically rewarding. For example, consider a person who refurbishes furniture as a hobby. Although the person gets the opportunity to participate in their leisure activity, the furniture will also look good in their home.
3. State of mind 3: A person in the "leisure-job" state of mind is taking part without being forced but is motivated by external rewards, such if exercising with the aim of losing weight.
4. State of mind 4: According to Neulinger (as stated by Bannon & Bannon, 2017:24), the first three stages are related to leisure, however the last three relate to non-leisure. An example of an individual in "pure work" is someone undertaking an assignment, even if they are doing so due to interest. However, the individual would not have chosen to do the assignment if it did not form part of the class.
5. State of mind 5: These are "work-job" activities, and are "engaged under constraints and having both intrinsic and extrinsic rewards" (Bannon & Bannon, 2017:24). For example, if an individual is going to work under constraint, the job may be meaningful but the individual's main reasons for doing it is to earn a salary.

6. State of mind 6: “Pure-job” refers to any situation where a person only engages for the extrinsic reward, such as a payoff, and it stands in total opposition to pure leisure.

As stated previously, leisure forms a vital part of RT/TR service delivery, providing individuals with the freedom to participate in leisure and recreational activities of their choice. Therefore RT/TR can be classified as treatment/programmes/activities during which clients/patients experience states of minds 1–3, “pure leisure, leisure-work and leisure-job”.

Other terms often confused with RT/TR are special recreation and inclusive recreation. The term special recreation first emerged during the 1980s and is described by Austin *et al.* (2010:165) as the provision of recreational activities specifically for persons with disabilities. The use of the term inclusive recreation is more recent and describes the process in which all participants, regardless of age, race, gender, religious belief or ability, are included in recreational activities to promote meaningful engagement in leisure activities (Austin *et al.*, 2008:165; Dieser, 2020:25; Hironaka-Jeteau, 2009:4). The aim of inclusive recreation is to provide individuals with a sense of community, thus to enable them to see differences between them as assets and not liabilities (Hironaka-Jeteau, 2009:5). However, it can be argued that the opportunity to create communities is removed from the experience when persons with disabilities take part in special recreational activities with persons with similar disabilities. This does not mean that there is no space for special recreational opportunities, as these give participants the opportunity to share problems and exchange ideas (Austin 2009:327; O’Connell & Cuthbertson, 2008:133). These experiences also contribute to the instillation of hope, by seeing others who overcome problems and increase in self-confidence through participation (Austin 2009:32). Although special and inclusive recreation can also be outcome based, programmes are not necessarily created to attain outcomes for a specific individual, and are therefore not considered as RT/TR. Moreover an RTS/TRS will follows a systematic process consisting of assessment, planning, implementation and evaluation (the APIE process) to ensure that outcomes are reached and that the restrictions and limitations individuals experience during leisure and recreation activities are minimised (ATRA, 2018; Stumbo & Peterson, 2004:18).

2.3.1 History of RT/TR

It is important to understand the history of RT/TR before a clearer picture can be formed. The history provides an opportunity to learn by understanding past successes and failures, and may provide information to those wanting to implement RT/TR on how to avoid making the same mistakes (Dieser, 2007:14; Dieser, 2013:310).

RT/TR became part of the healthcare field in the United States of America (USA) in the 1900s, after pioneers such as Florence Nightingale, followed by Red Cross recreational workers, provided recreational services to soldiers in military hospitals (Dieser, 2007:16). These

recreational services aimed to provide soldiers with the opportunity for diversion from their traumatic experiences and to foster relationships by participating in activity areas such as music, dance, gardening, community trips, drama, games and social recreation (Brasile, 1998:14; Dieser, 2007:17). These services were referred to as hospital recreation; recreation was seen as "an end unto itself" (Dieser, 2007:21) and can be viewed as the starting point for community recreation, or the leisure/social service approach.

The leisure/social service approach developed in settlement houses during the 1800s, to help people with disabilities negotiate the difficulties they encountered due to socially constructed environments that denied them access (Dieser, 2020:21; Longmore, 2003:20). Jane Addams, Ellen Gates Starr, and Mary Keyer opened a community centre called the Hull-House in September 1889. This centre provided residents and persons with special needs with recreation and leisure programmes with the aim of improving health and well-being. The leisure/social service approach aims to address and overcome the issues people with disabilities face related to the built environment, attitudes, social institutions and narratives of other people (Mobily, 2015:48).

During the development of the leisure/social approach, a rival organisation developed that believed in a therapeutic/medical approach to the delivery of RT/TR services (Sylvester, 1990:3). This approach to treatment was more like that of a medical doctor or an occupational therapist (Dieser, 2013:308; Goncalves, 2012:52; Sylvester, 1990:4), who might prescribe treatment for a patient to learn to live with or minimise their problems (Triebel, as stated by Carter *et al.*, 1985:60). According to Mobily *et al.* (2015:48), as well as Carbonneau *et al.* (2015:7), the medical model sees the client as a person who "owns" defects, which could then be "cured" or "fixed" using recreational activities.

Today within the RT/TR profession in the USA, consensus has still not been reached on the definition of RT/TR, due to the different approaches in the delivery of RT/TR services. The debate is whether the field should be practised within therapy and medical services, as a form of treatment to enhance the total functioning of the individual, or whether RT/TR should be provided as a form of leisure and social service, to provide persons with special needs the opportunity to experience leisure and recreation (Carbonneau *et al.*, 2015:7; Goncalves, 2012:52; Peterson, 1989:26; Skalko & West, 2010:203; Sylvester, 1990:5; Sylvester *et al.*, 2001:19). Dieser (2007:14) uses the metaphor of the novel Frankenstein to describe the history of RT/TR. In the novel, Victor Frankenstein is the doctor who "was attempting to understand the secrets of heaven and earth so that he could prevent death and the physical and emotional pain associated with it". Frankenstein truly wanted to help people, but his dreams resulted in the destruction of his relationships and consequently his life. Dieser (2007:14) draws a comparison between this novel and the history of the RT/TR profession in the USA, as RT/TR leaders "caused destructive

consequences from genuine intentions". Although research supports the use of TR and the benefits it holds for the clients served, conflict has influenced the legitimacy and the credibility of the profession (Dieser, 2007:29).

2.3.1.1 Conflicts and disagreements

Studying the literature about the use of one of the approaches over the other, it is clear that a gap exists. Researchers (Carbonneau *et al.*, 2015; Mobily *et al.*, 2015) who support the use of the leisure/social approach have criticised the use of the therapy/medical approach, but the criticism seems to be one-sided, as the supporters of the therapy/medical approach are not as outspoken about why they believe in their approach and not the other. A criticism of the approach is that there is an absence of freedom of choice in terms of participation; freedom of choice is considered an important requirement in the experience of leisure (Caldwell, 2005:18; Edginton *et al.*, 2004:8; Iso-Ahola, 1980:9; Mobily, 2015:58; Stumbo & Peterson, 2004:19). A second argument against the use of this approach is that RT/TR services may become a duplication of other health professions, as the *leisure* component (the one element that distinguishes RT/TR from other therapies) is removed (Dieser, 2013:309; Sylvester *et al.*, 2001:25). An RTS/TRS who follows the leisure/social approach does not deny or try to "fix" a disability, but rather sees the disability as impairment and prefers to value the person's well-being and potential (Carbonneau *et al.*, 2015:7; Mobily, 2015:48). Following the leisure/social model, the RTS/TRS can address the environment, social institutions, attitudes and narratives of a person, addressing the difficulties that person faces (Mobily, 2015:48).

Followers of the medical/therapy model could argue that participants have the choice to participate, similar to treatment by a doctor – a doctor cannot force patients to be treated, and the same principle applies to potential RT/TR participants, who cannot be forced to participate in activities against their will. Additionally, if not initially present, the experience of leisure may possibly develop during treatment. Results from a study conducted by Lee and Datillo (1994:203) support this, as participants initially felt hesitant towards participation in activities and reported unpleasant experiences but, due to the transitory and changing nature of leisure, they ultimately identified these experiences as leisure. Although Lee and Datillo's study (1994) included outdoor adventure and sporting activities, one can ask if this might not also be true for clients of RT/TR services. Even if clients do not want to participate at a given time, they may experience leisure and develop through activities. In an attempt to resolve this conflict about service delivery, four positions have been suggested: 1) a recreation service approach where recreational programmes are provided for people with special needs; 2) a therapy approach, with the aim of improving illness or disability; 3) an umbrella or combined approach, combining the first two positions; and 4) a leisure ability approach, where programmes are delivered according to a continuum consisting of three phases: therapy or treatment, leisure education and recreation participation

(Dieser, 2007:26). According to this approach, RT/TR can be implemented in three phases: functional intervention, leisure education and recreation participation (Austin, 2009:169; Stumbo & Peterson, 2004:38; Williams, 2007:68). Functional intervention activities relate to rehabilitation practices and include the skills needed to actively participate in leisure activities and a leisure lifestyle. These skills include physical abilities, cognitive abilities, emotional or affective functioning and social abilities (Austin, 2009:169; Stumbo & Peterson, 2004:42-43). The goal of the leisure education phase is to assist clients to understand the importance of leisure and teach them how to participate fully (Williams, 2007:68). A person who wishes to participate in leisure-related activities needs the relevant skills, attitudes and knowledge and clients gain these through leisure counselling (Austin, 2009:169; Stumbo & Peterson, 2004:48). A study by Janssen (2004) is one example of how RTSs/TRSs use leisure education in interventions. Janssen (2004:285) presented a 6-week leisure education programme with the aim of improving the quality of life of older adults. The programme assisted older adults to understand leisure and its contribution to a healthy lifestyle, to identify leisure resources available to them and to apply self-determination in choosing leisure activities. During the recreation participation phase, clients are provided with the opportunity to practise their newly attained skills and take part in fun, enjoyable and self-expressive types of recreational activity (Stumbo & Peterson, 2004:70; Williams, 2007:68). Williams (2007:68) states that clients can take part in one or all three of the programme phases, and an RTS/TRS will choose one of the four phases based on the needs of the client.

From these arguments, the different views towards RT/TR service delivery may also be explained according to the strengths and deficits approaches. According to Heyne and Anderson (2012:109), a practitioner who follows the deficits approach will form a list of problems to be addressed within an intervention, with the aim of fixing the identified problems. This approach correlates with the therapy/medical approach to RT/TR service delivery. The emphasis of the intervention will lie in what is wrong, missing or abnormal, which is based on the medical model (Anderson & Heyne, 2012:109). In contrast with the deficits approach, the strengths approach assists individuals to reach their personal goals and aspirations by understanding environmental factors and resources (Heyne & Anderson, 2012:112). The individual's weaknesses are not ignored, but they receive just enough attention to not interfere with the treatment goals (Heyne & Anderson, 2012:112). The emphasis of intervention programmes rests on individual strengths, capabilities, resources and aspirations, and the "individual is seen as a potential waiting to be developed" (Heyne & Anderson, 2012:111).

Whether a strengths or deficits approach is followed may also be influenced by the way disability is defined. The World Health Organization (WHO) defines disability as "any loss or abnormality of bodily function, including physiological, psychological, or anatomical" (WHO, 1980). This view of disability is related to the view of the therapy/medical model that Mobily *et al.* (2015:49) argued wants to change a "broken" person into a "normate", based on the cultural belief of "being normal".

In contrast, the social model of disability defines disability as “the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical and social barriers” (Albrecht, as stated in Swann-Guerrero & Rauworth, 2009:212). The different approaches also lead to another point of contention, which relates to terminology. Within national, regional and state organisations in the USA, titles used for RT/TR services differ (Compton, 1989:488). Some refer to TR and others RT, due to the different approaches. Followers of the therapy/medical approach refer to RT, in the belief that recreation and leisure services should be prescribed for medical purposes (Dieser, 2007:21, Mobily, 2015:57). Austin (2002a:277) commented that this approach to recreational and leisure pursuits is “aimed towards patient recovery rather than as an end in itself”. The American Therapeutic Recreation Association (2011) avoids the debate by stating that TR is the field and RT is the practice. However, the term TR is favoured by followers of the leisure/social approach, as they consider that leisure is enjoyment and that the therapy and improvement or change that follow are a by-product of the enjoyment (Dieser, 2013:308; Goncalves, 2012:52). Dieser (2013:309) affirms that an TRS who follows this approach to service delivery relies on the leisure theory as well as leisure programming theory. There seems to be an effort from RTSs/TRSs to move away from the use of the word “therapeutic” or “therapy”, as this places focus on the participants’ incapacities (Carbonneau *et al.*, 2015:11) rather than their abilities, and does not leave room to describe their need to experience leisure (Mobily *et al.*, 2015:52).

With this information about the two approaches in mind, the question arises as to whether the debate is necessary. Both approaches to service delivery focus on the use of leisure to improve quality of life; without it, nothing distinguishes RT/TR from any other type of treatment or therapy. One can also question the likelihood of the efforts of an RTS or TRS resulting in a person experiencing leisure, since one person’s perception of leisure may be different to the next person’s (Edginton *et al*., 2004:6; Kelly, 2012:18; Parr & Lashua, 2004:1). Therefore, an RTS, TRS or individual running an RT/TR programme should focus their attention on generating the conditions in which a person experiences leisure (Edginton *et al.*, 2004:9). Ultimately, assisting participants in the process of overcoming barriers and constraints to achieve the freedom to experience leisure should be the primary priority of an RTS or TRS, regardless of the approach they follow.

2.3.2 Benefits of RT/TR

Despite the conflicts and disagreements in the USA over what RT/TR is and is not, one of the greatest benefits of those discussions was the research that showed that RT/TR programmes positively influenced the health and well-being of clients served (Dieser, 2007:28). According to Parr *et al.* (2005:360), as well as Stumbo and Peterson (2010:5), the benefits of leisure, recreation

and, consequently, RT/TR, can be categorised into three types, emotional/psychological, social and physical, all of which relate to quality of life and well-being. These are discussed accordingly.

2.3.2.1 Emotional and psychological benefits

According to Stumbo and Peterson (2004:8), "emotional well-being is an important component of overall quality of life," and is influenced by an individual's mental health. Keyes (2002:208) describes the state of good mental health as flourishing, and that someone in this state of mind is filled with positive emotions and functions well socially, as well as psychologically. However, someone with poor mental health is described as languishing, and is filled with feelings of emptiness and stagnation (Keyes, 2002:210). Research has confirmed that poor mental health leads to increased disability and impairment (Keyes, 2002:210; Keyes, 2007:95), which, if not addressed, may lead to mood disorders such as depression and bipolar disorder (Zastrow & Kirst-Ashman, 2010:342); these findings highlight the importance of developing and maintaining emotional well-being and mental health.

Stumbo and Peterson (2010:8) state that leisure and, subsequently, RT/TR provide both experiences and context to improve emotional and psychological well-being, and that it is not unusual for individuals to participate in leisure for the psychological benefits more than for any other type of benefit. Participants of RT/TR often feel excluded from society; they may have suffered stereotyping, as people tend to perceive individual differences in others rather than similarities and strengths (Devine, 2007:52). Research conducted by Hutchinson *et al.* (2008:20) concluded that leisure outcomes from RT/TR programmes can be used as a resource in times of stress as RT/TR provides participants with coping skills, findings that are echoed by Tiger (2016:289). Other positive outcomes for participants of RT/TR programmes include the development of a sense of normality, less agitation and a perception of an improved ability to express and regulate their emotions (Buettner *et al.*, 2006:45; Dustin *et al.*, 2011:335; Tiger, 2016:289).

2.3.2.2 Social benefits

Kassin *et al.* (2011:3;597) stress the importance of social relationships and social well-being by noting that humans are social beings who actively seek social interaction and who cannot live in isolation from others. The acquisition of social skills, or social skills training, is classified as a key component of RT/TR programmes (Austin (2004) as affirmed by Rothwell *et al.* (2006:244), as RT/TR does not just create opportunities to learn new skills, but also to practise these skills (McAvoy *et al.*, 2006:193). As mentioned previously, some people believe that they are excluded from society; research has found that RT/TR programmes assist participants to gain the necessary skills to reintegrate into their communities (Rothwell *et al.*, 2006:250; Woodford *et al.*, 2017:264). Dustin *et al.* (2011:334), Martin *et al.* (2014:211) and Tiger (2016:289) found that, due

to the social nature of RT/TR programmes, participation in group activities during RT/TR programmes assisted individuals in establishing and maintaining healthy relationships and creating positive role models. Programmes also supported the development of communication, teamwork, mutual respect, social connections and support groups (DeVries, 2016:323; Martin *et al.*, 2014:224; McAvoy *et al.*, 2006:193; Woodford *et al.*, 2017:264).

2.3.2.3 Physical benefits

Regular exercise is well known to provide various physiological benefits that contribute to primary and secondary prevention of chronic diseases (Austin *et al.*, 2006:54; Macera *et al.*, 2003:124; Warburton *et al.*, 2006:807). Despite awareness of the health benefits, people may not participate in regular exercise due to a lack of motivation, lack of enjoyment from participation or a feeling that it is not for them (Henderson & Ainsworth, 2003:314; Whitehead & Biddle, 2008:251). Wilson *et al.* (2004:26) found that participants' perceived safety also affects participation patterns, which is influenced by factors such as neighbourhood crime levels and access to recreational facilities.

It is therefore essential that RT/TR programmes are delivered in a safe environment and, more importantly, are based on individual interests, to ensure that participants enjoy the activities while also improving their physical health. In a study conducted by Buettner *et al.* (2006:45), RT/TR programmes were effective in treating apathy in older adults. The authors suggested therefore that RT/TR programmes are provided before strong medications are prescribed. In a study by Austin *et al.* (2006:54), gardening had positive effects on the health of seniors, suggesting that the provision of programmes according to their individual interests may enhance participation and consequently their physical health.

2.4 REPLICATING RECREATIONAL THERAPY/THERAPEUTIC RECREATION IN OTHER COUNTRIES

Conflict between RT and TR started when the two began to professionalise in the USA. The conflict was based generally on differences between their philosophical foundations (Austin & Crawford, 2015:35), and it is important that this is considered when replicating these services in other countries. Therefore, identifying where, other than the USA, RT/TR has been implemented is beneficial, as well as identifying how services are being applied and how difficulties in application are being addressed. Dieser (2002:364) argued that the US credentialing model could not be replicated in all countries because it should be "based on the attitudes and beliefs of a country's own culture, knowledge about their own cultures, and articulate multicultural skills within their own culture". This may include the way in which disability is defined within a country and the manner in which services are delivered. Blouin and Echeverri (2010:2) also noted that the definition of the word "rehabilitation" differs from country to country and that the terms treatment,

therapy, intervention and rehabilitation are often used interchangeably, implying a “planned process to bring positive change in behaviour” (Stumbo & Peterson, 2004:41).

Dieser (2005:73 & 2013:316) suggested that other countries follow the Mosaic Certification Framework (MCF) to ensure that RT/TR develops within a country’s own cultural reference. The MCF was created according to the prevailing political ideology in Canada and permits different provinces to share a credentialing framework in universities, while allowing various RT/TR organisations to create competencies and core standards of practice, based on cultural diversity within provinces (Dieser, 2013:316).

2.4.1 RT/TR in Canada

According to Dieser (2013:307) and Howard *et al.* (2007:238), Canada was the first country after the USA to develop an RT/TR organisation. The Canadian Therapeutic Recreation Association (CTRA) was established in 1996 in partnership with the National Council for Therapeutic Recreation Certification (NCTRC) with the intention of representing the profession at a national level (Sullivan, 2015:27). Although the CTRA is established, the steps towards professionalisation within the Canadian provinces and organisations were debated for a number of years with little progress (Hebblethwaite, 2015:20). The ongoing conflict was about whether the CTRA should follow the MCF, as discussed previously, align with the NCTRC or create its own short-term credentialing framework (Howard *et al.*, 2007:238). In a contentious move, the CTRA in 2009 chose to align with the NCTRC and rejected the MCF, as its implementation was not practically feasible in all provinces (Dieser, 2013:316). One of the issues was that Canada has two official languages, English and French. The second was that the manner in which social problems are addressed in Canada differs from the USA (Carbonneau *et al.*, 2015:6; Hebblethwaite, 2015:19; Howard *et al.*, 2007:237). Health and human service legislation within the 10 provinces of Canada is not aligned and each province forms their own legislation (Howard *et al.*, 2007:237), whereas the Americans with Disabilities Act can override all state legislation in the USA (Howard *et al.*, 2007:237). An example of the legislation concern can be found in the Quebec legislation, which suggests that persons with loss of autonomy are kept at home, the consequence being that people living in isolation are not reintegrated into the community (Carbonneau *et al.*, 2015:13). Although there are problems in the delivery of RT/TR services, various RT/TR interventions have been successfully implemented, specifically relating to leisure education (Carbonneau *et al.*, 2011; Desrosiers *et al.*, 2007).

2.4.2 RT/TR in Japan

RT/TR in Japan functions within restricted limits and focuses on delivering RT/TR services for the elderly (Nishino *et al.*, 2007:120). A large percentage (20%) of the Japanese population consists of individuals aged 65 years and older (Cabinet Office Japan, 2006:1). This has resulted in a large

number of elderly people who require long-term care and the Japanese government responded to this problem by amending the Elderly Welfare Law in 2005 to include the provision of preventative care, allowing the elderly to take part in social and cultural activities to assure a healthy and full life (Nishino *et al.*, 2007:120). Not only did the number of long-term care facilities increase by the creation of this law, the elderly's choice of services also increased. Included in these are services offered by *fukushi* recreational workers, the Japanese equivalent of RTSs/TRSs. Because of Japan's focus on its ageing society, *fukushi* recreational workers are mostly found in hospitals, nursing homes and rehabilitation settings (Nishino *et al.*, 2007:121). Although the National Recreation Association of Japan was established in 1947 and the position of *fukushi* recreational workers was inaugurated in 1993, recognition of the importance of trained recreational professionals and the benefits of them is limited in Japanese society, resulting in unqualified *fukushi* recreational workers being appointed (Nishino *et al.*, 2007:127).

2.4.3 RT/TR in Australia

The origin of RT/TR in Australia dates back to the early 1940s when nurses started to use different forms of recreational activity in the rehabilitation of injured servicemen (DRTA 2018a; Howard *et al.*, 2007:244). The Australian Red Cross recognised gaps in healthcare services and began to provide basic training courses in crafts, which were later adapted to include diversional activities (DRTA, 2018a). Seven students who completed the Red Cross training formed the Diversional Therapy Association of Australia in 1976 (DRTA, 2018a) and decided to use the term diversional therapy rather than RT/TR, because of the occupational context in non-medical settings. Diversional therapy has since become an area of study at various universities across Australia (Pegg & Darcy, 2007:133, 134).

The provision of diversional therapy activities has been affected by Australia's expectation that healthcare services are driven by evidence-based practice, which subsequently led to a number of reforms, mostly initiated at federal level (Howard *et al.*, 2007:244; Pegg & Darcy, 2007:135). As a consequence, various health and community service sectors were influenced, as each of these reform agendas brought their own changes (Pegg & Lord, 2008:181). According to Pegg and Darcy (2007:135) "they have brought forth a greater consideration of quality of life issues with a recognition for, perhaps the first time, that there needs to be proper alignment of legislation, policies, and funding at national and state levels to successfully implement the proposed reforms across the nation." An example is Australia's National Mental Health Plan, which was updated and now requires attention to the quality of rehabilitation services, social reintegration and the availability of inclusive TR-based programmes (Howard *et al.*, 2007:245; Pegg & Darcy, 2007:136). Although the changes have been positive and have created a need for diversional therapy, various leisure providers have recognised the link between active leisure engagement and health (Pegg & Darcy, 2007:133). According to Darcy (as cited in Pegg & Darcy, 2007:137),

there were hundreds of complaints against leisure and recreation practitioners, as well as diversional therapists, about discrimination and inappropriate facilities and services. Pegg and Darcy (2007:137) attribute this unfortunate situation to practitioners who did not necessarily place the dignity of the individuals they served at the forefront of their services. As a consequence, diversional therapists were required to be more accountable for the programmes they offer and the manner in which they are delivered (Howard *et al.*, 2007:245). This caused great unhappiness and numerous diversional therapists expressed that they were "uncomfortable with the notion of being required to undertake any form of critical evaluation to demonstrate client outcomes, or even to justify service offerings" (Howard *et al.*, 2007:245). Even with the establishment of the professional body, recognised university degrees and federal support, the reality is that RT/TR in Australia remains threatened, being perceived as time filling and diversional (Howard *et al.*, 2007:246; Pegg & Lord, 2008:184).

2.4.4 RT/TR in Finland

Owing to the special connection the Finnish people have with crafts, RTSs/TRSs working in Finland are referred to as craft and recreational workers (Aho *et al.*, 2007:144) and mostly focus on facilitating groups, although services for individual clients are also available (Aho *et al.*, 2007:142). The Finnish education system is funded and controlled by the state, therefore separate credentialing is not necessary (all qualifications comply with regulations), although there is need for a professional body to develop the field of RT/TR (Aho *et al.*, 2007:143). According to Aho *et al.* (2007:142), only one university, the HAMK University of Applied Sciences in Hameenlinna, offers a degree in craft and recreation. Although their graduates do not struggle to find jobs, they are not always well paid (Aho *et al.*, 2007:145). Craft and recreational workers work in collaboration with occupational therapists and operate in a variety of settings such as hospitals, old age homes, health centres, prisons, substance abuse units and services for people with disabilities (Aho *et al.*, 2007:142).

2.4.5 RT/TR in South Korea

According to Howard *et al.* (2007:242), RT/TR in Korea is still in its infancy, with no academic training available. This has not slowed the development of the profession, with the Korean Therapeutic Recreation Association (KTRA) established in 1993 with the aim of introducing the concept to the public and into various healthcare settings (Howard *et al.*, 2007:240). A credentialing council similar to the NCTRC in the USA was established in 2001 to develop certification standards and a certification exam. Although there are certified RTS/TRS in South Korea, they are not employed full-time, and as a result Howard *et al.* (2007:243) stated that credentialing might have been a hasty decision.

2.4.6 Critical reflection and summary of the current global state of RT/TR

The practice of RT/TR as a profession appears only to be known in North America (the USA and Canada) and it is struggling to come into its own as a profession in other countries. Although credentialing systems and professional bodies are in place in some countries, implementation seems problematic. However, much of the information used to compile this section is outdated and whether the situation has changed in the last decade is unclear; some of the research articles were published in 2007 (i.e. those about Japan, Finland and South Korea). Other countries (e.g. Iran and New Zealand) have professional bodies, details of which were not reviewed due to a lack of available literature.

Dieser's (2002:364) view that credentialing should be based on a country's own cultural reference is of paramount importance; the USA's credentialing model resulted in various problems when attempts were made to implement it in other countries. Two authors have made reference to RT/TR in SA. Dieser (2013:316) proposed the use of the MCF; however, Young (2015:42) proposed two options. She first proposed that RT/TR not be implemented as a standalone profession but rather be aligned with one of the other professions included in this study. She also suggested that general recreation practitioners should be trained to provide inclusive services, as a second option. A more detailed analysis based on available research and literature about RT/TR in SA is needed, to make recommendations about the feasibility of RT/TR as a standalone profession or one that might be integrated or aligned with existing professions in SA. Furthermore, before deciding on a credentialing system for use in SA, professionals and academics first need to identify current gaps in RT/TR services in the country, which will enable discussion of the philosophical foundation for such services, as well as the viable steps required for credentialing professionals.

2.4.7 An overview of recreation and healthcare systems in South Africa

Although the purpose of this study is to describe and interpret TR/RT within selected health care professions in SA, and **not** to determine whether there is a possibility of establishing TR/RT as a profession in SA, it is important to give an overview of the current state of recreation and health in SA and provide a critical analysis of gaps in TR/RT-type services.

2.4.7.1 Recreation in South Africa

As described in chapter 1, TR/RT as a registered profession in SA ended in June 1978 (Strydom, 2005a:119). Since then, the country has undergone significant political and social change. Currently, public recreation in SA is managed on three levels (Figure 2.3).

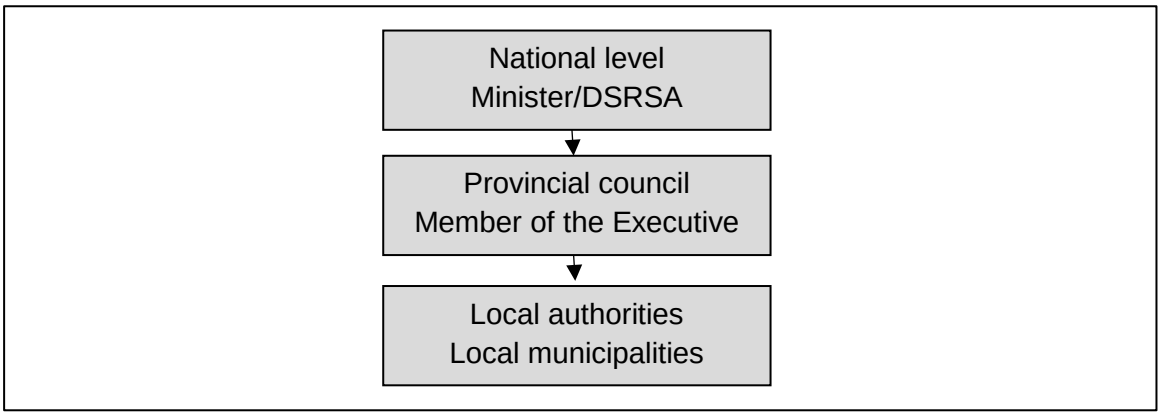

Figure 2.3 Illustration of recreation in South Africa (adapted from Mogajane, 2011:53). *DSRSA,* Department of Sport and Recreation South-Africa, South Africa.

At the national level, recreation is planned and provided for by the Department of Sport and Recreation South-Africa (DSRSA) under the guidance of the Minister of Sport and Recreation (Mogajane, 2011:53). According to Mogajane (2011:53), each of the nine provinces of SA has a Member of the Executive Council who is responsible for the delivery of recreation at provincial level and the development of provincial recreation policies, while local authorities, through local municipalities, are responsible for implementation of the policies. Services should be in line with DSRSA's vision of creating "an active and winning nation" (South Africa, 2018), as well as the individual goals set by the national department. According to DSRSA's strategic plan (2015–2020) the department has six strategic goals, which are presented in Table 2.1 (DSRSA, 2015–2020:59).

Table 2.1 Strategic alignment per strategic goal[a]

Strategic objective	Strategic goal
Strategic goal 1: Citizens access sport and recreation activities	• Active recreation programmes implemented. • Sport participation opportunities provided to communities. • School sport programmes supported. • Provincial sport development programmes supported. • Access to sport and recreation facilities optimised. • Technical and management support provided.
Strategic goal 2: Sport and recreation sector adequately transformed	• Active recreation programmes implemented. • Sport participation opportunities provided to communities. • School sport programmes supported. • Provincial sport development programmes supported. • Transformation programmes implemented and monitored. • Access to sport and recreation facilities optimised. • Technical and management support provided.
Strategic goal 3:	• Scientific support services coordinated for athletes.

Athletes achieve international success	• Approved major events supported. • Sport tourism to South Africa promoted. • Achievements in the sport and recreation sector acknowledged.
Strategic goal 4: Enabling mechanisms to support sport and recreation	• Provincial sport development programmes supported. • Good governance supported. • Sport and recreation bodies supported. • Strategic bilateral relations managed and strengthened. • Participation in strategic multilateral relations managed. • Access to sport and recreation facilities optimised. • Technical and management support provided.
Strategic goal 5: Sport used as a tool to support South African government	• Strategic leadership, management and support services provided. • Government responsibility towards anti-doping supported.
Strategic goal 6: An efficient and effective organisation	• Strategic leadership, management and support services provided.

[a]DSRSA (2015–2020:59).

Although the government has a department devoted to recreation, recreational activities are not necessarily provided; as indicated in Table 2.1, the emphasis of DSRSA is mainly on sport and active recreation rather than other activities included in recreation such as hobbies (Young, 2015:37). DSRSA has admitted that sport has been endorsed at the expense of recreation in the past (DSRSA, 2015-2020:42), and changes were made to include recreation in the strategic objectives of the National Plan for Sport and Recreation of 2012 (DSRSA, 2012:28). However, whether any changes at provincial and municipal level have been implemented within the profession is unclear. Although DSRSA strives to improve access to recreational facilities and open spaces, an article published in a national South African newspaper stated that a proposal to build low-cost housing in the parks of certain cities in North West Province was approved (Cilliers, 2018:1), highlighting a disparity between national, provincial and local policies, and that the delivery of recreation is not a priority at provincial or local level. In this regard, Mogajane *et al.* (2018:119) stated that recreation programmes are lacking due to gaps and deficits in policy, and challenges related to funding, human resources and facilities.

Another problematic aspect is that recreation cannot be seen as a profession in SA. The foundation to understanding what professions are and how they operate is to define a profession (Saks, 2012:1). The literature identifies four attributes that classify a profession; these include the existence of a unique body of knowledge, professional preparation, professional credentialing and a code of ethics (Lord, 2007:32; McLean & Yoder, 2005:180). These four attributes are derived

from US and Canadian literature; no such literature on professionalism in the SA context is available. When one considers the attributes that need to be present for an occupation to be classified as a profession in the USA and Canada, recreation within an SA context does not comply with the requirements. Sylvester (1990:2) explains that a body of knowledge provides individuals with an idea on what to do, how to do it and essentially why they do it and is created over time through research and publications (Carter & Van Andel, 2011:40). Although sufficient research evidence of the positive impact of leisure and recreation within the SA context exists (e.g. Bloemhoff (2016); Greffrath *et al.* (2013); Gresse (2013); Louw *et al.* (2012); Tesnear & Meyer (2008); Verster (2004); Weilbach *et al.* (2011), the body of knowledge is still limited compared with international contexts.

In terms of professional preparation, the number of tertiary education institutions providing leisure and recreational studies has decreased since 2017, leaving only three universities in SA that offer a degree in recreation science. North-West University offers 3-year Bachelor of Health Science degrees in 1) recreation science and psychology; 2) recreation science and tourism management; and 3) sport and recreation administration (NWU, 2018a). After completion of the undergraduate degree, students can apply for an honours degree in recreation science. University of Venda offers a Bachelor of Science degree in recreation and leisure studies, a 4-year undergraduate degree that includes honours (Univen, 2018). The third is University of the Western Cape, which presents a generic undergraduate degree in sport, recreation and exercise science, following which students can complete a generic honours degree in sport, recreation and exercise science (UWC, 2013).

Although two universities provide education in recreation science and leisure, whether this is sufficient is open to question, considering that untrained personnel lacking the skills and knowledge to provide recreation programmes are employed at recreation centres (Mogajane *et al.*, 2018; Peters *et al.*, 2012). Peters *et al.* (2012) found that recreational workers in Johannesburg were not trained for their designated jobs as recreational specialists, nor did they fully understand the meaning of the term recreation (Peters *et al.*, 2012:153). These findings were echoed in another study completed by Mogajane *et al.*, (2012:245) who concluded that the majority of individuals working within the field of recreation and leisure were not qualified and lacked the expertise to work within the sector. The need exists for trained and experienced recreation workers within provincial and municipal structures, and the fact that the number of institutions that provide recreation education and training decreased since 2017 is worrying.

According to McLean and Yoder (2005:182), the third listed attribute of a profession, professional credentialing, is closely related to professional preparation. Professional organisations improve the standards of practice within the profession (Lord, 2007:35). Furthermore, Lord (2007:35) states that credentialing ensures that an individual has met the criteria of education, experience

and continuing professional development. An independent organisation, the Leisure and Recreation Association of South Africa (LARASA), was established in 2010, and communicated the inequities within the industry to government structures, after which the strategic objectives of the National Plan for Sport and Recreation were changed, in 2012. According to its mission statement, LARASA "serves as a single unified association creating opportunities through leisure and recreation service delivery to build a better life for all South Africans in line with the Millennium Development Goals" (LARASA, 2018). Although the establishment of LARASA had some influence on government's focus, membership is not compulsory, does not require certification and has no statutory authority. DSRSA was of the opinion that recreation associations that were developed earlier, such as Sport and Recreation South Africa (RECSA), lacked organisation and unity in delivering recreational services; consequently, DSRSA in 2015 reported being in the process of developing a governance body/model for recreation (DSRSA, 2015–2020:42). However, it was unclear if any progress had been made at the point of undertaking this study.

The final attribute of a profession is that it has a code of ethics, which includes the moral philosophy of a professional group and obligations to clients (Lord, 2007:35). This is also lacking in SA in the field of RT/TR. In spite of the public need for recreational activities, knowledge about the definition of the term *recreation* and the potential benefits associated with it is missing (Goslin & Kluka, 2015:33; Peters *et al.*, 2012:153). If recreation itself is struggling to grow and establish in SA, the question arises as to whether growth is possible for RT/TR.

2.4.7.2 South Africa's unique healthcare situation

If the development of RT/TR in a country is dependent on the local culture and beliefs, then the development of RT/TR in SA poses unique challenges. The country is composed of various ethnic and cultural groups, and is a young democracy only 24 years post-apartheid, which left a legacy of underdevelopment, inequality and poverty (Brynard, 2010:114; Hermien, 2003:3). According to a community survey in 2016 (Stats SA, 2016), there were 51.6 million people living in SA, with only 83.5% of households having access to piped water and 79.2% of people living in formal housing, leaving millions without water or adequate housing. The government is, therefore, understandably under severe pressure to supply basic services to all citizens and the delivery of recreational services is not a key focus in the allocation of resources (Campbell, 2014; Etheridge, 2018; Pitt, 2018).

The SA government provides public healthcare services to all citizens through primary healthcare clinics, and district, regional, tertiary and central (academic) hospitals (Gauteng Province, 2017). These healthcare services are under severe pressure as they deliver services varying from basic primary to specialised healthcare to 80% of the population (SouthAfrica.info, 2012). Public hospitals should be able to provide all required services, but waiting times may be long, facilities

and equipment old, appointments rushed and staff unable to provide quality care, (Young, 2016:3). The other 20% of the population chooses to pay to belong to private medical schemes (SouthAfrica.info, 2012).

2.4.7.3 Critical reflection on the possible pathways for RT/TR in South Africa

One of the unique challenges RT/TR in SA will face relates to the population it will serve, as well as the sector (private/public) in which the services will be provided. Although all people have the right to recreation and leisure services, as embedded in the constitution (Constitution of South Africa, 1996), certain considerations are necessary when delivering services to the SA public. One of these is increasing levels of unemployment, which means resources and opportunities are distributed unevenly and many individuals cannot afford basic services (Hermien, 2003:5; Van der Berg, 2010:3). As a result, additional treatments such as RT/TR are unlikely to serve the whole SA population, as these will not be included as public health services and not all South Africans will be able to pay for such services.

In conclusion, if RT/TR has a future as a profession in SA, professionals and academics need to decide which approach to follow, not only deciding between the medical/therapy approach and the leisure/social approach, but also between the options available for certification/credentialing and accreditation. It is therefore important to distinguish between these terms. According to Adams *et al.* (2004:27), as well as Priest and Gass (2005:6), certification is the process by which an individual is evaluated in terms of minimum standards of competency and is deemed competent to practice a profession. In general, certification requires that a person holds some form of professional credential, such as a university degree, experience within the field of practice or an exam pass, followed by professional maintenance, such as continuing education (Adams *et al.*, 2004:27). Credentialing is a term closely related to certification, which according to Altschuld and Engle (2015:6) “specifies that a person has the requisite knowledge, skills, and practical experiences to be deemed worthy of a credential or designation of such status.” Certification is required in the USA, Canada, Australia and South Korea. Even though academic training is available in these countries (except in South Korea), public recognition of RT/TR as a profession is still a problem. Therefore, to avoid a hasty decision in implementing RT/TR credentialing, such as occurred in South Korea (Howard *et al.,* 2007:243), it would be beneficial for the public to firstly recognise the importance of recreation, and for an RT/TR curriculum and a certification/credentialing system to then be developed. Accreditation is the other option and is defined as the formal review of a programme or institution to determine if it meets the standards of a profession or discipline (Altschuld & Engle, 2015:6; Priest & Gass, 2005:6). However, before accreditation of training institutions can be considered, standards of practice for RT/TR should be developed by an organisation such as LARASA and universities will have to agree that training is necessary, conditions that are currently not yet in place.

If deciding on the medical/therapy approach, services will probably develop from the private healthcare sector. Due to the therapeutic nature of RT/TR, RTSs/TRSs will probably need some kind of credentialing, either as a standalone profession or integrated into another health profession and, therefore, possible registration with the HPCSA. If the profession focuses on the leisure/social approach, with cooperation from government the broader community could be served. The primarily "recreational" nature of RT/TR may not necessarily warrant strict credentialing and/or HPCSA registration as the services will not necessarily be focused on rehabilitation or therapy.

2.5 HEALTH PROFESSIONS OF SOUTH AFRICA

Before RT/TR can be established as a profession, it is important to consider the scopes of practice of related health care professions in SA, to avoid duplication of services already available. Scope of practice refers to the various functions and responsibilities professionals, in this case physiotherapists, occupational therapists and biokineticists, are permitted to take on during the course of their everyday work. Defining a scope of practice also prevents professionals from taking part in activities outside of such scope (Keenan, 2018). To practise professionally within the SA healthcare sector, registration with the HPCSA is a prerequisite (HPSCA, 2013). As mentioned in chapter 1, three occupations offer RT/TR-related services in SA, the definitions of practice of which all show some similarities to the broad international concept of RT/TR, discussed in section 2.3 of this chapter. Before the scopes of practice are described, the illness–wellness continuum is discussed, to distinguish between treatment and wellness.

2.5.1 Illness–wellness continuum

The illness–wellness continuum was conceptualised in 1972 by John Travis as a way of distinguishing between the wellness and treatment paradigms. According to Travis (2018), there are many degrees of wellness, just as there are different degrees of illness.

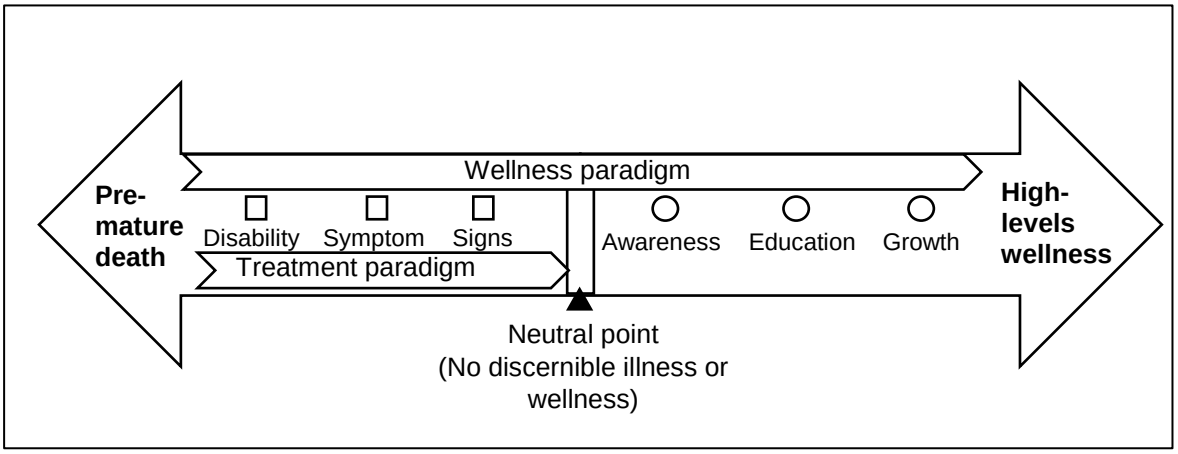

Figure 2.4 Illness–wellness continuum (Travis, 2018).

According to this continuum, treatment brings an individual to a neutral point (Anon, 2013) in the centre of the continuum, where symptoms of disease have been eliminated using drugs, surgery, psychotherapy or similar treatments. The left-hand side of the continuum is referred to as the treatment paradigm and on this side the state of health is worsening (Anon, 2013; Travis, 2018). When moving to the right into the wellness paradigm, the levels of health and well-being of an individual increase, facilitating a move towards higher levels of well-being (Travis, 2018). The wellness paradigm works in harmony with the treatment paradigm and encourages the individual to move beyond the neutral point as far as possible to the right (Travis, 2018). It is possible for a person to lack physical symptoms and be bored, anxious or simply unhappy with their lives without a diagnosed illness. Therefore, a move towards wellness is encouraged, to ensure that the person does not fall into illness; the direction the individual faces is more important than their position on the continuum (Anon, 2013; Travis, 2018). According to Travis (2018), the continuum has one shortfall as it does not account for the individual who might, for instance, be disabled and who is taking responsibility for living their life to the fullest. Travis (2018) states that if the physical dimension were considered they would fall on the left side, and their intellectual, emotional and spiritual dimensions would be on the right side.

2.5.2 Compilation of the health professions team

The interaction between health and disease diagram in Figure 2.5 provides a representation of the different health dimensions, the respective healthcare professionals and possible areas of overlap (Ellapen *et al.*, 2018). This model is explained first to facilitate discussion of the scopes of practice of biokinetics, occupational therapy and physiotherapy.

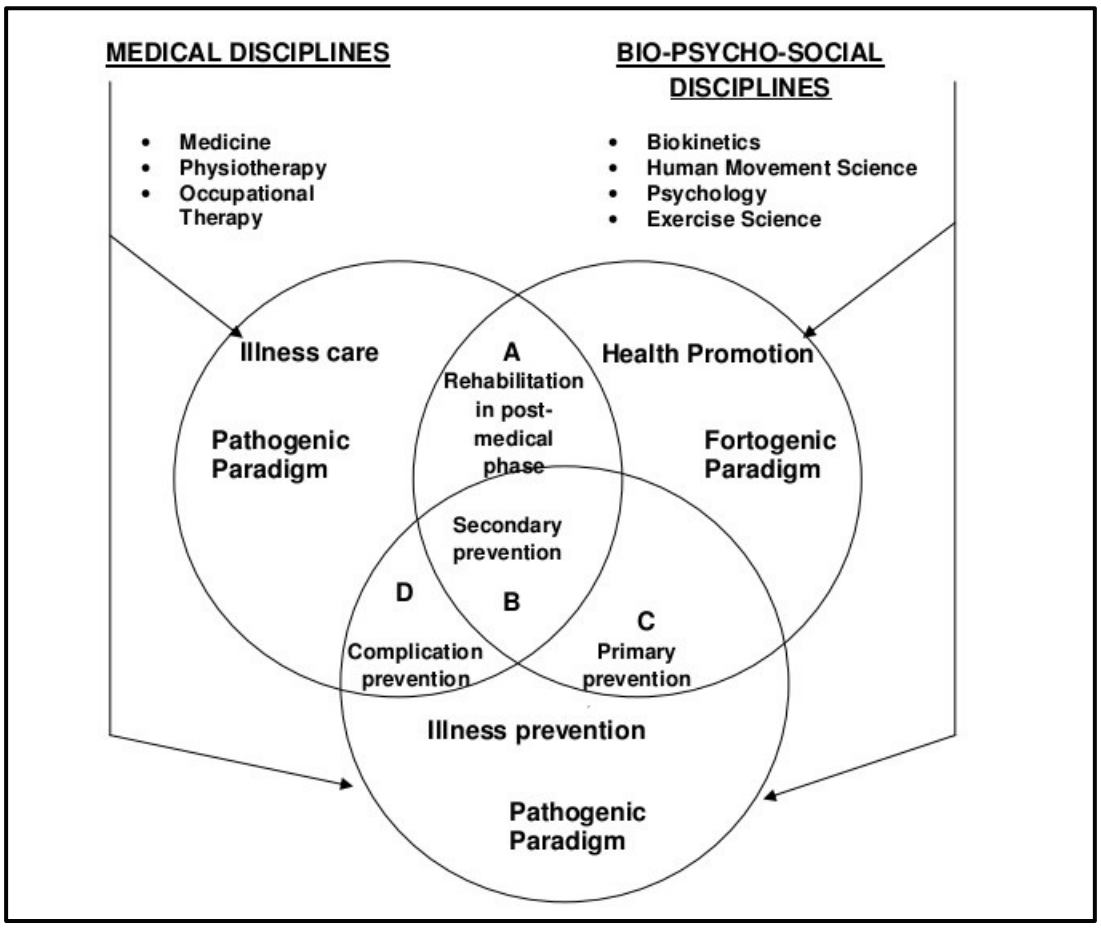

Figure 2.5 The interaction between health and disease (Strydom *et al*., 2009:644).

The three health professions of biokinetics, occupational therapy and physiotherapy may be classified as either pathogenic or fortogenic, may focus on illness prevention or may focus on both the pathogenic and fortogenic paradigms. It is important to note that the different paradigms are not isolated from each other and that they do overlap, suggesting close interaction and collaboration between the various disciplines (Strydom *et al.*, 2009:643).

The pathogenic paradigm relates to the medical model of RT/TR and includes patients who are at risk of pathology or patients who already have an illness or pathology; the aim of treatment is to cure the patient (Strydom, 2005b:15; Strydom *et al.*, 2009:642,643). A typical example of a patient in the pathogenic paradigm is one at risk of developing or already diagnosed with diabetes. The medical disciplines included in the pathogenic paradigm are medicine, occupational therapy and physiotherapy (Strydom *et al.*, 2009:634). The next paradigm includes the bio-psycho-social disciplines, based on the bio-psycho-social model which is described as “a method that considers the biological, psychological and social influences on human health and the body’s ability to respond to and recover from various diseases.” (Rholetter, 2013). The disciplines based on the bio-psycho-social model are biokinetics, psychology, human movement sciences and exercise science (Strydom *et al.*, 2009:643). A person functioning in the fortogenic paradigm is healthy and does risk developing pathology, but would like to be more physically active to prevent illness and

to increase their quality of life (Ellapen *et al.*, 2018). Therefore, the fortogenic paradigm focuses on maintaining individual strengths and reinforcing them to remain healthy (Strydom, 2005b:15). Individuals functioning in the illness prevention paradigm are at risk of becoming ill but do not have an illness (Strydom, 2005:16). The professions that could potentially influence the development of RT/TR in SA will be discussed next; these are physiotherapy, occupational therapy and biokinetics.

2.5.2.1 Physiotherapy

Physiotherapy is acknowledged as an international health profession and is known by a variety of titles; these include kinesiology, physiotherapy and physical therapy (Higgs *et al.*, 2001:80; WCPT, 2018). The World Confederation for Physical Therapy is an international body that represents, peer regulates and coordinates the profession, along with the national organisation in SA, the South African Society of Physiotherapy (SASP) (WCPT, 2018).

Physiotherapists work within the pathogenic and fortogenic paradigm (Figure 2.5) and can register with the SASP. They are responsible for the assessment, treatment, prevention and management of human movement disorders and injuries, restoring normal functioning and minimising pain associated with movement (HPCSA, 2017b; SASP, 2018; WCPT, 2018). The restoration of normal function is the primary goal of physiotherapy and includes patient and family education in addition to the management of patients' conditions (Higgs *et al.*, 2001:81). Physiotherapists uses skilled hands-on therapy (massage), manipulation, electrotherapy, exercise, group activities, breathing exercises and mechanical aids, and work with adults and children to empower them to become as independent as possible in their lives, workplaces, homes and during recreational activity (HPCSA, 2018, SASP, 2018; WCPT, 2018). According to the HPCSA (1976; 2017b), physiotherapists treat and manage a wide variety of injuries and ailments including from the fields of orthopaedics, neurology, respiratory and thoracic medicine, cardiovascular medicine, obstetrics, sports medicine, paediatrics and geriatrics, and in intensive care units and general rehabilitation. There are various places in which physiotherapists provide their services, including hospitals, old age homes, sport centres and for sporting teams, in schools, in research, at private practices, in training institutions, and in health policy development units, community health centres and special centres for people with physical disabilities (SASP, 2018).

There will always, to some degree, be an overlap of health professions (Brown & Greenwood, 1999:169), especially when they are aiming to improve the overall wellness and quality of life of their patients. According to Higgs *et al.* (2001:82), as well as Brown and Greenwood (1999:169), the roles of physiotherapy and occupational therapy overlap and this may also be true for physiotherapy, occupational therapy and biokinetics. Even if the end goal of the professions is similar, the rationale, decision-making process and treatment differ for each one, as each

profession is grounded in its own body of knowledge. Thus, there are clear distinctions among the professions.

2.5.2.2 Occupational therapy

The scope of the occupational therapy profession was published in the Government Gazette, notice R2145, number 14178, in 1992 (Government Gazette, 2018). Occupational therapists provide services to persons who are temporarily or permanently impaired by illness, environmental limitations, developmental delay or disability and use assessment and treatment to develop, recover and maintain work skills and normal activities (HPCSA, 2017a; Wits, 2018). Normal activities are described as activities of everyday living, such as play, social activities, work, recreation, domestic activities and personal care (Government Gazette, 2018). Occupational therapists provide activity-based interventions that encourage participants of all ages to participate in daily activities and these services also include the elimination of barriers to independence that individuals may experience (HPCSA, 2017a). Occupational therapists are typically employed in hospitals, schools, clinics, old age homes, private practice, pre-primary schools, rehabilitation centres and insurance companies, as well as in various places of work (UWC, 2018; UFS, 2018; Wits 2018).

As stated earlier in this section, occupational therapists work in the pathogenic paradigm, in rehabilitation in the post-medical phase (A in Figure 2.5) and in secondary prevention (Figure 2.5, B) in an attempt to restore independence of normal activities, which is categorised as illness care (Strydom, 2005b:15; Strydom *et al.*, 2009:643). To practise as an occupational therapist, registration with the Board for Occupational Therapy, Medical Orthotics, Prosthetics and Arts Therapy at the HPCSA is compulsory (HPCSA, 2017a). Like biokineticists, occupational therapists have a professional body, the Occupational Therapy Association of South Africa (OTASA), to which they can belong, although membership is not compulsory.

2.5.2.3 Biokinetics

Biokinetics is registered under the Physiotherapy, Podiatry and Biokinetics Board at the HPCSA (HPSCA, 2017b), which describes a biokineticist as someone who treats persons with sports and orthopaedic injuries using exercise as a treatment modality. Registration at the HPCSA is mandatory, but registration with the professional body, the Biokinetics Association of South Africa (BASA), is optional. Biokinetics consists of the two Greek words “*bio*”, meaning life, and “*kinesis*”, meaning movement, describing biokinetics as life through movement (BASA, 2018). According to the HPSCA (2017b) and BASA (2018), a biokineticist uses exercise therapy, based on scientific evidence, for the rehabilitation of persons with sport injuries, chronic diseases and lifestyle diseases (such as obesity). SA is the only country that refers to this profession as biokinetics, but its practice is known in other countries such as Australia, where practitioners are referred to as

accredited exercise physiologists (ESSA, 2018) and New Zealand, where practitioners practise as adapted or clinical exercise physiologists (Rankin, 2014). The practice of biokinetics is separated in the USA and includes clinical exercise physiologists who work with the clinical population (CEPA, 2018) and athletic trainers who work with orthopaedic patients (NATA, 2018). The scope of biokinetics covers health promotion, maintenance of physical abilities and specialised physical activity programme prescriptions (BASA, 2018; HPSCA, 2017b). Although exercise orientated, a biokineticist works towards improving quality of life and well-being.

Biokinetics can be classified under all three paradigms shown in Figure 2.5. Domains indicated by letters A to D in Figure 2.3, along with practical examples of each, are discussed next.

According to Ellapen *et al.* (2018), the area marked with an A in Figure 2.5 is referred to as final-phase rehabilitation or post-medical phase, and is where the pathogenic and fortogenic paradigms overlap. An example of a patient in this area is a cardiac patient on medication and undergoing physiotherapy who is referred to the biokineticist for treatment or physical exercise (Strydom *et al.*, 2009:644). After the cardiac patient in area A has successfully been rehabilitated, they need to participate in activities to enhance treatment compliance, meaning activities must be enjoyable so that they are motivated to continue with the treatment. This is where RT plays a role, as it is important that patients enjoy the activities in which they participate, for them to feel relaxed and stay interested (Strydom *et al.*, 2009:645). Strydom *et al.* (2009:645) state that patients in area C have no illness or pathology present and are participating in exercise to prevent possible illness, and improve health and quality of life. Area D is known as complication prevention; here the patient does not have pathology but is at risk of developing an illness (Ellapen *et al.*, 2018). Therefore, the patients will partake in physical activity to avoid being diagnosed with an illness. This area also falls within the illness prevention dimension, which is an extension of the ill care dimension of the pathogenic paradigm (Ellapen *et al.*, 2018).

2.6 SUMMARY

The application of leisure and recreational activities combined with the APIE process provides clients of RT/TR with the opportunity to gain emotional, psychological, social and physical benefits. Although it is possible to gain some of these benefits from participating in activities presented by biokineticists, physiotherapists and occupational therapists, clients do not necessarily have the opportunity to gain these benefits within their leisure time as activities are prescribed by the other professions and not based on individual leisure preferences. Therefore, it can be said that individuals are not provided with the freedom to enjoy activities of their choice while also working towards achieving certain goals and objectives. When considering the current services available, the other professions featured in this study are providing rehabilitative types of activities and recreational activities are also available for any person to participate in. However,

when individuals are finished with rehabilitation, but not entirely ready for independent participation in recreational activities, the opportunities for RTSs/TRSs arise.

RT/TR originated in the USA and spread to Canada; and these are the only two countries that have succeeded in establishing RT/TR as a profession. Although RT/TR is established in USA, the profession is divided by different approaches to service delivery. Therefore, recognising the history of the profession in the USA, as well as in various other countries where RT/TR has been implemented (with varying success), is important, to ensure that similar mistakes are not made in SA.

In addition, SA has some other unique challenges in the development of RT/TR. Basic healthcare services are not distributed evenly and resources are limited. RT/TR may not be included in public health services nor their funding be covered by third parties such as medical aid schemes. In addition, recreation is struggling to establish itself in its own right and cannot be described as a profession, as there is currently a limited body of knowledge within the SA context, limited professional preparation, no credentialing bodies and no established code of ethics. Furthermore, the public is not aware of the meaning and importance of recreation and, combined with poor service delivery and organisation, it is difficult to see a future for recreation (including RT/TR) as a profession. Although government is trying to rectify the situation, this is not necessarily happening at service delivery level.

With the above in mind, this review of literature contributes to the current body of knowledge of RT/TR in SA as it reveals potential obstacles to avoid when implementing RT/TR as a profession in SA. From the literature review, it is concluded that it would be beneficial to encourage the public to firstly recognise the importance of recreation, to be followed by the development of an RT/TR curriculum, a certification/credentialing system and a credentialing body. Importantly, if these aspects are ignored, SA might end up with a situation similar to that of South Korea, where trained RT/TR specialists do not have jobs, or Finland, where individuals are not well paid, or Australia, where trained RT/TR specialists are unrecognised as a profession by the public. The definitions of practice of other health professions in SA, namely biokinetics, physiotherapy and occupational therapy, already have some similarities to the broad international concept of RT/TR. Additionally, the literature review highlighted that some healthcare professions already appear to provide services relates to the international concept of RT/TR, and that it is necessary to clearly determine what RT/TR in SA should entail, and in what contexts in should be practised and with which sectors of society.

Chapter 3

Methods

3.1 INTRODUCTION

This chapter describes the research process used to underpin the data collection required to achieve the objectives of the study. The aim of this study is to provide information on the nature of RT/TR within the academic training of current healthcare professions in SA, and to establish if RT/TR services are provided in practice by selected healthcare professions. The first objective was to interpret and describe recreational therapy training within the curricula of biokinetics, occupational therapy and physiotherapy. The second objective was to interpret and describe recreational therapy (RT) within the scope of practice of biokinetics, occupational therapy and physiotherapy. This chapter consists of a description of the study design, the participants, data collection methods and procedures, data analysis method used and ethical considerations.

3.2 RESEARCH APPROACH

This study is based on a qualitative research approach, with a qualitative interpretive descriptive design (Sandelowski, 2000:339). Two separate data collection methods were used: a qualitative content analysis and semi-structured telephonic interviews, each with its own data analysis method, content analysis and thematic analysis (sections 3.2 and 3.3).

3.3 OBJECTIVE 1

3.3.1 Study design

Qualitative content analysis was used to interpret and describe RT/TR training within the curricula of biokinetics, physiotherapy and occupational therapy. Content analysis is a systematic evaluation process to compare information from different sources to seek similarities and identify differences (Bowen, 2009:28), and this analysis method was chosen for this study. The documents under study were employed as the source of the data and provided the researcher with an idea of “what is going on” in the document (Prior, 2011:96). Since data collection took place without the intervention of a researcher, the analysis of documents had few ethical issues and did not impose risk to individuals (Johnson & Reynolds, 2011:279; Rubin & Babbie, 2014:460).

The goal of content analysis is to “provide knowledge and understanding of the phenomenon under study” (Downe-Wamboldt, 1992:314) and is concerned with systematically coding and classifying textual content to identify the presence, or the absence, of an idea or theme (Bowen, 2009:28; Johnson & Reynolds, 2011:292,294; Kondracki *et al.*, 2002:225). Three different approaches are used for content analysis and were followed in this study: inductive/conventional, deductive/directed and summative. Inductive/conventional content analysis was used as limited literature or research was available (Hsieh & Shannon, 2005:1279). The deductive/directed approach was also followed, as there was existing theory or previous research on the phenomenon being studied that would benefit from further description (Hsieh & Shannon, 2005:1281). Summative content analysis was also used, the aim of which was to get a sense of the data and to “explore the usage of words in an inductive manner” (Zhang & Wildemuth, 2016).

3.3.2 Documents

The documents analysed through inductive content analysis included the NCTRC’s *Certification Standards: Part 1: Information for New Applicants*, a document discussing the requirements to register as a Certified Therapeutic Recreation Specialist (CTRS) and at the NCTRC. The documents analysed in the deductive content analysis comprised the 2018 yearbooks of the seven South African (SA) universities that present a degree in all three professional fields included in this study (physiotherapy, occupational therapy and biokinetics). These universities have established curricula for all three professions; education and training takes place within the scope of practice of each profession, and therefore it was assumed that minimal trespassing across their respective scopes takes place at these universities.

The following seven SA universities presented a degree in all three professions and were, therefore, included in the study:

- University of Cape Town
- University of the Free State
- University of KwaZulu-Natal
- University of Pretoria
- Stellenbosch University
- University of Western Cape
- University of the Witwatersrand.

3.3.3 Data collection and analysis

The *NCTRC Certification Standards: Part 1: Information for New Applicants* document was obtained from the NCTRC's website and the document was analysed inductively/conventionally, as the researcher had no predetermined notions (Hsieh & Shannon, 2005:1279). The researcher met with the co-coder to discuss the research question, the purpose of the inductive content analysis and the process of analysis, and both the researcher and the co-coder completed the inductive content analysis independent of each other. Once both parties completed the analysis, they met to discuss the findings where they agreed on the content of the document that was relevant and important to the study. It was agreed that the required coursework was reflected in the minimum knowledge required to pass the NCTRC examination, and this was used to compile a control sheet, which consisted of predetermined words, phrases, theories, topics, concepts or other characteristics that were then used in the deductive analysis. The purpose of the control sheet was to ensure that the yearbooks were viewed though the same "lens".

Table 3.1 Name of yearbook document according to university

University	Document
University of Cape Town	Academic handbook
University of the Free State	Academic rule book
University of KwaZulu-Natal	Academic handbook
University of Pretoria	Academic yearbook
Stellenbosch University	Academic calendar
University of Western Cape	Academic calendar
University of the Witwatersrand	Academic rules and syllabuses

For the deductive content analysis, the 2018 academic yearbooks for physiotherapy, occupational therapy and biokinetics were downloaded from the websites of the seven universities. If yearbooks were not available online, documents from the South African Qualification Authority (SAQA) were used, as all qualifications or part-qualifications require registration at SAQA (SAQA, 2014). When gathering the 2018 yearbooks from the university websites, it was noted that not all universities refer to the documents in the same manner; therefore an explanation of the term within the context of this study is necessary. A yearbook is an official university document that contains information about an entire degree; this includes course outline, credits/teaching hours, module descriptions and outcomes. Table 3.1 lists the named documents from each university.

The researcher read the course curriculum (physiotherapy, occupational therapy and biokinetics) for each university and compiled a list of modules from each yearbook for analysis. The researcher and the co-coder compared the content and modules included in the academic yearbooks with the required coursework, as indicated by the control sheet, using the ATLAS.ti programme. According to Bowling (2009:421), programmes such as ATLAS.ti compare marked

text or codes, which can easily be viewed and further compared. The researcher had already created a control sheet with predetermined words, phrases, theories, topics, concepts and other characteristics, during the inductive analysis. Using the control sheet for the deductive analysis, the researcher identified instances where content from the control sheet was included in the yearbooks. In instances where a single module was required for two or all three courses, for instance, the *Introduction to Psychology* module that both occupational therapy and physiotherapy students study, the module was coded only once, but was coded (in ATLAS.ti) for each course at the specific university. Therefore the content of the module was coded once and additional codes were added to indicate that the content formed part of two or more of the courses.

Because universities may have used different words to describe similar content, the researcher and the co-coder did not search for the words or phrases exactly as specified on the control sheet, but included other terms that may have described the same content. Once again, the researcher and the co-coder met after completion of the analysis, to discuss the findings. The co-coder exported her project using ATLAS.ti and the researcher uploaded the co-coder's project folder. The researcher compared the co-coder's analysis to her own, differences in findings were identified, and the researcher reflected on each of them. Some codes were added to the researcher's version of the document; however, some were removed after the researcher and the co-coder discussed the dissimilarities, as information was interpreted differently.

Both the inductive/conventional and deductive/directed approaches follow three main phases of data analysis: preparing, organising and reporting the data (Elo *et al.*, 2014; Elo & Kyngas, 2007:110). When preparing the data, the researcher immersed herself in it to gain a sense of a whole (Hsieh & Shannon, 2005:1279). During the inductive content analysis, the researcher read through the document repeatedly and highlighted important information; the document was read through again and the researcher made notes to pinpoint the important information. When organising the data, codes and themes were applied according to the text headings. The coding process was guided by the research objective, which allowed identification, indexing and retrieval of content for use in the deductive analysis, and which was to find similarities between the curricula of RT training and those of biokinetics, physiotherapy and occupational therapy.

Although the deductive analysis followed the same process as the inductive analysis, the approach to each analysis differed, as the format and type of documents analysed were different. The yearbooks consisted of different modules presented as elements of curricula at various universities; therefore (as mentioned previously), only identified modules were analysed and not the entire document. The researcher also read though the module content a number of times, which was coded according to the topics on the control sheet when it correlated with the control sheet information. During the summative analysis, the number of times a code appeared from each topic (on the control sheet) was totalled to indicate the total mentions for each topic within

each course, within each university. The words and content in summative content analysis were counted to “extend the analysis to include latent meanings and themes” (Zhang & Wildemuth, 2016). According to Zhang and Wildemuth (2016), the counting of words may lean towards qualitative research in the early stages, but the goal of summative content analysis is to get a sense of the data and to “explore the usage of words in an inductive manner.”

3.4 OBJECTIVE 2

3.4.1 Study design

An interpretive, descriptive qualitative research design was used to interpret and describe the prevalence of RT/TR within the scope of practice of biokinetics, physiotherapy and occupational therapy. Sandelowski (2000:339) considers this approach to be beneficial for researchers who want answers for “who”, “what” and “where” questions. Small samples are often used to identify themes and patterns (through interviews, observation and content analysis), to generate an interpretive description to subsequently inform a clinical understanding (Thorne *et al.*, 2008:3).

3.4.1.1 Semi-structured telephonic interviews

Individual semi-structured telephonic interviews were used to interpret and describe the prevalence of RT within the scope of practice of biokinetics, occupational therapy and physiotherapy. The interviews were recorded by an external recording device, which was placed next to a phone with a speaker. In general, interviews are employed to understand the world through the eyes of the participant, to understand the meaning of their experience and to explore the participants’ lived world (Kvale, 1996:1). According to Opdenakker (2006), telephonic interviews as a data collection method are beneficial when the study is dependent on reaching people at sites with limited access such as hospitals, and when participants are spread far apart. Traditionally, researchers were uncertain about the value of telephonic interviews compared with face-to-face interviews; however, when comparing the quality of interview transcripts from various interview methods, no significant differences have been found (Smith, 2005:33; Sturges & Hanrahan, 2004:108). It is important to evaluate study outcomes before using telephonic interviews, to ensure that the intended study type is suitable. However, studies with clearly defined outcomes and focus, such as this study, are suitable for this method (Smith, 2005:33, 34).

Individual semi-structured interviews have themes that need to be revealed by asking participants a set of open-ended questions (Richards & Morse, 2007:111), yet they also provide the opportunity to change the sequence of the questions or to follow up on aspects as the participant mentions them (Greeff, 2011:351; Kvale, 1996:124). According to Richards and Morse (2007:114), semi-structured interviews are used when the researcher knows enough about the phenomenon being studied to develop questions, but does not know enough to anticipate the

answers of the participants. For this study, the researcher compiled an interview schedule based on the study aim. After the interview schedule was created, the researcher conducted three interviews with biokineticists to test the schedule and check that participants understood the questions. Adaptations to the interview schedule were made after each interview. These interviews were conducted as part of the development of the interview schedule and did not form any part of the data collected in the study.

3.4.2 Participants

A purposive sampling technique was used to interpret and describe the prevalence of RT within the scope of practice of biokinetics, occupational therapy and physiotherapy. According to Smith (2005:34), a purposive sampling method is used to identify participants from a determinate population, whereas key informant sampling includes participants with special expertise (Marshall, 1996:523). The researcher also used snowball sampling, which is described as a process by which researchers identify participants who, in turn, may put the researcher in contact with other possible participants (David & Sutton, 2011:232). Participants who met the requirements stated in Table 3.2 were included in this study.

Table 3.2 Inclusion and exclusion criteria

Inclusion criteria	Justification
● Biokineticists, occupational therapists and physiotherapists.	● The target professionals for this study.
● Professionals in private practice.	● Public healthcare workers are overloaded with patients and may be unable to provide all the services that fall within their scope of practice, due to time and resource constraints.
● Minimum of five years' experience.	● Participants would have a better sense of the day-to-day activities of the profession if they had at least five years' experience in the field.
● Male and female participants.	● Participants were not rejected due to their gender.
● Registered with the HPCSA.	● Registration at the HPCSA is a prerequisite for practice.
Exclusion criteria	**Justification**
● Assistants or intern biokineticists, occupational therapists or physiotherapists.	● Assistants do not hold registration at HPCSA/registration to practise as biokineticist, occupational therapist or physiotherapist and were therefore ineligible for inclusion.
● Participants who spend most of their time providing gym training or similar activities within the field of sport science.	● Participants who spend most of their time providing gym training or other activities related to sport may answer the questions from a sport-orientated perspective, and not necessarily as biokineticists,

	occupational therapists or physiotherapists. When making first contact, the researcher asked the participants to reflect on their daily tasks. If these related predominantly to being a gym instructor and not directly or only minimally to the tasks of a biokineticist, occupational therapist or physiotherapist, they were thanked for their willingness to take part, but were excluded for not meeting the inclusion criteria of the study.

HPCSA, Health Professions Council of South Africa.

3.4.2.1 Selecting participants

The researcher used the HPCSA's website, which is in the public domain, to search for the contact information of all HPCSA-registered biokineticists, occupational therapists and physiotherapists. Participants were selected based on an availability sample, according to the inclusion criteria in Table 3.2. Due to low response rates, the researcher also employed snowball sampling, with participants who had already taken part in the interviews asked if they were willing to identify and contact other potential participants and explain the research project to them (becoming a mediator).

3.4.2.2 Making initial contact

The researcher asked an independent person to contact potential participants by email. By the end of the recruitment process, a total of 374 people had been invited to take part in the study. In line with recommendations by Smith (2005:34), the following information was included in the introductory email: an explanation of how the researcher obtained the participant's information, the purpose of the email, and an introduction to the researcher and how to contact her. The information in the email, along with a link to the informed consent form, provided the potential participant with a description of the inclusion criteria and an explanation of the purpose of the study, and asked them to provide a preferred contact number if they were willing to participate. Additional information was included in the email to assist them with their decision to participate. This information included an explanation of the data collection method (telephonic interviews at no cost to them; interview recordings made with participants' permission) and the length of the interview, which would be no longer than 50 minutes (Ryan *et al.*, 2001) and at a time convenient to the participant. A time frame was included, to approximately indicate to the participant when the telephonic interviews would take place. An explanation of the process that was to follow the interviews and the intended use of the findings was also included. The email also described the concept of confidentiality and indicated that the participant was free to withdraw at any time. Potential participants had 2 weeks to decide whether they were willing to participate. They were

asked to complete the informed consent form by following a link that directed them to the programme QuestionPro (Appendix A). This was used to obtain informed consent; once this was provided, they were asked to complete an online biographical questionnaire consisting of 10 questions (Appendix B).

An email to remind potential participants about the study was sent by the independent person after 2 weeks. It asked them to complete the informed consent online if they were willing to take part; participants who were not willing did not have to send an email to reject participation. Once participants indicated that they were willing to be part of the study and had completed the informed consent form, they were sent a follow-up email. In this email, they were thanked for their willingness to take part in the study and were asked to identify a time that was convenient to them within a schedule provided by the researcher. The interview schedule (questions participants were to be asked during the telephonic interview) was attached to the email (Appendix C). The researcher then arranged private space before the interview, to improve confidentiality (Smith, 2005:34). The study findings and related published articles were shared with participants via email at the end of the study, once the data had been analysed and the findings written up.

3.4.2.3 Participant profiles

An ample sample size is one that answers the research question (Marshall, 1996:523) and, therefore, data gathering for this study continued until data saturation was reached, with a further two interviews that were conducted to confirm the findings. Since the study aimed to identify points of intersection of RT/TR within the scope of practice of selected healthcare professions, only biokineticists, occupational therapists and physiotherapists were included.

Data saturation was reached at eight interviews in the biokinetics group, nine in the physiotherapy group and seven in the occupational therapy group; an additional two interviews were conducted in each group to confirm the findings (no new information emerged during these interviews). Participants were asked to complete a short biographical questionnaire (Appendix A), which was used to compile a participant profile.

The majority of participants were between the age of 31 and 40 years; the only person older than 51 years was in the occupational therapy group (Figure 3.1).

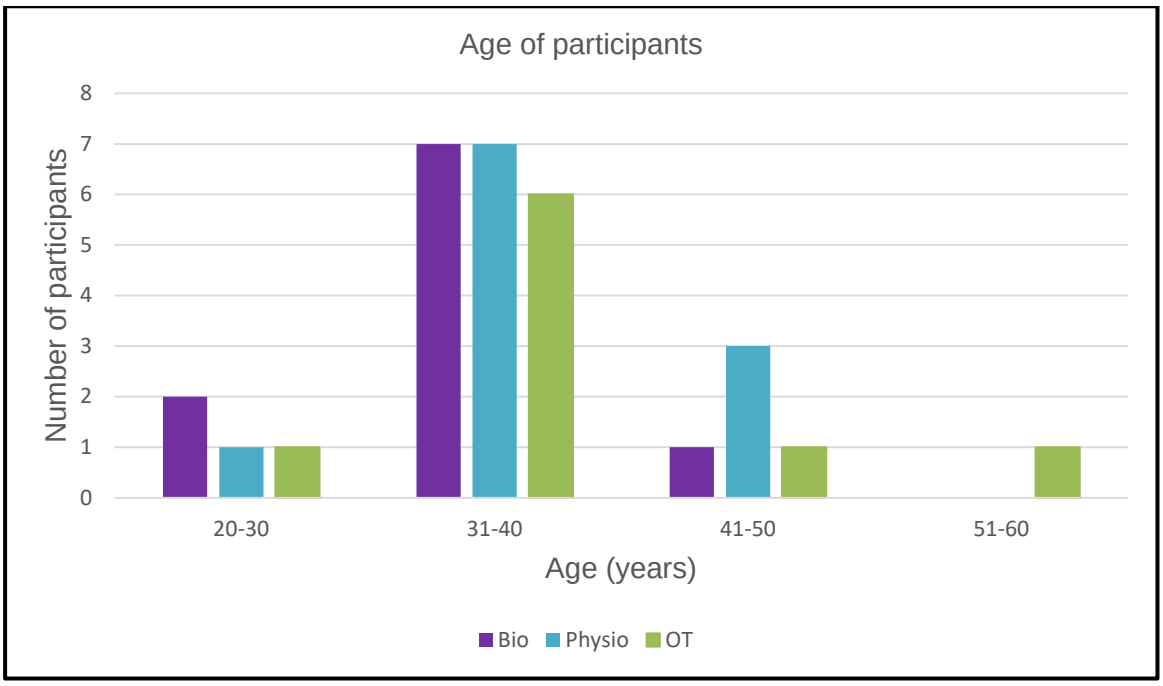

Figure 3.1 Age of participants.

Bio, Biokineticist; *Physio,* physiotherapist; *OT,* occupational therapist.

Most of the participants were female and all males came from the biokinetics group (Figure 3.2).

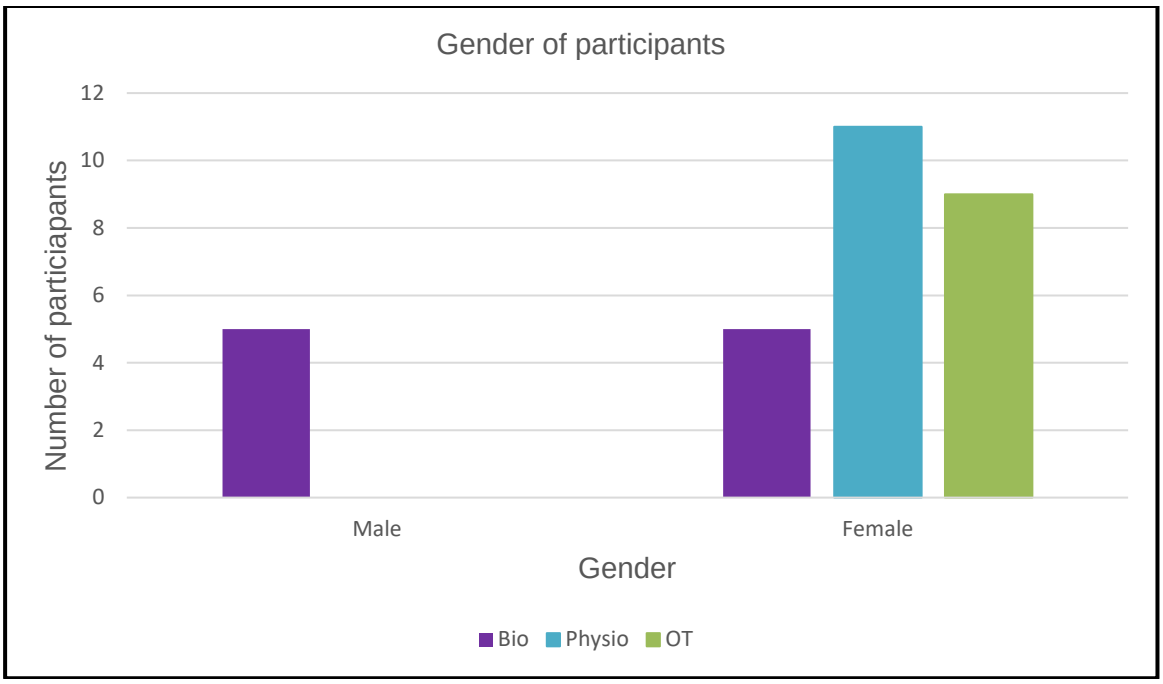

Figure 3.2 Gender of participants.

Bio, Biokineticist; *Physio,* physiotherapist; *OT,* occupational therapist.

The majority of the participants came from the Eastern Cape; there were no participants from Northern Cape or Mpumalanga provinces (Figure 3.3).

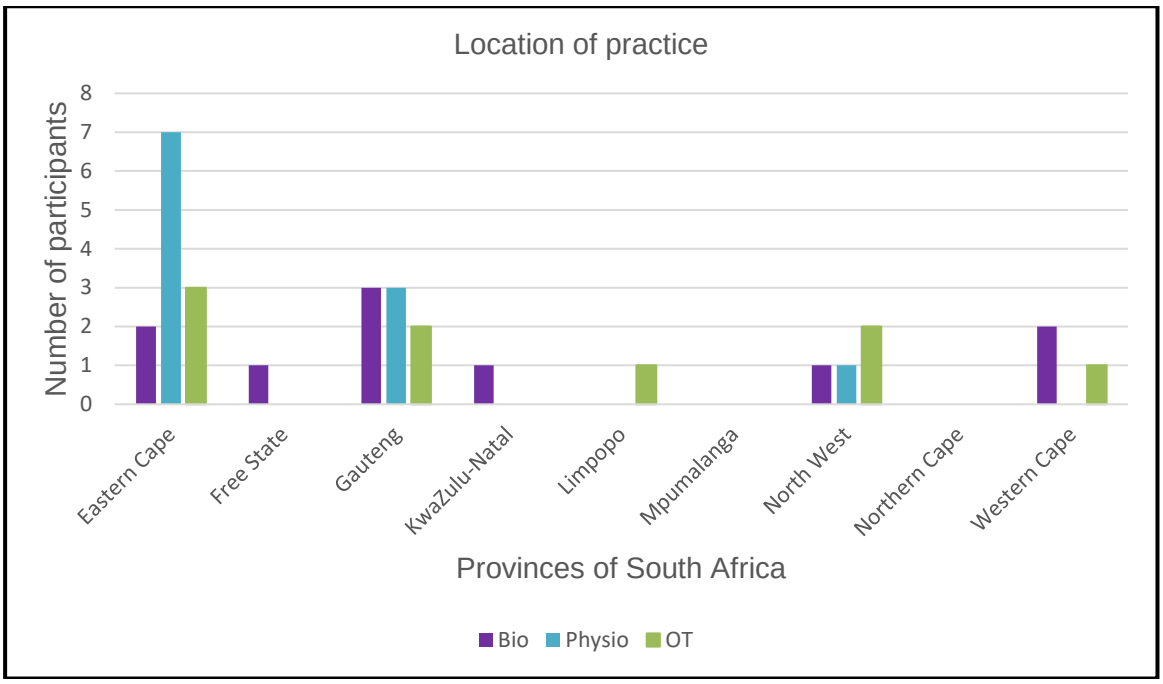

Figure 3.3 Location of practice.

Bio, Biokineticist; *Physio,* physiotherapist; *OT,* occupational therapist.

From Figure 3.4, which shows number of years in practice, the biokineticists clearly did not have as much experience as the physiotherapists and occupational therapists; biokinetics is a relatively new profession in SA compared with physiotherapy and occupational therapy.

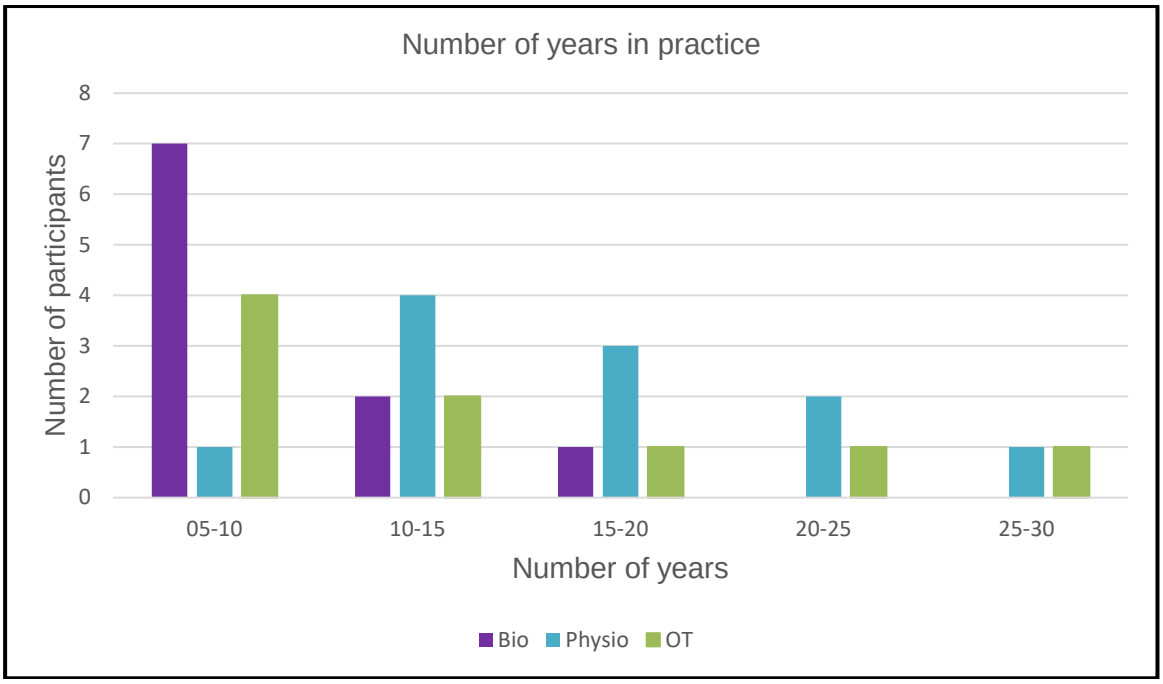

Figure 3.4 Number of years in practice.

Bio, Biokineticist; *Physio,* physiotherapist; *OT,* occupational therapist.

3.4.2.4 The day of the interview

The researcher contacted the participant at the time arranged, identified herself and checked if it was still a convenient time to talk to the participant (Smith, 2005:36). Prior to the interview questions, the researcher went through the following with the participant:

- Introduced the aim of the study
- Explained the concept of confidentiality
- Asked permission to record the telephonic interview
- Confirmed that the participant provided informed consent
- Asked if they were still willing to participate.

The researcher then asked the questions as indicated in the interview schedule and limited the interview to the time agreed. At the end of the interview, the researcher asked the participant if they would like to add anything or had any questions or uncertainties, and then ended the conversation with a summary and an expression of gratitude for their participation in the study.

Participants were then asked if they were willing to identify and contact other potential participants and explain the research project to them (become a mediator). After explaining what the study was about, they obtained the approval of potential participants to share their contact information with the researcher. If the potential participants did not agree, their contact information was not shared. The names and contact information of newly identified participants were provided to the independent researcher who then sent them the official study invitation. After each day of interviews, the recorded interviews were downloaded to the researcher's laptop into a password-protected folder. Each participant interview and record was allocated a participation number and the recordings were deleted from the recording device.

3.4.3 Data analysis

The audio recordings were transcribed by an external person, who signed a confidentiality agreement. Any personal information provided by the participant was removed from the transcribed interviews. The recorded individual semi-structured telephonic interviews and transcripts were used to analyse the data. According to Henning *et al.* (2005:127), to analyse means to take words apart, in order to make sense of, interpret and theorise about the data. Thematic analysis was used, and has been described as a "a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006:79). According to Braun and Clarke (2006:87), the steps followed during data analysis are familiarising oneself with the data, generating codes, searching for themes, reviewing themes, defining and naming themes and producing a report.

When the external person completed each interview transcription, the researcher listened to its recording while reading through the transcription. This not only ensured that each recording was interpreted and transcribed correctly, but also formed part of the research process, as the researcher had to familiarise herself with the data. The finalised interviews were imported to ATLAS.ti for data organisation and management. The researcher read through each interview again and coded the content according to the data itself and the researcher's understanding of the content of each passage (open coding). As the researcher completed each group of interviews (biokinetics, physiotherapy and occupational therapy), the ATLAS.ti project folder was exported and send to the independent co-coder, along with the research outcomes and a description of the meanings of the various codes, for reference when checking the data. According to Bazeley (2013:150), it is unreasonable to expect two people to come to the exact same conclusions, with the same codes and in the same way; therefore the researcher provided the co-coder with her codes. The co-coder was asked to check the researcher's codes, create new ones if necessary, add codes that may have been missed the first time and determine if data saturation was reached. The co-coder wrote a report and sent it to the researcher; the researcher then added the quotes to the codes (on ATLAS.ti) if necessary. Disagreements were discussed between them and a decision was made to either add or ignore the code, based on the conclusions of the discussions.

Following coding of all three groups, the researcher printed the codes and used them as a basis to create categories, themes and sub-themes. After analysis of the interviews, the researcher compared the findings for similarities and differences to the literature gathered and reviewed for objective 1. The main reason for this comparison is described by Thorne *et al.* (2008:196) and was an attempt to reintroduce the literature as a way of finding deeper meaning. The new literature was used to elaborate on the findings, before attempting to extend the interpretation of them. Interpretation is a component of all research and "requires the active effort" from the researcher (Schreier, 2012:20).

3.5 ETHICAL CONSIDERATIONS

Permission to conduct the study was obtained from the Health Research Ethics Committee of North-West University (HREC) (NWU-00019-17-A1). Participants gained no direct benefit through participation, but indirect benefits included a gain in the body of knowledge of their profession. The study held minimal risk to participants, although potential participants may have felt embarrassed or uncomfortable if declining to participate. To reduce this risk, the researcher did not send the invitation emails herself and individuals who did not wish to participate did not have to reply to the invitation email. Participants may have felt overwhelmed by the documentation they needed to complete (informed consent); however, it was explained that the intention of the document was to protect them. To avoid potential loss of income to participants, a convenient time to them was arranged, including after business hours when necessary. Finally, to avoid

participant fatigue during the interview; participants were free to stop the interview at any time and reschedule. Based on this appraisal of associated risks and benefits, the benefits were perceived to outweigh any risks. A small token of appreciation was mailed to the participants to thank them for their time and participation in the study.

Anonymity was ensured by not linking individual interview responses to the participant's identity when the research findings were reported. Confidentiality was ensured by the data capture method – identifying data were changed during transcription and the digital recordings deleted once the data were transcribed. Only the researcher, the interview transcriber and the independent co-coder had access to the data; the latter two individuals signed an agreement to ensure that all information was kept confidential.

After each day of interviews, the recorded interviews were downloaded to the researcher's laptop into a password-protected folder and deleted from the recording device. Once all interviews were transcribed, the interviews were copied to a password-protected folder on an external hard drive and the recordings permanently removed from the laptop. The transcribed interviews and the hard drive were placed in a locked cabinet in the researcher's office for storage for 7 years.

3.6 TRUSTWORTHINESS

According to Graneheim and Lundman (2004:109), there are different concepts relating to the trustworthiness of a study when following either qualitative and quantitative research designs (Table 3.3). The qualitative concepts relating to qualitative research methods were used in this study; these included credibility, transferability, dependability and conformability (Graneheim & Lundman, 2004:110; Schwandt *et al.*, 2007:19).

Table 3.3 Measures taken to ensure trustworthiness

Element of trustworthiness	Source	Measures taken
Credibility of both objectives	(Graneheim & Lundman, 2004:110; Pitney & Parker, 2009:67)	Credibility of a study increases when the findings are believable. The credibility of this study was enhanced through peer examination of the research process. These peers included the scientific committee and HREC, when the proposal was evaluated for scientific rigour and ethical clearance. Qualified and experienced research supervisors also ensured that the study was completed in an appropriate scientific and systematic manner. Credibility also increased when the co-coder reviewed the findings.
Transferability of both objectives	(Graneheim & Lundman,	Transferability of a study increases when the findings of one study can be transferred to the next (Schurink *et al.*,

Element of trustworthiness	Source	Measures taken
	2004:110; Pitney & Parker, 2009:68; Schwandt *et al.*, 2007:19)	2011:420). Transferability in this study was improved by providing a rich and thorough description: the researcher provided a rich description with as much information as possible about the research process and context. In addition, the findings of the study were reported thoroughly and questions used to increase transferability. Transferability for objective 1 was further improved by using a purposive sampling method to maximise the value of data collected.
Dependability of both objectives	(Pitney & Parker, 2009:68; Schwandt *et al.*, 2007:19)	Dependability is concerned with the research project being logical, well documented and audited (Schurink *et al.*, 2011:420). Therefore, an external audit trail was established: the researcher asked an external independent researcher (a staff member of the recreation programme at the NWU) to examine the research process as well as the findings, in order to evaluate the consistency of the data and findings.
Conformability of both objectives	(Johnson & Reynolds, 2011:294; Schwandt *et al.*, 2007:19)	Conformability relates to the objectivity of a study (Schurink *et al.*, 2011:421). The conformability of this study was increased by means of an external co-coder who also coded the data. The researcher provided an independent co-coder with the transcribed interviews, the research outcomes and the process used to code the data, so that they could identify codes and themes independently of the researcher. Once both the researcher and the co-coder had coded the data, they met to discuss the findings.

HREC, Health Research Ethics Committee; *NWU,* North-West University.

3.7 DISSEMINATION OF FINDINGS

The researcher planned that the study findings and related published articles would be shared with participants via email following data analysis, write-up of findings and final examination. The possibility that the research findings would be presented at a conference also arose, such as the Biokinetics Association of South Africa's *Life Through Movement International Conference.*

Chapter 4

Results and discussion: Objective 1

4.1 INTRODUCTION

Chapter 2 revealed that South-Africa (SA) faces various challenges in terms of the development of recreational therapy/therapeutic recreation (RT/TR) as a profession and it was evident that the other counties who attempted to create RT/TR as a profession experienced various problems. To avoid similar problems in SA, it was important to find out whether any other professions in SA are trained to perform RT/TR-related tasks. Therefore the objective of this study was to interpret and describe recreational therapy (RT) training within the curricula of biokinetics, occupational therapy and physiotherapy. This chapter reports the results obtained from the inductive content analysis of the National Council for Therapeutic Recreation Certification (NCTRS) of the United States of America (USA), as well as the deductive content analysis of the academic yearbooks of seven South African (SA) universities. It also includes the interpretation and discussion of the findings of the first objective. Objective 2 will be discussed in chapter 5.

4.2 INDUCTIVE CONTENT ANALYSIS

The 2018 document *NCTRC Certification Standards: Part I: Information for New Applicants*, was extracted from the NCTRC website and subjected to inductive content analysis. The purpose of the inductive analysis was to establish the core requirements needed to register as a Certified Therapeutic Recreation Specialist (CTRS) and to compile a control sheet for use in the deductive analysis, as the NCTRC document alone does not provide any information about RT or therapeutic recreation (TR) in SA. The data analysis process was guided by the study's first research objective. Three themes emerged from the analysis and are presented in Table 4.1.

Table 4.1 Themes and sub-themes identified from inductive content analysis of the National Council for Therapeutic Recreation Certification Standards Part 1 document

Theme	Sub-themes
Certification paths and process	Academic path
	Equivalency path
Content and supportive coursework information	Anatomy and physiology
	Abnormal psychology
	Human growth and development across the lifespan
Exam content outline	Foundational knowledge

Theme	Sub-themes
	Assessment process
	Documentation
	Implementation
	Administration of therapeutic recreation/recreational therapy service
	Advancement of the profession

4.2.1 Theme 1: Certification paths and process

The analysis revealed that to register as a CTRS, a candidate must comply with the eligibility requirements set by the NCTRC and pass a knowledge-based examination. These requirements stated that an individual who wishes to apply for credentialing must be in the possession of a bachelor's degree and may also be required to go through a pre-approval process to eliminate uncertainties about coursework, before submitting their formal application. There are three paths that can be followed to be credentialed: an academic path and two equivalency paths (A and B). In addition to the bachelor's degree content, coursework in TR and general recreation, supportive coursework and experience in TR practice are required for both paths. Table 4.2 represents the requirements of the academic (A) and equivalency (B) paths. One credit hour, according to the United States (US) credit system, is noted to comprise one contact hour in the classroom and two hours of student preparation time (Department of Education, 2008). This differs from the SA credit system, where credits are multiplied by 10 to give the required hours spent on the content (SAQA, 2000).

Table 4.2 Requirements of the academic path and the equivalency paths A and B of National Council for Therapeutic Recreation Certification credentialing

	Academic path	Equivalency path A	Equivalency path B
Core modules	• Minimum of 54 credits in TR and general recreation content coursework and; • No less than 45 credits in TR content. • In addition to the credits, a candidate should have a minimum of 5 RT/TR modules.	• Minimum of 54 credits in TR and general recreation content coursework, and; • No less than 45 credits in TR content. • In addition to the credits, a candidate must have a minimum of 5 RT/TR modules, and 3 of the modules must be at least 9 credits.	• Minimum of 54 credits in TR and general recreation content coursework and; • No less than 45 credits spend in TR content. • In addition to the credits, a candidate must have a minimum of 5 RT/TR modules and each module must be at least 9 credits.

	Academic path	Equivalency path A	Equivalency path B
Supportive modules	A total of 54 credits, comprising a minimum of 12 credits in anatomy and physiology, 12 credits in abnormal psychology and 12 credits in modules of human growth and development across the lifespan. The remaining credits must be in social science and humanities subjects.	A total of 72 credits in the content areas of social sciences and humanities.	A total of 54 credits comprising a minimum of 12 credits in anatomy and physiology, 12 credits in abnormal psychology and 12 credits in modules of human growth and development across the lifespan. The remaining credits must be in social science and humanities subjects.
Internship/work experience	Internship: 560-hour or 14 uninterrupted-week internship experience in TR at a facility that follows the RT/TR process under the supervision of a CTRS, after coursework has been completed.	Work experience: 5 years of paid full-time work experience. (Individuals who possesses a graduate degree in TR need a minimum of 3 years full-time paid experience in RT/TR-related services.)	Work experience: 1 year of full-time work experience under the supervision of a CTRS in RT/TR-related services.

CTRS, Certified Therapeutic Recreation Specialist; *RT/TR,* recreational therapy/therapeutic recreation.

Table 4.2 shows that a minimum of 54 credits was needed in TR and general recreation content coursework, with no less than 45 credits in TR content for NCTRC credentialing. As mentioned in chapter 2, only three universities in SA presented a degree in recreation and leisure: North-West University, University of Venda and University of Western Cape, at the time of writing. In 2018, the recreation honours degree at North-West University comprised a total of 200 credits in general recreation with a total of 48 credits in RT/TR (NWU, 2018a; NWU, 2018b). However, University of Venda's recreation and leisure degree consisted of a total of 280 credits, with only 10 credits in RT/TR (Matshovhana, 2018). University of Western Cape offered a generic undergraduate degree in sport, recreation and exercise science, and students could also complete an honours degree in sport and recreation management, of which a total of 10 credits were dedicated to recreation and another 10 specifically to RT/TR. Although two of these universities met the general recreation content coursework requirements of the NCTRC (North-West University and University of Venda), they did not meet the requirements for RT/TR. Not only did they not meet the requirements for number of core modules – the supportive coursework and the internship were not included at any of the three SA universities presenting a degree in recreation/leisure.

4.2.2 Theme 2: Content and supportive coursework information

Professionals in any field are required to possess a specified body of knowledge. The analysis showed that candidates wishing to apply to the NCTRC for credentialing were required to have completed a certain amount of content coursework as part of their bachelor's degree. The content of the coursework, including the supportive coursework, is determined by the NCTRC Job Analysis. On review of an applicant's academic records, the NCTRC determined their eligibility by the content of their coursework and the completion of a minimum number of hours spent studying different courses/modules.

4.2.2.1 Therapeutic recreation and general recreation content courses/modules

The analysis revealed that the following courses/modules were not accepted as RT/TR content courses/modules at the NCTRC at the point in time that the analysis was conducted:

- Courses/modules for specific activity skills for a single population;
- Courses/modules with grouped activity areas for a single population (for example, camping for special populations).

The following courses/modules were not accepted as general recreation content courses/modules:

- Optional or specialised courses/modules, such as outdoor recreation or resource management;
- Courses/modules aimed at specific activities or groups of activities, such as aquatics or crafts.

4.2.2.2 Supportive coursework information

NCTRC defined supportive coursework as courses/modules that support the practice of RT/TR and that are taught by a department outside the major RT/TR or recreation department; however, supportive coursework/modules could not be specific to any other professional discipline (e.g. occupational therapy) – this was not accepted as supportive coursework. The course/module requirements that had to be included as supportive coursework are shown in Table 4.3.

Table 4.3 Course and module requirements for supportive coursework for National Council for Therapeutic Recreation Certification credentialing, 2018

Required subject	Typical courses accepted	Additional information
Anatomy and physiology	• Anatomy and physiology • Human anatomy and physiology • Kinesiology may be accepted on condition that the applicant also complete a course in anatomy.	In the case that these requirements are met in a single course/module (i.e. human anatomy and/or human physiology), then anatomy and physiology should be addressed in equal parts (at least 50% of the course respectively). Entry-level courses/modules, such as human biology, do not meet the anatomy and physiology requirement, and are not accepted as supportive coursework.
Abnormal psychology	• Abnormal psychology • Psychopathology • Behavioural disorders • Psychology of behavioural conditions.	Courses/modules that only cover learning disabilities are not accepted as supportive coursework by the NCTRC.
Human growth and development across the lifespan	• Human development across the lifespan.	—

NCTRC, National Council for Therapeutic Recreation Certification.

4.2.3 Theme 3: Exam content outline

The information gained from the analysis showed that once candidates for NCTRC certification received confirmation of eligibility from the NCTRC, they were required to pass the NCTRC's CTRS examination. The exam content (Table 4.4) was based on the NCTRC Job Analysis, which assures that the exam is a representation of the practice of RT/TR.

Although the inductive analysis of the NCTRC's documents was primarily used to compile a control sheet on which to base the deductive content analysis, certain general issues that require further discussion emerged. Firstly, the certification standards set by the NCTRC could not be implemented in SA; not only is the practice of RT/TR unknown, but registration with the Health Professions Council of South Africa (HPCSA) could also be required (depending on need and

scope). Secondly, the supportive coursework needed for the healthcare professions training is expected to have some overlap; therefore, some, if not all, supportive coursework would be expected to be contained within the training of the other healthcare professions included in this study. Thirdly, the exam outline of the reviewed NCTRC document was compiled for an existing profession in another country, as could be seen in the last section of the exam content outline: *Advancement of the profession*. Although not all the exam content would be appropriate for SA, it served as a suitable benchmark against which RT/TR in SA could be measured.

Table 4.4 National Council for Therapeutic Recreation Certification Certified Therapeutic Recreation Specialist examination outline

Foundational knowledge
1. Human developmental stages across the lifespan
2. Theories of human behaviour and principles of behavioural change
3. Concepts and models of health and human services
4. Principles of group dynamics and leadership
5. Legislative and regulatory guidelines and standards
6. Contributions of play, recreation, and leisure to health and well-being
7. Models of RT/TR service delivery
8. Practice settings
9. Standards of practice
10. Code of ethics
11. Professional qualifications
12. Cultural competency
13. Cognitive/developmental disorders and related impairments
14. Physical/medical disorders and related impairments
15. Psychiatric disorders and related impairments
Assessment process
16. Current RT/TR assessment instruments
17. Interprofessional inventories and questionnaires
18. Secondary sources of assessment data
19. Criteria for selection and/or development of assessment
20. Implementation of assessment
21. Sensory assessment
22. Cognitive assessment
23. Social assessment
24. Physical assessment
25. Affective assessment
26. Leisure assessment
27. Functional skills assessment

Documentation
28. Interpretation and documentation of assessment results
29. Individualised intervention plan
30. Writing measurable goals and behavioural objectives
31. Progress/functional status
32. Modification of intervention plan
33. Discharge/transition plan of person(s) served
34. Required facility documentation
Implementation
35. Selection of programmes, activities and interventions to achieve the assessed needs of the person(s) served
36. Purpose and techniques of activity/task analysis
37. Activity modifications
38. Modalities and/or interventions
39. Facilitation approaches
40. Intervention techniques
41. Risk management and safety concerns
42. Role and function of other health and human service professions and of interdisciplinary approaches
Administration of therapeutic recreation/recreational therapy service
43. Service plan of operation
44. Procedures for programme evaluation and accountability
45. Quality improvement guidelines and techniques
46. Personnel, intern, and volunteer management
47. Payment system
48. Facility and equipment management
49. Budgeting and fiscal management
Advancement of the profession
50. Professionalism
51. Credential maintenance and upgrading professional competencies
52. Advocacy for person(s) served
53. Legislation and regulations
54. Public relations, promotion and marketing of the RT/TR profession
55. Professional associations and organisations
56. Research activities
57. Collaboration between higher education and direct service providers

RT/TR, Recreational therapy/therapeutic recreation.

4.3 DEDUCTIVE CONTENT ANALYSIS

A candidate who wants to register as a CTRS in the United States of America (USA) must pass the NCTRC exam. The exam reflects the knowledge and skills required by TRSs/RTSs, so the exam content outline was used as a control sheet (Appendix D) for the deductive content analysis, to enable the interpretation and description of recreational therapy training (as reflected in the NCTRC's exam content in 2018) within the curricula of biokinetics, occupational therapy and physiotherapy.

The deductive content analysis was completed by reviewing the 2018 academic yearbooks of the seven universities presenting degrees in the three fields included in this study (biokinetics, occupational therapy and physiotherapy). The universities referred to the documents differently, as noted when accessing them online; therefore, an explanation of the term "yearbook" within the context of the study is necessary. A yearbook is an official university document that contains information about entire degrees, including course outlines, credits, hours of tuition, module descriptions and outcomes. Table 4.5 shows the name of the yearbook document used by each university for 2018.

Table 4.5 Name of academic yearbook document for South African universities, 2018

University	Document
University of Cape Town	Academic handbook
University of the Free State	Academic rule book
University of KwaZulu-Natal	Academic handbook
University of Pretoria	Academic yearbook
Stellenbosch University	Academic calendar
University of Western Cape	Academic calendar
University of the Witwatersrand	Academic rules and syllabuses

The review revealed that, in addition to variations in the name of the academic yearbook, there were dissimilarities in the time taken to complete the biokinetics, occupational therapy and physiotherapy qualifications and in the number of credit hours, across the universities. Every university in Table 4.5 offered 4-year degrees in both occupational therapy and physiotherapy in 2018, but not in biokinetics. Universities of KwaZulu-Natal, Pretoria, Stellenbosch, Western Cape and Witwatersrand offered a universal 3-year undergraduate degree in health sciences/sport science, with an additional year for completion of an honours degree in biokinetics, whereas University of Cape Town offered an honours degree in biokinetics but not an undergraduate programme. In contrast, University of the Free State offered a 4-year degree in biokinetics. Table

4.6 provides a breakdown of the qualification at each university, the course credits and the minimum number of years required to complete the qualification.

The first step in the deductive analysis was to analyse the content of the coursework of all three professions at the seven universities, by matching the items to the control sheet. This was followed by a summative approach to the analysis with the aim of interpreting and describing RT training within the curricula of biokinetics, occupational therapy and physiotherapy. This was done by counting the number of times each item in the control sheet was mentioned in the yearbooks. Table 4.7 shows how the yearbooks of each profession at the various universities were analysed to determine the amount of times each of the 57 topics listed on the control sheet were mentioned. Importantly, each "topic" was only counted once in every module. In the instances where a single module was required for two or all three courses, for example, *Introduction to Psychology*, which occupational therapy and physiotherapy students studied together, the module was coded only once, but was coded (in ATLAS.ti) for each course at the specific university.

Table 4.6 Characteristics of biokinetics, occupational therapy and physiotherapy qualifications at South African universities

University	Qualification	Credits	Years
University of Cape Town	Bachelor of science in occupational therapy	559	4
	Bachelor of science in physiotherapy	588	4
	Bachelor of arts honours in biokinetics	120	1
University of the Free State	Bachelor of occupational therapy	540	4
	Bachelor of science in physiotherapy	518	4
	Bachelor of biokinetics	584	4
University of KwaZulu-Natal	Bachelor of occupational therapy	520	4
	Bachelor of physiotherapy	512	4
	Bachelor of sport science Bachelor of sport science honours in biokinetics	384 144	3 1
University of Pretoria	Bachelor of occupational therapy	589	4
	Bachelor of physiotherapy	548	4
	Bachelor of sport science Bachelor of science honours in biokinetics	409 120	3 1
Stellenbosch University	Bachelor of occupational therapy	567	4
	Bachelor of science in physiotherapy	506	4
	Bachelor of sport science Bachelor of science honours in biokinetics	402 240	3 1
University of Western Cape	Bachelor of science in occupational therapy	500	4
	Bachelor of science in physiotherapy	495	4

	Bachelor of sport science	365	3
	Bachelor of science honours in biokinetics	135	1
University of the Witwatersrand	Bachelor of science in occupational therapy	480	4
	Bachelor of science in physiotherapy	480	4
	Bachelor of health sciences	432	3
	Bachelor of health sciences honours in biokinetics	140	1

Table 4.7 Topic mentions by healthcare profession and total number in 2018 yearbooks of South African universities*

Item number	Control sheet item	Number of universities that covered the topic, within each profession			Total number of times item mentioned
	Foundational knowledge	**Bio**	**Physio**	**OT**	
1.	Human developmental stages across the lifespan	5	2	5	27
2.	Theories of human behaviour and principles of behavioural change	4	4	4	25
3.	Concepts and models of health and human services	3	6	6	25
4.	Principles of group dynamics and leadership	2	2	4	13
5.	Legislative and regulatory guidelines and standards	3	3	3	16
6.	Contributions of play, recreation, and leisure to health and well-being	2	0	4	8
7.	Models of RT/TR service delivery	1	0	0	1
8.	Practice settings	0	2	3	11
9.	Standards of practice	0	0	2	4
10.	Code of ethics	5	5	6	41
11.	Professional qualifications	1	0	0	1
12.	Cultural competency	3	4	4	31
13.	Cognitive/developmental disorders and related impairments	3	3	6	25
14.	Physical/medical disorders and related impairments	6	5	6	47
15.	Psychiatric disorders and related impairments	2	5	6	26
	Assessment process	**Bio**	**Physio**	**OT**	
16.	Current RT/TR assessment instruments	0	0	0	0
17.	Interprofessional inventories and questionnaires	1	1	1	4
18.	Secondary sources of assessment data	0	0	0	0
19.	Criteria for selection and/or development of assessment	3	1	1	6
20.	Implementation of assessment	5	6	6	74

Item number	Control sheet item	Number of universities that covered the topic, within each profession			Total number of times item mentioned
21.	Sensory assessment	0	0	0	0
22.	Cognitive assessment	0	0	0	0
23.	Social assessment	0	0	0	0
24.	Physical assessment	5	3	1	19
25.	Affective assessment	0	0	0	0
26.	Leisure assessment	0	0	2	2
27.	Functional skills assessment	0	0	2	2
	Documentation	**Bio**	**Physio**	**OT**	
28.	Interpretation and documentation of assessment results	2	0	2	10
29.	Individualised intervention plan	2	1	2	9
30.	Writing measurable goals and behavioural objectives	2	0	0	2
31.	Progress/functional status	0	0	0	0
32.	Modification of intervention plan	1	0	0	1
33.	Discharge/transition plan of person(s) served	1	0	0	3
34.	Required facility documentation	0	2	1	3
	Implementation	**Bio**	**Physio**	**OT**	
35.	Selection of programmes, activities and interventions to achieve the assessed needs of the person(s) served	5	4	7	48
36.	Purpose and techniques of activity/task analysis	1	0	6	9
37.	Activity modifications	2	0	2	4
38.	Modalities and/or interventions	3	0	6	11
39.	Facilitation approaches	0	0	1	1
40.	Intervention techniques	2	0	2	5

Item number	Control sheet item	Number of universities that covered the topic, within each profession			Total number of times item mentioned
41.	Risk management and safety concerns	4	0	1	10
42.	Role and function of other health and human service professions and of interdisciplinary approaches	1	3	4	25
	Administration of RT/TR service	**Bio**	**Physio**	**OT**	
43.	Service plan of operation	4	4	4	15
44.	Procedures for programme evaluation and accountability	0	2	3	6
45.	Quality improvement guidelines and techniques	0	1	0	1
46.	Personnel, intern and volunteer management	2	2	5	13
47.	Payment system	1	0	1	2
48.	Facility and equipment management	3	1	1	8
49.	Budgeting and fiscal management	1	1	2	6
	Advancement of profession	**Bio**	**Physio**	**OT**	
50.	Professionalism	0	5	5	21
51.	Credential maintenance and upgrading professional competencies	1	1	0	3
52.	Advocacy for person(s) served	0	1	1	2
53.	Legislation and regulations	0	0	4	7
54.	Public relations, promotion and marketing of the RT/TR profession	2	1	2	9
55.	Professional associations and organisations	0	0	0	0
56.	Research activities	6	6	7	67
57.	Collaboration between higher education and direct service providers	3	4	6	24

Bio, Biokinetics; *OT,* occupational therapy; *Physio,* physiotherapy; *RT/TR,* recreational therapy/therapeutic recreation.

*Colour coding as follows: *green,* >20 mentions; *white*, 10–20 mentions; *purple,* 2–10 mentions, *blue,* no mentions.

Table 4.7 provides a summary of the data reported in Appendix E. For each professional field of study (biokinetics, physiotherapy and occupational therapy), the total number of universities covering each topic on the control sheet is presented, as well as the total number of times a topic was mentioned for all three fields of study. The topics highlighted in green were mentioned most frequently; these were:

- Human developmental stages across the lifespan
- Theories of human behaviour and principles of behavioural change
- Concepts and models of health and human services
- Code of ethics
- Cultural competency
- Cognitive/developmental disorders and related impairments
- Physical/medical disorders and related impairments
- Psychiatric disorders and related impairments
- Implementation of assessment
- Selection of programmes, activities and interventions to achieve the assessed needs of the person(s) served
- Role and function of other health and human service professions and of interdisciplinary approaches
- Professionalism
- Research activities
- Collaboration between higher education and direct service providers.

Not all items were included for all three professions in the yearbooks (highlighted in purple). The following were mentioned between two and ten times in total, either for different professions within the same university, for different professions at different universities or within the same profession at different universities:

- Contributions of play, recreation and leisure to health and well-being
- Models of TR/RT service delivery
- Standards of practice
- Professional qualifications
- Interprofessional inventories and questionnaires
- Criteria for selection and/or development of assessment
- Leisure assessment
- Functional skills assessment
- Individualised intervention plan

- Writing measurable goals and behavioural objectives
- Modification of intervention plan
- Discharge/transition plan of person(s) served
- Required facility documentation
- Purpose and techniques of activity/task analysis
- Activity modifications
- Facilitation approaches
- Intervention techniques
- Risk management and safety concerns
- Procedures for program evaluation and accountability
- Quality improvement guidelines and techniques
- Payment system
- Facility and equipment management
- Budgeting and fiscal management
- Credential maintenance and upgrading professional competencies
- Advocacy for person(s) served
- Legislation and regulations pertaining to RT/TR
- Public relations, promotion and marketing of the RT/TR profession.

The following topics were not mentioned in the yearbook of any of the seven universities (highlighted in blue in Table 4.7):

- Current RT/TR assessment instruments
- Secondary sources of assessment data
- Sensory assessment
- Cognitive assessment
- Social assessment
- Affective assessment
- Progress/functional status
- Professional associations and organisations.

4.4 DISCUSSION

The findings of the deductive content analysis are discussed according to the NCTRC CTRS examination outline headings, shown in Table 4.4, i.e. headings of the control sheet.

4.4.1 Foundational knowledge

Foundational knowledge is the basic knowledge agreed on by a group of people who share interest in a subject matter (Panitz, 1999). Here, foundational knowledge is the knowledge needed to practise RT/TR. According to Richard (2016:278, 282), new technology, changes in healthcare and research findings have influenced the evolution of the RT/TR profession over the last four decades, consequently affecting RT/TR curricula and the knowledge needed to practise.

Foundational knowledge comprised items 1 to 15 of the control sheet (Appendix D). Students studying for any profession within allied health arguably need similar foundational knowledge (Dwulit, 2017:195), and some of the foundational knowledge items featured in the yearbooks extensively (marked in green in Table 4.7). These were

- Human developmental stages across the lifespan
- Theories of human behaviour and principles of behavioural change
- Concepts and models of health and human services
- Code of ethics
- Cognitive/developmental disorders and related impairments
- Physical/medical disorders and related impairments
- Psychiatric disorders and related impairments.

Four of the items on the control sheet were not mentioned in the yearbooks for all three professions (marked in purple on Table 4.7), indicating that these items were only included in the training of one or two universities. According to Austin (2002b:1), RT/TR models provide RTSs/TRSs with “philosophical as well as pragmatic orientations to advance both the theory and practice of the profession.” Control sheet item 7, “Models of TR/RT service delivery” (Table 4.4) was only mentioned in the yearbook of University of Western Cape. This is the only university included in the study that presented recreation as part of their undergraduate degree; therefore, that RT/TR forms part of the curriculum is unsurprising. In addition, in 2015 the HPCSA added the training criterion that biokinetics curricula/syllabuses contain a single module in RT/TR (Wilders, 2012, cited by Young, 2015:35). However, the restructuring of a degree is a lengthy process requiring approval by the various universities, the HPCSA and South Africa Qualifications Authority (SAQA), which might explain why RT/TR is not included in the curricula of all universities that present a degree in biokinetics. In addition, the difference between core and supportive coursework (often referred to as fundamental modules) should be understood. Knowledge gained through core modules forms the foundation of the profession for which a student is preparing and takes up most of the credit hours within the

curriculum (NWU, 2017:39). Much less time in terms of credit hours is spend on supportive coursework modules, which support and provide a better understanding of the content of the core modules (NWU, 2017:39,44). Hence, RT/TR forms part of the supportive coursework of biokinetics, but not part of the core modules from which the learning of foundational knowledge enables practice as a biokineticist, and this is why RT/TR is not included in the scope of practice of biokinetics.

Although standards of practice and professional qualifications (items 9 and 11, respectively, Table 4.7) were mentioned, these referred to profession-specific content. The relevance of these two items is thus questioned as there is no reason for a biokineticist or occupational therapist to need knowledge on the standards of practice or professional qualifications of RT/TR.

4.4.2 Assessment process

Control sheet items 16–27 referred to **assessment**. Assessment, as mentioned in chapter 2, is the first step in the RT/TR process, and takes place when a client starts with RT/TR treatment. An RTS/TRS will gather and analyse data to determine the client's current status, level of functioning, strengths and interests and use this information to develop a programme (Austin, 2013:158; Long, 2007:80). Due to the diverse range of RT/TR clients and client abilities, various assessment methods and standardised assessment instruments are available to measure a variety of functions (Table 4.7).

Similar to the RT/TR process, biokineticists, physiotherapists and occupational therapists evidently also use assessment, indeed they are required to by the HPCSA (HPSCA, 2016). Occupational therapists use measurement, which, according to Preston and Edmans (2016:137), is used to establish the "dimension (size), quality (amount) or capacity of a trait, attribute or characteristic of a person that is required by the therapists to develop an accurate picture of the person's nee and problems to form a baseline for therapeutic intervention". Therefore control sheet item 20, "implementation of assessment", was understandably mentioned a total of 74 times, indicating how assessment forms a vital part of training for all three professions. These assessments, however, are not relevant to the practice of RT/TR, as its scope of practice and aims of treatment differ. Six of the control sheet items related to assessment were not found in the yearbooks for any of the professions. These included knowledge of assessment instruments specific to RT/TR, indicating that the assessments carried out by the three professions are only relevant to their respective scopes of practice. That specific types of assessment, including assessment of the sensory, social, cognitive and affective aspects of an individual, were not mentioned in the yearbooks may be for a number

of reasons. One possible explanation is that these aspects are not deemed important within the scopes of practice of the three professions and therefore not included in their curricula. However, a more reasonable explanation is that yearbooks lacked detailed descriptions of module content and therefore the specific assessment aspects were not provided.

4.4.3 Documentation

Documentation refers to the written records of the client made during the RT/TR process, which then become the legal record of the services provided (Austin, 2009:366; Stumbo & Peterson, 2004:310). According to the HPCSA (2016), all healthcare practitioners are required to keep records of patient treatment; therefore one would expect that these items were mentioned often in the university yearbooks; however, this was not the case. A possible reason is that there are differences in the treatment process and documentation requirements set by the NCTRC and the HPCSA. Additionally, the university training of the three professions may focus more on theory and its application, and less on the management and day-to-day functions encountered once in practice.

An RTS/TRS is required by the NCTRC (2018) to keep records of the content mentioned in items 28–34, namely, interpretation and documentation of assessment results, individualised intervention plans, written measurable goals and behavioural objectives, progress/functional status, modification of intervention plans, discharge/transition plans of person(s) served and other required facility documentation. In comparison, the HPSCA (2016) requires the following documentation and information:

- Personal information of the client
- Patient history, including allergies and idiosyncrasies
- The date, time and location of consultations
- Client assessment
- Particulars of the clinical management of the patient
- Information on patient referrals
- The patient's reaction to treatment or medication
- Test results
- Imaging results
- Information about granting sick leave and the reasons for it.
- Proof of informed consent, where applicable.

Documentation is clearly a requirement of the HPCSA, although the type of information and documentation differ from that required by the NCTRC. Therefore, the yearbooks

unsurprisingly did not contain the information required by the NCTRC, as the process and scope of practice of RT/TR differ from those of the professions included in this study.

4.4.4 Implementation

Implementation is the third step of the RT/TR process and during this phase programmes are presented to the clients (Austin, 2009:224). Two of the items included in this section were mentioned extensively: item 35 “selection of programmes, activities and interventions to achieve the assessed needs of the person(s) served” and item 42 “role and function of other health and human service professions and of interdisciplinary approaches”. However, item 35 described the process that the other professions follow to select activities and did not include principles of RT/TR practice. Item 42 may be relevant to the practice of RT/TR, as an RTS/TRS can also work with similar service professionals such as medical doctors, nurses and psychologists (Austin *et al.*, 2015:21-22).

Five universities made reference to activity/task analysis in the yearbooks, each in terms of occupational therapy. Activity analysis refers to the process of analysing an activity according to the physical, cognitive, social and affective requirements of a client to be able to complete the activity (Stumbo & Peterson, 2004:188) and activity analysis evidently forms an important part of occupational therapy training.

4.4.5 Administration of RT/TR service

Administration of RT/TR services is covered by items 43–49 and includes aspects of the management of an RT/TR practice. Instances where these items were mentioned were in biokinetics-, physiotherapy- and occupational therapy-practice modules, although they were mostly found in occupational therapy training and referenced infrequently in either of the other professions. However, the yearbooks may have lacked sufficiently detailed descriptions of curriculum content to mention these and they may in fact form part of curricula. Additionally, the focus of training is on professional practice and not its management.

4.4.6 Advancement of the profession

According to Austin, (2013) (as stated by McCormick *et al.*, 2015:294), any system/profession can move in one of three directions – it may grow, decline or reside in a temporary state of equilibrium. Practitioners of a profession grow professionally through items 50–57 on the control sheet (Appendix D), including complying with minimum standards, but also by conducting research and contributing to the professional body of knowledge. Unsurprisingly some of the items (i.e. items 50: “professionalism”, 56: “research activities” and 57: “collaboration between higher education and direct service providers”) were mentioned

numerous times in the yearbooks; clearly the included professions need to ensure professional growth within their fields of expertise.

Although credential maintenance and upgrading of professional competencies (item 51) and legislation and regulations (item 53) were mentioned, their relevance is questionable as credentialing maintenance and legislation are not universal but specific to each profession and the country in which these professions practise.

4.5 CONCLUSION

This chapter comprises an interpretation and description of RT training within the training curricula of biokinetics, physiotherapy and occupational therapy. Completion of this objective contributes to the current body of knowledge of RT/TR in SA, by pointing out certain similarities in the training of these professions, especially in non-recreation content and foundational knowledge, likely because all allied health professionals require similar foundational knowledge. Other knowledge required to pass the NCTRC examination, such as that of assessment procedures, programme implementation, client documentation and research, were also included in the curricula of biokinetics occupational therapy and physiotherapy; however, the focus of teaching of this knowledge is profession-specific and not that of RT/TR. Although occupational therapists would not be able fulfil the NCTRC credentialing requirements on the basis of their existing course content, they are most qualified in terms of RT/TR training, followed by biokineticists then physiotherapists.

A study limitation to consider is that not all the items included in the control sheet were applicable in SA, as the list was compiled from the US recreation credentialing organisation, the NCTRC, in a first-world country, and the list items would have been based on the healthcare situation and structure of that country. Examples of these are item 5: “legislative and regulatory guidelines and standards” and item 12: “cultural competency”. Although SA’s regulatory guidelines and culture differ from the USA’s, an initial focus on the NCTRC was productive for the inductive analysis. Although the aim of the inductive analysis was the compilation of a control sheet for use in the deductive analysis, none of the SA universities met the recreation or RT/TR requirements for credit hours and total number of courses, and few met the requirements for supportive coursework.

Differences in module descriptions were noted among yearbooks: some universities used keywords in their explanations (e.g. University of Pretoria) whereas others included detailed descriptions of content (e.g. University of Cape Town). Some of the course content from the professions is generalisable or could be changed to include RT/TR, for example, items 46–

49: “personnel, intern, and volunteer management”; “payment system”; “facility and equipment management”; and “budgeting and fiscal management”. Although course content was specific to the professions, small alterations could potentially be made to include RT/TR.

It cannot be said, though, that the entire practice of RT/TR could be included in existing curricula by making small alterations; differences between formal curriculum and hidden curriculum, which is also important in the training of students, must also be considered. According to Wear and Skillicorn (2009:452), the hidden curriculum “can be both human and structural; that is, it can be transmitted through human behaviors and through the structures and practices of institutions”. Hidden curriculum refers to the attitudes, values and beliefs of faculty members from whom students learn (Van Puymbroeck *et al.*, 2010:220); therefore, for students to learn the attitudes and values of RT/TR would be impossible if they did not receive training from RT/TR educators.

Chapter 5

Results and discussion: Objective 2

5.1 INTRODUCTION

Completion of the first objective (chapter 4) revealed that the other healthcare professions explored in this study (biokinetics, physiotherapy and occupational therapy) receive training in the foundational knowledge required to register as a Certified Therapeutic Recreation Specialist (CTRS), but limited or no recreation or recreation therapy/therapeutic recreation (RT/TR) training. However, it is unclear if any of these professionals provide similar services to those of RT/TR, as practised in the United States of America (USA). This chapter provides the results for the second objective of the study: to interpret and describe RT/TR within the scope of practice of biokinetics, physiotherapy and occupational therapy. Findings from the 30 semi-structured telephonic interviews conducted are detailed and discussed.

5.2 RESULTS

Data analysis resulted in the identification of three categories: 1) professional activities; 2) professional approach; and 3) professional bodies, as well as one distinct standalone theme, RT/TR in SA, which was not broad enough to constitute a separate category. Each category had its own set of themes and sub-themes. Table 5.1 provides an overview of the themes and sub-themes in each category.

Table 5.1 Overview of categories, themes and sub-themes

Category 1: Professional activities	Sub-themes
Theme 1: Type of clients	• Injuries • Groups • Conditions • Problems • Wellness
Theme 2: Types of activity	• Aerobic exercises • Strengthening activities • Therapeutic techniques • Functional activities • Recreational activities • Flexibility exercises
Theme 3: Activity setting	• Indoors • Outdoors

Category 1: Professional activities	Sub-themes
Theme 4: Treatment process	• Evaluation • Re-evaluation
Theme 5: Participation format	• Individual sessions • Group sessions
Theme 6: Termination	• Patients leaving • Finances • When functional • Never terminate
Theme 7: Referrals	• Referrals from • Referrals to • Referral reasons
Theme 8: Challenges	• Finances • Clients
Category 2: Professional approach	**Sub-themes**
Theme 1: Treatment approach	• Treatment • Wellness • Combination
Theme 2: Scope of practice	• Biokinetics • Physiotherapy • Occupational therapy
Category 3: Professional bodies	**Sub-themes**
Theme 1: HPCSA	• Benefits • Challenges
Theme 2: Professional bodies	• BASA • SASP • OTASA
Category 4:	Sub-themes
RT/TR in SA	• Client's ability to pay • Cultural relevance • Activities provided • Need for RT/TR

BASA, Biokinetics Association of South Africa; *HPCSA,* Health Professions Council of South Africa; *OTASA,* Occupational Therapy Association of South Africa; *RT/TR,* recreational therapy/therapeutic recreation; *SA,* South Africa; *SASP,* South African Society of Physiotherapists.

In the following section, key findings from the semi-structured telephonic interviews are reported. The interviews were grouped according to the various professions: biokinetics (Group 1), physiotherapists (Group 2) and occupational therapists (Group 3). The numbers (01–10/11) represent the number of the participant in the discussion. Participant 104, for example, gave the fourth interview in the biokinetics group. Supporting quotes and connection to existing literature are provided and a comprehensive discussion follows the results.

5.2.1 Category 1: Professional activities

Eight themes describing professional activities were identified (Table 5.1). These themes were types of clients, types of activities, activity setting, treatment process, participation format, termination, referrals and challenges.

5.2.1.1 Types of clients

The theme **types of clients** refers to the clients of the various professions, the core of all professional activities. According to the participants, the biggest influence on the professional activities they provide was the type of clients and their conditions or reasons for seeking treatment.

Injuries included orthopaedic injuries, workplace injuries and injuries caused by car accidents. Orthopaedic injury refers to injuries to the musculoskeletal system. According to Shultz *et al.* (2009:13), these typically include closed soft tissue injuries (contusions, sprains and strains), bone and joint articulations (closed fractures, epiphyseal injuries, dislocations and subluxations) and nerve injuries. From responses about the types of clients that participants work with in their practice, both biokineticists and physiotherapists evidently worked with people with orthopaedic injuries on a regular basis. Participant 104 mentioned that their patients have "mainly orthopaedic injuries, so lower back, ankle, knees, shoulders, that would be the main types of patients that have been coming to my practice and that would form about 80% of the rehab". One of the physiotherapists (208) described their patients as having "orthopaedic conditions, backs, necks, shoulders". Occupational therapists also worked with orthopaedic injuries to some extent, but their treatment was focused on hand, head and hip injuries. As participant 301 explained, "I also work with individual adults, some [of] whom have … head injuries", and one participant specialised in the treatment of hands. In addition to orthopaedic injuries, occupational therapists treated patients with workplace injuries or who were injured in car accidents. Although the types of injuries were unclear, participant 307 explained the she treated patients who "would have an injury in the work situation and then need to go back to work so I'll do that assessment and report".

The types of clients that biokineticists, physiotherapists and occupational therapists saw were also categorised into various **groups**, the next sub-theme. These groups included children, adolescents, adults, older adults and sport athletes. Participant 208 explained, "I do work with a lot of … geriatric people like the elderly which … from 65 and older is quite the common [type of] person that we do see here", while participant 202 mentioned that they worked with patients as follows: "Ja [yes] … and also … soccer players, rugby players, youngsters … that

are having … adolescence, that have got growth pains". Thus, evidently these professions provide treatment to people of all ages.

From the theme **types of clients** another subtheme emerged: various **conditions**, which included developmental disabilities, physical disabilities, intellectual disabilities, disorders/diseases, chronic conditions and psychiatric disorders. Participants who worked with these types of patients described them as their "special population", as they received long-term treatment and practitioners did not necessarily know if the patients would ever recover. Participant 202 explained, "I don't know if they are going to get better or not … you are working on these patients and after nearly two months you only see results after two months and it's still a small difference". Although some participants worked with this type of client (mostly occupational therapists), other participants, especially from the biokineticist group, mentioned that they do not work with "special populations" as they "don't … really get much exposure to them" (104).

In terms of **conditions**, a wide range of developmental disabilities were treated by certain participants. Developmental disabilities are conditions resulting from impairments in language, physical status, learning or behaviour that present at birth or before the age of 18 years (CDC, 2017; Piatt & Dawson, 2015:214). Occupational therapists were found to treat the majority of clients with these types of disabilities. Participant 303 explained that she worked with children with "dyslexia … autism, or anywhere on the autism spectrum" and participant 307 mentioned,

> "I have autistic children that is [sic] special needs. I've got children with cerebral palsy that is [sic] special need. I see young adults with dyslexia and dyscalculia, also experiencing a severe problem with the[ir] functioning, so I'll also see that as special needs. Most of … my children go to special schools when they can't cope in a normal school environment".

In terms of working persons with special needs, biokineticists and physiotherapists mostly worked with clients with cerebral palsy, although one physiotherapist worked with more than one type of developmental disability. She (205) explained, "I see kiddies with cerebral palsy, spina bifida and muscular dystrophy types of problems". Biokineticists had little exposure to these developmental disabilities, reflected by the statement of participant 108, who mentioned that "we have one cerebral palsy person which comes to us, and further … none … that type of social skills and learning skills to be quite honest, I hardly … work with that. It's about 2% of my practice".

Physical disability was also mentioned during the interviews and typical clients included amputees, and blind, deaf, paraplegic or quadriplegic people. As occupational therapists were

more likely to work with patients with other disabilities, one would expect that they might also work with patients with physical disabilities. However, from the interviews it appeared that physiotherapists worked with this client group more often than biokineticists and occupational therapists. It is possible that these clients have adjusted to activities of daily living (ADL) and have problems not directly related to their disability that physiotherapists can address. For example, one of the physiotherapists (206) explained that she sees patients for other problems and not directly because of their condition: “For example, I had … an amputee the other day, with back pain and not due to the actual amputation”.

Few biokineticists and physiotherapists mentioned patients with psychiatric disorders as a treatment group; however, more than half of the occupational therapists reported working with this group. Participant 308 noted, “I’ll see psychiatric patients at the psychiatric unit, where I do crafts with them in the afternoons”. Participant 307 mentioned that she works with persons with depression: “… the same with the psychiatric patient who has severe difficulties with depression, poor concentration, poor memory, poor motivation”. The limited exposure that biokineticists had to these patients was reflected by a single participant (101), who stated, “Sometimes I get referral[s] from a psychiatrist here. But not that much, so you sometimes get people with depression”.

Four participants (one biokineticist and three occupational therapists) stated they treated people with Down syndrome; however, this was the only intellectual disability mentioned during the interviews, highlighting that people with intellectual disability do not form a significant component of the research participants’ caseload.

Other disorders, chronic illnesses and diseases participants treated included arthritis, fibromyalgia, Parkinson disease and muscular dystrophy, with all three professions working with these. Patients with chronic disorders included cardiac patients, who were seen by biokineticists and physiotherapists. Participant 108 described these patients as being high risk: “So, the cardiovascular people … Ja [yes], well … if the person got … ICD [implantable cardiac defibrillator] fitted or … a pacemaker fitted, immediately that puts them … in our high-risk category”.

Participants also treated persons with certain **problems**, the next sub-theme. These included problems such as bedwetting, lack of self-esteem, developmental/perceptual motor difficulties and scholastic problems, and were only reported by occupational therapists. Participant 304 explained that her clients are “mostly kids with … developmental delays and then scholastic disorders … and then … children with sensory integration difficulty”. Participant 307 worked with similar clients, describing them as children with “… scholastic problems … typical

occupational treatment with children … developmental problems, perception problems, reading aspects and guidance with math." That these patients were solely mentioned by occupational therapists could be explained by only occupational therapists being concerned with ADL (Government Gazette, 2018), as reflected in their scope of practice.

Several biokineticists and one physiotherapist mentioned that they present activities that maintain patient wellness and quality of life. As a result, the **wellness** sub-theme emerged. Participant 104 explained that "there are a string of wellness as well [we also do wellness], so, people that just want to change their overall health…", indicating that biokineticists provide activities to people who do not necessarily have a condition. This was confirmed by participant 108 who declared that "… wellness people … general fitness people" were also accommodated in their services. Participant 209, a physiotherapist, explained that she held exercise classes aimed at wellness: "my exercises classes, we're almost talking about 12 exercise classes a week, and those are aimed at wellness."

5.2.1.2 Types of activities

The types of activities presented by the various professions were determined by the types of clients they worked with. Various participants echoed this and in all professions; for example, participant 105 stated that activity "differs from patient to patient and … what your aim is with this patient". This theme was divided into six sub-themes: aerobic exercises, strengthening activities, therapeutic techniques, functional activities, recreational activities and flexibility exercises.

According to Kenney *et al.* (2015:577), **aerobic exercise** improves cardiorespiratory endurance by enhancing the efficiency of aerobic energy-producing systems. Although a variety of activities are classified as aerobic exercise, activities mentioned included cycling, exercises, running, swimming and walking. Participant 102 explained that they take a history and talk to the client as part of the initial interview and evaluation, noting that it was during this stage "where I do realise … okay, this person must do cardiac type of activities so … we would maybe do a bit more cardiac and bicycle to warm up, or we tell them to go and swim at home". Exercise was mentioned numerous times by the biokinetics group, not surprisingly, as biokinetics is described as "life through movement" (BASA, 2018). Aerobic exercise classes were also used, with participant 107 noting "sometimes we do … a more aerobic step kind of a class; sometimes we do a stretching kind … of a class; it just depends around the patients based [in the class] at the time". The interviews indicated that biokineticists and physiotherapists focused on aerobic exercises.

Strengthening activities are activities that strengthen certain muscle groups. Strengthening activities evidently formed an important part of biokinetics practice, with reference made to specific activities, specific muscle groups and types of training, such as resistance and stabilising exercises. When asked about the types of activities participants engage their clients in, participant 102 answered:

> "I focus quite a lot in the two first sessions on posture. The way you actually carry your body, to me there is a very big influence in how people get to use the correct muscles… I look for the areas that still needs [sic] improving, so evaluation seems to show me, should I focus a lot on stretching or are they already in a good place with stretching? And then there is core activation and strengthening of all the different imbalances".

Participant 109 referred to the scope of biokinetics in general and went on to say, "so if you think about biokinetics, we can pretty much do … strengthening, which is, with all its derivatives, maybe isometric, isokinetic, or isotonic … we can do proprioception, which is balance. We can do range of motion, flexibility, stretching." Physiotherapists, however, used Pilates-style exercise classes for patients with chronic pain, as participant 210 explained, "rehabilitation form of Pilates, where we specifically focus on strengthening and stretching and moving correctly and relaxation techniques." Occupational therapists also mentioned that they include strengthening exercises in their treatment, although the type of activity differed, as reported by participant 305: "with the adults, it's lots [of] hand therapy, focus on muscle tone, muscle strength … important of ADL. Mostly ADL activities".

Therapeutic techniques is a comprehensive term that includes manual therapy and splint-making. From the interviews it emerged that although biokineticists prescribed certain therapeutic activities, such as mobilisation exercises, physiotherapists performed most of the activities within this sub-theme, including massage therapy, acupuncture and ultrasound treatment. When asked about the types of activities they perform in their day-to-day work, participant 204 explained, "massage, myofascial release, mobilisation, rehabilitative exercises and then I do give some electrotherapy machine as well, if needed." Participant 210 provided a comprehensive description of the activities:

> "Again, it depends on the patient … and the condition of the patient, so if it is your typical sports patient … they don't come for a lot of sessions, so more a treatment approach … I would mostly make use of soft tissue mobilisation … dry needles … and then we would rehab; firstly, we would look at … strengthening of the surrounding muscles and stretching and preventative [treatment]. We then … just maybe address their … sports equipment, footwear, etc. If it is not [a] chronic … pain patient, then I would still use …

my dry needles and my soft tissue nodes and maybe some electrotherapy, like ultrasound… ".

Occupational therapists, as mentioned earlier, performed hand therapy and sometimes needed to make splints for patients' hands.

Functional ability is the next sub-theme discussed. Stumbo and Peterson (2004:42) describe functional activity as functional behavioural areas, these include physical, mental/cognitive, emotional and social aspects. Although all three professions were represented in this sub-theme, the majority of the codes were captured in the occupational therapy group, as they addressed ADL, including fine and gross motor skills, self-esteem and social skills, and sensory integration. Participant 305 explained that she used a variety activities, for example: "We do lots of hammock swings, tactile stimulation … we also do auditory integration training with the kids". In addition, participant 306 explained, "I usually start off with gross motor activities, where there is a lot of balancing activities, a lot of coordination, a lot of bilateral integration – that's your two-handed activity". Biokineticists also worked within this area, but their focus was mainly on balance and functional exercises, whereas the physiotherapists only focused on activities that promoted function, as participant 208 mentioned when asked the type of activities included in treatment: "exercises to focus on the muscles and then … a more global … we have a more functional type of things like that [sic]. The function they can't do and trying … to get back function."

Occupational therapists also use **recreational** types of activity to treat their patients, especially when treating children. Participant 303 presented her activities in a unique way, as she explained,

> "we try to use … activities that are known to them but … with a twist, if I can put it like that. So, using … a paint activity but instead of painting with a paintbrush we paint with … q-tips or with their fingertip, other objects we can find, just to … excite them a bit more … to the … activity, so a lot of arts-and-crafts-type activities, a lot of games, like board games and things, we try and include. Just so that there's … variety … in terms of the type of activity, so it's not the same thing over and over and over again".

Occupational therapists also used play-based activities to encourage children to participate in treatment.

Flexibility exercises/flexibility refers to the ability to move (arms, trunk and legs) in a pain-free and non-restricted range of motion (Prentice, 2011:693). Activities involving or promoting flexibility were mostly performed by biokineticists, but both of the other professions also used

some form of activity to promote flexibility, especially stretching, which most therapists began their sessions with. Participant 103 described how "we follow … the principle that we were taught … by biokinetics where we will do a warm-up, a stretch and then an exercise routine, so within an hour slot that they have with us, they would either do a 5- or 10-minute warm-up with us or before they see us and then we go straight into stretching". Participant 207 explained that it forms part of their treatment process: "I like starting with stretches just to release the muscles … and get them more confident in doing things, and then I start with weight-bearing exercises and then I take it to functional".

5.2.1.3 Activity setting

Type of activity also influenced the decision to provide activities **indoors or outdoors**. Research has concluded that spending time outdoors holds various health benefits; these include an increase in self-confidence and perceived well-being, improved cardiovascular health, reduction of stress and the development of social interaction and cohesion (Hartig *et al.*, 2014:215, 216, 222; Olsson *et al.*, 2013:796). The majority of the activities presented by all three professions were conducted indoors within treatment facilities. There were, however, conditions under which treatment was carried out outdoors. Biokineticists and occupational therapists took their clients outside when required to evaluate sport-specific skills and abilities or when clients needed to become accustomed to a specific terrain. Participant 106 explained,

> "all of my treatments happen in my practice which is indoor … I also have a swimming pool just outside which I use from time to time and then, when it comes down to more sports-specific stuff, when they have to get cleared … like netball players and rugby players … there are times I'd go out with them to the fields and then we do drills that are more sports-specific and to get them used to … the terrain that they are going to be back on if they return to play."

Physiotherapists used the outdoors when clients struggled with specific activities, as stated by participant 201: "If I need to practise something like uphill walking, we have a nice hill outside that we try and use or stairs outside of the building up and down; sometimes we have movement restriction going down stairs then we just go down stairs. But most of my therapy happens inside the practice." Occupational therapists incorporated the outdoors as part of their therapy when working with children; as participant 303 stated,

> "Our practice is very … a homely environment, so we have very nice outside space as well but try to incorporate as much as possible … just because the kids don't play outside as much as they should … with everyone stuck in front of TVs and iPads and what not. So we try to include as much outside activity as possible, even if it is just for our warm

up … or even if they have to climb up a rope ladder to fetch the paint that they are going to paint with … Things like that".

5.2.1.4 Treatment process

The treatment process is the general process of designing and implementing the treatment programmes presented by the different professions. Sub-themes identified within this category were evaluation and re-evaluation.

Evaluation was completed to assess a patient's current state in order to determine the focus of the programme, sessions or interventions. Without evaluation, determining programme success would not be possible. When asked about treatment activities, participant 103 referred to the first evaluation: "we will then do the evaluation to determine what is causing the problem and figure out what the treatment solution will be, to either reduce the problem or to make sure the problem goes away". Similarly, participant 211 explained,

> "I usually have a 45 minute … treatment session. So I would use the first 15 minutes to … catch up, find out … The injury is quite important … a good assessment will determine the way forward and … I think if you get a good assessment the first time … then you don't waste their money or their time by treating them too many times after that. So I think it is definitely vital … a history is very important … any changes that occurred … before the injury, and if it's just trauma, it's quite straightforward, so … if it's … a tendonitis or something like that you need to get a real good history of what could have been the cause … so assessment is super-important for me and then … functional activities. Going through that … so I just like to find out what's their leisure".

Participant 211's comment above emphasised the importance of recreational preferences – she used their recreation activities to determine the treatment focus, explaining, "I think in the assessment it is important to find out what are their hobbies, what are their sports of choice … If they can't run, what else can we do to … facilitate running."

Not all participants consulted with their clients on their recreational preferences. When asked about this, participant 209 reacted, "No, I haven't". Participant 307 said, "You need to take a person's … lifestyle, a person's dislikes and likes and his personality; you have to take everything into account so there will always be a form of assessment, where you … see what the person is interested in doing". Participant 104 stated,

> "a lot of our rehab is based on what their activities are afterwards. So if they play golf, that is what they want, to get back into golf. Then I'll do … the vast majority of the rehab will focus … on getting them golf-fit and if it's a runner, a lot of rehab will be focused on

running's aspects and stuff like that, so we do obviously take … whatever recreation they do into consideration at the rehab".

When activities are based on clients' recreational preferences, they tend to engage in the activities (Caldwell, 2005:18), which motivates them to comply with treatment. Similar findings were made in this study; as participant 107 described,

> "I always consult with my patients [on] their preferences, because … I just feel if you don't do that they probably would not participate. Example, if you have a patient that really doesn't like water but you know they would benefit from the water, putting them in the water isn't going to help them in any way … they're probably going [to] come for that one session and then not going to come again, so it's not an activity that they enjoy doing".

Participant 201 stated,

> "usually with our first consultation one of the questions we ask the patient is, what are their hobbies, to see how we … I mean it doesn't help to rehab someone … for a specific sport if they don't do it at all. So I have a lot of patients that like walking or even just basic walking their dog, so then we ask, 'what do you normally do, what do you enjoy, what do you want to get back to eventually, when you are rehabilitated?', and then I would try and incorporate that into it".

In addition to the first evaluation, **re-evaluation** formed a vital part of client treatment. For example, children referred to an occupational therapist by teachers and parents had their problems re-evaluated to ensure that they had improved. Participant 304 stated that re-evaluation was important: "just to check the … progress … we will terminate if we see … it's going better or it's if the teacher is happy or the mother is happy". The importance of re-evaluation appeared similar for biokinetics, with participant 110 concurring, "at four weeks [I] do a re-evaluation on my clients and we test them and see if they are up to all their goals that we have set for them". Physiotherapists referred to the initial evaluation, but none of them referred to the re-evaluation. This may because their therapy is more "hands on" and they can see and feel the differences in, for example, a client's range of motion. Participant 211 was of opinion that the hands are a powerful tool that can be used to feel things; she explained, "there is something about your hands that is … I think that they are a very powerful tool that you have and you can feel quite a bit. I think with experience you use your fingertips and it gets [they get] more and more sensitised".

5.2.1.5 Participation format

Participation format represents the format in which programmes are presented; the data suggested that treatment sessions were either presented **individually** or in a group format, each with its own set of benefits and challenges. A description of the participation format is followed by an explanation of the benefits and challenges associated with working with individuals and groups.

Biokineticists focus on final-phase rehabilitation (Ellapen *et al.*, 2018), therefore clients do not present with pain and swelling, and treatment is concerned with strengthening, but may also be aimed at maintenance or prevention of a recurring injury. Participant 109 explained that rehabilitation should be executed on individual basis: “so for me, rehab is without a shadow of a doubt a one-on-one, and I think you can get away with fitness training … in a group.” Participant 102 concurred and mentioned that “most of the definite patients are individual … but we promote getting part of the preventative medicine or to long-term maintenance after a phase of rehabilitation ... We do have a preventative class more aimed at cyclists to improve their posture and also their strength of different muscles that is [sic] not really activated with the cycling.” Although most biokineticists who participated in this study preferred to work on an individual basis, they also worked with small groups, of 4–5 persons.

Seven of the eleven participants presented only individual sessions. Similar to the biokinetics group, group sessions were aimed at wellness; participant 209 explained, “my exercises classes, we’re almost talking about 12 exercise classes a week, and those are aimed at wellness.” Participant 211 stated that she was in the process of starting group sessions, also aimed at injury prevention: “I’m actually in the process of starting a group session for some athletes, for … an injury prevention class”.

Only one of the occupational therapists who took part in the study (participant 307) worked with groups, in a psychiatric unit, while the rest solely focused on individual treatment. However, participant 302’s view agreed with that of 307: “I find the group activities work … better with your … psychiatric … mood disorders and that kind of thing, and that is something that we really work with … often here”.

Benefits and challenges experienced by the professionals when working with individuals and groups were also identified; due to similarity in responses, unlike previously, they are not discussed here according to professional group. The benefit of taking part in one format was automatically perceived as a shortfall in the other format. All participants reported that working on an individual basis was beneficial, because they only have to focus on a single patient. As

participant 203 reported, “You’ve got one patient, you are interacting with that patient alone.” In addition, participant 104 mentioned that

> “personally I prefer individual activities more … mainly because you can give them undivided attention … making sure that they are doing the exercises correctly … because it is … an emotional journey as well … if you say had a deeper conversation in the individual session versus when you are in a group setting [of] 4–5 people, they don’t really tend to open up too much or share what people have been through”.

Participant 101 stated, “I make sure that everything is done correctly … it’s only you and that person, so if they have any issues, they are more confident and sometimes tell you ‘okay, I did like this and this and this’, and even things coming out at home, so they normally tell you what’s going on in their personal life as well”. Other benefits included the personal relationships that therapists have with their clients, as described by participant 202: “The benefit is that … we’re spending a whole hour so I get to know the person”.

Challenges of working with individuals not associated with the benefits of working in a group, were explained by participant 208: “…sometimes you … can get too involved with the individual and sometimes they expect too much from you as the therapist. They expect you to do magic. Ja [yes], they expect you to do magic, right after one session, they want to start running.”

Humans are social beings, who work, play and live together (Kassin *et al.*, 2011:3) and, therefore, it not unusual for persons in a group to learn from each other, and support and motivate each other, which also contribute to cohesiveness (Austin, 2009:327,328; Kassin *et al.*, 2011:296, 299; Zastrow & Kirst-Ashman, 2010:13). The effects of groups on group cohesion are reflected in a comment by participant 303: “I see that in the groups that it’s nice to have that group cohesion, that motivation, that little bit of competition element that they get with when they are … in therapy with their friends or their colleagues”. Participant 102 mentioned,

> “There is a financial advantage to be in a group session and it is normally cheaper for the patients … if we see 3 or 4 people in the same class, its 3 or 4 times cheaper for the patient … and a lot of them also enjoy the socialising about it, because they realise there is other people [sic] in the same situation, and that is also a good motivational thing to see other people in that situation”.

The motivational aspects and the financial advantage of treating clients in groups were the greatest benefits of groups and were mentioned by numerous participants. For example, participant 207 referred to support from groups: “I think, sometimes when they are in a group

setting and they see how others suffer more than them, or they're more … support[ed] from other people going through the same thing." Participant 308 mentioned the financial benefit, stating, "with the group setting, I think the most benefit you get there is, firstly, finances. It's a lot cheaper for the parents [of the children treated]". It was also mentioned that the type of client and the reason for seeing their therapist determined participation in group activities. Clients also needed to understand the physical movements required in group activities, as noted by participant 103: "We actually have to get the person involved in the movement, all the time … the patient doesn't understand what the problem is. They don't know how to move a certain limb so we have to train them one-on-one with verbal cues, visual cues, to get them to do the movement we require from them to get better." Lastly, seeing people in groups saved time and clients with the same problems could be grouped, as participant 211 explained, "I think the time issue for me is a big thing, so … I could help six people at the same time … 45-minute session".

5.2.1.6 Termination

The results indicated that treatment terminated for various reasons, including patients leaving before treatment ended, lack of client finances and therapists terminating treatment when clients were functional. In some cases, treatment was never terminated.

Clients leaving before treatment ended was a common problem throughout all three professions. Participant 204 responded, "Sometimes, somebody does stop halfway through, so they don't have time for it anymore, but it's that individual's choice". Participant 302 experienced the same problem and mentioned, "yes … it sometimes happens that a patient terminates the therapy themselves then I am not so [laughing] happy, obviously. Ja [yes], they leave a bit sooner than what I would have preferred." Participant 307 tried to explain the reasons for clients leaving and said, "treatment is sometimes terminated by the patient because of different reasons; that would be, finances aren't there … the patients sometimes move away, some patients are just not compliant." As reported by the previous participant, clients often terminate treatment prematurely for financial reasons. Participant 210 experienced this:

> "let's say this is a middle-class town, so the medical aid will pay for a few sessions and then … they have to pay themselves and ja [yes], with the economy … I think it is for a lot of them … physio [physiotherapy] is not so important. I think food and other things is [sic] more important than coming for physio, so a lot of the patients I do treat for maybe 4 to 6 sessions. That's all I have."

Therapists were also considerate of client finances, terminating treatment if clients were not making progress. Participant 209 described how they terminated treatment “when either a patient is better or not making any progress”.

Treatment is also terminated once the client has reached predetermined goals, when they are functional, when the problem is solved or when clients can proceed without the therapists. Participant 207 explained that she proceeded until “they go well without my help. So, if they’re pain-free and fully rehabilitated, or sometimes I let them go for longer periods of time without physio to see that they can actually cope without having physio each week and that it is okay and they can manage their pain, especially for the chronic pain people.” Patients were released from treatment once they did not need the help of the biokineticist anymore. Participant 106 commented,

> “when it comes down to that, when you can see that the person can sustain the wellness or the situation themselves, so when you know they will be able to actually help themselves from there on … If it is something that has to have maintenance … or otherwise if you see … your treatment has been … fully finished. So if you can actually see you have finished your protocol, the person is able to do everything that you would actually test them on and they would test positive on that and you know from there on they would be fine and they won’t be needing your service anymore.”

There were also instances where client treatment was never terminated, although this was only found in the biokineticist group. Participant 107 described this situation: “I don’t think I, you ever terminate your treatment … If I feel … patients are not happy with your service or something like that, they generally keep on … you won’t really terminate a treatment unless they have a reason that they shouldn’t be exercising or they shouldn’t be physically active.” Participant 103 elaborated on the process:

> “we actually never terminate our treatments … we design exercise programmes that will last for a certain period of time, then we look at a re-evaluation or we might re-assess the situation and design a new exercise programme that has evolved from the previous exercise programme … we might terminate the treatment with that programme, so the exercise programme … lasts for about 6 weeks. Then we will go through their full programme with the patient after their sessions they did at home. Say ‘are you happy with the programme? Do you understand you’re opting to terminate? Do you know what you’re doing?’ Then we would agree. They go off for 6 weeks. We re-assess them in 6 weeks but we say, ‘okay let’s see how much improvement you’ve got from this exercise programme’. Then we redesign the new exercise programme to push them to the level of the … rehabilitation … That’s normally the process, that’s what is required. Once you

see that the person has overcome any injury, they don't have any of the symptoms that they first described, then we will say… 'okay we've designed you a generic exercise programme. You can now do any exercise you want to do'. Either give them [an] exercise programme, or say that you can continue with whatever you were doing before you came to see us".

5.2.1.7 Referrals

The referrals process is followed to send patients from one professional to another, or between professionals in the same profession. The professions featured in the study **referred clients to and from** various professionals, as shown in Table 5.2.

Table 5.2 Referrals from and referrals to

Profession	Referrals from:	Referrals to:
Biokinetics	Orthopaedic surgeon Chiropractor General practitioner Occupational therapist Physiotherapists Psychiatrist	Occupational therapist Physiotherapist Chiropractor General practitioner Kinderkineticist Physiotherapist Sport physician
Physiotherapy	Orthopaedic surgeon General practitioner Personal trainer	Biokineticists Chiropractor General practitioner Dietician Occupational therapist Orthopaedic surgeon Pharmacist Physiotherapist Podiatrist Psychologist
Occupational therapists	Lawyers Psychologist School	Biokineticist Chiropractor Dietician General practitioner Optometrist Orthopaedic surgeon Physiotherapist Play therapist Psychologist Neurologist Psychiatrist Speech therapist

As demonstrated by Table 5.2, the various professions were not reluctant to refer to other healthcare professions. Interestingly, the physiotherapists also referred clients to other physiotherapists; as participant 210 explained, “If the patient is [a] kid, and [a] neurological condition which I can’t treat due to my space and my lack of equipment, I would rather refer them to one of my colleagues … she’s got the right equipment … to treat neurological patients.”

Another sub-theme identified was the **reason for referrals**. The reasons clients are referred to other practitioners were very similar among all three professions, and are discussed accordingly. Clients not progressing or clients requiring treatment outside of a practitioner’s scope of practice were the main reasons. As participant 110 stated, “if I just feel I’ve come to a point where I can’t help them anymore. I can’t progress them any further then I do … refer them on to a person that I think is in the next stage in their treatment.” Participant 304 explained how she referred when she felt out of her depth, echoed in a reaction from participant 305: “when there’s issues that arrive that are out of my scope then we refer”.

5.2.1.8 Challenges

When exploring the challenges participants faced within their scope of practice, similar problems were experienced. The greatest problem was finance, with medical aid schemes paying for a limited number of sessions and clients without the resources to cover further expenses. Practitioners felt placed under severe pressure to produce results within a limited time. As participant 203 responded, “a lot of the medical aids, the funds are coming out of their savings, so by the time they come to physio they had seen the doctor, they had X-rays maybe … they have very little funds left, so sometimes we [are] suppose[d] to perform a miracle.” Participants were asked whether they consult with their clients on their recreational preferences, when planning treatment activities. Participant 307 replied,

> “otherwise it won’t work, but sometimes … it doesn’t have to change everything, like a hemiplegic patient. He used to do sport and everything and then he needs to say okay, [he] cannot do what [he is] interested in, but now you need to find some new activities, so I would say 80% of the time you try to work within a person’s interests and the time available and definitely you [have] got to look at the finance he has available.”

The second problem mentioned was client treatment compliance. Clients were sometimes expected to carry out activities at home; however, they may not have done so, putting therapists under additional pressure as they already felt limited by the available treatment time. It was also mentioned that clients sometimes do not attend regularly, perhaps coming for one session and then skipping sessions.

The third problem discussed was client expectations that therapists "fix" their problems. Participant 211 described her frustration: "I think that is just ridiculous … I don't know about the other professions, but in physio … there is a lot of pressure to fix someone … I don't feel I can charge someone if I haven't made a huge difference." Indicating that clients wanted the therapists to do all the work, participant 204 expressed that there were "preconceived ideas of what a physio should do and should not do … Lots of people think that they come for a massage and that I should fix the problem … I follow a collaborative approach, where I'm only assisting you [the patient] in healing yourself."

5.2.2 Category 2: Professional approach

5.2.2.1 Treatment approach

Based on the illness–wellness continuum described in chapter 2, the participants were asked whether they follow the treatment or wellness approach during their treatment sessions. Most participants across the three professions explained that they focus on both treatment and wellness, as an improvement of a client's condition will also promote their wellness. As participant 210 described, "I would say it's maybe a combination of both because we are treating the pain, but we're also trying to prevent recurrence of injury and we're also trying to achieve the expectation of the patient and improve quality of life." Improving a client's condition does improve their wellness; however, working with patients for a condition or illness/pain is classified as treatment, especially when treatment is terminated once the client is functional again. Therefore, it can be said that the physiotherapists and occupational therapists were working within the treatment approach and that the biokineticists were the only professionals working within both the treatment and the wellness approaches.

5.2.2.2 Scope of practice

The participants made reference to their scopes of practice and what they are allowed and not allowed to do when treating patients. The types of clients these practitioners worked with were discussed in the first part of this chapter, and the further discussion is based on participant responses on their scope of practice.

Biokineticists used exercise-based activities during final-phase rehabilitation, when patients were pain free. Participant 109 provided a thorough explanation of the scope of practice of biokinetics,

> "I think it is important here to note, that we['ve] obviously got quite a limited scope of practice, so if you think about biokinetics, we can pretty much do … strengthening, which is, with all its derivatives, maybe isometric, isokinetic, or isotonic … we can do

proprioception, which is balance. We can do range of motion, flexibility, stretching. We can do … some neurological feedback, ADL [activities of daily living] … but it's not like we have a massive scope in terms of … what we can do, so I would say that strengthening would probably be the main thing … I like the neurological aspect … the activation of muscles … because I think quite often that's where injuries and operations … causes the most problems is that the muscles are there, they're just not working … An example of that would be somebody with a recurring hamstring issue, the glutes [gluteal muscles] are actually not firing, so, you fix the glutes and all of a sudden, the hamstring issue goes away. So … strengthening, muscle activation … stretching."

Physiotherapists are responsible for first-phase rehabilitation; therefore pain and swelling is not uncommon. They restore range of motion and functionality, using a variety of manual therapies such as massage, electrotherapy and ultrasound. They also use other types of exercise to treat clients.

Although biokineticists and physiotherapists have separate registered scopes of practice, both professions accused the other of stepping into their scope, examples of which would be biokineticists performing manual therapy, and physiotherapists prescribing functional exercises and return-to-sport protocols. However, that there are "grey areas" and overlap to scope of practice was also mentioned. As participant 104 said,

"there is sometimes a grey area between physios [physiotherapists], chiros [chiropractors] and bios [biokineticists], so just to kind of clarify that you know what the different scopes of practice are between the three and making sure that there's a good working relationship between the three practitioners. Some of the areas we cross … that's for a bit of a challenge, people don't know who to see. Should you go [to] the …bio, the chiro or the physio."

Occupational therapists have a different scope of practice to the other two professions and they also use other types of activity. Occupational therapists assist individuals with ADL, as participant 307 describes,

"There's not really something that does not really fit. If a patient say[s], 'I cannot get my clothes on', that is ADL so that is occupational therapy. If the patient say[s] to you, 'I cannot walk because I cannot lift my knee', then I practise and exercise to let them get to walk again. That is still daily living, ja, there is nothing in the scope of practice that I think I am allowed to be, that I cannot use, when as long as I stay in my scope. I cannot do speech therapy, I've got to refer … a psychiatric patient come[s] to me and they talk to me about deep emotional problems, I cannot … I'm not trained to deal with that. I refer a patient, 'you need to speak to your psychologist regarding this problem'. You must just

be strict about … what you do, because of the HPCSA [Health Professions Council of South Africa] you know where the limits are. You know that is the scope, so I know where is my scope and I stay within my scope. And I've got enough work, I don't need to do other people's work."

5.2.3 Category 3: Professional bodies

This category communicates the benefits and challenges of being registered with a governing body – the Health Professions Council of South Africa (HPCSA) – and the various professional bodies – the Biokinetics Association of South Africa (BASA), the South African Society of Physiotherapy (SASP) and the Occupational Therapy Association of South Africa (OTASA).

5.2.3.1 HPCSA

The following discussion is according to all three professions, as they all require registration with the HPCSA and gave similar responses to the questions on this theme.

In general, sentiment towards the HPCSA was not positive, but some participants referred to the benefits of being a member. The greatest perceived benefits of being registered with the HPSCA is that they were protected and regulated, allowing clients to claim from medical aid schemes, which would not be possible without registration. While some practitioners saw mandatory continuing professional development (CPD) in the form of accruing points for attending training as an unnecessary inconvenience, some felt it kept them up-to-date with research and treatment techniques. Other benefits reported by the participants included the credibility of being registered and the ethical treatment of clients. Although some practitioners experienced benefits, others felt that they were registered only for the necessity of being able to practise. As explained by participant 110, "To be 100% honest, I can't see any benefit. The benefit is that I can practise." Participant 204 shared the viewpoint of participant 110: "At the moment … it is a governing body, but … I don't see a lot of it. It's a statutory thing. I have to belong to them. I'm not so sure whether I would have been a member of them if it was not a statutory requirement … it feels more that they [are] victimising us as practitioners and not necessarily protecting us and the public." It was also mentioned that the HPSCA's communication is not up to standard, that registration was a waste of time and that the HPCSA was unable to define the scopes of practice. Participant 110 explained,

> "I just know in true communication that there is a lot of friction at the moment about what bios may do and what … is actually stepping onto the physiotherapist's feet. So, I do know that the HPCSA, that's the biggest thing, that they're busy … trying to define the

scope of practice. What are biokineticists allowed to do? What is [a] physiotherapist allowed to do? There is [sic] a lot of grey areas in what you can do, and can't do."

5.2.3.2 Professional bodies

Membership of the various professional bodies is voluntary. The views of the participants about these bodies were generally positive; this may be because professional bodies are aware that they may lose members if they do not provide quality services. Despite the existence of three different bodies – one for each of the featured professions – the benefits experienced by the participants were similar; therefore, the benefits and differences are discussed together.

BASA, SASP and OTASA provide practitioners with malpractice insurance, which was cited as the main benefit and the main reason participants were members. Evident from the participant responses was that the professional bodies communicate with medical aid schemes about treatment tariffs and the codes used in billing for treatment. They reported that the bodies are very helpful, as they attempt to the promote the professions and provide important information, including information about CPD opportunities. The bodies also provided general support to participants and were available for general enquiries.

Numerous participants mentioned that BASA's services had improved over the last couple of years; however, some participants were unconvinced of the benefits of membership. As participant 107 explained, "I really don't see the benefit of being a member of BASA. I think most biokineticists are just members of BASA because of the malpractice insurance".

5.2.4 RT/TR in SA

The interview schedule did not included questions about RT/TR; however, some of the participants wanted to know more about the study when asked if they had any questions. When explaining to participant 109 that the main purpose of RT/TR is to assist people in experiencing leisure, their reaction was "I actually like that. I never thought about it like that but why are they not allowed to also have recreation and have leisure and I think there is a massive scope, now that you mention it."

One of the greatest concerns of the participants was client ability to pay for RT/TR services should they become available, with clients already struggling to pay for existing services. Participant 205 queried if RT/TR services would be culturally relevant:

> "the question is, can we really as … privileged South Africans, we have to understand what is culturally relevant to most of the people of our country, what is their recreation?

> Otherwise we end up with something that really meets the needs … [of] 5% of our population, and what is completely irrelevant to the rest because we've missed the boat on what is culturally recreational for, say, a young boy that lives in the township. We've really got to understand that and I guess the problem there is, you have a therapist coming from a very privileged first-world environment, hoping to treat the needs of the 95% of the people that actually haven't grown up in that way and don't understand, and it's only really, I don't … I wouldn't ask the government to spend money on this yet. A physiotherapist who actually comes from the environment where some 75% of our patients come from, otherwise, you're going to be well trained to go and move and live in America."

Some participants felt that they were already providing RT/TR services. When asked how, participant 202 explained by using the example of a client who could no longer garden due to a back injury: "and then we actually maybe treat their back and, because they love gardening, maybe tell them, that maybe instead of sitting from long sitting or they can actually stand and have a table and you can do gardening … you suggest it in that way, where you're actually going to the garden, working in the garden", thus indicating that the practitioner adapted the activity to enable the client to take part in their recreation.

Another participant, 307, an occupational therapist, believed that RT/TR would be important in SA, not just to serve clients, but because other treatments are very expensive. She explained, "I do think you need (it) in South Africa, you need recreational therapists because at the moment, occupational therapy is very expensive". She continued,

> "It's long training and it is very, very, very difficult to get into the university and those courses because there are so … just a few students that are allowed – 40 per year. There is a lot of girls that comes to my practice [sic] that wants to work with people, who wants to work in recreation and wants to help people and they cannot get into the university. So if there is a different course ... I'm really keen that somebody starts that, especially because I know what is the value of recreation [sic]. I could see every day, how people improve with recreation. And our way is tight now … where people work. People sleep. That's what people do. And the effect of stress, on people and there your solution is recreation, you know? So, ja, I could go on about this, because I am really passionate about recreation and the value of that, so good luck. I do hope you can prove that we need that".

5.3 DISCUSSION

The introduction to this chapter mentioned that RT/TR is unrecognised in SA, but that some of the other healthcare professions may provide services and treatment similar to those of RT specialists (RTSs)/TR specialists (TRSs) practising in the USA. The objective of this study was to interpret and describe RT/TR within the scope of practice of biokinetics, physiotherapy and occupational therapy. Based on the results reported in this chapter, the following discussion provides an interpretation and description of RT/TR within the scope of practice of the relevant healthcare professions. Additionally, issues regarding the possible inclusion of TR/RT within healthcare in SA are discussed.

5.3.1 Category 1: RT/TR and professional activities

5.3.1.1 Potential clients for RT/TR

In terms of the *types of clients* treated by the three professions included in this study, it is not possible to state the extent to which RT/TR is carried out by them, as this theme only focused on who their clients were. RT/TR is not about who the clients are, but how they are worked with. Although the client types mentioned by the participants were not necessarily a focus for RT/TR, the responses provided a good indication of potential client types for RT/TR services, as well as the types of treatment RT/TR could deliver. Certain trends could be seen that are discussed further according to the sub-themes.

When reflecting on **injuries**, RT/TR could, but not necessarily, form part of the treatment team immediately after an injury has occurred. Clients would still follow same rehabilitation pathway currently used in SA (for example, referral to and treatment by a doctor, physiotherapist, occupational therapist and biokineticist). Notably, the purpose of RT/TR programmes is not to replace treatments already available. Although RTSs/TRSs can work in a medical facility such as a hospital or rehabilitation centre (Lord, 2007:43-46), RT/TR is not a medical speciality. It should rather be seen as an enrichment tool that complements medical services (Sylvester *et al.*, 2001:24), as no standalone profession can offer comprehensive and all-inclusive healthcare to clients (Austin, 2009:389). Williams *et al.* (2007) presented an RT/TR programme in a rehabilitation centre where patients also received physical therapy, occupational therapy, speech therapy and psychological services. Their study concluded that RT/TR programmes can improve the functional independence of adolescents recovering from strokes (Williams *et al.*, 2007:330). Tanaka (2003:71) stated that interdisciplinary teamwork could be beneficial, if a person receives medical treatment and the situation is appropriate.

RT/TR programmes could, therefore, be added to assist patients to return to their leisure activities, as leisure can be used to transcend negative life events (Caldwell, 2005:8).

Some forms of treatment for people with various **conditions** are already provided by the other professions, especially occupational therapists. In this study, people with these conditions are described as “special needs patients” who need long-term rehabilitation; results are only achieved after long periods of treatment. RT/TR could potentially support the treatment of other professions, even those not featured in this study, through the provision of recreational activities, so that rehabilitation is continuous. For example, Bennett *et al.* (2014) presented an adaptive RT/TR sports and recreational programme for veterans with post-traumatic stress disorder (PTSD) and their significant others, concluding that RT/TR programmes were effective tools for decreasing PTSD symptoms while also improving marital satisfaction (Bennett *et al.*, 2014:86). In terms of physical disability, the disability does not necessarily determine the treatment, as patients may consult physiotherapists with problems unrelated to their disability. As clients do not necessarily need therapy from the other professions due to the disability, the possibility exists that RT/TR may play a role for disabled clients, assisting them to take part in recreational activities. Persons with conditions such as Down syndrome might benefit from inclusive recreation (although not RT/TR), allowing this population to participate in recreational activities.

Occupational therapists may assist clients in the process of adjusting to leisure activities, for example, to strengthen a hand after an injury to enable an individual to return to their chosen activity; however, their primary aim is to improve a person’s ability to participate in ADL and not to ensure that clients experience leisure. Although cost-effectiveness cannot be used to justify the existence of a profession, consideration of it is appropriate, especially in SA where financing of treatment is an issue and RT/TR programmes could potentially support the occupational therapist’s interventions.

The professionals interviewed that appeared to truly provide **wellness** activities were biokineticists, who used movement and exercise-based activities. RT/TR can play an immense role in this area, as not all people enjoy formal, structured exercise as part of their leisure and may prefer to take part in active or passive recreational activities that also promote wellness. Biokineticists were not found to work with “special needs” clients that often. Whether the various recreational clubs in SA are able to accommodate people with special needs is unclear and they will certainly not assist someone in finding another activity, should they not like the activities on offer. RT/TR, however, would involve assisting clients to find suitable activities, as part of leisure education.

5.3.1.2 Potential activities for RT/TR

As previously stated, the extent to which RT/TR is practised by the different professions is difficult to discern only by studying their activities, but does provide valuable information regarding the possible practice of RT/TR in SA.

The professions studied focus their treatment on patient problems, therefore providing a treatment/medical model for RT/TR and not the social/leisure model. RT/TR activities could form part of all six types of activity mentioned (aerobic activities, strengthening, therapeutic techniques, functional abilities, recreational and flexibility exercises). Clapham *et al.* (2018) presented an RT/TR surfing intervention programme to a 12-year old boy with autism spectrum disorder to improve his physical fitness and personal behaviour. The programme resulted in the improvement of his aerobic capacity, muscle strength, endurance and range of motion (Clapham *et al.*, 2018:52), indicating that RT/TR programmes can be used to improve flexibility. Although RT/TR can be applied to improve aerobic exercises, strengthening activities, therapeutic techniques, functional activities, recreational activities and flexibility exercises, an aim associated with the activity type (sub-theme) might be to facilitate secondary outcomes from an RT/TR programme. For example, an activity such as mountain climbing can be used to improve trust between clients, but hiking up the mountain (aerobic exercise) will also strengthen certain muscle groups while improving flexibility. In this example, an RTS/TRS's main purpose is to ensure that the client experiences leisure while also developing trust between them and others. The outcomes from the aerobic exercise can be classified as secondary; the RTS/TRS may not have purposefully planned the secondary outcome.

As stated in section 2.3.1.1, there are four approaches for RT/TR: 1) a recreation service approach, where recreational programmes are provided for people with special needs; 2) a therapy approach, with the aim of improving illness or disability; 3) an umbrella or combined approach, combining the first two positions; and 4) a leisure ability approach (Dieser, 2007:26). After considering all the information gained in this study about the types of patients treated and activities provided by the featured professionals, it can be concluded that biokineticists, physiotherapists and occupational therapists provide functional interventions, as they are attempting to make clients as independent as possible. This is not to say that RT/TR could not be used to improve functional skills, as the services of RTSs/TRSs could be used in combination and collaboration with biokinetics, physiotherapy and occupational therapy. An RT/TR professional would also need knowledge of anatomy and physiology, to provide supplementary services.

The purpose of RT/TR is to assist individuals to experience leisure, therefore enabling the feeling of perceived freedom, which according to Neulinger's model can be classified as types of leisure activities, as participants have a large degree of freedom of choice to participate in these activities. Identifying the exact state of mind of participants in these activities is not possible without clarification from the participants of the reasons they take part in them (e.g. losing weight, pure enjoyment or a combination of reasons), and although they do take part in wellness activities, this is not classified as RT/TR. In contrast, when treatment focuses primarily on the rehabilitation of patients, the activities used are classified as activities of perceived constraints with limited or no freedom; states of mind 4–6 ("pure work, work-job and pure-job"). Although individuals may take part in these activities due to intrinsic motivation, or for the purpose of rehabilitation or regaining function, their perceived freedom is limited as they would not have necessarily seen a biokineticist, physiotherapist or occupational therapist if they were not required to do so for a medical reason.

5.3.1.3 RT/TR treatment process

Although evaluation and re-evaluation are part of the practice of the other professions included in this study, RT/TR has its own process of assessment, planning, implementation and evaluation (Long, 2007:80). The practice of RT/TR cannot be separated from this process and some SA researchers have used the RT/TR process and its procedures and principles to develop interventions, resulting in positive outcomes (Gresse, 2013; Tesnear & Meyer, 2008; Verster, 2004; Young, 2013).

In addition to the treatment process, reference was made in the interviews to the recreational preferences of clients. Although clients were sometimes consulted on their recreational preferences, for example, by biokineticists and physiotherapists when strengthening muscle groups to ensure that the client can participate in their preferred recreational activities, they did not necessarily use the recreational activity during treatment. In contrast, occupational therapists focused their rehabilitation on activities supporting the recreational preferences of their clients, consistent with the practice of RT/TR. For example, participant 306 incorporated her paediatric patient's recreational interest (dinosaurs) into their treatment.

5.3.1.4 Participation format of RT/TR

Programmes presented by the three professions were mostly on an individual basis, with some exceptions in the biokinetics group. Although RT/TR programmes can be presented to individuals, as in the study of Buettner *et al.* (2006) who followed the RT/TR process to present a programme to persons with dementia and disturbing behaviours, programmes are usually

presented in groups and the benefits are similar to those mentioned in the interviews (Stumbo & Peterson, 2004:45). Stumbo and Peterson (2004:45) explained that clients are assessed and persons with similar problems are usually clustered in group programmes.

Should activities that are functional interventions be presented in SA in collaboration with the other professions, they might also be in an individual format. Clients might be grouped together as they move towards leisure education and recreation participation programmes or move to the right-hand side of the illness–wellness continuum. However, should there be a need for RT/TR, it will be important to define the profession in SA, before making decisions on scope of practice.

5.3.1.5 Client termination from RT/TR

Finance was found to be one of the biggest problems leading to premature termination of intervention, and this issue definitely needs consideration for RT/TR in SA. The RTS could possibly work with other professions from the outset of rehabilitation, so that after termination from lack of finance the client can continue independently with rehabilitation through adapted leisure or recreational activities, which should not be a financial burden. Whether RT/TR in SA would focus on functional interventional activities and their viability, is questionable. The willingness of clients to pay for RT/TR in addition to, or rather than, biokinetics, physiotherapy or occupational therapy, is also open to question.

As discussed in section 5.3.1.2, RT/TR clients can take part in more than one of the programme phases (functional intervention, leisure education or recreation participation). Clients may choose to terminate at any stage, as treatment is entirely by choice, but, should they decide to go through all three phases, the programmes will tend to move in the direction of wellness and participants might choose to never terminate treatment. Stumbo and Peterson (2004:70) explain that clients are provided with opportunities to take part in organised activities, and RTSs/TRSs play a facilitative or supervisory role during programme execution. The RT/TR might also be able to work in collaboration with the biokineticist, after clients have received rehabilitation-focused treatment, when moving into wellness programmes, as the provision of maintenance-type activities in line with clients' recreational activities is a logical step.

5.3.1.6 Potential referrals to RT/TR

Depending on the role of the RTS/TRS in SA, it will be important to position RT/TR in such a way that other professions understand its value. Once the RTS/TRS is identified as a legitimate member of the multi-disciplinary team, RT/TR could be included as an option for

referral by the other professions. Professional standing will be imperative: RTS/TRS training would have to comply with minimum standards and the profession would need its own professional body.

5.3.1.7 Potential challenges

Challenges mentioned in the results, including finance, client adherence and client expectations, will need to be addressed, should RT/TR develop into a profession in SA. However, the self-determination theory suggests that client adherence difficulties or the problem of clients leaving before treatment has ended might be less prominent in RT/TR. According to the self-determination theory, motivation can be classified according to a continuum, with amotivation (the state where an individual is lacking the intention to act) on the left and intrinsic motivation (where activities are completed for inherent satisfaction) on the right (Ryan & Deci, 2000:72). The middle of the continuum consists of four extrinsically motivated behaviours, ranging from least autonomous to those providing highest level of autonomy (Ryan & Deci, 2000:72). Firstly, behaviours can be *externally regulated*, for example, a task may be completed to satisfy an external demand or to gain some form of reward (Ryan & Deci, 2000:72). Secondly, externally regulated behaviours can include *introjected regulation*, where regulations are taken on but not accepted as one's own, for example, when parents offer to reward their children if they do well at school (Deci & Ryan, 2012:89; Ryan & Deci, 2000:72). Thirdly, externally motivated behaviours are more autonomous and are *regulated through identification*; individuals accept and understand the importance of an activity for themselves (Deci & Ryan, 2012:89; Ryan & Deci, 2000:72). Finally, "when an identification has become congruent with other identifications, needs and experiences, the resulting regulation is referred to as *integrated regulation*" (Deci & Ryan, 2012:89). The treatment of the professions included in this study was mostly motivated through external rewards (with the purpose of getting better). As stated previously, intrinsic motivation lies on the right side of the continuum (which also forms an important part of leisure) and persons are more likely to continue participating for long periods, because activities are enjoyable and interesting (Deci & Ryan, 2012:89). Additionally, intrinsic motivation is facilitated if participants experience autonomy, relatedness and competence (Ryan & Deci, 2000:71,72). These are experiences that are often inherent to RT/TR programmes or can be easily included in them. Therefore, adherence to RT/TR programmes is predicted to be less of a problem, as activities should be based on client interest, with clients enjoying the activities provided.

5.3.2 Category 2: Professional approach of RT/TR

5.3.2.1 Treatment approach in RT/TR

When an RT/TR professional provides programmes focusing on functional intervention and they work with other healthcare professionals to assist clients with illnesses, they are working within the treatment approach (left-hand side of the illness–wellness continuum continuum). Programmes focusing on recreation participation are on the right-hand side of the continuum and are aimed at wellness, therefore indicating that the RT/TR professional can assume several functions on the continuum (Austin, 2009:164). The need for functional intervention programmes might be saturated, as this need is already covered by other healthcare professions. However, leisure education and recreation participation are poorly serviced; therefore, RTS/TRS will most likely fall into the “health/wellness” sphere of the HPCSA.

5.3.2.2 Potential scope of practice of RT/TR

Although determining whether each profession is practising within their scope of practice is beyond the scope of this study, grey areas do exist in terms of scopes of practice. RT/TR may also overlap, as recreation is also classified as an ADL. To prevent a duplication of services and to fulfil a specific need within healthcare in SA, RT/TR should have a clearly defined purpose and limits to the services and treatment offered, focusing on leisure and working with the other professions to provide clients with the best possible care.

5.3.3 Category 3: Professional bodies

5.3.3.1 HPCSA and RT/TR

To work within the healthcare sector in SA in professional practice, registration with the HPCSA is a prerequisite (HPCSA, 2013). The HPCSA guarantees excellence and the ethical treatment of clients through the establishment of education standards and training, ensuring that practitioners remain adequately trained through compulsory CPD (HPCSA, 2018). Again it is evident that the scope of RT/TR must be defined to determine if RT/TR should be registered with the HPCSA as a health profession, to enhance the credibility of the profession.

5.4 CONCLUSION

The study resulted in the identification of some activities used by the various professions. However, identifying the type of activity did not accurately identify whether an activity, for example, jogging, is classified as recreation or leisure, as the determining factor is the context in which it takes place, namely within the context of freedom of choice. The study revealed

that although the professions used activities, the context was mainly that of functional intervention where freedom is limited – clients are "forced" to some extent by their injury to receive treatment. RT/TR professionals would be able to support and strengthen the treatment of these and other professions if clients wish to develop these abilities from a leisure perspective. The absence of leisure education and recreation participation programmes is evident, with biokineticists providing the majority of wellness activities, but through exercise-orientated programmes; from the data, they were evidently the least likely to treat clients with “special needs”. Occupational therapy practice appeared to be closest in characteristics to RT/TR, with occupational therapy treatment having some focus on recreation-type activities; however, the main focus of the occupational therapy profession is to improve ADL, not necessarily to ensure that clients experience leisure. Within the context of Neulinger’s leisure states of mind model, the wellness activities of RTSs/TRSs and biokineticists are classified as state of mind 1–3 (“pure-leisure, leisure-work and leisure-job”); however, when the focus of activities lies with rehabilitation, they are classified as states of mind 4–6 (“pure work, work-job and pure job”), providing a clear distinction between the services of RT/TR and those of the other professions.

If a number of forms of treatment are already provided by the other professions, the question arises as to why RT/TR is also necessary, if these patients are already receiving treatment. The answer lies in the unique focus of RT/TR on leisure. As stated in chapter 2 (section 2.3) there are seven essential justifications for RT/TR, rooted in leisure theory (Sylvester *et al.*, 2001:26-33) as follows: 1) Research suggests that leisure contributes to health promotion and human growth. If RT/TR is rooted within leisure theory, then the benefits from leisure are the same as those from RT/TR, described in section 2.3.2. Leisure is clearly an important contributor to health and thus is RT/TR, as its vehicle; 2) Leisure contributes to a person’s sense of well-being, providing individuals with freedom, autonomy and self-determination (Sylvester *et al.*, 2001:33). 3) “In addition to adaptive needs, human beings also have creative-expressive needs. Leisure is often the only, and arguably the best, opportunity to satisfy those needs in rehabilitation” (Sylvester *et al.*, 2001:33). 4) Leisure is an instrument to assist clients with community reintegration. People with disabilities are often perceived as being “different” and are excluded from society, and may be victims of stereotyping, as people tend to perceive individual differences rather than similarities and strengths (Devine, 2007:52). However, leisure provides the opportunity for people of all abilities to take part in activities together, consequently helping to break down the stereotypes and leave participants feeling part of their community. 5) The social nature of leisure provides opportunities for addressing structural deficiencies that influence health and well-being. 6) Leisure contributes to quality of life. 7) All people have the right to experience leisure and the benefits associated with it (health, well-

being and quality of life). These seven justifications highlight the unique benefits that leisure can provide, which clients are not currently receiving in SA.

The three healthcare professions included in this study evidently focused mainly on physical rehabilitation and the maintenance of client function. RT/TR may not only assist in promoting these, it may also provide social and emotional benefits, improving the overall wellness of clients. However, if RT/TR is to develop again as a registered health profession in SA, definition of its scope of practice is important, to avoid overlap or duplication of services.

Chapter 6

Summary, conclusions, recommendations and limitations

6.1 SUMMARY

The aim of this study was to provide information on the nature of RT/TR within the academic training of current healthcare professions in SA. The study had two objectives; the first was to interpret and describe RT/TR training within the training curricula of biokinetics, physiotherapy and occupational therapy, and the second was to interpret and describe RT/TR within the scope of practice of biokinetics, physiotherapy and occupational therapy. A summary of the study chapters included in the study is provided.

In chapter 1, the problem was stated. RT/TR programmes have the potential to promote positive physical, emotional/psychological and social outcomes for clients, and the services provided by RT/TR differ to those of any other healthcare profession due to the leisure context of RT/TR programmes. Regardless of the associated potential benefits, RT/TR as a profession in SA ended in June 1978, when “Remedial gymnastics and recreational therapy” was removed from the register of the South African Medical and Dental Council (now the Health Professions Council of South Africa [HPCSA]). In SA, three professions are currently registered with the HPCSA that potentially offer RT/TR-related services: biokinetics, physiotherapy and occupational therapy, all of which have definitions of practice with some similarities to the broad international concept of RT/TR.

In chapter 2, it was concluded that leisure and recreation form a vital part of the delivery of RT/TR services and individuals participating in these types of programmes stand to gain certain benefits. United States of America (USA) and Canada are the only two countries worldwide that have established RT/TR as a profession, although other countries have attempted to implement RT/TR, with varied success. Therefore, it was important to recognise the history of the profession, to ensure that mistakes are not repeated in SA, which poses some unique challenges to the development of RT/TR, as basic healthcare services are not distributed evenly and resources are limited, resulting in recreational services that are not up to standard. Although the SA government is attempting to rectify this situation, the reality is that recreation is struggling to establish itself as a profession. The study explored the focus of three major health professions in SA – biokinetics, physiotherapy and occupational therapy – concluding that their focus is on rehabilitation and minimising the negative consequences of

injury, thus emphasising a need to clearly determine what RT/TR specialists in SA should do, in what contexts, and with which sectors of society.

Chapter 3 comprised descriptions of the study design, the participants, the data collection and procedures, the data analysis and ethical considerations, for each objective. The first objective was fulfilled by performing an inductive analysis of the US National Council for Therapeutic Recreation Certification (NCTRC)'s *Certification Standards: Information for New Applicants 2018*, developing a control sheet for use in the deductive analysis. The yearbooks of seven SA universities that each present qualifications in all three professions included in this study, were analysed deductively (based on the control sheet), to enable the interpretation and description of RT/TR training within their curricula. The second objective was fulfilled by conducting 30 semi-structured telephonic interviews with biokineticists, physiotherapists and therapists from all over SA and analysing the resulting data.

In chapter 4, the results relating to the first objective were presented, with further discussion. Some of the university curricula clearly contained information correlating with that in the NCTRC examination outline for RT/TR training in the USA, especially in terms of the non-recreational and foundational knowledge that health professionals require. The greatest similarities were found in occupational therapy curricula, followed by physiotherapy, although numerous elements of RT/TR were not addressed. Students enrolled in these qualifications evidently receive some training consistent with that of RT/TR training; however, training related to the "hidden" curriculum of RT/TR was absent. The hidden curriculum is the information transferred through human interaction and institutional practices, and includes the attitudes, values and beliefs of faculty members from whom students learn (Van Puymbroeck *et al.*, 2010:220, Wear & Skillicorn, 2009:452). Students of the other professions are evidently not trained in the hidden RT/TR curriculum: their lecturers are not RT/TR specialists and are, therefore, not able to teach the attitudes, values and beliefs of RT/TR practice. Not all of the aspects of practice covered by the NCTRC, such as legislation and cultural competency, are relevant to SA, due to differences in US and SA healthcare, and it was found that some of the NCTRC credentialing content, especially content relating to management, could be adapted to include RT/TR, as it is generalisable.

Chapter 5 reported on the data gathered from the telephonic interviews and discussed these results. All three professions provided activities that can be classified as functional intervention, which relates to rehabilitation practices and could possibly prepare participants for future leisure activities. The main focus of the professions was on physical abilities and, in some cases, cognitive, emotional or affective functioning and social abilities (Austin, 2009:169; Stumbo & Peterson, 2004:42-43). Although these activities are already provided by

the three professions, in the future, RT/TR programmes could potentially be used to support the treatment provided by biokineticists, physiotherapists and occupational therapists. Clients could choose to take part in programmes that are leisure-orientated rather than therapy-orientated, with a focus in RT/TR on clients that have needs that requires a functional intervention. The study resulted in the identification of a gap with the potential to be filled by RT/TR, as none of the professions focus on leisure education or recreation participation. When examining the results in light of Neulinger's leisure states of mind model, it was found that depending on the individual's reasons for participation RT/TR activities, as well as the wellness-based activities of the biokineticist can be classified as activities of perceived freedom – states of mind 1–3 ("pure leisure, leisure-work and leisure-job") – and can therefore be seen as leisure. The activities of physiotherapists, occupational therapists and biokineticists who focus on rehabilitation types of programmes are classified as activities of perceived constraint – states of mind 4–6 ("pure work, work-job and pure-job") – and although some of the activities used during the rehabilitation process may seem similar to recreational activities, the context (i.e. limited freedom) of the activities disqualifies them from being regarded as leisure.

6.2 CONCLUSIONS

This study has revealed conclusively that RT/TR training is not evident in the curricula of biokinetics, physiotherapy and occupational therapy in SA. Although some of the content required to practise as an RT/TR specialist is found in these curricula, it is not recreation-related and consists primarily of the foundational knowledge required to practise as a health professional. The data analysis conducted to achieve the first objective led to the conclusion that occupational therapists receive more RT/TR-orientated training than biokineticists and physiotherapists, although many aspects of RT/TR practice are not addressed within their curricula.

The study's second objective was to interpret and describe RT/TR within the scopes of practice of biokinetics, physiotherapy and occupational therapy, and it was concluded that RT/TR is not fundamental aspect of the practice of any of the three. Occupational therapists use treatment activities similar to those of RT/TR, although their treatment orientation is considerably different, with rehabilitation as their main focus, in contrast to leisure as the main focus of RT/TR. Unlike RT/TR services, the activities of both occupational therapists and physiotherapists are classified as activities of perceived constraint, due to the rehabilitative focus of treatment. Although the activities provided by biokineticists may qualify as leisure according to Neulinger's leisure states of mind, they do not qualify as RT/TR, as it is not the

intention of biokineticists for a person to experience leisure and they do not follow the assessment, planning, implementation and evaluation (APIE) process. According to Neulinger's model, biokineticists present physical activity programmes orientated towards wellness, they are the least likely professional group to treat clients with "special needs", and their programmes are exercise orientated. In addition, none of the professions provide programmes that can be classified as leisure education and recreation participation, which according to the Leisure Ability Model (LAM) is a component of RT/TR. Therefore, clear gap exists that can potentially be addressed by having RT/TR specialists practising in SA.

6.3 CONTRIBUTION OF THE STUDY

As mentioned in the previous section, fulfilment of the first objective concluded that aside from the foundational knowledge required to practise as a health professional that is common to all health-related professions, and specialised knowledge critical to each specific profession, biokineticists, physiotherapists and occupational therapists do not receive specific RT/TR training. Furthermore, there are no other professional preparation curricula in SA that offers education and training related to the provision of RT/TR services as no SA universities currently offering a degree in recreation/leisure comply with the minimum requirements set by the NCTRC (refer to section 4.2.1). The second objective concluded that none of the professions featured in this study provide RT/TR or related services, although the scope of occupational therapy comes closest. These findings are a clear indication of a gap within the healthcare sector that could be filled by RTSs/TRSs.

Chapter 2 explored outcomes from other countries where attempts to implement RT/TR have been made. In the USA, Canada and Australia, academic training and certification practices are in place, but public recognition of RT/TR as a profession remains a struggle. In South Korea, credentialing exists but with no academic training and similar difficulties are experienced in the recognition of RT/TR as a profession. This highlights how neither academic training for RT/TR nor a credentialing system for RT/TR will succeed without public recognition of the value and importance of RT/TR.

Based on the study findings it is recommended that RT/TR not be developed as a standalone profession at this time, a recommendation in line with that of Young (2015:42). This recommendation is because of: 1) lack of current RT/TR training, within all three professions included in this study; 2) lack of RT/TR training in and within universities presenting a degree in recreation or leisure, 3) lack of public recognition of and support for RT/TR; 4) the lack of RT/TR-related services currently provided to contribute to community awareness; and 5) lack

of infrastructure to support a profession, with no credentialing system for RT/TR. The purpose of the study was not to develop a framework for the delivery of RT/TR in SA, information from the literature review along with the study's results provided insights that can be used to make short and long-term guideline for the future of RT/TR.

6.3.1 Guidelines for short-term operationalisation

To avoid making hasty decisions about the development of RT/TR as profession, as occurred in South Korea, the current situation in SA should be evaluated, and the development of a profession, should there be a need, be approached systematically. Although we can learn from the successes and failures of the other countries who have implemented RT/TR, SA's unique situation must also be considered. The ability of potential clients to pay for RT/TR services in SA is limited, with persisting high levels of unemployment resulting in uneven access to resources and opportunities. Many individuals do not have access to, and cannot afford, basic health services and therefore might not be able to afford additional treatments such as RT/TR. However, if RT/TR has a future as a profession in SA, it is most likely to emerge from the private sector, serving paying clients. RT/TR might have to follow the same route of development as kinderkinetics, which was developed as an "entrepreneurial vocational opportunity" (Pienaar, 2009:61). This would address the problem of graduates not being employed immediately after graduation. This is not to say that RT/TR has no future within the public health sector, as there is a need to improve the health of all members of communities served by the public sector who cannot afford expensive rehabilitation services. However, it is currently unrealistic to expect the already overburdened public healthcare system to include new services such as RT/TR.

As mentioned in chapters 2 and 5 (sections 2.3.1.1 and 5.3.1.2), the leisure ability model divides the practice of RT/TR into three sections: functional intervention, leisure education and recreation participation. Functional intervention programmes were found in this study to be already provided by the other professions. To avoid duplication of services, biokineticists, physiotherapists and occupational therapists interested in providing RT/TR programmes are recommended to complete an additional SAQA-registered courses in RT/TR (with content including foundational recreational courses, assessment process, documentation and administration of RT/TR services). This would also enable them to provide programmes from an RT/TR perspective. The implementation of this recommendation will depend on 1) the development of a professional body for recreation that will be responsible for developing training courses or buy-in from an organisation such as LARASA to assist in the development of such courses, and 2) the support of the HPCSA, the Biokinetics Association of South Africa, the South African Society of Physiotherapy and the Occupational Therapy Association of

South Africa. However, it will ensure that professionals will only be able to practise within the RT/TR domain once minimum requirements are met. The length and type of training needed will be determined by the curriculum completed; however, based on the findings of this study, it is suggested that occupational therapists will require less training than physiotherapists and biokineticists. Once RT/TR programmes are provided and clients understand what the concept entails, a needs analysis could establish the potential for RT/TR to stand alone as a profession or whether the existing structure for providing programmes is sufficient. Either way, within the current context of service delivery in SA, it is unlikely that RT/TR would serve the whole SA population, as not everybody will be able to pay for services; this is already the case for biokinetics, physiotherapy and occupational therapy. Through improved provision of quality general recreation programmes, government buy-in to the benefits and delivery of such services could be achieved.

Another short-term development strategy for RT/TR in SA is the development of a forum consisting of individuals from various SA universities, as well as international universities (preferably professionals from both the therapy/medical approach and from the leisure/social approach), so that a curriculum for RT/TR in SA can be developed. This recommendation is based on the path that the kinderkinetics system followed in 1995 when kinderkineticists began to be trained. Students were required to study a generic undergraduate degree and had the opportunity to specialise in their honours year (Pienaar, 2009:61). Although the selection process for the honours degree was strict due to capacity problems and the lack of an established market for kinderkinetics students to work in, the programme's popularity continued to grow (Pienaar, 2009:61). Currently, only three universities in SA offer a degree in recreation science (see section 2.4.7.1). Based on the route that kinderkinetics followed, it is recommended that the members of the forum evaluate each university's curriculum and identify a university whose curriculum contains most of the required content to train an RTS/TRS, and develop an honours programme for that specific university. Other universities could then beneficially adapt their programmes to enable them to provide the same qualification. Additionally, more universities must be involved in RT/TR training, as identified by Pienaar (2009:62) who noted that to become a registerable category the HPCSA, at least four institutions must offer the training before an application can be considered.

Lastly, recreational specialists can require education and training in special and inclusive recreation (see section 2.3) so that they can provide programmes addressing the gaps in leisure education and recreation participation. If special and inclusive recreation could be included in the recreation services provided to the public, persons with unique needs may be assisted to take part in recreation, which forms part of the outcomes for RT/TR based on the

LAM. The additional benefits of this approach are twofold; firstly, the implementation of leisure education and recreation participation programmes will serve a broader section of the population, while those providing the services will not require registration with the HPCSA and, secondly, the establishment of such practices will make South Africans aware of the availability, or lack, of recreation and RT/TR. A recreation needs analysis may then be justified as well. Although this can be implemented in the short-term, it will be beneficial to continue with this until the long-term operationalisation guidelines have been met.

6.3.2 Guidelines for long-term operationalisation

In the long term, recreation must be established as a practice with its own professional body, before a new professional registration category (RT/TR) can be introduced. As explained in section 2.4.7.1, SA currently has one organisation for leisure and recreation, the Leisure and Recreation Association of South Africa (LARASA). Membership is not compulsory and does not require certification, and the organisation has no statutory authority. It is therefore recommended that the role of LARASA be strengthened, with support from universities and colleges offering recreation and leisure education, as they can assist in advocating the importance of leisure and recreation among stakeholders, such as government departments, and also the public in general. Through this, support for the practice of RT/TR can be generated, as the concept of recreation will be better understood. Although all South Africans take part in some form of recreation or leisure activity on a daily basis, they may be unaware that this is classified as recreational and may lack understanding of the value and importance of recreation in their lives. Before RT/TR can be established as a profession in SA, it is important to determine the need for RT/TR services and the public must be aware of these services before a need can be identified.

Once LARASA has gained wider membership and public support, a special interest group for RT/TR in SA can be established within LARASA, consisting of individuals from various universities and other persons who have an interest in the establishment of RT/TR, for example, the biokineticists, physiotherapists and occupational therapists who have completed the additional coursework (members of the forum previously discussed can also be invited to be part of this group). This group can be tasked to identify a scope of practice for RT/TR in SA, standards of practice and a code of ethics. It will also be beneficial for the interest group to determine who will provide the training (lecturers) for the qualifications needed, as there are currently no Certified Therapeutic Recreation Specialists in SA. Once universities go through the process of registering the new curriculum, they can apply for accreditation to train RT/TR specialists, followed by certification and credentialing. It will also be beneficial to implement some form of community internship with the credentialing of these individuals.

6.3.3 A model for service delivery for RT/TR in SA

To prevent duplication of services, and to clearly define the possible scope of practice for RT/TR, a new model of service delivery for RT/TR is needed in the SA context. The possibilities for such a model are further explored in this section. Figure 6.1 is a proposed model/continuum for RT/TR in SA and incorporates Neulinger's states of mind (explained in section 2.3), the illness–wellness continuum of Travis (2018) (explained in section 2.5.1) as well as the LAM as explained in section 2.3.1.1 (Stumbo & Peterson, 2004:39).

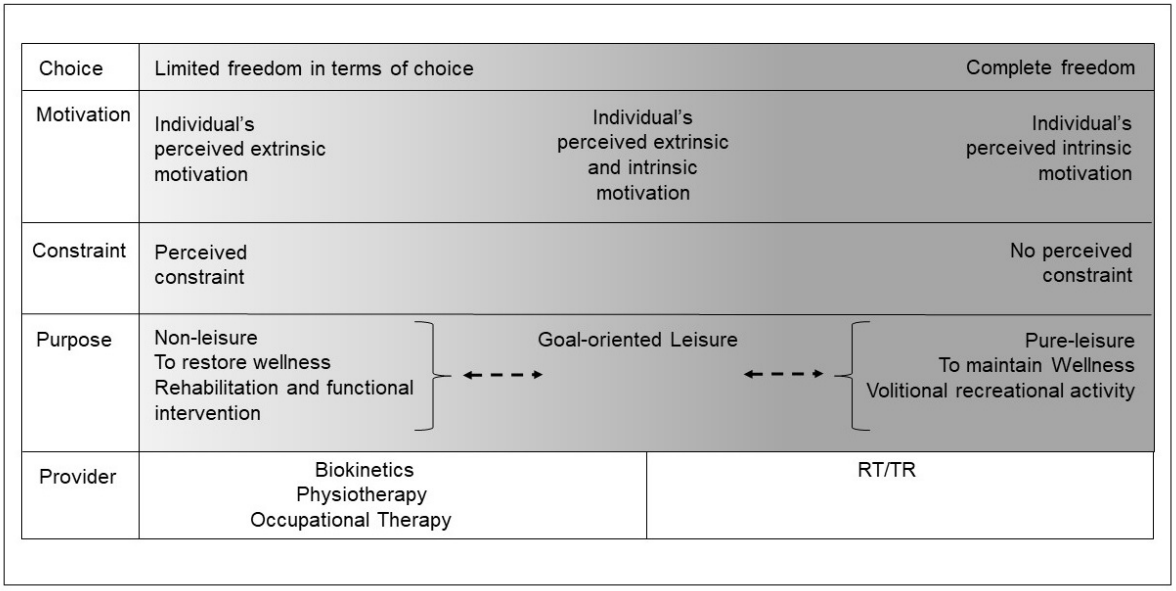

Figure 6.1 Proposed model/continuum for recreational therapy/therapeutic recreation in South Africa (adapted from Neulinger, 1981 [as cited by Bannon & Bannon, 2017:22], Travis (2018) and Stumbo & Peterson, 2004:39). *RT/TR*, recreational therapy/therapeutic recreation.

The two models and continuum combined with the findings of the current study provide an indication of the healthcare services currently available and create a clear picture of what RT/TR can add within the SA context. Therefore, the purpose of this proposed model is firstly to describe the differences in practice between the healthcare professions included in the study and RT/TR. Secondly the proposed model indicates what RT/TR can contribute towards healthcare in SA. The following concepts are used within the continuum: choice, which refers to the individual's freedom of choice of activities; motivation, which refers to extrinsic or intrinsic motivation (see section 2.3 for explanation); constraint, referring to perceived constraint and no perceived constraint (terms in the continuum were changed; however, the meaning is similar to that of perceived freedom as explained in section 2.3) and purpose, including the reasons why the individual is taking part, such as for rehabilitation or to maintain

wellness. Lastly, the provider is the professional responsible for the treatment or provision of activities.

The gradient within the current continuum, transitioning from light to dark grey, indicates the increase of the specific element in discussion. Individual choice in terms of freedom on the left-hand side of the continuum (light grey or almost white) is limited, due to the nature of the activities prescribed by the biokineticist, physiotherapist or occupational therapist. Individuals are extrinsically motivated and only participate in the activities with the purpose of regaining function. However this is not true for all individuals and some tend to move towards the right–darker grey. Individuals in the middle of the continuum might enjoy the exercises prescribed by the biokineticists, but their main purpose for participation may, for example, be to lose weight, hence experiencing goal-directed leisure. RT/TR activities (dark grey) are based on individual freedom of choice and are planned according to individual interests, with the aim of getting participants to experience leisure. From this model, it is clear where the proposed focus in terms of the scope of practice of RT/TR should lie, as well as how the concept of leisure differentiates RT/TR from the other healthcare professions.

In conclusion, the benefits from the study are twofold. Firstly, the knowledge gained from this empirical investigation contributes to the body of knowledge of RT/TR in SA. RT/TR is interpreted and described within selected healthcare professions in SA, information which did not previously exist. Previous publications about the development of RT/TR in SA are available, such as that of Young (2015); however, whether any professions received training to provide RT/TR-related services and whether they were providing these services was unclear. The study explored the services currently provided by selected healthcare professions and how they relate to the practice of RT/TR in the USA. Secondly, gaps in healthcare services in SA are identified, and short- and long-term guidelines for the operationalisation of RT/TR were made, along with a proposed model/continuum for RT/TR provision. In the long term, this can be used to motivate the development of RT/TR as a unique profession, specifically tailored to the SA context.

6.4 RECCOMENDATIONS AND LIMITATIONS

Recommendations for future research:

- To establish the need for RT/TR services in SA, especially for leisure education and recreation participation programmes, a needs analysis from the perspective of prospective clients is required. However, the public must be aware of these services before a need can be recognised. Research studies are recommended that explore RT/TR programmes provided in collaboration with other healthcare professions, to establish their benefits. This will contribute to the body of knowledge of RT/TR in SA.
- It would be beneficial to conduct a study analysing the curriculum of each university currently providing a degree in leisure/recreation, to identify the university curriculum that contains most of the required content to train RTS/TRS and develop an honours programme for them, if it is decided to move forward with the kinderkinetics approach.
- The interview schedule was developed to establish the types of patients the various professions treat and activities they use to treat them. Whether they practise within their scope of practice as defined by the HPCSA is unclear. Determining the degree to which practitioners remain within their own registered scopes would be beneficial.

The study had some limitations. Firstly, the NCTRC's documents were used, and the NCTRC is a US organisation with an established infrastructure to support RT/TR. The practice of RT/TR is based on their healthcare situation and structure, which differ to those of SA. Secondly, the SA academic yearbooks from the universities were not all available from the university websites – in one case, SAQA documents were used instead. Thirdly, some yearbooks contained less detailed information about module content than others. Fourthly, recruitment of participants for this study was difficult; therefore, snowball sampling was used. Whether the results would have been different if all participants had been recruited in the same manner is unclear. Finally, this study aimed to interpret and describe RT/TR within the scopes of practice of selected health professions; however, whether they practise within their own scopes was unclear, and may have influenced the findings.

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Appendix A

Informed consent form

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM FOR *BIOKINETICIST/ OCCUPATIONAL THERAPIST OR PHYSIOTHERAPIST*

TITLE OF THE RESEARCH PROJECT:

Interpretive description of recreational therapy within selected health care professions in South Africa

REFERENCE NUMBERS:
PRINCIPAL INVESTIGATOR:
Mrs. Cindy Kriel (MA)

ADDRESS:

North-West University
Faculty of Health Sciences
Private bag X6001
Potchesfstroom
2522

CONTACT NUMBER:

018-299-4206

You are being invited to take part in a research project that forms part of a PhD study. Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU-00019-17-A)** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the research ethics committee members or relevant authorities to inspect the research records.

What is this research study all about?

- *This study will be conducted from Potchefstroom and will involve semi structured telephonic interviews with biokineticists, occupational therapists and physiotherapists.*
- *The objectives of this research are:*
    - *To interpret and describe the prevalence of recreational therapy training within the curriculums of biokinetics, occupational therapy and physiotherapy*
    - *To interpret and describe the prevalence of recreational therapy within the scope of practice of biokinetics, occupational therapy and physiotherapy.*

Why have you been invited to participate?

- *You have been invited to participate because you are a biokineticist, occupational therapist or a physiotherapist*

- *You have also complied with the following inclusion criteria: A practitioner who practises your profession within a private practise, have at least 5 years of working experience and holds registration at the HPCSA.*
- *You will be excluded if:* you are an *assistant of one of the professions, since you do not hold registration at the HPCSA. You will also be excluded if you spend most of your time providing gym training or activities included in sport science, since questions may be answered from that point of view and not necessarily as a biokineticists, occupational therapists or physiotherapists.*
- *Public health care workers are overloaded with patients and are sometimes unable to provide all the required services, as it takes up more time per patient. Therefore, they spend minimum time with each patient and do not necessarily complete all services as described in the scope of practice. Therefore, practitioners within private practise are invited to participate.*

What will your responsibilities be?

- *You will be expected to be part of one semi structured telephonic interview and answer questions (please see the questions attached on the email) regarding your day to day activities and responsibilities as a practitioner in one of the fields identified. The interview will not be longer than 60 minutes and will be arranged at a time convenient to you.*

Will you benefit from taking part in this research?

- *You will gain no direct benefit as participant in this study, however indirect benefits will include the gain in the body of knowledge of your profession and you will also learn about the gaps in your profession.*

Are there risks involved in your taking part in this research?

- *The risks you may experience while participating in this study includes the risk of feeling embarrassed when you have to reject the participation; therefore, if you do not wish to participate you don't' have to reply to the invitation email. The possibility of loss of income may also exist when you spend 60 minutes of your time on the telephone, which you could have spent to see a patient, hence interviews would be scheduled it a time convenient to you. Lastly, you may experience fatigue during the interview, consequently you may stop the interview at any time and reschedule.*

What will happen in the unlikely event of some form of discomfort occurring as a direct result of your taking part in this research study?

- *Should you have the need for further discussions after the telephonic interview due to possible discomfort an opportunity will be arranged for you to do so.*

Who will have access to the data?

- *Your name will not be used and individual responses made during the interviews will not be linked to your identity when reporting the research findings; this will contribute to anonymity during the study. Confidentiality will be ensured by the way data will be captured, changing identifying data during transcription and deleting the digital recordings once data have been transcribed. Only the researcher and an independent co-coder will have access to the data. The recorded interview will be downloaded to the researcher's laptop into a password-protected folder and deleted from the recording device. Once all interviews are transcribed the interviews will be copied to a password protected folder on an external hard drive and the recordings will be permanently removed from the laptop. Both the transcribed interviews as well as the hard drive will be locked up in a cabinet in the researches office for seven years.*

What will happen with the data/samples?

- *The interviews will be recorded in order for the researcher to analyse the interview, recordings will be deleted from the recording device and be kept in a password protected file.*
- *This is a once off collection and data will be analysed in South-Africa.*

Will you be paid to take part in this study and are there any costs involved?

No you will not be paid to take part in the study but a small token of appreciation will be mailed to you to thank you for your participation in this study. The telephonic interviews will be on the cost of the researcher, there will thus be no costs involved for you, if you do take part.

Is there anything else that you should know or do?

- You can contact Cindy Kriel at 018-299-4206 if you have any further queries or encounter any problems.
- You can contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 2089; carolien.vanzyl@nwu.ac.za if you have any concerns or complaints that have not been adequately addressed by the researcher.
- You will receive a copy of this information and consent form for your own records.

How will you know about the findings?

- At the end of the study the research findings/thesis, will be shared with you by means of an email.

I declare that:

- I have read this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher and all my questions have been adequately answered.
- I understand that taking part in this study is voluntary and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Declaration by participant:

I agree/disagree to take part in a research study titled: Interpretive description of recreational therapy within selected health care professions in South Africa (please tick box below).

☐

Appendix B

Questions contained in the biographical questionnaire

Biographical questionnaire:

	Question:	Answers
1	Name and surname	Fill in
2	Gender	Male/Female
3	Home language	Dropdown: Afrikaans, English, Ndebele, Northern Sotho, Sotho, Swazi, Tsonga, Tswana, Venda, Xhosa, Zulu. Extra Other: Please specify
4	Age	Dropdown: 20-30 31-40 41-50 51-60 60+
5	University where you obtained your degree	Dropdown: Nelson Mandela Metropolitan University North West University Sefako Makgatho Health Sciences University University of Cape Town University of Free State University of Johannesburg University of KwaZulu-Natal University of Limpopo University of Pretoria University of Stellenbosch University of Venda for Science & Technology University of the Western Cape University of the Witwatersrand Tshwane University of Technology Other: Please specify
6	In which Province do you presently practise?	Dropdown: Eastern Cape Free State Gauteng KwaZulu-Natal Limpopo Mpumalanga North West Northern Cape Western Cape
7	How long have you been practising as a biokineticist/occupational therapist/physiotherapist?	Fill in. Years and months
8	Which professional bodies are you a member of (not HPCSA)?	BASA OTASA

		SASP None
9	What is the average number of patients/clients that you provide your service to, or interact with per week?	Fill in
10	Preferred contact number	Fill in

BASA, Biokinetics Association of South Africa; *HPCSA,* Health Professions Council of South Africa; *OTASA,* Occupational Therapy Association of South Africa; *RT/TR,* recreational therapy/therapeutic recreation; *SA,* South Africa; *SASP,* South African Society of Physiotherapists.

Appendix C

Interview schedule

Interview schedule for the study "Interpretive description of recreational therapy within selected health care professions in South Africa".

The following questions will be asked during the interview.

Introduction
1. Reflecting on a typical work day, what do you enjoy most about practising as a biokineticist/occupational therapist/physiotherapist?
Treatment/preventative treatment approach
2. Can you please describe to me the type of clients you see in your practice?
3. In consulting/seeing your clients/patients, would you please describe your approach? (i.e. do you use the treatment model, wellness model or a combination of both?)
Different activities
4. Can you please describe to me the type of activities that you use and/or integrate in this approach?
5. In your approach, do you focus on individual-, group- and/or a combination of individual and group treatment/preventative treatment?
Treatment network and the termination process
6. Please describe at what stage or under which conditions in your treatment/preventative treatment you refer your clients/patients.
7. Please describe at what stage you typically terminate your treatment/preventative treatment.
8. In your experience and reflecting on your scope of practice as a biokineticist/occupational therapist/physiotherapist, please describe the challenges you have experienced in treatment/preventative treatment of clients/patients.
Registration with the HPCSA and professional body
9. From your perspective, would you please describe the benefits of a. Being registered with the HPCSA b. Being a member of a professional body

HPCSA, Health Professions Council of South Africa

Appendix D

Control sheet

Control sheet: National Council for Therapeutic Recreation Certification Certified Therapeutic Recreation Specialist examination outline

Foundational knowledge
1. Human developmental stages across the lifespan
2. Theories of human behaviour and principles of behavioural change
3. Concepts and models of health and human services
4. Principles of group dynamics and leadership
5. Legislative and regulatory guidelines and standards
6. Contributions of play, recreation, and leisure to health and well-being
7. Models of RT/TR service delivery
8. Practice settings
9. Standards of practice
10. Code of ethics
11. Professional qualifications
12. Cultural competency
13. Cognitive/developmental disorders and related impairments
14. Physical/medical disorders and related impairments
15. Psychiatric disorders and related impairments
Assessment process
16. Current RT/TR assessment instruments
17. Interprofessional inventories and questionnaires
18. Secondary sources of assessment data
19. Criteria for selection and/or development of assessment
20. Implementation of assessment
21. Sensory assessment
22. Cognitive assessment
23. Social assessment
24. Physical assessment
25. Affective assessment
26. Leisure assessment
27. Functional skills assessment
Documentation
28. Interpretation and documentation of assessment results
29. Individualised intervention plan
30. Writing measurable goals and behavioural objectives
31. Progress/functional status
32. Modification of intervention plan
33. Discharge/transition plan of person(s) served
34. Required facility documentation

Implementation
35. Selection of programmes, activities and interventions to achieve the assessed needs of the person(s) served
36. Purpose and techniques of activity/task analysis
37. Activity modifications
38. Modalities and/or interventions
39. Facilitation approaches
40. Intervention techniques
41. Risk management and safety concerns
42. Role and function of other health and human service professions and of interdisciplinary approaches
Administration of therapeutic recreation/recreational therapy service
43. Service plan of operation
44. Procedures for programme evaluation and accountability
45. Quality improvement guidelines and techniques
46. Personnel, intern, and volunteer management
47. Payment system
48. Facility and equipment management
49. Budgeting and fiscal management
Advancement of the profession
50. Professionalism
51. Credential maintenance and upgrading professional competencies
52. Advocacy for person(s) served
53. Legislation and regulations
54. Public relations, promotion and marketing of the RT/TR profession
55. Professional associations and organisations
56. Research activities
57. Collaboration between higher education and direct service providers

RT/TR, Recreational therapy/therapeutic recreation.

Appendix E

Topic mentions by university, healthcare profession and total number in 2018 yearbooks of South African universities

Topic mentions by university, healthcare profession and total number in 2018 yearbooks of South African universities

	UCT			UFS			KZN			UP			SU			UWC			Wits		
	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT
1.	0	0	4	1	0	0	1	2	4	1	1	1	0	0	1	4	0	5	2	0	0
2.	5	0	2	1	0	0	1	1	2	0	1	2	0	1	3	2	4	0	0	0	0
3.	0	2	3	1	0	1	2	1	3	0	1	1	0	1	0	1	2	3	0	1	2
4.	0	0	0	1	0	1	0	0	1	0	3	2	0	0	0	3	0	0	0	1	1
5.	1	1	2	0	0	0	0	0	0	0	3	1	1	2	0	2	0	3	0	0	0
6.	0	0	2	1	0	0	0	0	1	0	0	1	0	0	0	1	0	2	0	0	0
7.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
8.	0	2	1	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	4
9.	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.	0	2	2	3	0	2	1	3	3	1	3	2	0	1	0	6	4	5	1	0	2
11.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.	0	4	7	2	0	0	0	1	3	0	0	0	2	0	1	6	1	1	0	1	2
13.	0	1	1	1	0	2	0	1	4	0	2	2	0	0	0	3	2	4	1	0	1
14.	1	5	1	3	0	3	3	4	5	0	3	3	3	0	0	3	1	4	3	1	1
15.	0	0	1	0	0	3	1	1	3	0	1	3	0	1	0	1	1	4	1	2	3
16.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0
20.	0	6	5	4	0	1	0	6	4	3	1	1	4	2	0	13	3	14	2	3	2
21.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.	0	3	2	4	0	0	0	2	0	3	0	0	1	0	0	1	1	0	2	0	0
25.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
27.	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.	0	0	5	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	2	0	0
29.	0	0	2	2	0	0	0	2	2	0	0	0	0	0	0	1	0	0	0	0	0
30.	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

	UCT			UFS			KZN			UP			SU			UWC			Wits		
	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT	Bio	Phy	OT
31.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
33.	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0
35.	0	1	6	4	0	2	0	3	8	4	1	2	2	0	2	2	2	6	2	0	1
36.	0	0	1	0	0	0	0	0	2	0	0	1	0	0	1	0	0	1	0	0	2
37.	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
38.	0	0	1	0	0	1	1	0	1	0	0	2	0	0	0	1	0	2	1	0	1
39.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
40.	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0
41.	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	6	0	0	1	0	0
42.	0	5	7	3	0	0	0	0	0	0	1	1	0	0	0	3	3	1	0	0	1
43.	0	1	0	1	0	1	1	0	1	0	0	1	2	1	1	3	1	0	0	1	0
44.	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	2	1	0	0	0
45.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
46.	0	0	1	1	0	2	0	0	2	0	0	1	0	1	1	3	1	0	0	0	0
47.	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
48.	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	3	0	0	0	1	0
49.	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
50.	0	1	3	0	0	0	0	1	1	0	1	1	0	4	2	0	5	2	0	0	0
51.	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0
52.	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
53.	0	0	3	0	0	0	0	0	2	0	0	1	0	0	0	0	0	1	0	0	0
54.	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	4	0	0	0	1	0
55.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.	3	3	4	7	0	1	3	4	5	0	2	2	3	2	4	11	3	4	2	1	3
57.	0	1	1	0	0	1	1	3	1	0	2	3	0	2	0	2	0	3	1	0	3

UCT, University of Cape Town; *UFS,* University of the Free State; *KZN,* University of KwaZulu-Natal; *UP,* University of Pretoria; SU, Stellenbosch University; *UWC,* University of Western Cape; *Wits,* University of the Witwatersrand; *Bio,* biokinetics; *OT,* occupational therapy; *Physio,* physiotherapy.

Appendix F

Proof of ethical clearance

NWU®
NORTH-WEST UNIVERSITY
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Research Ethics Regulatory Committee
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ETHICS APPROVAL CERTIFICATE OF STUDY

Based on approval by **Health Research Ethics Committee (HREC)** on **05/12/2017**, the North-West University Research Ethics Regulatory Committee (NWU-RERC) hereby **approves** your study as indicated below. This implies that the NWU-RERC grants its permission that provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Interpretive description of recreational therapy within selected health care professions in South Africa
Study Leader/Supervisor: Dr JT Weilbach
Student: C Kriel-2070093

Ethics number: N W U - 0 0 0 1 9 - 1 7 - A 1
(Institution – Study Number – Year – Status)

Application Type: Single study
Commencement date: 14/11/2017 **Risk:** Minimal

Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.

Special conditions of the approval (if applicable):
- Please submit the final version of the interview schedule to the HREC for approval before implementing it in the study.
- If the curricula are not available on the website, the HREC should be informed of the manner in which permission will be obtained from the university to get access to the curricula, in the form of an amendment request to Ethics-HRECApply@nwu.ac.za.

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:

- *The study leader (principle investigator) must report in the prescribed format to the NWU-RERC via HREC:*
  - *annually (or as otherwise requested) on the monitoring of the study, and upon completion of the study*
  - *without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.*
- *Annually a number of studies may be randomly selected for an external audit.*
- *The approval applies strictly to the proposal as stipulated in the application form. Should any changes to the proposal be deemed necessary during the course of the study, the study leader must apply for approval of these amendments at the HREC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.*
- *The date of approval indicates the first date that the study may be started.*
- *In the interest of ethical responsibility the NWU-RERC and HREC retains the right to:*
  - *request access to any information or data at any time during the course or after completion of the study;*
  - *to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.*
  - *withdraw or postpone approval if:*
    - *any unethical principles or practices of the study are revealed or suspected,*
    - *it becomes apparent that any relevant information was withheld from the HREC or that information has been false or misrepresented,*
    - *the required amendments, annual (or otherwise stipulated) report and reporting of adverse events or incidents was not done in a timely manner and accurately,*
    - *new institutional rules, national legislation or international conventions deem it necessary.*
- *HREC can be contacted for further information or any report templates via Ethics-HRECApply@nwu.ac.za or 018 299 1206.*

The RERC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the RERC or HREC for any further enquiries or requests for assistance.

Yours sincerely

Prof. Refilwe Phaswana-Mafuya
Chair NWU Research Ethics Regulatory Committee (RERC)

Appendix G

Proof of language editing

RESEARCH THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE DOCTOR PHILOSOPHIAE IN RECREATION SCIENCES AT THE POTCHEFSTROOM CAMPUS OF NORTH-WEST UNIVERSITY

Cindy Kriel

Student number: 20700938

Interpretive description of recreational therapy within selected healthcare professions in South Africa

STATEMENT ON EDITORIAL ASSISTANCE

I hereby confirm that I, Helen Elizabeth ROBINSON, edited the thesis written by Cindy KRIEL , titled **Interpretive description of recreational therapy within selected healthcare professions in South Africa.**

Corrections were made in respect of grammar, punctuation, spelling, syntax, tense, language use and flow.

My edit may not be identical to that submitted for examination. The author, at their sole discretion, has the prerogative to accept, delete, or change before submission amendments made by the editor.

Helen Robinson
Member: Professional Editors' Guild of South Africa

PO Box 482
Mahikeng
NW
Tel: 082 714 3003
msinsi@mweb.co.za

14/03/2019

Appendix H

Proof of submission of article

Dear Ms Kriel

Thank you for your submission to the SAJRSPER. Your paper has been through editorial review and will now be placed in peer review.

Your reference number is MS 1405. Please use this reference number in the subject line for all future correspondence.

Kind regards
Hanlie

SJ (Hanlie) Moss (PhD, MBA)

Professor

Editor: South African Journal for Research in Sport, Physical Education and Recreation

Physical Activity, Sport and Recreation Research Focus Area

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Title: Interpretation and description of recreational therapy within the curriculum of occupational therapy

Titel: Interpretering en beskrywing van rekreasie terapie in die kurrikulum van arbeidsterapie

Authors: Cindy KRIEL[1], Theron WEILBACH[1], Linda L CALDWELL[1]

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Running head: Recreational therapy within the curriculum of occupational therapy

Interpretation and description of recreational therapy within the curriculum of occupational therapy

ABSTRACT
In South Africa (SA), recreational therapy (RT)/therapeutic recreation (TR) as a registered profession ended in June 1978 and currently remains unrecognised. However, some of the existing health professions in SA may provide services similar to those of RT/TR as practised in the United States of America (USA). In particular, the scope of practice of occupational therapy shows some similarities to the broad international concept of RT/TR. The purpose of this study was to interpret and describe RT, as contextualised in the USA, within the curriculum of occupational therapy. The credentialing document for the speciality of RT/TR published by the US National Council for Therapeutic Recreation Certification: *Certification Standards: Information for New Applicants, 2018* was subjected to inductive content analysis, followed by a deductive analysis of the occupational therapy yearbooks of seven SA universities. Some similarities were observed between the requirements of RT/TR in the USA and the occupational therapy curricula, especially in terms of foundational knowledge. However, knowledge about recreation, specifically RT/TR, was lacking from the occupational therapy curricula, suggesting that RT/TR is not featured in these curricula.

Keywords: Occupational therapy, therapeutic recreation, therapeutic recreation specialist.

INTRODUCTION
In South Africa (SA), recreational therapy (RT), also known as therapeutic recreation (TR), as a profession ended in June 1978, when "Remedial gymnastics and recreational therapy" was removed from the register of the South African Medical and Dental Council, now the Health Professions Council of South Africa (HPCSA) (Strydom, 2005). RT/TR is currently unrecognised in SA as a profession (Young, 2015). In contrast, RT/TR in the United States of America (USA) has shown remarkable growth over the past two decades (Kunstler & Daly, 2010; NCTRC, 2014), with the National Council for Therapeutic Recreation Certification (NCTRC) regulating the registration of RT/TR specialists. As RT/TR is unrecognised in SA, for the purpose of this article it is described as a process that uses leisure activities to increase independence in all life activities, by minimising restrictions and limitations experienced by individuals with disabilities and/or illnesses, to improve their overall health, well-being and quality of life (Stumbo & Peterson, 2004; Robertson & Long, 2007; ATRA, 2015).

The Leisure Ability Model (LAM) identifies three distinct phases to the services that RT/TR offers: firstly, the functional intervention phase, followed by the leisure education phase and lastly the leisure participation phase (Stumbo & Peterson, 2004; Williams, 2007; Austin, 2009). In the first phase, focus is placed on restoring the functional abilities of patients, for them to be able to engage in leisure (Stumbo & Peterson, 2004; Austin, 2009). The second phase is focused on educating patients about the value and importance of leisure and recreation, and the recreational opportunities available to them (Stumbo & Peterson, 2004; Williams, 2007; Austin, 2009). In the final phase, independent patient participation in leisure and recreation is facilitated (Stumbo & Peterson, 2004; Williams, 2007). RT/TR services, based on the LAM, clearly cover a broad spectrum with numerous physical, emotional, psychological and social benefits (Stumbo & Peterson, 2004), although these are often overlapping and interconnected. Because the scope of services that RT/TR specialists deliver ranges from functional intervention to leisure participation, the NCTRC in the USA requires RT/TR specialists to have specific skills and knowledge, including foundational knowledge (i.e. anatomy, physiology and human development) and knowledge specifically related to recreation and TR, in order to practice. From an SA perspective, where RT/TR is not currently practised, the possibility exists that some of the existing health professions may provide services similar to those of RT/TR.

According to the Occupational Therapy Association of South Africa (OTASA), occupational therapists are concerned with activities of daily living and help individuals to become independent, assisting them with rehabilitation to improve motor function, sensory function and interpersonal skills (OTASA, 2016). Leisure and recreation are activities of daily living, and so the scope of practice of occupational therapy shows some similarities to the broad international concept of RT/TR. It is therefore possible that, In the absence of RT/TR in SA, occupational therapists may, intentionally or unintentionally, have taken the opportunity to fill the RT/TR gap. In this case, the training curricula for of occupational therapists would be expected to reflect elements of RT/TR. By comparing the content of SA university curricula for occupational therapy to the training required to practise RT/TR in the USA, identifying whether occupational therapists receive RT/TR-related training is possible. Such findings can assist in determining whether the need exists for RT/TR qualifications in SA or, alternatively, how RT/TR could be incorporated into occupational therapy training, to enable occupational therapists to better serve their clients.

PURPOSE OF THE STUDY

The purpose of this article is to interpret and describe RT, as contextualised in the USA, within the curriculum of occupational therapy.

METHODOLOGY

To determine the extent of RT/TR training within the occupational therapy curricula at selected SA universities, both inductive and deductive qualitative content analyses were used. To establish what constitutes RT/TR training, the NCTRC document: *Certification Standards Part I: Information for New Applicants* was downloaded from the NCTRC website and subjected to inductive analysis. The purpose of the inductive analysis was to determine the content and themes of the training that prospective RT/TR specialists must complete to be eligible for the NCTRC's exam. As part of the inductive analysis, a control sheet was developed (Table 1) and used to ensure that during the deductive analysis all documents were viewed through the same "lens". The 2018 academic yearbooks for occupational therapy were downloaded from the websites of the seven SA universities that offer occupational therapy training Using the control sheet, these were analysed deductively. If a yearbook was not available, documents from the South African Qualification Authority (SAQA) were used, as all qualifications are registered at SAQA and their course content available (SAQA, 2014). The yearbooks of the following universities were included:

- University of Cape Town
- University of the Free State
- University of KwaZulu-Natal
- University of Pretoria
- Stellenbosch University
- University of Western Cape
- University of the Witwatersrand.

Table 1 Control sheet (compiled from US National Council for Therapeutic Recreation Certification standards 2018.

Foundational knowledge
1. Human developmental stages across the lifespan
2. Theories of human behaviour and principles of behavioural change
3. Concepts and models of health and human services
4. Principles of group dynamics and leadership
5. Legislative and regulatory guidelines and standards
6. Contributions of play, recreation, and leisure to health, and well-being
7. Models of RT/TR service delivery
8. Practice settings
9. Standards of practice
10. Code of ethics
11. Professional qualifications
12. Cultural competency
13. Cognitive/developmental disorders and related impairments
14. Physical/medical disorders and related impairments
15. Psychiatric disorders and related impairments
Assessment process
16. Current RT/TR assessment instruments
17. Interprofessional inventories and questionnaires
18. Secondary sources of assessment data
19. Criteria for selection and/or development of assessment
20. Implementation of assessment
21. Sensory assessment
22. Cognitive assessment
23. Social assessment
24. Physical assessment
25. Affective assessment
26. Leisure assessment
27. Functional skills assessment
Documentation
28. Interpretation and documentation of assessment results
29. Individualised intervention plan

30. Writing measurable goals and behavioural objectives 31. Progress/functional status 32. Modification of intervention plan 33. Discharge/transition plan of person(s) served 34. Required facility documentation
Implementation
35. Selection of programmes, activities and interventions to achieve the assessed needs of the person(s) served 36. Purpose and techniques of activity/task analysis 37. Activity modifications 38. Modalities and/or interventions 39. Facilitation approaches 40. Intervention techniques 41. Risk management and safety concerns 42. Role and function of other health and human service professions and of interdisciplinary approaches
Administration of RT/TR service
43. Service plan of operation 44. Procedures for programme evaluation and accountability 45. Quality improvement guidelines and techniques 46. Personnel, intern, and volunteer management 47. Payment system 48. Facility and equipment management 49. Budgeting and fiscal management
Advancement of the profession
50. Professionalism 51. Credential maintenance and upgrading professional competencies 52. Advocacy for person(s) served 53. Legislation and regulations 54. Public relations, promotion and marketing of the RT/TR profession 55. Professional associations and organisations 56. Research activities 57. Collaboration between higher education and direct service providers

RT/TR, Recreation therapy/therapeutic recreation.

The first step in the deductive content analysis was to read through each university's course/curriculum and compile a list of modules for analysis. Both the researcher and a co-coder completed the deductive content analysis by comparing the module content to the information on the control sheet, using qualitative data analysis software (ATLAS.ti) and identified instances where terms on the control sheet were also mentioned in the yearbooks. Universities used a variety of words to describe content, so the researcher and the co-coder also considered synonyms and alternative phrases that may have described similar content. Once both parties completed the analysis, the researcher uploaded the co-coder's project folder on ATLAS.ti to compare the findings. Some of the codes were removed after the researcher and the co-coder discussed the dissimilarities, and others were added.

Both the inductive and deductive analyses followed the same phases of data analysis: data preparation, data organisation and data reporting (Tesch, 1990; Elo & Kyngas, 2007; Elo *et al.*, 2014). During the data preparation phase, the researcher immersed herself in the data to gain a sense of the whole document. During the inductive analysis, the researcher read through the data repeatedly, highlighting important information and making notes, to capture the information. When organising the data, codes and themes were applied according to the text headings. The coding process was guided by the research objective, which allowed identification, indexing and retrieval of content for use in the deductive analysis, and which was to find similarities between the curricula of RT training and that of occupational therapy. The deductive analysis was approached differently, as the format of the document differed from the one used in the inductive analysis; however, the same process was followed.

Ethical clearance

Approval to conduct the study was granted by the Health Research Ethics Committee of North-West University (NWU-00019-17-A1).

RESULTS

Table 2 shows the distribution and number of mentions of the topics of the control sheet, by university. The topics highlighted in blue were mentioned frequently, that is by four or more of the seven universities.

Table 2 Number of universities according to mention of control sheet item in occupational therapy curriculum

Item number	Control sheet item	Number of universities
Foundational knowledge		
1.	Human developmental stages across the lifespan*	5
2.	Theories of human behaviour and principles of behavioural change*	4
3.	Concepts and models of health and human services*	6
4.	Principles of group dynamics and leadership*	4
5.	Legislative and regulatory guidelines and standards	3
6.	Contributions of play, recreation, and leisure to health, and well-being*	4
7.	Models of RT/TR service delivery‡	0
8.	Practice settings†	3
9.	Standards of practice†	2
10	Code of ethics*	6
11	Professional qualifications‡	0
12	Cultural competency*	4
13	Cognitive/developmental disorders and related impairments*	6
14	Physical/medical disorders and related impairments*	6
15	Psychiatric disorders and related impairments*	6
Assessment process		
16	Current TR/RT assessment instruments‡	0
17	Inter-professional inventories and questionnaires†	1
18	Secondary sources of assessment data‡	0
19	Criteria for selection and/or development of assessment†	1
20	Implementation of assessment*	6
21	Sensory assessment‡	0
22	Cognitive assessment‡	0
23	Social assessment‡	0
24	Physical assessment	1
25	Affective assessment‡	0
26	Leisure assessment†	2
27	Functional skills assessment†	2
Documentation		
28	Interpretation and documentation of assessment results†	2
29	Individualised intervention plan†	2
30	Writing measurable goals and behavioural objectives‡	0
31	Progress/functional status‡	0
32	Modification of intervention plan‡	0
33	Discharge/transition plan of person(s) served‡	0
34	Required facility documentation†	1
Implementation		
35	Selection of programmes, activities and interventions to achieve the assessed needs of the person(s) served*	7
36	Purpose and techniques of activity/task analysis*	6
37	Activity modifications†	2
38	Modalities and/or interventions*	6
39	Facilitation approaches†	1
40	Intervention techniques†	2

41	Risk management and safety concerns†	1
42	Role and function of other health and human service professions and of the interdisciplinary approaches*	4
Administration of RT/TR service		
43	Service plan of operation*	4
44	Procedures for programme evaluation and accountability†	3
45	Quality improvement guidelines and techniques‡	0
46	Personnel, intern, and volunteer management*	5
47	Payment system†	1
48	Facility and equipment management†	1
49	Budgeting and fiscal management†	2
Advancement of profession		
50	Professionalism*	5
51	Advocacy for person(s) served†	1
52	Legislation and regulations*	4
53	Public relations, promotion and marketing of the RT/TR profession†	2
54	Professional associations and organisations‡	0
55	Research activities*	7
56	Collaboration between higher education and direct service providers*	6

OT, occupational therapy; *RT/TR*, recreation therapy/therapeutic recreation.
* ≥4 mentions; † 1–4 mentions; ‡ no mentions

DISCUSSION

The aim of the inductive analysis was to develop a control sheet that could be used to complete the deductive analysis; however, other important information was also acquired during the document analysis. A candidate who wishes to write the NCTRC certification examinations must comply with the NCTRC eligibility requirements. Three different routes to NCTRC credentialing can be followed: in summary, candidates are required to have a bachelor's degree with a minimum of 54 credits in therapeutic recreation and general recreation content coursework, with no less than 45 credits in therapeutic recreation content. They are also required to have completed supportive coursework with a minimum of 12 credits in anatomy and physiology, 12 credits in abnormal psychology and 12 credits in modules of human growth and development across the lifespan. The remaining credits must be in social science and humanities subjects.

The findings of the deductive content analysis are discussed according to the headings of the control sheet (Table 1).

Foundational knowledge

According to Panitz (1999), foundational knowledge is the basic knowledge of a subject, as agreed on by a group of people who share an interest in the subject, which, in this case, was RT/TR. Foundational knowledge comprised items 1–15, of which 10 were mentioned at more than four universities. Two of the items (models of RT/TR service delivery and professional qualifications) both of which related to the delivery of RT/TR services, were not mentioned by any university: the item "Professional qualifications" is not applicable to the SA context, which differs markedly from that of the US. Although occupational therapists are taught foundational knowledge as part of their training, it should be noted that students of all the allied health professions need similar foundational knowledge (Dwulit, 2017).

Documentation

Documentation forms an important part of the RT/TR process and includes written records, which then become the legal record of the services provided (Stumbo & Peterson, 2004; Austin, 2009). Although the HPCSA requires all healthcare practitioners to keep record of patient treatment, course content related to documentation was not mentioned to a great extent in any of the analysed yearbooks.

The NCTRC requires an RT/TR specialist to keep records according to items 28–34. These cover interpretation and documentation of assessment results, individualised intervention planning, writing measurable goals and behavioural objectives, and recording progress/functional status, modifications to the intervention plan and

discharge/transition plans of the person(s) served, as well as other required facility documentation. Similarly, the HPCSA (2016) requires the following documentation and information to be recorded:

- Personal information of the client.
- Patient history, including allergies and idiosyncrasies.
- The date, time and location of consultations.
- Client assessment.
- Particulars of the clinical management of the patient.
- Information regarding patient referrals.
- The patient's reaction to treatment or medication.
- Test results.
- Imaging results.
- Information regarding the time and reasons patients are granted sick leave.
- Proof of informed consent, where applicable.

The limited mention of content on documentation in the yearbooks used for this study is possibly attributable to the brevity of the descriptions of course/module content; documentation may form part of the training of occupational therapists but is not explicitly mentioned in the yearbooks.

Knowledge of required documentation and how it is kept is evidently vital to both the HPCSA and NCTRC, although the type of and requirements for information differ. Dissimilarities are not unexpected, due to differences in the treatment process and scope of practice of RT/TR and occupational therapy.

Implementation

Implementation of RT/TR takes place through the presentation of programmes to clients (Austin, 2009). Four of the items included in this section were mentioned extensively: item 35 "Selection of programmes, activities and interventions to achieve the assessed needs of the person(s) served"; item 36 "Purpose and techniques of activity/task analysis", item 38 "modalities and/or interventions" and item 42 "Role and function of other health and human service professions and of interdisciplinary approaches". Although items 35 and 38 were mentioned frequently, the items can be predicted to describe the processes followed to implement occupational therapy programmes, and not include principles of RT/TR practice. Occupational therapists use activities for rehabilitation; therefore, activity analysis forms an important part of their practice (item 36). Activity analysis is the process of analysing an activity in terms of the physical, cognitive, social and affective requirements of the client to complete it (Stumbo & Peterson, 2004:188). Item 42, "Role and function of other health and human service professions and of the interdisciplinary approaches" has some relevance to RT/TR, as RT/TR specialists may work with other service professions such as nurses, medical doctors and psychologists (Austin *et al.*, 2015).

Administration of RT/TR service

Items 43–49 refers to the administration of RT/TR services, including the management aspects of an RT/TR practice. Two of the items, 43 "Service plan of operation" and 46 "Personnel, intern, and volunteer management", were mentioned frequently, possibly because the content is generalisable and used in most health professional practices and businesses. However, relatively few administrative tasks and responsibilities were mentioned in the relevant yearbooks, yet administration appears to be an important topic to the NCTRC. Once again, this may be due to the brief nature of the course/module descriptions used in the yearbooks, although curriculum focus may be more on theory and practice than on management and administration.

Advancement of the profession

A profession can develop in one of three directions: it may grow, decline or reside in a temporary state of equilibrium (Austin, 2015 as quoted by McCormick *et al.*, 2015). Practitioners can contribute to the growth of their profession by participating in the activities of items 50–57, such as complying with minimum standards, participating in research and contributing to the body of knowledge. Occupational therapists also need to ensure professional growth so, unsurprisingly, items 50 "Professionalism", 53 "Legislation and regulations", 56 "Research activities", and 57 "Collaboration between higher education and direct service providers" were mentioned numerous times. However, the relevance of the mentions of "Professionalism" and "Legislation and regulations" is questionable as both professionalism and legislation differ between occupational therapy and RT/TR.

CONCLUSIONS

The purpose of the study was to interpret and describe RT, as contextualised in the USA, within occupational therapy curricula at SA universities. The results firstly suggested that training in the core knowledge of recreation is lacking in SA, with none of the universities including recreation-specific courses or modules in their occupational therapy curricula. As occupational therapy curricula are specifically tailored to the competencies required by occupational therapists, this result was unsurprising. Secondly, much of the training at SA universities corresponding with the NCTRC document is generalisable to most, if not all, health professions. Yearbook descriptions of course or module content similar to that required by the NCTRC focused specifically on occupational therapy and not RT/TR. Despite some similarities between the NCTRC requirements and occupational therapy curricula, RT/TR does not feature in occupational therapy curricula.

RT/TR is currently unrecognised in SA (Young, 2015). The results revealed that occupational therapy curricula do not feature RT/TR-related training. As the treatment and services provided by occupational therapists concern the activities of daily living activities of patients. RT/TR-related services could potentially complement occupational therapy services, as recreation is an important daily living activity. If trained in RT/TR, occupational therapists could supplement their current treatment, not only by assisting patients to engage in recreation, but also by using recreation as a form of treatment, simultaneously improving patients' overall health and wellness.

LIMITATIONS

As the profession of RT/TR is currently unrecognised in SA, an international benchmark (USA, NCTRC) was used to determine the requirements for RT/TR training. Although RT/TR as a profession is based on the US healthcare system and regulatory guidelines, which cannot be compared to SA's systems, the NCTRC requirements were useful as an initial benchmark.

An additional limitation was that not all the universities published yearbooks and therefore some details of course content were accessed from SAQA instead. Whether the university curriculum content was similar to that recorded at SAQA is unclear.

Finally, when completing the deductive analysis, differences were noted in terms of module descriptions, with some university yearbooks giving thorough explanations and others only using keywords. This limited the ability to fully describe and interpret the content.

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