

**THE EXPERIENCES OF OCCUPATIONAL THERAPISTS REGARDING
RETURNING CLIENTS WITH TRAUMATIC BRAIN INJURY TO WORK THROUGH
THE UTILISATION OF THE MODEL OF OCCUPATIONAL SELF-EFFICACY**

**A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENT OF THE
DEGREE MAGISTER SCIENTIAE (OCCUPATIONAL THERAPY)**

**Department of Occupational Therapy
University of the Western Cape**



**UNIVERSITY of the
WESTERN CAPE
LEE-ANN ARENDSE**

Student number: 2331356

Submission date: 11 January 2016

Supervisor: Dr. M Shaheed Soeker

Key words: traumatic brain injury, rehabilitation, vocational rehabilitation, self-efficacy, qualitative research, case study research, occupational therapy, client-centred practice, return to work, barriers, facilitators, journaling, reflection, introspection

DECLARATION

I, LEE-ANN ARENDSE, hereby declare that the work on which this thesis: *The experiences of Occupational Therapists regarding returning clients with traumatic brain injury to work through the utilisation of the Model of Occupational Self-Efficacy*, is my own original work (except where acknowledgements indicate otherwise), and that neither the whole work nor any part of it has been, or is to be submitted for another degree in this or any other university.

All sources that I have used or quoted have been indicated and acknowledged by means of complete references.

LEE-ANN ARENDSE



Signature:

Date: 11 January 2016



TABLE OF CONTENT

DECLARATION	ii
TABLE OF CONTENT	iii
ACKNOWLEDGEMENTS	ix
DEFINITION OF TERMS	xi
LIST OF ABBREVIATIONS	xiii
ABSTRACT	xiv
CHAPTER ONE	1
1. Background	1
1.1 Introduction	1
1.2 Rationale	2
1.3 Research design and method	4
1.4 Research context	5
1.5 The research process	6
1.6 Research problem	6
1.7 Research question	7
1.7.1 Aim	7
1.7.2 Personal motivation for conducting this study	7
1.8. Overview of the chapters	8
Chapter One: Brief overview of the study	8
Chapter Two: Literature review	8
Chapter Three: Research methodology	8
Chapter Four: Findings	9
Chapter Five: Discussion	9
Chapter Six: Conclusion and recommendations	9
CHAPTER TWO	10
LITERATURE REVIEW	10
2. Introduction	10
2.1 Epidemiology of traumatic brain injuries	10
2.1.1 Incidence of TBI	11
2.1.2 Risk factors of TBI	12
2.1.3 Classification of TBI	12

2.1.4	Outcomes of TBI.....	14
2.2	The personal cost of TBI.....	14
2.3	How TBI can affect the worker role	16
2.4	Return to work	16
2.4.1	RTW programmes currently in use: Supported Employment Approach.....	18
2.4.2	Vocational Co-ordinator Model.....	19
2.4.3	Programme without Walls	20
2.5	Client-Centered Practice	21
2.6	Barriers to RTW for individuals with brain injury	22
2.7.	Facilitators for successful RTW for clients with TBI.....	24
2.7.1	Employment Equity Act, No. 55 of 1998	24
2.7.2	Skills Development Act, No. 97 of 1998.....	25
2.7.3	Disability Rights Charter	25
2.7.4	United Nations Convention on the Rights of Persons with Disabilities	26
2.8	Therapists' views of returning client with TBI to work	27
2.9	The model of occupational self-efficacy.....	28
2.9.1	The model in occupational therapy.....	30
CHAPTER THREE		32
METHODOLOGICAL FRAMEWORK.....		32
3.	Introduction.....	32
3.1	Research Purpose	32
3.2	Aim of the study.....	32
3.3	Objectives of the study.....	33
3.4	Research paradigm.....	33
3.4.1	Qualitative research	33
3.4.2	Exploratory research	33
3.4.3	Descriptive research.....	34
3.5	Description of study setting	34
3.6	Sampling strategy.....	35
3.6.1	Participants selection	35
3.6.1.1	Inclusion criteria for therapists	35
3.6.1.2	Exclusion criteria for therapists	36
3.6.2	Description of study participants	36

3.7	Data collection techniques	39
3.7.1	Face to face interviews.....	40
3.7.2	Telephonic interviews	41
3.7.3	Semi-structured interviews	41
3.7.4	Description of interview process	42
3.8	Data analysis	43
3.8.1	Data management.....	43
3.8.2	Thematic content analysis.....	44
3.9	Bracketing	46
3.10	Trustworthiness.....	47
3.10.1	Truth value:.....	47
3.10.1.1	Member checking:	47
3.10.1.2	Interview techniques:.....	48
3.10.1.3	Researcher’s reflexivity:.....	48
3.10.1.4	Peer debriefing:.....	49
3.10.2	Applicability:	49
3.10.3	Consistency:	50
3.10.4	Neutrality	50
3.11	Ethical statement.....	50
3.12	Limitations of the study	51
CHAPTER FOUR.....		53
FINDINGS		53
4.	Presentation of findings	53
4.1	Theme One: The progress of the implementation of the Model of Occupational Self-Efficacy Depends on client-related factors	54
4.1.1	Characteristics of higher functioning clients that were perceived as more difficult to manage in rehabilitation.....	55
4.1.1.1	Clients with lower levels of education and lower paying jobs were easier to take through the rehabilitation process	56
4.1.1.2	The client’s personality has an impact on the rehabilitation process	58
4.1.1.3	Older clients were more difficult to place in work test placement and jobs	59
4.1.2	The client motivation levels and insight have an impact on the rehabilitation process.	

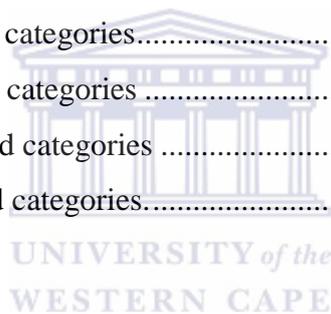
4.1.2.1	Clients with high motivation levels were easier to take through the rehabilitation process	63
4.1.2.2	Poor insight and judgement affected the client’s work skills.....	65
4.1.2.3	Non-compliant clients appeared to struggle throughout the rehabilitation process	66
4.1.3	Socio-economic circumstances affected the client’s rehabilitation process and ability to RTW.....	69
4.1.3.1	A lack of social support may prevent the client from progressing	69
4.1.3.2	Financial constraints may prevent the client from completing rehabilitation programmes.....	71
4.2	Theme Two: The progress of rehabilitation and the clients’ ability to RTW depends on therapist-related factors.....	73
4.2.1	The implementation of the model is influenced by the context of the therapist.....	74
4.2.1.1	Medical aids negatively affect the rehabilitation process with clients	76
4.2.1.2	The work context of therapists affects the time period of the rehabilitation programme	77
4.2.2	Therapists’ experience with the model impacted on how the model was implemented	80
4.2.2.1	How the different work contexts of the therapists affected the way the model was implemented.....	80
4.2.2.2	The amount of time therapists had to work with the model impacted on how the model was implemented.	82
4.2.3	The earlier intervention commences, the better the outcome of the rehabilitation process.....	84
4.2.3.1	Early participation in rehabilitation may enhance the client`s ability to RTW	85
4.2.3.2	A delay in participation in vocational rehabilitation negatively influences functional problems	86
4.3	Theme three: Characteristics of the model that influenced the vocational rehabilitation process.....	87
4.3.1	Stages of the model were helpful.....	88
4.3.1.1	The stages helped inform the rehabilitation process	90
4.3.1.2	The model is dynamic: moving back and forth between stages facilitated the rehabilitation process	94
4.3.2	The value of activities used during the rehabilitation process	96
4.3.2.1	The process of how activities were used during the rehabilitation process.....	96
4.3.2.2	The value of journaling and reflection throughout the rehabilitation process.....	99

4.4	Theme four: The job market and the perceptions of employers related to disability affect the vocational rehabilitation process.....	101
4.4.1	Employers’ perceptions of, and attitudes toward TBI impacted on vocational rehabilitation and the RTW process.....	102
4.4.1.1	Employers’ attitudes toward TBI and disability impacted the rehabilitation process and RTW.....	104
4.4.1.2	Employers with an understanding of TBI aided the clients to RTW.....	105
4.4.2	The job market influences the client’s ability to find employment	107
4.4.2.1	The availability of jobs for people with disabilities hindered the rehabilitation and the RTW process.....	107
4.4.2.2	Learnerships act as facilitators in the rehabilitation process	108
4.4.2.2	Educating employers about the model and the RTW process.....	109
CHAPTER FIVE		113
DISCUSSION.....		113
5.	Introduction.....	113
5.1	Barriers.....	113
5.1.1	Low motivation levels and poor insight.....	114
5.1.2	Poor / difficult socio-economic circumstances of clients	116
5.1.3	Medical aids.....	119
5.1.5	Time constraints.....	120
5.2	Facilitators.....	122
5.2.1	The stages of the MoOSE	122
5.2.2	The use of activities	123
5.2.3	Journaling and reflection.....	125
5.3	Strategies to improve the implementation of the model and RTW	128
5.3.1	Education of employers	128
5.3.2	Applying legislation which mandates the employment of people with disabilities....	133
CHAPTER SIX.....		137
CONCLUSIONS AND RECOMMENDATIONS		137
6	Introduction.....	137
6.1	Conclusions.....	137
6.2	Recommendations.....	138
6.2.1	Recommendations to enhance the model.....	139

6.2.2 Recommendations for the occupational therapy profession and multidisciplinary team	139
6.2.3 Recommendations for employers	141
6.2.4 Recommendations for policy makers.....	141
6.2.5 Recommendation for further research	143
REFERENCES	144
APPENDICES	170
Appendix 1.....	170
Appendix 2.....	171
Appendix 3.....	174
Appendix 4.....	176

List of tables

Table 4.1: Theme one and related categories.....	54
Table 4.2: Theme two and related categories	73
Table 4.3: Theme three and related categories	87
Table 4.4: Theme four and related categories.....	101



List of figures

Figure 1.1: Causes for traumatic brain injuries.....	12
Figure 2.1: The Model of Occupational Self-Efficacy.....	29
Figure 4.1: Diagrammatic representation of themes and categories.....	111

ACKNOWLEDGEMENTS

First and foremost, I would like to thank my Heavenly Father for the favour he granted me to have this opportunity to conduct this research project. Secondly I would like to take this opportunity to thank everyone who supported me and guided me throughout this research process, the most difficult thing I have ever done. To my supervisor, Dr M Shaheed Soeker, for your guidance, constructive criticism, support and believing in me when I was ready to give up. To my darling husband, Clement Arendse, for your support, love and patience throughout this gruelling process and reading the content of the document even though it is not your field of interest. Thank you for putting up with all the crazy and eating sandwiches for supper when I was unable to cook your dinner. I am grateful to my colleagues, Zareena Darries, Zakiera Ganie and Candice Papé for your support, kind words and checking up on me when I moved away. I will be eternally grateful. To my participants, thank you for your enthusiasm, time and commitment to this research project. Without you there would be no research. To my family, especially my mom, Mrs Roslyn Kruger. I could feel your prayers lifting me out of the dark places. To the National Research Fund, thank you for providing the finance that enabled me to do the research project. To Sandy van Eeden and Grandle Opperman, thank you for always being available and willing to help me with all my administrative issues. A special thanks to Grandle for your help with my transcriptions. To my dear friend, Michelle Burger, for always asking how I'm doing and celebrating with me for every complete chapter. Your love and prayers mean the world to me. To Mr Peter Johnson-Smith and Dr Nasiema Allie at the Division for Post-Graduate Studies, your support and effort to help the post-graduate students complete their research has proven invaluable. To my editor, Mr Gavin Wildschutt-Prins, thank you for your help and agreeing to edit my

document at the last minute. To everyone whose name is not mentioned here, I thank you for your love and support throughout this whole process.



DEFINITION OF TERMS

Traumatic Brain Injury: a non-degenerative, non-congenital insult to the brain from an external mechanical force causing temporary or permanent neurological dysfunction, which may result in impairment of cognitive, physical and psychosocial functions (National Institute for Occupational Health, 2013).

Return to work: The process of safely returning employees to a workplace or vocational pursuit and the development of skills that could improve one's ability to return to a job on a timely basis (Gilworth, Eyres, Corey, Bhakata & Tennant, 2008).

Facilitators: the absence or presence of factors in an individual's environment which improves function and decreases disabilities. These factors include the physical environment that is accessible, presence of relevant assistive technology, and positive attitudes of people towards disability, as well as services, systems and policies that promotes the participation of all people with a health condition in all areas of life (World Health Organisation [WHO], 2001).

Vocational rehabilitation: “the process whereby those disadvantaged by illness or disability can be enabled to access, maintain and return to employment” (British Society of Rehabilitation Medicine, 2003: 1).

Client-centered practice: also known as person – centered therapy is a counseling approach that uses the individual needs of the patient/ client as tools to produce the best therapy as the person needs. In client - centered therapy the therapy is based on what the client needs and it's the therapist's role to promote self – understanding and independence in their rehabilitation (WHO, 2001).

Supported employment: an approach to helping people with disabilities participate in the open labour market, helping them find meaningful jobs and providing support from a team of professionals (Gamble & Moore, 2003).



LIST OF ABBREVIATIONS

TBI: Traumatic Brain Injury

MoOSE: Model of Occupational Self-Efficacy

UWC: University of the Western Cape

SASSA: South African Social Security Agency

RTW: Return to Work



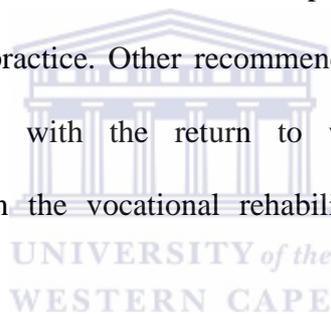
ABSTRACT

Traumatic brain injury (TBI) is a major public health concern which mostly affects the economically viable population. In addition, the Code of Good Practice as described in South African Labour Law serves as a guide for employers to encourage equal and fair opportunities for employees with disabilities. However, despite the presence of this policy, as well as other legislation, research has shown that individuals with TBI are failing to return to work. The Model of Occupational Self-Efficacy (MoOSE) was developed as a client centered approach to return individuals with TBI to work.

The aim of the current study was to explore, and describe the experiences and perceptions of occupational therapists who have used the MoOSE in the vocational rehabilitation and return to work process of clients with TBI. The participants in the study were selected by means of purposive sampling and semi-structured face-to-face interviews were conducted on a monthly basis for three months with 10 occupational therapists. The semi-structured interviews were used to gain insight into and explore the perceptions of the occupational therapists who have used the MoOSE in their vocational rehabilitation programmes with clients who have suffered TBI. The findings of the study were analyzed by means of thematic content analysis. The outcome of this study was aimed at finding ways to enhance / improve the model when it is used in the vocational rehabilitation process with people who have suffered TBI. Informed consent was obtained from the research participants and confidentiality of their information was maintained. Data was collected by means of semi-structured interviews which were audiotaped and transcribed. Transcriptions were analysed by using constant comparative methods of data analysis which resulted in categories, which reflected the purpose of the study being created. The analysis of transcripts was done using Microsoft Word. Results were then divided into themes and discussed holistically. Four themes emerged that answered the

research question. Theme one described how client related factors impacted on the implementation of the MoOSE. Theme two explored the therapist related factors that impacted on the implementation of the MoOSE while theme three discussed how characteristic of the model impacted on the vocational rehabilitation and return to work process. The participants appreciated the clear four stages of the MoOSE and the dynamicity of the model. Theme four described how the job market and employer perceptions impacted on the return to work process.

Recommendations were then discussed that could further improve the model and the implementation thereof. Recommendations included adding a motivation component to the MoOSE, involving family members in the rehabilitation process and therapist reflection as a means to foster client-centered practice. Other recommendations were aimed at addressing policy issues which interferes with the return to work process and encouraging interdisciplinary collaboration in the vocational rehabilitation of individuals with TBI.



CHAPTER ONE

1. Background

This study served as an investigation of the experiences of occupational therapists when using the Model of Occupational Self-Efficacy (MoOSE) in the process of vocational rehabilitation and facilitating the return to work (RTW) process - with clients who suffered traumatic brain injury (TBI). Soeker (2009) developed the MoOSE as a means to effectively return clients to work. Given the novelty of the model, there was a need to explore the perceptions of occupational therapists when using this model in the vocational rehabilitation and RTW process of clients who have suffered TBI. Exploring and investigating the perceptions and experiences of occupational therapists who have used the model will help identify any barriers therapists might experience and will open the floor to further development and improvement of the model when using it in a vocational rehabilitation setting with people who have suffered a traumatic brain injury.

1.1 Introduction

A TBI is defined as a blow or jolt to the head or a penetrating head injury that disrupts the function of the brain and can range from mild, i.e. a brief change in mental state or consciousness, to severe i.e. an extended period of unconsciousness or amnesia after the injury (Centers for Disease Control and Prevention, 2002). The severity of the TBI is often determined by the Glasgow Coma Scale (GCS) which measures a person's consciousness based on verbal, motor and eye opening responses (Gill, Reiley & Green, 2004 and Bruns & Hauser, 2003). It is the leading cause of death and disability in young people (Ponsford, Harrington, Olver & Roper, 2006 and Shames, Treger, Ring & Salvatore 2007). Webster, Taylor and Balchin (2015) reported that an internal audit conducted at Groote Schuur Hospital in 2009 revealed that of a total of 10 046 trauma patients admitted that year, approximately 24% were classified as head injury patients with 654 of the head injury

patients having moderate to severe head injuries. The audit also revealed that 82% of assault related head trauma was experienced by Black and Coloured men. The sudden trauma to the brain may result in injuries which could leave the individual with impairment in physical, social and behavioural functioning (Archiniegas, Held & Wagner, 2002). This often results in the failure of the injured person to achieve or resume a productive role in his or her family, society, work and school (Stock, 2006 and Oppermann, 2004). The return to previous jobs following a brain injury is one of the goals that individuals with brain injury often set (Oppermann, 2004). Following a TBI, some individuals decide not to RTW while some are unable to RTW and some who attempt to RTW are unsuccessful in doing so (Yasuda, Wehman, Targett, Cifu & West, 2001). TBI incidence rates peak between the ages of 16 and 25 years which means that people affected by TBI live with the effects of TBI for the majority of their lifespan (Sorensen & Krauss, 1991). Stock (2006) and Oppermann (2004) stated that work is tremendously important in how people define themselves and when asked to describe themselves they would often talk about their job or career, which poses a problem as people affected by TBI are usually considered to be in the workforce. Poor employment outcome following TBI presents a global health issue which results in a significant financial and social burden which often impacts on the self-identity, autonomy and emotional well-being of the affected individual (Ownsworth & McKenna, 2004). Shames *et al.* (2007) were of the opinion that the implications of RTW for patients with TBI are not only financial in nature, but that productive employment may enhance their recovery. In light of the aforementioned, it is clear that TBI is a very important public health issue and that the RTW may serve as an important aspect in the recovery and well-being of clients with TBI.

1.2 Rationale

A TBI is an insult to the brain resulting from external physical forces such as high speed motor vehicle accidents (MVA's) and falling from heights which exceeded the height of the

person, as well as sports injuries, gunshot wounds and work related injuries (Gutman, 2001, Urban, Harris & Masel , 2005 and Centers for Disease Control and Prevention, 2002). According to Gutman (2001) and Khan, Baguley and Cameron (2003)), TBI occurs more frequently in men than in women by a ratio of four to one, with 80% of all individuals who sustain TBI being between the ages of 18 and 30 years. This may be due to lifestyle and risk exposure by men, as young men sustain TBI as a result of MVA's, violence and sport that have a safety risk element (Gutman, 2001 and Khan *et al.*, 2003). A brain injury has an enormous impact on day-to-day functioning of an individual and may be described as one of the greatest challenges that the individual may face and that the onset of TBI may threaten the individual's core identity because it robs him / her of their perceived potential (Hoogerdijk, Runge & Haugboelle, 2011). TBI causes physical deficits including abnormal muscle tone, primitive reflexes, rigidity, muscle weakness and decreased endurance, as well as postural deficits, ataxia, limited range of motion, loss of sensation and loss of integration and body movement (Gutman, 2001). Cognitively, the victim may suffer reduced attention and concentration, impaired memory, poor judgment, and delay in processing information, as well as impairment of executive function, abstract thinking, generalisation, perceptual skills and psychological factors such as self-concept and social roles (Gutman, 2001). Due to these deficits, TBI affects all occupational areas including, Activities of Daily Living (ADL), education, work, leisure and social participation (Pullaski, 2003).

Mateer and Sira (2006) stated that TBI often has a significant negative impact on the vocational outcome of clients and Green *et al.* (2008) were of the opinion that the more chronic the injury and the longer unemployment post-injury persists, the smaller the chances of eventual RTW may be. While RTW is considered a key element in the quality of life and satisfaction with people who suffer TBI, only a small minority RTW (Kowlakowsky-Hayner & Tyerman, 2012). According to Huntstiger and Thompson (1998), it has been documented

that the RTW after a moderate to severe brain injury is generally unsuccessful and high unemployment rates have been attributed to emotional, behavioural and neuropsychological changes arising from brain injuries. Grosswasser (1995) stated that 15 – 20% of all TBI patients are unemployable with most of these patients suffering severe physical and neurobehavioural deficits after being in a coma for extended periods. Preston and Ulicny (1992) added that even if individuals with acquired brain injuries do return to competitive employment, they end up taking any position that is available, engage in modified jobs or acquire completely different positions because of the persisting injury related deficits they may experience. Further, Vuadens, Arnold and Bellman (2006) reported that 70% of moderately brain injured individuals do not RTW and 20% of mildly brain injured individuals are unemployed and a total of 10% of brain injured clients are dismissed from their jobs one year post trauma. Cognitive and emotional disturbance associated with TBI, as well as other factors often determine a client's ability to return to competitive employment (Mateer & Sira, 2006), and despite the introduction of vocational rehabilitation practices and favourable legislation changes, RTW and employment rates still remain poor (Kendal, Muenchberger & Gee, 2006).

1.3 Research design and method

In order to explore, describe and understand the perceptions of occupational therapists when using the MoOSE in the vocational rehabilitation and RTW process of individuals with TBI, the researcher made use of a qualitative research design. This type of research design focuses on what people tell you or what they do that enables the researcher to understand the meaning of what is going on (Gillham, 2000). The researcher made use of an exploratory and descriptive approach during the research process.

A group of 23 occupational therapists were invited to attend a workshop on the implementation of the MoOSE and ten occupational therapists were selected purposively for

the study. Each of the 10 therapists went back to their practice setting and implemented the MoOSE with their clients who have suffered traumatic brain injury. Each of the 10 occupational therapists were interviewed in order to gain insight into their experiences of the model. Each of the occupational therapists were interviewed between one and three times. The interviews were audiotaped and transcribed verbatim. The data was managed using the data management principles described by Huberman and Miles (1994), namely; formatting, cross referral, indexing, abstracting and pagination while data analysis was carried out using the methods of thematic content analysis described by Lincoln and Guba (1985).

This study adhered to the ethical principles of conducting research with human participants described by the World Medical Association Helsinki Declaration (World Medical Association, 2008). Informed consent was received from the participants and their confidentiality and privacy, as well as the privacy of their clients were respected.

The criteria advocated by Krefting (1991) were used to achieve trustworthiness. These criteria included strategies for establishing truth value, applicability, confirmability and neutrality of the data.

1.4 Research context

The research context of the study was in the Metropole District Health Services of the Western Cape, South Africa. The research participants consisted of 10 occupational therapists from the private and public sectors with no less than six months' experience in working with patients who have suffered traumatic brain injuries. The data was gathered by means of semi-structured interviews within the various therapists' work areas. A total of 27 interviews, 21 face to face and six telephonic, were conducted. One interview was conducted with Participant 9, two interviews were conducted with participant four and three interviews being conducted with the rest of the participants.

1.5 The research process

Ethical approval was obtained from the University of the Western Cape (UWC) Higher Degrees Committee. The researcher contacted a group of occupational therapists in order to invite them for a workshop during which they would be introduced to the MoOSE. After the workshop, the therapists were contacted and invited to participate in the research study. They received an information sheet detailing the nature and purpose of the study. Once a participant decided to participate in the study, he / she signed a consent form and completed a demographic information sheet which focused on their qualifications and experience. Each participant was provided with the Brain Injury Workbook and the Life Skills Workbook which they used during the rehabilitation process. The participants then went back to each of their individual practices and implemented the model with the clients with TBI. The researcher followed up with participants on a monthly basis for three months to conduct semi-structured interviews documenting their clients' progress, as well as how they were finding the use of the model and any barriers and facilitators they may have experienced throughout the rehabilitation process. These interviews were audio taped and transcribed. Once the information was transcribed and the data was analysed, the researcher contacted each participant individually to report on the findings and to ascertain if the information was correct.

1.6 Research problem

Evidence suggests that the RTW rates for TBI survivors is minimal. Statistics discussed in the literature review shows that failure to RTW poses a problem for clients who have suffered TBI. Van Velzen, van Bennekom, Edelaar, Sluiter and Frings-Dresen (2009) revealed that employment rates after an acquired brain injury was as low as 41% one year post injury while Hofgren, Esbjörnsson and Sunnerhagen (2010) indicated that a large amount of brain injured individuals do not RTW, even after having undergone some form of rehabilitation. Soeker

(2009) developed the MoOSE to enhance the RTW of individuals with TBI. However, as the model is quite new, the current study will explore the experiences and perceptions occupational therapists who have used the MoOSE in the vocational rehabilitation and RTW process of individuals with TBI.

1.7 Research question

What are the experiences of 10 Occupational Therapists in the utilisation of the MoOSE in returning clients with TBI to work after rehabilitation?

1.7.1 Aim

The study aim was to investigate the experiences of 10 Occupational Therapists in the utilisation and implementation of the MoOSE in returning individuals with TBI to work after rehabilitation.

1.7.2 Personal motivation for conducting this study

While working as a Disability Claims Consultant, the researcher found that many people who had sustained TBI were medically boarded from their jobs as they were perceived as no longer being able to perform their duties. This brought about curiosity with regard to whether there is a way to return these individuals to work, especially considering that many of them were younger than 40 years old and still had many years before retirement. Dr Soeker, introduced the researcher to the MoOSE and its use in the vocational rehabilitation and RTW process with TBI. Once learning about the successes Dr Soeker had with the MoOSE, the researcher was interested in learning how other occupational therapists would feel about using the model in their vocational rehabilitation practices with clients who have suffered TBI and if they felt that there were any ways in which the model could be improved to suit the needs of the various occupational therapists in their various settings. Further, the researcher's previous experience in an acute neurosurgery ward, made her question whether it

was indeed possible for people who have sustained TBI to RTW given the difficulties, such as memory problems, behavioural problems, physical deficits and emotional difficulties associated TBI. As such, the researcher embarked on this research study to explore the perception and experiences of occupational therapists when using the MoOSE in the rehabilitation and RTW of individuals with TBI.

1.8. Overview of the chapters

Chapter One: Brief overview of the study

This chapter of the study provides the background of the study and introduces TBI as a public health problem. In addition, it describes the rationale for the study, the research design and methods, as well as the research context and the research question. Furthermore, it provides an overview of the subsequent chapters.

Chapter Two: Literature review

Chapter two of this thesis focuses on the epidemiology and classification of TBI, as well as the prevalence and outcome of TBI. In addition, it provides a discussion on rehabilitation strategies that are currently in place to assist people with TBI to RTW, as well as legislation and social policies which govern the employment of people with disabilities. Further, the chapter also gives a detailed description of the MoOSE and the stages which are used in the RTW process of individuals with TBI.

Chapter Three: Research methodology

In chapter three, the methodological principles are described. It provides information with regards to the study design, the study setting, the sampling strategy used for participant selection, the data collection techniques and the data analysis process. In addition, the methods used to ensure trustworthiness and the ethical principles are discussed in this chapter.

Chapter Four: Findings

This chapter focuses on the findings of the study. It describes the patterns and trends that emerged from the analysis of the study. The findings were presented as themes, categories and subcategories.

Chapter Five: Discussion

In chapter five, the researcher presented the findings of the study in relation to relevant literature.

Chapter Six: Conclusion and recommendations

Chapter six is the final chapter of the study where a conclusion is formulated which takes into account the discussion and the findings of the study. In addition, recommendations are made that were taken from perspectives of the participants, as well as the literature discussed in chapter five.



CHAPTER TWO

LITERATURE REVIEW

2. Introduction

In this chapter the researcher will discuss the epidemiology, the prevalence and outcomes of Traumatic Brain Injury (TBI) and how having sustained a TBI can have a negative effect on the worker role. There will also be a discussion about the barriers that prevent the successful RTW of people with disabilities, as well as legislation and social policies which supports employment opportunities for people with disabilities. In addition, the researcher will discuss current rehabilitation approaches used in the RTW process of people with TBI. Finally, the researcher will introduce the Model of Occupational Self-Efficacy (MoOSE) as a RTW model for people who have sustained TBI.

2.1 Epidemiology of traumatic brain injuries

A TBI is an acquired brain injury from an outward mechanical force causing temporary or permanent neurological dysfunction which may result in cognitive, physical and psychosocial impairment (National Institute for Neurological Disorder and Strokes, 2013). Thurman, Alverson, Dun, Guerrero and Sniezek (1999) stated that a TBI may be caused by a penetrating or blunt trauma, or acceleration or deceleration forces. TBI can cause a milieu of psychological, intellectual, emotional, social and vocational challenges (Conti, 2007). The outcomes of TBI may vary and may include significant morbidity and a decreased ability to function in society (Mollayeva, Shapiro, Mollayeva, Cassidy & Colantonio, 2015). Kalyan, Nadasan and Puckree (2007) stated that the causes of death and disability following a TBI may vary with age, race and gender and noted that improved medical care has resulted in a decrease in mortality following TBI, but that it has increased the morbidity rate, resulting in an increased number of people living with neurological impairments. Burns (2008) stated that the survival rate often results in irreversible and debilitating loss of function, incurred as a

result of a brain injury, and this in itself challenges medical and rehabilitation teams to treat patients to their highest potential.

2.1.1 Incidence of TBI

Kalyan *et al.* (2007) stated that TBI is the leading cause of death and disability in most western countries and according to the WHO, TBI will surpass many diseases as a major cause of death and disability by 2020 (Hyder, Wunderlich, Puvanachandra, Gururaj & Kobusingye, 2007). The overall incidence of TBI in developed countries is about 200 per 100 000 persons annually (Bruns & Hauser, 2003 and National Institute for Occupational Health, 2013) and according to the KwaZulu-Natal Department of Health (2010), an estimate of 89 000 new cases of head injuries are reported in South Africa annually, with the majority of these being motor vehicle, bicycle, or vehicle-pedestrian mishaps (more than 50%); falls (approximately 25%) and violence (nearly 20%) (National Institute for Occupational Health, 2013). Hyder *et al.* (2007) indicated that an incident rate of 150 to 170 per 100 000 occurs in Latin America and sub-Saharan Africa. Bryan-Hancock and Harris (2010) reported that the incidence rate of TBI in South Africa has been estimated at 1.5 to 3.5 times that of the estimated global rate and Schultz (2007) added that African and Coloured males are most at risk of sustaining head injuries. Kalyan *et al.* (2007) reported that 40% of patients admitted to the only public neurosurgical unit in KwaZulu-Natal in 2001 were diagnosed with TBI, with the number of patients who received follow-up rehabilitation being unknown. Conti (2007) stated that of all the brain injuries, 70 % result in mild injury, 20 % result in moderate to severe injury and 10 % are fatal. The factors most correlated with outcome include age, length of the coma, length of the post-traumatic amnesia and the area and extent of the brain damage.

2.1.2 Risk factors of TBI

Naidoo (2013) stated that a major risk factor for TBI are extremes of age, male gender and low socio-economic status and, in South Africa, interpersonal violence is a far more frequent cause of mortality and TBI. Road traffic accidents in South Africa produced a higher rate of TBI in females when compared to males and these rates were higher in more developed provinces like the Western Cape, Mpumalanga and Gauteng (Bradshaw *et al.*, 2005). Cassidy *et al.* (2004) revealed that TBI can occur due to a variety of reasons such as violence, homicide, traffic collisions and falls, as well as intoxication of drugs or alcohol which, according to Olson (2014), may lead to violent and traumatic experiences. Bruns and Hauser (2003) indicated that males and individuals living in socioeconomic deprivation, as well as very young children, adolescents, young adults and the elderly are considered at high risk for sustaining TBIs.

Causes of Head Injuries in South Africa

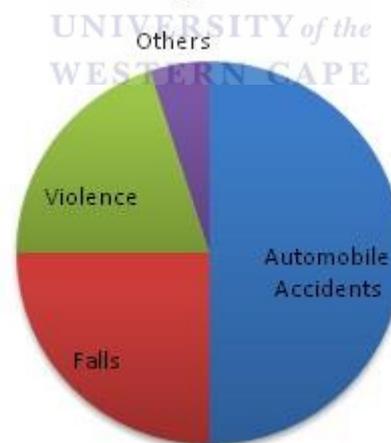


Figure 1.1: Causes for traumatic brain injuries

(National Institute for Occupational Health, 2013a)

2.1.3 Classification of TBI

The classification of TBI is usually based on the severity, anatomical features / structural damage and mechanisms (Saatman *et al.*, 2008 and Maas, Stocchetti & Bullock, 2008). The

mechanism of a brain injury could be described as a causative force which is usually sustained as a result of falls and traffic collisions which results in closed injuries while gunshots and stab wounds, which are more penetrating, would result in more localised damage to the brain (Saatman *et al.*, 2008).

Brain injuries are usually classified as mild, moderate or severe and the Glasgow Coma Scale (GCS) is the most commonly used system to classify the severity of brain injuries (Iankova, 2006 and Maas *et al.*, 2008). The GCS measures the person's level of consciousness based on verbal, motor and eye opening responses to stimuli (Gill, Reiley & Green, 2004 and Bruns & Hauser, 2003). Responses such as active opening of eyes, ability to remember the incident, recognition and identification of familiar people and expressing orientation to his or her current surroundings are indicative of a favourable prognosis for the brain injured individual. A score of eight or below represents a severe TBI and a score of nine to 12 indicates a moderate TBI while a score of 13 – 15 is suggestive of a mild TBI (Sbordone, Saul, Puricsh & Sbordone, 2007 and Bruns & Hauser, 2003). In addition to the GCS, the computerised tomographic (CT) and magnetic resonance imaging (MRI) scans have been developed in order to differentiate between the different types of brain injuries (Saatman *et al.*, 2008). These diagnostic approaches are used to investigate the damage to the physical structures of the brain, such as where the lesion has occurred and which lobe of the brain had been affected; which is important as the size of the lesion, as well as lobe involvement may determine the nature and extent of the individual's disability. In this context, Allen, Bruss and Damasio (2004) recorded that reasoning, abstract thought, executive functioning, emotions, problem solving and personality are all controlled by the frontal lobe. In addition, the parietal lobe controls motor function, perception, while the occipital lobe controls visual stimuli and the temporal lobe controls memory, speech and recognition. As such, understanding the

various classification methods of TBI highlights the ways in which the injury will affect the affected individual, as well as how it could possibly affect the worker role.

2.1.4 Outcomes of TBI

Maas *et al.* (2008) recorded that the outcome after a head injury is generally assessed at six months after the injury and that experience shows that 85% of the recovery happens within this period, but that further recovery can occur later. According to Burns (2008), some brain injuries are mild with symptoms disappearing over time, while other brain injuries may cause debilitating loss of functioning or permanent disability. Humphreys, Wood, Philips and Macey (2013) indicated that while many TBI patients have no physical disabilities and a normal life expectancy, they never recover their full social independence. The effects of TBI include motor deficits, cognitive deficits, functional deficits, communication / language deficits, social deficits, personality / psychiatric changes, regulatory disturbances and traumatic Epilepsy (Burns, 2008 and Khan *et al.*, 2003). With regard to long term outcome and recovery, disturbances in cognition, mood and behaviour have been identified as some of the most debilitating aspects of brain injuries (Humphreys *et al.*, 2013). Maas *et al.* (2008) recommended early and intensive rehabilitation for the best possible outcome. In this light, there appears to be various consequences of TBI which include cognitive and physical disabilities, psychological and behavioural disturbances.

2.2 The personal cost of TBI

Ptyushkin, Vidmar, Burger and Marinckec (2010) were of the opinion that the serious physical and dramatic cognitive and psychological consequences associated with TBI has a profound impact on the life of the affected individual and Selassie *et al.* (2008) stated TBI comes at great economic and personal cost to the injured person, as well as to his or her family and society. The impairment in neurological and cognitive functions may lead to restrictions in activity and hindrances in social participation (Shukla, Devi & Agrawal, 2011).

Khan *et al.* (2003) stated that the severe and permanent consequences of TBI can alter an individual's life, which may result in disruptions in dynamics within families. Humphreys *et al.* (2013) reported that four years post injury most survivors lived with their family and neither worked or attended school, and as such were a source of a psychological burden to the families who care for their injured relatives. This often results in close relationships, marriages and partnerships breaking down which increases the risk of social isolation and psychological distress in the TBI survivor (Wood & Yurdakal, 1997). As such, the divorce rate for individuals with TBI were higher than the national average which may have been related to the high rates of hostility and temper outbursts by the participants in the sample study by Hoofien, Gilboa, Vakil & Donovan (2001) which evaluated the long term mental and psychosocial outcome of individuals who have sustained severe TBI. Humphreys *et al.* (2013) noted that the psychological sequelae of TBI such as personality changes and emotional problems were socially debilitating. The individual with the brain injury's reduced capacity to perform in educational and occupational settings often results in dependence on government issued grants for financial support (Wilson, Wills, Pretorius & Swartz, 2015). Further financial stressors caused by medical expenses and loss of income (earning potential) over a lifetime were also noted (Schultz, 2007 and Khan *et al.*, 2003). Due to the nature of a TBI, individuals with brain injury are often unable to care for themselves and this may result in a family member having to leave his or her job in order to care for the individual with the brain injury, thus increasing the financial stressors (Sander, Maestas, Sherer, Malec & Nakase-Richardson, 2012). Being unable to work has financial implications, such as a lack of financial independence, health care coverage and providing for dependents, for the individual with TBI (DeBaillie, 2014). In this vein it is clear that sustaining a traumatic brain injury comes at an immense personal cost to the individual and the people in his / her life.

2.3 How TBI can affect the worker role

Webster *et al.* (2015) identified a variety of neurocognitive and behavioural consequences of TBI which may impact on the worker role. Frontal lobe injuries often result in poor judgement, impaired problem solving abilities, the inability to think abstractly and poor organisational skills. A worker requires these skills in order to make decisions, problem solve, retain instructions, reason logically and have good working habits such as coming to work on time. Other deficits related to frontal lobe injuries include loss of inhibition, impulsive behaviour, aggression and personality changes as well as aggression, anxiety and reduced social skills. All of these difficulties may result in social conflict with colleagues and managers and the inability to cope within a stressful work environment. In addition, left temporal lobe deficits may result in communication disorders such as Aphasia, including the ability to comprehend speech (Stuss, 2011). In this context, it should be noted that any deficits in language and speech ability will affect a worker's communication skills which could cause further frustrations in the worker with the brain injury. Other factors that may influence the worker role include poor concentration, poor memory, slow information processing, inflexible thinking, difficulties with planning, loss of initiative, drive and spontaneity, as well as anxiety, low tolerance of frustration, noise or stress and a lack of insight and awareness (Rehab Group, 2012).

2.4 Return to work

Hofgren *et al.* (2010) indicated that RTW is an important factor in the rehabilitation process. Individuals who enter or RTW following a brain injury often require assistance to identify, locate and maintain employment, a fact that is especially true for workers from economically disadvantaged situations who may have limited pre-injury work experience (Remondet Wall, Rosenthal & Niemczura, 1998). Phillips, Drummond, Radford and Tyerman (2010) indicated that low post-injury employment rates indicated that it was difficult to RTW following a TBI.

Employment is important in structuring life, providing stability, and enabling an independent lifestyle (Petrella, McCol, Krupa & Johnston, 2005) and obtaining and maintaining employment is strongly related to quality life and wellbeing of a person (Tsaousides *et al.*, 2009). Being employed has also shown a strong and consistent relationship with social integration within the community, home and leisure activities (O'Neill *et al.*, 1998 and Vuadens *et al.*, 2006). Ownsworth and McKenna (2004) are of the opinion that the loss of employment negatively affects self-identity, emotional wellbeing and autonomy and failure to RTW can come at a great economic and personal cost for people with TBI, their families and society. For people with TBI, vocational rehabilitation involves helping the person, as well as work colleagues and employers to understand and cope with how the physical, social and psychological fallout affect their ability to work (Phillips *et al.*, 2010).

Vocational rehabilitation is a “process whereby those disadvantaged by illness or disability can be enabled to access, maintain and return to employment, or other useful occupation” (British Society of Rehabilitation Medicine, 2003, p. 5). Successful return to employment has become a prominent marker for assessing rehabilitation outcome (National Institute of Health, 1999). Remondet Wall *et al.* (1998) stated that vocational rehabilitation after TBI is a demanding process as unemployment rates are reportedly high pre-injury and tend to remain high following TBI. While RTW is a major goal for people with TBI (Hofgren *et al.*, 2010), a systematic review conducted by Van Velzen *et al.* (2009) revealed that employment rates after an acquired brain injury were as low as 41% one year post-injury. A study which measured the unmet needs and services of 859 persons with TBI revealed that 50% of acquired brain injury survivors reported unmet needs in the areas of improving job skills, finding paid employment and increasing income (Heinemann, Sokol, Garvin and Bode, 2002). Hurt (1991) stated that there are six critical factors for successful vocational rehabilitation namely; remediation of cognitive deficits and development of compensatory

strategies, the individuals need to experience an acceptance of vocational limitations and improvement of self-esteem. Furthermore, confidence in work skills, education in fatigue management and increased work tolerance, as well as participation in trial work experience prior to re-entering competitive employment, increased frustration tolerance and regulated emotional response and intensive follow up service is required (Hurt, 1991).

2.4.1 RTW programmes currently in use: Supported Employment Approach

In the 1980's, the supported employment approach to vocational rehabilitation was developed (Wehman *et al.*, 1993 and Wehman *et al.*, 2003). In supported employment, vocational specialists find paid employment for persons with disabilities and they provide ongoing support and long term follow-up to help with job training or accommodation as required in order to maintain employment for persons with disabilities (Wehman *et al.*, 2003). This programme required the brain injured client to be placed in a community based competitive job with a Job Coach. The Job Coach's role includes one-on-one onsite training, vocational counselling and support, in addition to assisting with job searching, job applications and interviews, as well as employment inductions, travel job analysis, skills training and working with colleagues. The Job Coach provides support within the work environment from the time of placement until the client's work stabilises. In this specific study, of the 43 people with severe injuries who participated, 70% were competitively placed within the first six months. Wehman *et al.* (1989) reported that following participation in the supported employment model, the clients' hourly wages increased and their vocational options were expanded. Another study by Preston and Ulicny (1992) showed that in a sample of 124 participants, 61% were either placed in a competitive job setting or were considered job ready at the time of programme completion, with half of those placed in competitive employment finding employment with their former employers, even though some job modifications were required. Gamble and Moore (2003) followed 1073 participants with TBI of which 78% received

supported employment services during the vocational rehabilitation process. Of the participants, 48.6% were competitively employed by the time their cases were closed and 51.4% were not employed. Of the participants who were not employed, 7.3% were provided with supported employment and 92.7% were not provided with supported employment. Of the clients who were provided with supported employment, 67.9% of the cases resulted in clients being placed in competitive employment. In a more recent study, Bond, Drake and Becker (2008) found that the employment rate for individuals who were provided with supported employment was 61% compared to the 23% of the control group. The same study revealed that individuals provided with supported employment obtained their first job nearly 10 weeks earlier than the control group and those who obtained competitive employment worked 20 hours or more per week (Bond *et al.*, 2008). In many European countries a certain percentage of jobs are set aside for people with disabilities, which is also considered as supported employment (Brede *et al.*, 2015).

2.4.2 Vocational Co-ordinator Model

The Mayo Medical Centre in Minnesota developed the “co-ordinated model” which integrates medical and vocational rehabilitation via co-ordinators (Malec, Buffington, Moessner & Degiorgio, 2000). According to the model, the co-ordinators were responsible for identifying the needs of their clients and recommended services which would meet these needs. The vocational and rehabilitation therapy goals were integrated and RTW plans were developed by the co-ordinators. Clients’ work skills within the work place setting were evaluated and they were provided appropriate support, including education to employers and community service provided. At one-year follow-up, 80% were placed at various employment settings such as sheltered, supported, transitional and independent.

2.4.3 Programme without Walls

The Programme without Walls is a person-centred community based approach to vocational rehabilitation with a counsellor offering consistent support throughout the process. Team members engage in a systematic assessment of vocational interest, academic achievement, aptitude and functional capacity. At this stage, mock interviews are arranged and the client is accompanied by a designated team member to assist and provide feedback as part of the preparation for actual job interviews. Once an employer is identified, the counsellor reviews the position, the job location and its distraction levels, as well as the degree of supervision and job structure required. When a client is hired, team members assist him / her to learn the job, become integrated in the work environment and maintain job performance. The programme successfully placed more people with acquired brain injury than those receiving traditional vocational rehabilitation services. The participants also worked longer hours and earned more money per hour (O'Neill, Zuger, Fields, Fraser & Pruce, 2004). While the abovementioned vocational rehabilitation programmes may have been successful in returning clients with TBI to work, these strategies do not appear to be client-centred, given that most of the decisions are made by the therapists / vocational case co-ordinators and do not consider the perceptions and experiences of the clients with TBI. According to Sumsion (1999) a client-centred approach views the client as the most important person in guiding the intervention and has direct involvement in the decision-making process regarding their health.

In addition, to the abovementioned vocational rehabilitation strategies not being client centred, some of them appear to be time-consuming and expensive, often causing a delay in the return to work process.

2.5 Client-Centered Practice

The Canadian Association of Occupational Therapists (CAOT) defines client-centered occupational therapy as all “collaborative approaches aimed at enabling occupation with clients. Occupational therapists demonstrate respect for clients, involve clients in decision making, advocate with and for clients in meeting clients’ needs, and otherwise recognize clients’ experience and knowledge” (Law, 1998, p. 3). Hammel (2013) stated that therapists who undertake client-centered practice are those who strive to reduce power inequalities, who help clients make decisions about their lives, who are neither authoritarian nor judgemental and who listen to their clients. In addition, a study on occupational therapists’ perspectives by Hurst and Krizaj (2012) revealed that therapists felt that the use of client-centered practice is beneficial to the occupational therapy process. It is about respect for clients, their strengths, experiences and knowledge, their moral right to make choices concerning their lives and fostering respectful and supportive relationships with clients (Hammel, 2013). Sumsion and Law (2006) indicated that being in a partnership with a client, listening and communicating and understanding the values and preferences of the client are important elements of a successful client-centered programme. However, a study by Bright, Boland, Rutherford, Kayes, and McPherson (2012) in which the experiences of clinical researchers were explored found that often the therapists-client relationship was driven by the need to assess, prescribe and treat; which often results in the therapist setting goals that are in line with the services they could offer for people. In a study in which nine clients were interviewed with regard to their insights into client-centered practice, Sumsion (2006) found that while clients were not familiar with the term “client-centered” practice, they agreed that it was important and they appreciated rehabilitation programmes that were focused on personal, realistic goals and getting help which allowed them to take the lead and set goals which are important to them. Restall, Ripat and Stern (2003) and Duggan (2005) suggested that personal reflection by

therapists can improve the client-centered process as it allows them to explore their own knowledge, values and beliefs with regard to personal and professional experiences and tasks and it also facilitates an understanding of how their own personal beliefs and values shape their practice. Duggan (2005) was of the opinion that integrating reflection into practice increases awareness of actions and allows therapists to become increasingly mindful of the choices they make in their daily work. Bright *et al.* (2012) discovered that “being with clients” is more important than “doing to” them and Hammel 2013 suggested that the shift from an expert clinician to a coach hands the power back to the client and may result in a client-centered partnership in which the power is shared between therapist and client (Bright *et al.*, 2012). In this vein, Soeker, Van Rensburg and Travill (2012) were of the opinion that occupational therapists should use a client-centered and holistic work integrative approach which would allow them to successfully rehabilitate and facilitate the RTW process with individuals who have suffered TBI.

2.6 Barriers to RTW for individuals with brain injury

According to The World Bank (2014), 25% of the labour force in South Africa were unemployed and Remondet Wall *et al.* (1998) indicated that the unemployment rate pre-TBI is reportedly high and that it remains as such following the injury. In this context, it could be said the unemployment rate in South Africa is a barrier in the RTW process of individuals with disability and TBI in particular. Kregel, West, Wehman, Sherron and Kreutzer (1995) identified health problems, inappropriate job descriptions and inappropriate behaviour by individuals as factors which contributed to poor RTW rates. Zuger, Brown, O’Neill, Stack and Amitai (2015) indicated that the major barriers for a successful vocational outcome following a TBI include the nature and complexity of the injury, the availability of, or inappropriate services, restraint within the community and the loss of benefits such as disability benefits, all of which could inhibit the vocational progress. Shames *et al.* (2007)

indicated that factors that interfere with the individual with brain injury's ability to RTW successfully include problems with executive functioning, goal setting and self-monitoring. These factors may interfere with the worker being able to plan, priorities, execute and meet objectives. Gilworth *et al.* (2008) stated that the lack of employers and supportive staff during the initial stage of reintegration also makes it difficult for employees with TBI to securely RTW. In the study by Gilworth *et al.* (2008), brain injured individuals reported experiencing a lack of support, unrealistic or unreasonable expectations from the employer or a blatant disregard or prejudice toward them while others reported that persistent symptoms of their conditions were affecting their ability to RTW and their worker role, as well as the lack of advice and guidance on the best time to RTW; which also affected their ability to RTW. Lefebvre, Cloutier and Josée Levert (2008) added that the physical, cognitive and emotional fallout of TBI may limit the activities in which brain injured individuals are able to participate. In addition, environmental barriers within the workplace may also serve as barriers for individuals who have sustained physical disabilities as a result of a TBI (Hofgren *et al.*, 2010). In a study of the perceptions of individuals with TBI on RTW by Soeker *et al.* (2012), the participants in the study identified the loss of their physical, cognitive and functional abilities, as well as a lack of preparedness, a fear of being underestimated and the perception of being a burden on society as impacting on their ability to RTW. Participants in a study during which individuals with mild to moderate brain injury described their RTW experience (Gilworth *et al.*, 2008) revealed that the participants felt that the invisibility of their injury made them feel like their work colleagues doubted whether their difficulties were genuine, which may have contributed to their lack of understanding regarding the impact of the brain injury. In summary, the above literature reveals that there are a myriad of barriers which hinder the RTW of individual with brain injury; which include factors related to the availability of jobs for disabled (and non-disabled) people in South Africa, the perceptions

and attitudes of employers and colleagues, the cognitive and physical fallout of the injury, as well as the emotional and psychological consequences and the individual with brain injury's own perceptions and feelings regarding their ability to RTW.

2.7. Facilitators for successful RTW for clients with TBI

As there are barriers to the successful RTW of clients with TBI, there are also factors which facilitate the RTW process of clients with TBI. Remondet Wall *et al.* (1998) reported that factors which predict RTW following a TBI include lower injury severity scores, age younger than 60 years, greater length of pre-injury work history, fewer transportation difficulties and higher levels of education. Hofgren *et al.* (2010) indicated that a positive attitude toward work was a good indicator of RTW when trying to overcome serious injury in order to RTW and, according to Soeker *et al.* (2012) the basic needs, such as gaining independence and engaging in previous activities, of an individual to participate in occupation facilitated their growth and recovery after the brain injury. In addition to the above factors, literature revealed that legislation and social policies exist which can enable individuals with TBI to RTW.

2.7.1 Employment Equity Act, No. 55 of 1998

According to the Employment Equity Act, No 55 of 1998 (Department of Labour, 1998) in order to restore equal employment opportunities for all, post-apartheid; employers should employ employees from all previously disadvantaged groups, including people with disabilities. This serves to encourage equal employment opportunities and fair treatment of disabled and non-disabled people and aims to eradicate any stigma and unfair discrimination to previously marginalised groups of people including people with disabilities. Despite the content of the Employment Equity Act, Penn and Watt (2000) reported that while a 56% RTW rate for individuals with brain injury was found, this rate dropped to 32% when only full time employment (not downgraded) was included. In this vein, Hofgren *et al.* (2010) explained that employers are more willing to employ someone with a physical disability as

they assume that people with disability are only people in wheelchairs and who have motor deficits. This suggests that people with traumatic brain injury, despite the Act being in place, may have difficulty in procuring paid employment following their injuries.

2.7.2 Skills Development Act, No. 97 of 1998

The purpose of the Skills Development Act, No 97 of 1998 is to develop the skills of the South African workforce in order to improve the quality of life of workers, their prospects of work and labour mobility (Department of Labour, 1998a). This Act is another attempt to promote and advantage previously disadvantaged groups, including people with disabilities in the workforce. The Act required the establishment of Sector Education and Training Authorities (SETAs) with one of their core functions being the establishment of learnerships (Department of Labour, 1998). A learnership is a formal work-based approach to learning and gaining qualifications and includes both structured work experience and structured learning (Finance and Accounting Services Sector Education and Training Authority, 2004). Learnerships provide people with disabilities with the unique opportunity to practically learn skills which can be used in the workplace once they have completed their training. As such, the Act is aimed at providing training opportunities for all people, including people with disabilities to become self-sufficient by finding equal employment opportunities and becoming entrepreneurs who create their own income generation projects.

2.7.3 Disability Rights Charter

The Disability Rights Charter (Lawyers of Human Rights, 1992) states that there should be no discrimination against those persons with disabilities. It declares that all disabled citizens of South Africa should have the opportunity to live independently, and in a society that is free from all forms of abuse, discrimination and exploitation (McClain Nhlapo, Watermeyer & Schneider, 2006). Article 1 of this document states that people with disabilities have the right to enjoy equal opportunities in all spheres of life, which include living, learning and working.

According to Article 5 of the Charter, disabled people have the right to employment in the open labour market and appropriate measures such as training programmes should be implemented by the government and employers to ensure that opportunities are created in order to allow people with disabilities full access and enjoyment of work opportunities in the open labour market. In addition, Article 5 states that incentives, such as tax concessions for employers, should be implemented to encourage them to employ disabled people. It also indicated that the state assistance would be provided to disabled people to encourage them to engage in income generation through workshops and self-help projects. Since the development of the Disability rights charter, there does not appear to be any real successes in the implementation of these policies in South Africa.

2.7.4 United Nations Convention on the Rights of Persons with Disabilities

The United Nations (UN) Convention on the Rights of Persons with disabilities is an international human rights treaty that was designed to promote, protect and insure equal enjoyment of all human rights and fundamental freedoms by all people with disabilities. These rights and fundamental freedoms include employment. In addition it was designed to promote respect of their inherent dignity (United Nations, 2008). Article 27 of the Convention specifically focuses on the rights of people with disabilities to employment. The aims of the protocol includes the following:

- The prohibition of discrimination on the basis of disability with regard to all matters concerning employment.
- The protection the rights of person with disabilities which includes equal job opportunities, equal remuneration for work of equal value, safe and healthy working conditions and the redress of grievances ”
- The promotion of employment opportunities and career advancement of persons with disabilities.

- Assistance with finding, obtaining maintaining and returning to employment.
- Employment of persons with disabilities in the public sector.
- Ensure that reasonable accommodation is provided to persons with disabilities in the workplace.
- Promotion of vocational rehabilitation, job retention and return-to-work programmes for persons with disabilities.

In light of the aforementioned, it is evident that social policies and legislation are crucial to ensure that the rights of people with disabilities are not violated and that they have equal opportunities to vocational training and jobs.

2.8 Therapists' views of returning client with TBI to work

According to the American Occupational Therapy Association [AOTA] (2015), the occupational therapist is the key rehabilitation professionals who assist individuals with traumatic brain injury to reintegrate back into the community. Occupational therapists provide both case management and discipline specific services to people with TBI (Innes, Bootes & Chapparo, 2002) and are experts in assessing functional activity demands against performance abilities of the individual with TBI (AOTA, 2015). Their responsibilities include to evaluate whether there is a suitable match between individuals with TBI and their work environment and to determine specific work goals for individual with TBI (Innes *et al.*, 2002). In addition, they can help clients relearn how to do activities and determine new ways of accomplishing activities. A qualitative study in which 20 occupational therapists were interviewed, revealed that they were of the opinion that behavioural factors such as social performance, temperament control, social insight, intrapersonal factors such as experience and self-confidence, as well as coping with noise and affect impact on work performance of person with TBI (Innes *et al.*, 2002). In the same study, cognitive factors which were perceived as impacting on work performance for persons with TBI included memory,

concentration, problem solving, organisational skills, and information processing, communication and task performance, as well as motivation / attitude, following instructions abstract or concrete thinking, judgment, academic skills, perception and initiatives (Innes *et al.*, 2002). Another qualitative study, which explored the opinions of rehabilitation approaches which were perceived as contributing to positive outcome, of eight Australian and three British therapists revealed that environments such as collaboration with and inclusion of the person's support network, client centered goal setting, the provision or education and the development of therapeutic relationships were important facilitators of a successful outcome and community based rehabilitation, while factors such as self-awareness, motivation, substance use and behavioural difficulties were identified as barriers to optimal outcomes (Doig, Fleming & Kuipers, 2008). However, it should be noted, that while the researcher found these articles related to therapists' opinions about return to work models, the two studies mentioned above were the only two relevant to occupational therapy, vocational rehabilitation and return to work that could be found using multiple search engines and key words.

In light of the above, the researcher discovered that while a variety of literature sources exist that explore the perceptions of TBI clients of the vocational rehabilitation process, limited studies have been conducted which explore the vocational rehabilitation process from a therapist point of view.

2.9 The model of occupational self-efficacy

Bandura (1977) introduced the concept of self-efficacy which he defined as the confidence of an individual in his or her own ability to cope with a difficult task or problem. Soeker (2009) developed a four stage model called the Model of Occupational Self Efficacy (MoOSE) as a method to assist clients with brain injury to return to work. The structure of the MoOSE indicates that the stages of the model are spiral and not linear (figure 2.1) and the person can

fluctuate between the stages based on his or her occupational self-efficacy. A second spiral in between each stage represents the environment which may include family, structural barriers, places of employment, colleagues, health professionals and organisations that will have an influence on the person's performance.

OCCUPATIONAL SELF EFFICACY
 AN OCCUPATIONAL THERAPY PRACTICE MODEL
 FOR THE RETURN OF THE BRAIN INJURED INDIVIDUAL TO WORK

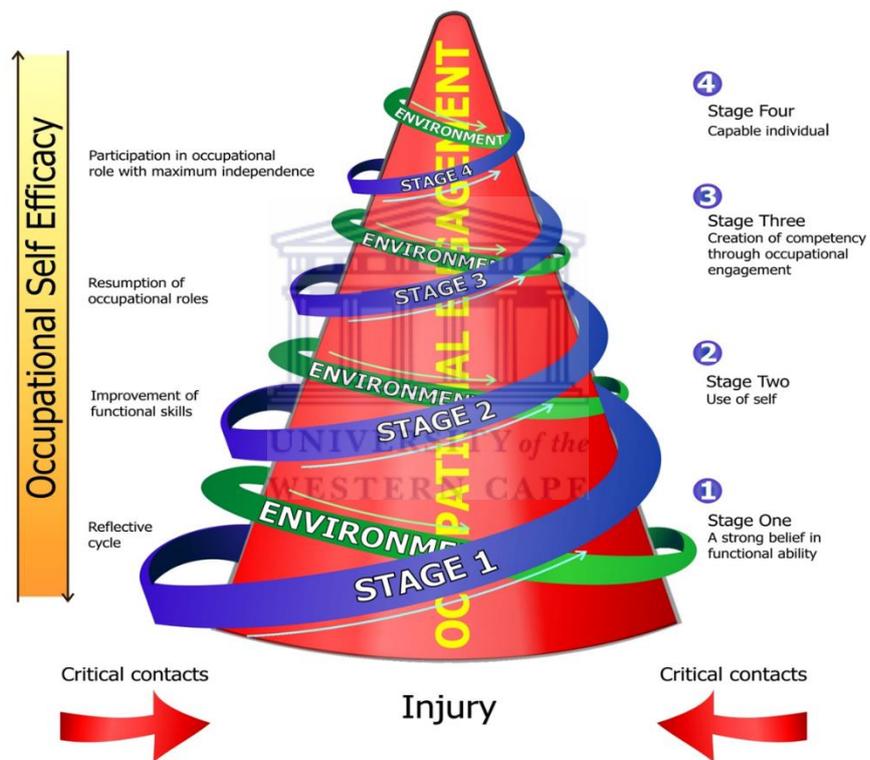


Figure 2.1 The Model of Occupational Self-Efficacy (Soeker, 2009)

The model has four phases which the individual with brain injury is required to complete.

Stage one is called, “A strong personal belief in functional abilities”. During this stage the occupational therapist will facilitate a process of introspection and reflection in the client in

order to develop new insights into his or her ability to cope in their work and social environment.

Stage two is called “Use of Self”, where the occupational therapist would continue to act as a facilitator and through a process of introspection and inner strength development, the client would have reached autonomy to participate in more occupational activities such as activities of daily living, work and leisure.

Stage three is called “Creation of competency through occupational engagement”, where the client may be referred for vocational rehabilitation and a functional capacity assessment or screening. The client will be asked to identify a difficult workplace scenario, following which the occupational therapist and the client will role play the scenario in order to identify coping strategies for the client. The client will be placed in an actual work setting to practice his or her work skills.

Stage four is called “Capable individual” and is the final stage of the model. During this stage the client would view him or herself as a capable worker and would be able to participate in the worker role with maximum independence and the occupational therapist would gradually withdraw from the role of facilitator.

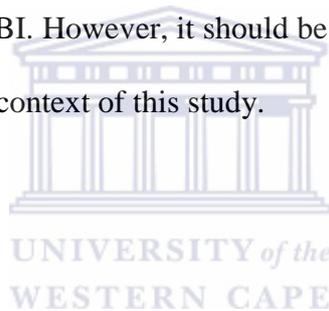
2.9.1 The model in occupational therapy

In occupational science, Eriksson, Tham and Guidetti (2013) describe occupation as the activities that fulfill one’s life, activities that are meaningful and purposeful to a person. When taking the aforementioned into consideration, it is clear that motivation and self-efficacy play an important part in occupational therapy practice. Given that the OT profession is aimed at assisting people to fulfil their daily occupations, OT’s tend to rely greatly on people’s internal motivation, self-concept and self-efficacy to engage in

occupation, considering that these factors play a role in the types of occupations in which people engage.

Conclusion

In conclusion, the literature shows that TBI is a serious public health problem which affects the work aged population. In addition, the available literature did not address the experiences of occupational therapists' in the RTW process with patients who have TBI. While the literature showed models, legislation and social policies currently in use in the RTW process of people with disabilities, these are not enough to improve the individual with brain injury's successful RTW. In this light, the study was conducted to explore and describe the occupational therapists' experiences of using the MoOSE in the vocational rehabilitation and RTW process with people with TBI. However, it should be noted that the model was not used as a theoretical framework in the context of this study.



CHAPTER THREE

METHODOLOGICAL FRAMEWORK

3. Introduction

In this chapter, the researcher will discuss the purpose of the research, the aim and objectives of the study research paradigm and the study section. In addition, the researcher will described the sampling strategies used for selecting participants, data collection and data analysis techniques, as well as trustworthiness of the study, the ethical statement and limitations of the study.

3.1 Research Purpose

Mateer and Sira (2006) stated that TBI often has a significant negative impact on the vocational outcome of clients and Green *et al.* (2008) were of the opinion that the more chronic the injury and the longer unemployment post-injury persists, the smaller the chances of eventual RTW may be. Soeker (2009) developed the Model of Occupational Self-Efficacy as a method to assist individuals who suffered brain injuries to RTW. Given the novel nature of the Model, there are very few opinions from Occupational Therapists regarding the Model. As such, a qualitative research study was designed in order to establish Occupational Therapists' opinions and experiences regarding the model after implementing the model with their clients.

3.2 Aim of the study

The study aim was to investigate the experiences of 10 Occupational Therapists in the utilisation and implementation of the Model of Occupational Self Efficacy in returning individuals with traumatic brain injuries to work after rehabilitation.

3.3 Objectives of the study

- To describe the barriers that Occupational Therapists may experience in the implementation of the Model of Occupational Self-Efficacy in returning individuals with traumatic brain injuries to work.
- To describe the enablers that Occupational Therapists may experience when using the Model of Occupational Self-Efficacy in returning individuals to work.
- To provide recommendations for the further development of the Model of Occupational Self-Efficacy as a vocational rehabilitation model for individuals with traumatic brain injuries.

3.4 Research paradigm

3.4.1 Qualitative research

According to Jongbloed (2000) and Bailey (2003), qualitative research aims to understand how people experience the world around them and their perspective thereof. Gillham (2000) indicates that the qualitative research paradigm is essentially descriptive and inferential in character. Qualitative methods focus primarily on the kind of evidence (what people tell the researcher or what they do) that will enable the researcher to understand the meaning of what is going on. Thus, the current study will be positioned in a qualitative research paradigm and will make use of a descriptive and contextual research approach to investigate how Occupational Therapists experience the implementation of the Model of Occupational Self-Efficacy in their vocational rehabilitation programmes. This information will provide us with strengths and weaknesses for the further development of the Model.

3.4.2 Exploratory research

Durheim (2002) described exploratory research as research that is meant to provide insight to a relatively unknown research area. The focus and purpose of this type of research is to gain insight and familiarity, generate new ideas and assumptions and for the development of

tentative theories and hypothesis (Lynn University Library, 2015). Durheim (2002) stated that an exploratory research project is an attempt to determine if what is being observed might be explained by current, existing theory. Exploratory research designs does not necessarily aim to provide final and conclusive answers to the research question, but merely explores the reach topic with various levels of depth. It is considered the initial research which forms the basis of more conclusive research (Mouton and Marais, 1996). In order to gain insight into the Occupational Therapists' perceptions of how the Model of Occupational Self-Efficacy impacted on the rehabilitation and RTW process, the researcher used open ended questions during the interviews. This information was later used by the researcher to gain an understanding of how the Occupational Therapists used the model and how it impacted on the rehabilitation and RTW processes.

3.4.3 Descriptive research

Descriptive research studies aim to describe phenomena found in real life situations (Durheim, 2002) as participants usually give an account of the phenomenon which is being studied (Holloway & Wheeler, 2010) and it aims to depict participants in an accurate way (Durheim, 2002). In this particular study, the researcher's aim was to explore the perceptions of Occupational Therapists when using the Model of Occupational Self-Efficacy as a guide in the rehabilitation and RTW process of clients with traumatic brain injury. During this research study, this approach allowed the researcher to collect data from the participants as they were asked to describe their experiences when using the Model of Occupational Self-Efficacy in the rehabilitation and the RTW process with clients who have suffered traumatic brain injuries.

3.5 Description of study setting

The research study took place in various Occupational Therapy Works settings in the Metropole of the Western Cape. These setting included tertiary hospitals, community health

centres and private practices. The researcher met up with each individual Occupational Therapist at his / her place of work in order to conduct the interviews. However, due to unforeseen circumstances such as conflicting schedules, the researcher contacted some of the Occupational Therapists at their homes after-hours from the Occupational Therapy post-graduate research office located at the Occupational Therapy Department at the University of the Western Cape. In another instance, the researcher had to meet a therapist at a nearby mall. This decision was made as the area in which the therapist was working was plagued by gang violence at the time of the study and, for safety reasons, the researcher felt it wise to stay out of this area and meet outside of the area.

3.6 Sampling strategy

The sampling strategy used was based on the participant selection criteria used to select the participants for the study. The researcher will first discuss the participant selection, inclusion and exclusion criteria, followed by a description of the participants.

3.6.1 Participants selection

A purposive sample of 10 participants who work within Neurological and Vocational Rehabilitation Units within the Private and Government Sector in the Western Cape were selected. The participants were selected based on their work experience with clients who have suffered traumatic brain injuries.

3.6.1.1 Inclusion criteria for therapists

- The occupational therapists would have had a minimum of six months experience in the treatment of clients with traumatic brain injuries. However, previous experience working with the MoOSE was not a requirement. In this context, OT's attended a training session in order to familiarise themselves with the model prior to agreeing to participate in the study.

- The therapists should be fluent in English and / or Afrikaans.
- The therapists should have a drivers' licence as the model required therapists to conduct work visits and often work out of office.

3.6.1.2 Exclusion criteria for therapists

- Therapists who do not work with clients who have suffered traumatic brain injuries.
- Therapists who have less than six months' experience in the treatment of clients with traumatic brain injuries.

3.6.2 Description of study participants

While most of the occupational therapists who took part in the study have worked with clients with traumatic brain injuries for more than one year, some of the participants had less experience. For most of the participants, this was their first time working with the Model of Occupational Self-Efficacy, while others had been working with the Model for over one year.

- *Occupational Therapists 1 (OT 1)*: OT 1 has an MSc in Occupational Therapy (Vocational Rehabilitation) and has two years' experience working in the occupational therapy field and with clients with TBI. At the time of the research study, she was employed in the public sector in a work assessment unit where she assesses clients' limitations and makes recommendations for reasonable accommodation to assist with RTW. She also provided rehabilitation therapy to clients with traumatic injury in order to assist with the RTW process. She has attended driving simulator, ethics and work analysis courses.
- *Occupational Therapists 2 (OT 2)*: OT 2 has a BSc in Occupational Therapy and has 10 years working experience in the occupational therapy field and two years' experience with clients who have TBI. At the time of the research study, she was involved in a research based practice where she provided rehabilitation services to

assist clients with TBI to RTW. She is currently completing her MSc in Occupational Therapy (Vocational Rehabilitation) and is experienced in neurodevelopmental techniques and sensory integration.

- *Occupational Therapists 3 (OT 3)*: OT 3 holds a BSc in Occupational Therapy, as well as a Post-Graduate Diploma in Vocational Rehabilitation. She is also trained in neurodevelopmental techniques (Bobath). She has been practicing as an Occupational Therapist for 20 years and has two years' experience working with clients suffering from TBI. She works in a public / private partnership practice where she supervises Occupational Therapy Technicians and Rehabilitation Care Workers providing a six week intermediate care rehabilitation programme for clients with neurological conditions (CVA and TBI) and orthopaedic conditions.
- *Occupational Therapists 4 (OT 4)*: OT 4 holds a BSc in Occupational Therapy and has nine years of work experience in the occupational therapy field and seven years' experience in working with clients with TBI. At the time of the research projects, she was employed as a community Occupational Therapists providing rehabilitation services to clients at Community Health Centres, Non-Government organisations and in the community (home based care). She is experienced in sensory integration and neurodevelopmental techniques. *OT 4 dropped out of the study as the client stopped coming for therapy.*
- *Occupational Therapists 5 (OT 5)*: OT 5 holds a Bachelor's degree in Occupational Therapy, as well as a Diploma in Vocational Rehabilitation, and has four years' work experience in the occupational therapy field specifically with clients with TBI. At the time of the research study, she was employed at a vocational rehabilitation private practice, where her duties included giving rehabilitation treatment to assist clients to

RTW. She is experienced in work hardening and neurodevelopmental techniques and often had to do work visits in order to facilitate the rehabilitation process.

- *Occupational Therapists 6 (OT 6)*: OT 6 holds a Bachelor's degree in Occupational Therapy from the University of Pretoria. She has five years' work experience in the occupational therapy field and has one year's experience in working with clients with TBI. She is currently employed in the private vocational rehabilitation process where her focus is mainly on orthopaedic (such as back and hand) pathologies, as well as some TBI and other neurological conditions. Her duties include assessment and facilitation of the RTW process. She is currently enrolled for a Master degree in Occupational Therapy.
- *Occupational Therapists 7 (OT 7)*: OT 7 holds a Master's degree in Occupational Therapy. He has a total of 23 years work experience in the occupational therapy field, as well as with clients with TBI. He is currently employed at a community health centre in the Cape Metropole where his duties include providing rehabilitation services to people at the community health centre and in the community (home based care). He is also experienced in neurodevelopmental techniques.
- *Occupational Therapists 8 (OT 8)*: OT 8 holds a BSc in Occupational Therapy. She has eight years work experience in the occupational therapy field, as well as with clients who have TBI. At the time of the research study, she was working in the research based practice field where she facilitated the RTW process of clients with TBI. She is experienced in neurodevelopmental techniques, functional capacity evaluations and "justifying the selection of assessments", and is currently busy completing her MSc in Occupational Therapy.

- *Occupational Therapists 9 (OT 9)*: OT 9 holds a BSc in Occupational Therapy and has six years work experience in the occupational therapy field and five years' experience with clients with TBI. At the time of the research study, she was working in a clinical rehabilitation setting, as well and provided supervision to third and fourth year students. She is experienced in neurodevelopmental and Bobath techniques.
- *Occupational Therapists 10 (OT 10)*: OT 10 holds a BSc in Occupational Therapy. She has three years' work experience in the occupational therapy field and six months work experience with clients with TBI. At the time of the research study, she was involved in research based practice where she provided rehabilitation services to assist clients with TBI to RTW. She had received training in the Model of Occupational Self-Efficacy from Dr Soeker at the University of the Western Cape.

3.7 Data collection techniques

In order to assess the experiences and perceptions of the Occupational Therapists, the researcher had an initial training session with the Therapists at which time they were educated on the four stages of the Model of Occupational Self Efficacy and the value it could add to their RTW rehabilitation programmes. Approximately 25 therapists from various rehabilitation units, such as Community Health Centres, Tertiary Hospitals, Neurological Rehabilitation Units and Private Practices in the Cape Peninsula were invited to attend a workshop on 25 September 2013 at the University of the Western Cape at which time they were introduced to the Model of Occupational Self Efficacy. The workshop introduced them to the four stages of the Model and how it could be applied in RTW rehabilitation with patients with traumatic brain injuries. The researcher arranged for two Occupational Therapists who had been using the model to share their successes with clients and how the model was implemented with their clients. Practical activities and strategies on how to

implement the Model with their clients during the different stages were provided to the therapists.

During this training workshop it was discovered that only three therapists had clients with TBI and they volunteered to participate in the research study. Following the workshop, the researcher followed up with these therapists and set up meetings at their various work settings in order to further explain the purpose of the study and what would be required of them. As time progressed, more therapists who attended the workshop expressed interest in participating in the research study and, as these therapists signed on, the researcher met with each of them individually at their places of employment or other predetermined venues in order to refresh their knowledge regarding the model. While all of this was taking place, the researcher had already started conducting face to face interviews with some of the participants who had patients with TBI and had already signed on to participate in the study.

Once the follow-up meeting took place, the therapists went back to their respective working areas, where they started utilising the Model with clients who have suffered traumatic brain injuries. Following the implementation of the Model, the researcher followed up with the Therapists in the form of face to face and telephonic semi-structured interviews (see Appendix 1) as she was able to get information from each of the therapists regardless of the phase of the Model in which their clients were functioning in.

3.7.1 Face to face interviews

The face-to-face interview, also called an in-person interview has continued to be the best form of data collection when one wants to minimise non response and maximise the quality of the data collected and are often used to solicit information in projects that can be considered to be very sensitive (Dialsingh, 2013). The researcher planned to conduct face to face interviews were with all the participants, but not all interviews were conducted face to

face. While it was initially planned for the researcher to do face to face interviews, the therapists' schedules did not allow for all interviews to be conducted face to face and some of the interviews were done telephonically. The researcher found this to be an acceptable method of communication as the content of the interviews was not of a nature that was dependent on reading body language and non-verbal cues.

3.7.2 Telephonic interviews

The telephonic interview is an accepted and well-studied approach for quantitative data collection (Aday, 1996). The benefits of telephonic interviews include decreased cost and travel, ability to reach geographically dispersed participants and enhanced interviewer safety (Novick, 2008, Ruane, 2005 and Fielding & Thomas, 2008). Sturges and Hanrahan (2004) added that the researcher did not have to travel to unfamiliar places. Chapple (1999) reported that telephonic interview data was "unexpectedly rich" (p.91) and Sweet (2002) reported that the quality and quantity of telephonic data was not noticeably different than face-to face-interviews. The use of telephonic interviews during this study was especially useful as certain participants were more readily able to do the interviews after-hours. Safety was a major concern as some of the participants were located in areas that were plagued by gang violence at the time therefore the use of telephonic interviews proved quite successful.

3.7.3 Semi-structured interviews

Semi-structured interviews were chosen because they retain the flexibility of qualitative research, while permitting a greater degree of standardisation than naturalistic interviews, and they allowed the researcher to focus on specific research interests i.e. the therapists' experiences of using the Model (Kelly, 2010).

3.7.4 Description of interview process

Prior to commencement of the interview process, the researcher had to obtain ethical approval for the UWC Higher Degrees Committee. An information sheet (see Appendix 2) which explained the purpose of the study in writing was emailed to each participant and the participants were contacted telephonically in order to the answer any questions that the participants may have. Once this process was complete, informed consent (see Appendix 3) was obtained after which the researcher contacted each participant via email in order to provide each of them with the demographic information sheet for them to complete in order to ascertain if they met the inclusion criteria. The demographic information sheet (see Appendix 4) required the participants to provide information such as their name, how many years they have worked as an OT and how long they have been working with clients with TBI, as well as their qualifications (including all courses they have completed), whether they work in the private or public sector and their work setting (CHC, vocational rehabilitation, neurology rehabilitation or project work). Once all the demographic information was received and organised in an Excel spreadsheet, the researcher contacted each participant telephonically in order to set up a time and date for the interview. Most of the interviews were conducted at the participants' places of employment at a set time, but at least three interviews were conducted in public areas such as coffee shops and libraries, while seven of the interviews were conducted telephonically due to time constraints and clashes in the schedules of the participants and the researcher. A total of 27 interviews, 21 face to face and six telephonic, were conducted. One interview was conducted with Participant 9, two interviews were conducted with participant four and three interviews being conducted with the rest of the participants. The interviews lasted between 10 and 20 minutes for each participant. Multiple interviews were conducted with participants in order gain insight into the stages of the model, how long each one would take to get to through the process and to

check on the progress of both the client and the therapist, especially considering that the MoOSE was so new to the therapist. The researcher made use of a list of open ended questions (see Appendix 1) to conduct the interviews with each participants. Furthermore, additional questions were added that pertained to the participants' client as determined in the interviews. Example of questions asked during one of these interviews were "*What kind of barriers did you experience during the rehabilitation process?*" or "*How did your client respond to the rehabilitation process?*" During each interview, if the participant had any questions with regards to the Model, the researcher would give some practical ideas of activities or clarification of the guidelines of the model. All the interviews were recorded by way of an audio recorder which was provided to the researcher by the Occupational Therapy Department at UWC.

3.8 Data analysis

Merriam (2001) describes data analysis as the process of: 'consolidating, reducing, and interpreting what people have said and what the researcher has seen and read'. Using the constant comparative method of data analysis, categories were created that reflected the purpose of the research (Kanuka, 2010). Each interview was analysed individually after which the researcher compared the data of all the interviews together collectively. In this particular study, the data analysis process involved data management and content analysis.

3.8.1 Data management

Huberman and Miles (1994) describes data management as a systematic process which involves the storage and retrieval of all the information in the research process from raw data to the final research report. Meadows (2004) stated that data management is a challenging, integral and vital part of the qualitative research process if it is to be successful. In addition, Meadows and Dodendorf (1999, 196) stated that "managing data well facilitates the interpretation similar to how a good orchestration facilitates good music". During this

research study, the raw data in the form of digital audio recordings were transferred verbatim. The initial 10 audio recordings were transcribed by the researcher while the remainder of the audio-recordings were transcribed by a professional transcriber in order to give the researcher time to focus on other research activities. The transcriber created columns on the right side of each page where researchers were able to make notes and comments. Once the audio-recordings were transcribed, the researcher listened to the audio-recording while reading the transcription in order to ascertain if the data transcriptions were accurate. Each interview was read several times to ensure that the researcher became familiar with their content and reading each interview also helped the researcher to prepare for the following interview. All audio-recordings and transcriptions were stored on the researcher's personal computer as well as in a Dropbox folder along with literature collected for the literature review. Consent forms and reflective notes were kept in a separate folder in the Dropbox folder.

3.8.2 Thematic content analysis

Taylor-Powell and Renner (2003) states that content analysis in qualitative research is fairly labour-intensive and the start of bringing meaning to the data. After the researcher had familiarised herself with the transcripts, units of meaningful and interesting information were identified by means of highlighting. Lincoln and Guba (1985) described these units of meaning as significant statements, phrases, or sentences that pertain to the phenomenon under study. In the transcripts, units were referenced and coded in the right hand column created on the word document next to the participant's direct quote; at which time either a word or a direct quote was extracted as a code or meaningful unit. The researcher followed this process throughout the entire transcript and repeated the process for all transcriptions. Once these units of information were located, instead of placing them on index cards as suggested by Lincoln and Guba (1985), each phrase or word was tabulated on the computer using Microsoft Word, without the use of a specific qualitative database programme. This was done

for each transcript. In addition, accompanying each unit of information was the direct quote from the participant, the chronology of the interview and the page number of the transcript. A large number of codes surfaced from the initial content analysis and as the process continued, the researcher found some commonalities between the codes and participants' statements. Once all the units of meaning had been identified, the researcher started categorising these codes. According to Lincoln and Guba (1985), categorising is a step in analysis where the researcher groups and organises codes that relate to the same content or implied meaning (Taylor-Powell & Renner, 2003). While the categories were not named yet, provisional categories were formulated by the researcher. However, Taylor-Powell and Renner (2003) stated that the researcher may adjust the description or identify new categories in order to accommodate data. Once the provisional categories were identified, the researcher decided which codes would be grouped into which categories and which codes would form a new category. This process was followed for all the codes and similar codes were placed together in a column, but codes that did not fit anywhere were placed in a "miscellaneous column". Once the researcher had read each column of codes, it was evident that the codes had distinctive meanings for its inclusion. The codes were then rechecked in order to ascertain that they were in fact coherent. Codes that did not fit into their columns well were moved to better suited columns. Conclusively, the researcher named each tabulated column according to its description in order to capture the content of the column. In addition, Lincoln and Guba (1985) stated that the "miscellaneous" column should be revisited in order to ascertain if any of these quotes may be assigned to a new category. The "miscellaneous" column was rechecked and while some of the quotes were relevant to some of the categories, others were unrelated or insignificant and as such, were discarded. The named categories were examined and it was noted that some of them could be sub-divided while others were subsumable. Once the provisional codes had been developed, the researcher started developing temporary

themes. Patton (1980) states that qualitative data analysis is inductive, as patterns and themes emerged from the data rather than being imposed on them. As such, the final stage of the data analysis pursued the inducing of themes based on the connections made between the categories. Once this step was completed, the researcher compiled a document describing the themes and discussed it with her supervisor via Skype. The themes, categories and subcategories were discussed, as well as their relevance to the aims and objectives of the research study and possible renaming of the themes.

3.9 Bracketing

Tufford and Newman (2010) suggests that in qualitative research the potential for the researcher to have an inevitable and unwanted influence, related to transmission of assumptions, values, interests, emotions and theories as well as on how the data is collected, interpreted and presented, does exist. The method of eliminating unwanted influences is known as bracketing, a method used by some researchers in order to mitigate the potential deleterious effects of unacknowledged preconceptions the researcher may have and thereby to increase the rigor of the project (Tufford & Newman, 2010). In light of this, the researcher eliminated any ideas and thoughts with regard to vocational rehabilitation, RTW and traumatic brain injury, thus increasing the rigor of the research study. In addition, the Model of Occupational Self-Efficacy was a new concept for the researcher and she had only limited experience in the treatment of traumatic brain injury and vocational rehabilitation. This helped the researcher look at this particular study as a completely new concept and the concept of studying occupational therapists' experiences was completely new to the researcher as often only clients and their families' perceptions are studied. Throughout the research process, the researcher reflected on the data collected and the researcher discussed findings during meetings with her supervisor and occasionally with colleagues. As such, the

researcher was able to obtain feedback and to set aside any preconceived notions or personal views from the information which was gathered.

3.10 Trustworthiness

Guba's Model of Trustworthiness of Qualitative Research (Krefting, 1991) consists of four basis criteria; truth value, applicability, consistency and neutrality.

3.10.1 Truth value:

According to Krefting (1991), truth value establishes how credible the findings of a study are as it aims to address the truthfulness of the findings based on the research design, participants and context of the study. In order to ensure the truthfulness of the data collected during this study, the researcher recorded all interviews conducted with participants on a digital audio recorder and these audio recordings were transcribed verbatim. This allowed accurate representation of the views of the study participants.

Credibility is the criterion used to assess truth value, this was assessed by member checking, interview techniques and triangulation. To further achieve credibility of the study, the following strategies that were posited by Krefting (1991) were used:

3.10.1.1 Member checking:

Member checking a technique used during which the researcher takes the interpretations of the study back to the participants in order to verify the credibility of the information (Lincoln & Guba, 1985). Krefting (1991) stated that this strategy of revealing research materials to the informants ensures that the researcher has accurately translated the informants' viewpoints into data. In order to conduct the member checking, the researcher initially arranged for a focus group to take place at the Occupational Therapy Department at the University of the Western Cape. However, due to unforeseen circumstances and schedule clashes, the focus group could not take place on the set time and date. Due to time constraints, it was not

possible to arrange another focus group and as such, the researcher compiled a document containing the result of the study and emailed it to all the participants of the study. The participants were then allowed to comment on the document and give their opinions based on the content and send it back to the researcher. Five out of the 10 participants returned comments on the results document. Once the researcher received the documents, she made telephonic contact with participants confirming and clarifying their feedback in order to amend findings where necessary. One participant was contacted via Skype as she had relocated to another country following the research.

3.10.1.2 Interview techniques:

The researcher conducted in-depth semi-structured interviews in order to obtain the data required to complete the research study. Employing semi-structured interviews allowed the researcher to adjust questions and add further questions based on the information revealed during the course of the rehabilitation process. An example of this is adding questions about the clients' motivation and insight levels which were not part of the original interview guide.

3.10.1.3 Researcher's reflexivity:

According to Creswell and Miller (2000) acknowledging one's belief in the early stages of a research study will ensure that the readers of a research project understand the stance of the researcher. In addition, they suggested that the researcher suspends his / her biases as he / she continues with the study. In this study, the researcher acknowledged that her experience as a Disability Claims Consultant and an occupational therapist working in an acute neurosurgery rehabilitation ward could influence the results of the study. These biases included thinking that clients with TBI are dangerous and assuming that all therapists would find it easy to work with the MoOSE. She therefore cast all her preconceived ideas regarding the MoOSE and TBI aside captured her experiences and perception in a reflexive journal. This gave her

the opportunity to reflect on how her prejudices and preconceived notions could have influenced the findings of the study.

3.10.1.4 Peer debriefing:

Peer debriefing (or examination) involves the researcher discussing the research process and findings with impartial colleagues who have experience in qualitative research methods at which time insights are discussed and problems are presented as a form of debriefing (Krefting, 1991). Lincoln and Guba (1985) suggested that this is a way of keeping the researcher honest and Krefting (1991) added that colleagues can also increase the credibility by checking categories developed out of the data. The researcher discussed the findings with her supervisor and also compiled a document describing the themes for the supervisor's perusal. In addition, the researcher discussed the results with an advisor from the Division for Post-Graduate Studies at the University of the Western Cape, as well as colleagues who were employed in the vocational rehabilitation and neurology rehabilitation fields. Feedback from these various sources provided the researcher with insights into the research, allowed her to be more analytical of the findings and be methodical and systematic in the presentation of the findings.

3.10.2 Applicability:

Applicability refers to the degree to which the findings can be applied to other contexts and settings or with other groups and how the findings may be applicable to larger populations (Krefting, 1991). This was achieved by providing comprehensive descriptions of the research methods, participants and their contexts, as well as detailed descriptions of participants and their lived experiences. Transferability is the criterion against which applicability is assessed. Transferability was ensured by comparing the demographic information of the participants as they were required to "fill in the gaps" in the profile (Krefting, 1991). In this light, the diverse demographics (level of experience and educational background, as well as experience with

the MoOSE and TBI) of the participants in the study would make it possible to apply the results to a larger population.

3.10.3 Consistency:

Krefting (1991) states that dependability is the criterion used to assess consistency. This was achieved by giving a dense description of the research methods. This included the development of a research proposal that was approved by the Senate Research Committee of the University of the Western Cape and conducting of semi-structured face-to-face and telephonic interviews which were audio-recorded with all participants. In addition, all data collected were managed correctly in order to ensure the dependability of the findings.

3.10.4 Neutrality

Neutrality is the freedom from bias in the research procedure (Sandelowski, 1986) and confirmability is the criterion used to assess neutrality. Confirmability refers to the degree to which the findings of the study are a function solely of the informants and conditions of the research and not of other biases, motivations, and perspectives (Krefting, 1991). Savin-Baden and Major (2010) states that it is based on the notion that the researcher needs to demonstrate that results could be, and at times even should be, confirmed or corroborated by others. The researcher achieved confirmability through member checking and peer debriefing, as well as the use of an audit trail.

3.11 Ethical statement

The World Medical Association (2008) developed the Helsinki Declaration which describes the principles which need to be adhered to during research involving human subjects in order to guard participants from being harmed by the research process and requires human rights and dignity to be respected. Ethical approval was sought from the University of the Western Cape's Senate Research Committee before commencement of the data collection phase of the

research project. Neither the participants nor their clients were harmed as the study did not include invasive procedures that could physical or psychologically harm them or their clients. Participants were informed about the study; aims, rationale and content of the study, both verbally and in writing. Participation was voluntary and there was no consequence for withdrawing from the research process. Participants were able to withdraw from the study at any stage during the research process. Confidentiality was ensured as the names and surnames of participants were not used in the final research report. In addition, permission was obtained from the participants and their affiliates was obtained prior to conducting the interviews. As prescribed by the National Health and Research Ethics Committee (2007), the benefits to the participants and the Occupational Therapy professions outweighed the risk of potential harm. All information provided to the researcher was treated as privileged and was stored in a secure place. Given the nature and content of the research study, a referral source such as a psychiatrist or psychologist was not required. However, the researcher was always available to offer the participants support and guidance if they had difficulty with application of the Model.

3.12 Limitations of the study

This section aims to describe the limitations of the study.

- While the researcher was able to find 10 participants to participate in the study, one of the participants dropped out of the study as her client stopped attending rehabilitation and she was unable to find another client who she could take through the rehabilitation process.
- The researcher had difficulty finding suitable participants with suitable clients to participate in the research, and as such, most participants joined the research study

quite late. This resulted in the participants not being able to take their clients through the whole rehabilitation process prior to the completion of the study.

- Due to schedule clashes and time constraints, the researcher had to conduct telephonic interviews with some participants instead of face-to-face semi -structured interviews. This may have affected the quality of the data revealed during the research process.
- Due to schedule clashes and time constraints, the researcher was unable to conduct a member checking focus group as planned and a document with the findings were emailed to the participants instead.



CHAPTER FOUR

FINDINGS

4. Presentation of findings

The researcher will now discuss the research findings in terms of themes, categories and sub-categories relating to the Occupational Therapists' experiences when using the model in the RTW process of clients with TBI. Four main themes emerged from the categories. Theme one related to client related factors, theme two is related to therapist related factors, theme three is related to characteristics of the model and theme four relates the current job market in South Africa, all of which affect the outcome of the model. The themes discussed were named as follows:

- Theme 1: The progress of the implementation of the Model of Occupational Self-Efficacy depends on client-related factors
- Theme 2: The progress of rehabilitation and the clients' ability to RTW depends on therapist-related factors
- Theme 3: Characteristics of the model that influenced the vocational rehabilitation process
- Theme 4: The perception of employers, with regard to disability and TBI, and the job market affects the vocational rehabilitation process

Theme One

Table 4.1: Theme one and related categories

<p>Theme One</p> <p>The progress of the implementation of the Model of Occupational Self-Efficacy depends on client related factors</p>	<ul style="list-style-type: none">• Category 1: Characteristics of higher functioning clients that were perceived as more difficult to manage in rehabilitation• Category 2: The client's personality has an impact on the rehabilitation process• Category 3: Socio-economic circumstances, affects the client's rehabilitation process and ability to RTW
--	---

4.1 Theme One: The progress of the implementation of the Model of Occupational Self-Efficacy Depends on client-related factors

The abovementioned theme describes how factors relating the client may affect the rehabilitation process. These factors include, motivation levels, level of functioning prior to the injury, the client's personality and socioeconomic circumstances.

"...because she was so high functioning before the accident, she struggles to make the link between you know, her true insight and her intellectual insight. The others were much more accepting." (P1)

The abovementioned quote described how a client who, prior to sustaining the TBI was high functioning and had a tertiary level of education, had a lot more difficulty accepting her

current ability as opposed to people who were less educated and lower functioning prior to sustaining their injuries. It was also perceived that she had little insight when it came to her current abilities as opposed to her previous abilities. The following categories will discuss the occupational therapists' experiences of how client related factors had an impact on the rehabilitation process: (1) level of functioning, (2) motivation levels and (3) socio-economic factors.

4.1.1 Characteristics of higher functioning clients that were perceived as more difficult to manage in rehabilitation

This category conveys the Occupational Therapists' perceptions that clients who were previously high functioning had more difficulty coming to terms with their new level of disability and were more difficult to work with as opposed to clients who were not as high functioning. One participant stated:

“She was highly... high functioning before the accident. She had a diploma in like arts and design... jewellery. She was a jewellery designer and... she's still got some of that creativity. You can see it, but she doesn't have the... I struggled the most with her because she didn't have the link... she couldn't make the link between true insight and intellectual insight where she was still under the impression that she can do certain things.” (P1)

The above quote indicates how a therapist had more difficulty with one of her clients who was higher functioning, had a higher level of education and a higher paying job than with other clients who were not as high functioning. The client appeared to have more difficulty accepting her current level of functioning and as such, she was more difficult to manage through the rehabilitation process.

Another participant stated that one of her clients constantly tried to revert back to her old job, even though test results showed that she may not be able to cope with the stress levels related to such a job despite the fact that she had other good vocational skills. She said:

“Now this lady kept on going back to what she did before, what she did before and she wanted to go back to counselling, which I know based on her test and based on... you know on all information collected, that she will not cope, but she had excellent skills in other things.” (P8)

It was noted that the rehabilitation process may be influenced by socio-economic factors:

“...it’s... it’s so all those underlying social and socio-economic, economic factors actually play a big role.” (P3)

Another participant indicated that familial relationships also interfere with the rehabilitation process:

“Uhm... It’s just, it’s difficult because there’s also lots of dynamics with him and his wife.” (P4)

This category points out that there are internal and external factors in the client’s life that may affect the rehabilitation process, the outcome thereof and the RTW process. This category is further described by subcategories related to the client’s education level, the clients’ personality and the client’s age.

4.1.1.1 Clients with lower levels of education and lower paying jobs were easier to take through the rehabilitation process

This sub-category communicates how clients’ education levels affected their perception of their disability and how it affected the progress of the rehabilitation process. It was noted that clients with higher education levels and previous higher paying jobs were more difficult to take through the rehabilitation process and clients with lower education levels and previous lower paying jobs found it easier to accept their disability and how it affected their current functioning. One participant stated:

“The maximum (level of education), I think is grade 11... she has a tertiary education... the others were much more accepting than her...” (P1, II)

“She had a diploma in like arts and design... jewellery.” (P1, I2)

The above quotes indicate how a therapist who was treating a group of 10 clients had more difficulty treating a client with a tertiary education as opposed to her other clients who did not finish high school as they were more accepting of their current state or circumstances than the client who had a higher level of education.

Another participant described how clients who were previously employed in higher functioning jobs found the rehabilitation process difficult because they are uncertain if they would be able to find “even a simple” job:

“... I mean not also... I mean especially, I think it’s worse if they have been in a good job prior to the accident ... the most I find is that the most... the clients who are most affected by the inability to do an adequate job are the client that have had a good job prior to the accident and now they can’t even find a simple job.” (P10)

The above quotes indicated that the therapist found it difficult to work with clients who have higher levels of education because they might have difficulty with the fact that they can no longer do their previous jobs and are often unwilling to perform jobs that they would consider below their level of education and achievement.

As opposed to higher education levels and previous work experience which may hamper the rehabilitation process, another participant stated that one of her clients with higher cognitive functioning and a higher IQ made it easier for her to facilitate the rehabilitation process. She stated:

“... with this particular client you know, his cognitive and IQ levels were still quite high and that’s what... what took us through some of the processes much quicker.” (P2)

4.1.1.2 The client's personality has an impact on the rehabilitation process

This subcategory aims to describe how the client's personality may have influenced the rehabilitation process. It was noted that clients with stronger personalities made it more difficult for therapists to take them through the rehabilitation process as they (the clients) wanted to do things in their own way when the therapist had already established that the course of treatment may be of more value for the client. One participant described her struggle with a "high maintenance" (strong-willed client) as follows:

"As for... the one that I've been struggling with... like I said she's much more difficult to handle... and it's her, it's her personality as well... She is very high maintenance as well." (P1)

One of her other clients found fault with every work test placement in which he was placed and would only go to the work test placement on one or two occasions:

"... but that's a personality thing that would just find problems with everything wherever he goes... He is the type of person who is good at receiving a disability grant." (P1)

The above quote alludes to a therapist's struggle with placing a client in a work test place as he found fault with all placements and appeared to be content with just receiving a disability grant rather than being employed and self-sustaining.

Therapists felt that clients who were hardworking were easier to place in work test placement and even permanent jobs:

"He's hard working, he's precise, because he (the supervisor) doesn't see that in the other workers." (P1)

The client's work ethic helped him find favour with an employer which made the rehabilitation process go smoother.

Another participant added that an employer was so impressed by a client's good work ethic and humility that they actually gave him more work to do despite their initial commitment of only one week.

“Uhm... in fact the initial test placement was only for one week, but he actually impressed them so much that there was some more work to do... They said to me, he was hardworking and he was humble and that was what impressed them the most.”
(P2)

One Occupational Therapist described her struggle with a client who had expectations of the therapist to ensure that he does get a job at the end of the rehabilitation process which resulted in him not taking charge of any part of his rehabilitation. She said:

“The expectation that I'm gonna be doing it... so maybe a lack (of pro-activeness) on his side. Like... Argh... I don't need to send my CV because she will get it for me.”
(P4)

This subcategory suggests that clients with difficult personality types affected the rehabilitation process in different ways. Clients who were more strong-willed or fault-finding hindered rehabilitation process by not following the instructions given by the therapist and they often did not return to work test placements due to “not being happy” at these placements. However, clients who were perceived to be humble and hardworking facilitated the rehabilitation process which made them easier to place in work test placements and appeared to have been more likely to be invited back to work with prospective employers.

4.1.1.3 Older clients were more difficult to place in work test placement and jobs

“It was really difficult finding placements for them, basically because the places that are available in Cape Town wants younger people, they don't want to take on the older ones.” (P10)

The above quote described a therapist's struggle to find work test placements for her older clients. It was also noted that this difficulty may be related to the employers who are not willing to employ older people and that younger people are willing to do more types of jobs than older people as described in the following quote:

“The younger clients are easier to work with than the older people uhm... also because there is a greater variety of things they are willing to do.” (P10).

Older clients were perceived to find it more difficult to come to terms with their new circumstances and appeared to have difficulty accepting that they may not be able to perform in their previous jobs. The following quote describes a therapist’s difficulty in trying to get older clients to change their perceptions and be open to the possibility of a trying a new kind of job. She said:

“That was difficult on the older clients who just had head injuries, because they couldn’t understand why they couldn’t go back to what they were doing and why it was... the workplace was so limited in what they could do.” (P9)

The researcher also found that the younger clients were more likely to have been placed in a job toward the end of the research study.

Participant one had a 28-year-old male client who was placed in a permanent position at a beverage company in Epping, while Participant two’s 26-year-old male client went back to his previous place of employment. Participant nine’s female client was in her early 20s and did not have any previous work, but was also placed in a permanent position at a fast food chain restaurant and Participant eight’s two female clients in their late 20s were placed in learnerships. However, Participant seven’s 42-year-old male client and Participant four’s 43-year-old male client were not in jobs by the end of the research study. Participant ten’s also stated that she even had difficulty getting her female clients who were over the age of 35 years into jobs and learnerships.

4.1.2 The client motivation levels and insight have an impact on the rehabilitation process.

This category describes how the client's insight and motivation levels may help or hinder the rehabilitation process. The therapists who participated in this research study conveyed that clients with higher motivation levels and more insight went through the rehabilitation with more ease than clients who have lower motivation levels and limited insight into their conditions. One participant who had worked with various clients stated the following:

"...It could take ja ... It could take a year, but it's... it honestly... it just depends on the insight of the client and the motivation of the client." (P9)

Another participant agreed with this statement and added that the first stage of the model could be the most difficult if the client had limited insight and motivation:

"The hardest to do obviously is stage one... because of the insight level... depending on the insight level and motivation of the client when they come in." (P1)

WESTERN CAPE

It was noted that factors such as receiving money to get to the rehabilitation facility was a great external motivation factor for clients to attend the rehabilitation as indicated by Participants 1 and 2:

"The R60 for transport and food is obviously also a motivator." (P1,)

"Transport money usually plays a role in his ability to get here." (P2)

Other external factors which motivated clients were related to their family dynamics and wanting to get back to their jobs as soon as possible in order to provide for their families:

"She is motivated. I think she ... I really think she is motivated. I think the main reason for that is, is ... she was the breadwinner of the family." (P6)

“I think she is very receptive. I think she is really motivated to get better. She mentioned that she’s the breadwinner, so it’s a very big motivation for her to try and get back to work.... because I mean if she has that extra... you know she wants to get better so she will put in more.” (P5)

This category also showed that while clients had high motivation levels, if they had poor insight and judgement into their abilities following the brain injury, they also struggled to get through the rehabilitation process. The following quotes describes a therapist’s struggle with a client who despite having some physical deficits wanted to go back to his previous field of employment even though it was unrealistic:

“... his hand and his balance, he wants that to improve. Insight is definitely not fully... developed, ‘cause he still thinks he can go back to work as a regular... in the engineering business. He’s still unrealistic there.” (P7)

“‘Cause insight is very linked to the motivation and to self-sense of self-efficacy... He’s very motivated but he does lack insight.” (P7)

Another therapist described how her client also wanted to return to his previous welding job, but presented with limited hand function and did not have the insight and judgement to take the necessary safety precautions to protect himself from the hazards associated with welding. She said:

“What made me question his insight and his cognitive ability was that: When he came for his last session, he had arc eyes. He didn’t put on a, his safety spectacles when he was welding... And he’s dead set that he can weld. That’s the difference.” (P4)

The abovementioned participant eventually dropped out of the study as a client, despite being very motivated to RTW, stopped coming to therapy as he was not getting what he thought he would get and that was a job in the welding industry. The participant said:

“... so it’s... it’s ... it’s almost like it’s trial and error, trial and error. And he wants to skip all of this stuff. All of the... the... the theory stuff.” (P4)

Participant 5 also had some difficulty with her client wanting to move through the rehabilitation process at a faster pace despite the deficits she faced:

“Sometimes I think she wants to maybe fast forward things a bit. So that insight with regards to her ability seems to be a problem...” (P5)

This category aims to describe the relationship between motivation, insight and compliance to therapy. It is further described by subcategories related to how motivation levels, insight and compliance affected the rehabilitation process.

4.1.2.1 Clients with high motivation levels were easier to take through the rehabilitation process

This subcategory aims to explain how motivation levels impacted on the rehabilitation process, but also how having a job was also a motivation for the client. It was found that clients became restless toward the end of the rehabilitation process if they had gone through all the stages and were not employed in a job as yet. This often affected their motivation levels and how they progressed in the rehabilitation process as described by one participant.

“Second hardest would obviously be stage four because you have to move... because now the client is progressing and you need a base for the client... otherwise they lose their motivation to carry on.” (P1)

Another participant was of the opinion that despite being motivated by the prospect of finding employment after the rehabilitation process, their internal motivation was still low as they did not appear to have the knowledge of how to get to the desired result of getting into a job. One participant said:

“So when I started when you know, formulating goals and working towards like a future for them, I found that they were quite motivated... Uhm but the internal motivation’s still not up to par.” (P8)

However, she stated that she felt her hands-on approach and constantly being there to encourage them and give them feedback helped them to become more successful and ultimately become more motivated.

“And I also think the... the hands-on support from me and the co-ordinators also you know is helping them to... to... ja to become more successful. So I think especially for these two ladies, the internal motivation just escalated because they experienced that.” (P2).

The abovementioned quotes showed that while a client’s motivation levels may not necessarily be high at the start of the rehabilitation process, external support and encouragement may increase the client’s motivation levels which ultimately aided the rehabilitation process as described in the following quote.

“... what also helped me was they (the clients) had a very high motivation.” (P8)

Once the clients were motivated to attend the rehabilitation programme, they became more compliant with therapy and they began to progress with their rehabilitation.

“Yes... then they like coming. They are motivated to come. They do all their home programmes. And they engage and you can actually see the progress when they come back.” (P1)

In essence, it was noted that motivation can come from various places such as the therapist and family. The therapists involved in this research study were of the opinion that the level of motivation exhibited by the client can determine the how long the rehabilitation process takes, as one participant stated:

“It could take ja. It could take a year, but it’s it honestly it just depends on the insight of the client and the motivation of the client.” (P9)

And despite having deficits, having high motivation levels may aid the rehabilitation process.

One participant said:

“He’s got all these deficits counting against him and the positives are his motivation.” (P4)

4.1.2.2 Poor insight and judgement affected the client’s work skills

Despite having high motivation levels, therapists noted that clients who had difficulty accepting, or had poor insight into their abilities following a TBI affected their work skills, as well as hindered the rehabilitation process. One participant said:

“His a... let me say, his assets is [sic] that he’s very motivated and he’s got a strong belief that he’s going to get better and that things is [sic] gonna improve for him again. It was, I think it’s a little bit unrealistic at times.” (P7, 11)

“He’s very motivated but he does lack insight... If somebody sees himself as more efficient than he is, that’s the link to the model of self-efficacy. So his lack of insight directly affects the model.” (P7, 13)

Other therapists felt their clients’ lack of insight caused them to want to move through the rehabilitation process at a very fast pace, but that this hindered their progress. The participants said:

“Sometimes I think she wants to maybe fast forward things a bit. So that insight with regards to her ability seems to be a problem...” (P5).

“They just want the job right now without working towards getting there.” (P10)

Some participants were of the opinion that clients with a lack of insight into their conditions were difficult to work with and that they often did not realise that they also had cognitive problems and not just physical deficits. Another participant said:

“... but they have no insight so that means they haven’t gotten a strong personal belief yet but it’s difficult to work with them because they don’t think that they have a problem. Their problem is that their arm doesn’t work, they don’t have the insight to know that they have a cognitive difficulty and a concentration difficulty and that is the problem.” (P3)

The following quote describes a therapist's struggle with a client who was still convinced that she had the same abilities as she previously had, which made it difficult for the therapist to take her through the rehabilitation process. It was noted that only once she gained insight and acceptance of her new abilities was the client able to move through the rehabilitation process at a faster pace.

“I struggled the most with her because she didn't have the link... she couldn't make the link between true insight and intellectual insight where she was still under the impression that she can do certain things. But, she can't do those things anymore. And that was my biggest challenge with her... getting her to the acceptance phase where she, you know... no longer... who I used to be... I don't have as much capability as I used to, but I have other capabilities now.” (P1)

One of the therapists described how one of her clients had accepted his condition as he had insight into his abilities and as a result was able to do his work more effectively once he was placed in a work test placement. She said:

“So he knows about making lists... you know... writing things down, planning things in advance, always having his journal with him. And these are things he figured out for himself... And his acceptance of his skills for where he is right now.” (P2)

The consensus was that if clients were more realistic about their own abilities, the rehabilitation process went smoother as the clients were able to improve their work skills based on their abilities as well as the deficits they were experiencing as a result of their brain injuries.

4.1.2.3 Non-compliant clients appeared to struggle throughout the rehabilitation process

Another client related factor that appeared to have affected the rehabilitation process and that caused endless struggles for therapists was that some clients were non-compliant to their treatment. Some clients neglected to attend their appointments, others did not follow through

with their referrals to other health professionals while others did not follow their home programmes or do their homework.

A therapist had a struggle with a client who did not show up for his rehabilitation or followed through with a referral made to the speech therapist. Due to his non-compliance, he was unable to progress in his rehabilitation and he eventually stopped attending his rehabilitation sessions which resulted in this particular participant dropping out of the study. She stated:

“It’s been so difficult and he’s also missed his speech therapy appointment... I did arrange one afternoon for him to come here and shadow the Cleaner and clean a section, but he didn’t pitch on that day. So it showed that his compliance is also not very good.” (P4)

Another therapist had difficulty with her client not doing her homework (of writing journals) which affected the planning of the therapy sessions given that journaling gives the client the opportunity to air any fears that they may have with regard to the rehabilitation process and it gives the therapist the opportunity to find out where the clients’ difficulties are and as such the therapist may be able plan the therapy sessions accordingly. She stated:

“I think it is a bit of a problem that she doesn’t do her homework that well.” (P5)

Due to this particular client not following through with her homework, it was only discovered late in the rehabilitation process that she had a fear of driving as she was the one who drove the car during the accident when she sustained the brain injury. Only once she started journaling about this fear, was she able to progress as the therapist now had a starting point from which to initiate therapy:

“Cause I think that’s another problem that we struggling with is Getting her to follow through.” (P6)

The above quote describes a therapist's difficulty with a client who did not follow through with her home programme. It was unclear what her lack of follow through was related to; as it could have been that the client did not have the insight or motivation to follow through or it may very well have been part of the pathology of having a TBI.

Another therapist indicated that her clients who attended therapy on a regular basis did a lot better and progressed more than the clients who did not attend the groups on a regular basis and follow through with their homework. One participant said:

“The other two haven't... I mean responded like the one hasn't been coming to the groups and the one... ja she... the... the response hasn't been that great.” (P10)

Clients who regularly attended therapy also seemed to enjoy their therapy which resulted in more enjoyment and progress.

“Yes... then they like coming. They are motivated to come. They do all their home programmes. And they engage and you can actually see the progress when they come back.” (P1)

As such, the researcher found that there does appear to be a link between insight, motivation and compliance. It would appear that clients who were motivated, whether it be by internal or external factors, were more likely to progress in the rehabilitation process. However, even if clients were motivated and they lacked insight, the rehabilitation process was hindered and clients with good insight and high motivation levels were more likely to be compliant and follow through with home programmes which resulted in good progress in the rehabilitation process.

4.1.3 Socio-economic circumstances affected the client`s rehabilitation process and ability to RTW

This category aims to describe how clients' socio-economic circumstances can impact on the rehabilitation process. It is divided into two subcategories pertaining to social support and financial constraints. The participants in the study indicated:

“...the circumstances of the patient, his social circumstances affects the person’s progress and how they are hindered.” (P7)

“So all this is adding stress on her and I think that’s actually just hampering the process. I think they mention... I think they call that environmental factors.” (P6)

The above quotes capture a therapists thought of how social circumstances (and environmental factors) may affect a client’s progress in the rehabilitation process.

4.1.3.1 A lack of social support may prevent the client from progressing

In this subcategory, the researcher will aim to describe that a lack of social support in the client’s life may hinder the rehabilitation process and the clients’ progress. One participant stated that sometimes, when a client does not have social support, they may end up with further injuries which may throw the rehabilitation process off track:

“And then they don’t have the family that’s going to support them. And they probably land up with another head injury.” (P3)

Another participant stated that her client was stagnating in the rehabilitation process and upon further investigation it was discovered that she had a lot of social problems at home. The participant said:

“What’s happening at home and how that is impacting on her class performance... I found that she had personal problems, now this also what my you know... her

husband is abusing her, her daughter wanted to commit suicide, her youngest daughter or youngest child is on TB medication, so it's a constant you know.... going to the hospital and she has no social support. So, she's got no family here, they are all in the Eastern Cape.” (P8)

The above quote describes how a client was impacted by what was happening at home and without the necessary social support she was having a lot of trouble in class and was not progressing in her rehabilitation.

“Uhm... It's just... it's difficult because there's also lots of dynamics with him and his wife... the assault happened because of his extra marital affairs and it's a very touchy subject.” (P4)

The above quote describes a therapist's difficulty with a client as his caregiver was not interested in helping him due to circumstances related to his injury and things that happened prior to his brain injury. The therapist had found it difficult to gain information about the client and there was no one to help him with his home programme which prevented him from progressing in the rehabilitation process.

One participant stated that while the family was very supportive, the pressure of being the breadwinner in the home resulted in the client feeling stressed which also impacted on her progress in the rehabilitation process. She said:

“She's more stressed because she is the breadwinner of her family.” (P6)

A lack of support from employers also appeared to create difficulties for clients in the rehabilitation process. One participant said:

“...a lot of psychosocial factors. So somehow I feel that a lot of my work is problem solving, so we do get a lot of challenging clients but this one has been particularly challenging with the diagnosis I think and a lack of support from the work's side.” (P5)

In essence, it was clear that social support played a vital role in the clients' progress during the rehabilitation process. Negative social circumstances also impacted the clients' progress and appeared to hinder the progress even more, while positive social circumstances aided the rehabilitation process and the client's progress.

4.1.3.2 Financial constraints may prevent the client from completing rehabilitation programmes

In this subcategory the researcher will aim to show how financial constraints may prevent the client from completing the rehabilitation programme, especially with clients who are being treated in the private sector and are dependent on medical aids to pay for their treatment.

“She has not submitted her forms for temporary disability, so she's not getting paid at the moment. And apparently the Doctor has not filled in the forms because he wants her to pay to fill in the forms. But she hasn't got any money to pay. So it's quite a catch 22 at the moment.” (P5)

The above quote describes a client's struggle with finances and that she was unable to pay a Doctor to complete her medical form in order to apply for temporary disability at her work. As a result, she was unable to pay for further treatment as her medical aid benefits had also run out.

Some participants showed concern as their clients did not receive vital rehabilitation such as physiotherapy as their medical aid benefits had run out, which resulted in some functional impairments, thereby hampering the rehabilitation process.

“Uhm... I realised that, I've noticed that her mood her has been decreasing and that also her functioning, 'cause she doesn't received any physiotherapy anymore, due to financial constraints. She's also starting to get more of her hypertonia in her body.” (P6)

“And her... where she previously... we thought that she had benefits for Physiotherapy, it seems now that that has also not come through.” (P5)

As such, these therapists found themselves in a situation where they had to first try and help sort out the clients' finances before continuing with the rehabilitation process. One participant said:

“Ja... so I think for us the main factor at this moment is just to try and sort out this money problem because that will make her feel a bit less anxious.” (P6)

It was noted that medical aid does not pay for work visits, which resulted in the therapist not being able to make work visits and as such, she could not make the appropriate recommendations in order to help the client, which in turn caused a lot of frustration for the therapist. The participant said:

“The thing is that the Medical Aid doesn't pay for work visits so I'll have to just bill her for individual sessions but that's not going to work because we're not making progress just by e-mail and telephonically, unless they (the medical aid) maybe come and see me here maybe we can arrange that but I cannot meet for a face to face discussion with them because we're not making progress. So that has been very frustrating.” (P5)

UNIVERSITY of the
WESTERN CAPE

While financial difficulties may not have been a factor for clients who were receiving therapy in the public sector, this was a very real concern for clients who receiving treatment in the private sector. With medical aids only paying for a certain amount of therapy sessions and prescribed minimum benefit (PMB) conditions being taken into consideration, clients who received treatment in the private sector experienced this as an extra stressor on top of social, physical and cognitive issues they may have experienced.

Theme Two

Table 4.2: Theme two and related categories

<p>Theme Two</p> <p>The progress of rehabilitation and the clients' ability to RTW depends on therapist-related factors</p>	<ul style="list-style-type: none">• Category 1: the implementation of the model is influenced by the work context of the therapist• Category 2: therapists' experience with the model impacted on how the model was implemented• Category 3: The earlier intervention commences, the better the outcome of the rehabilitation process
--	---

4.2 Theme Two: The progress of rehabilitation and the clients' ability to RTW depends on therapist-related factors

The abovementioned theme describes how factors relating to the therapist may impact on the rehabilitation process and the clients' ability to RTW. These factors include, the therapists' work context, their experience with TBI and the model, as well as medical aids and when intervention commences.

"... we would start doing that beginning part of the model, but we wouldn't have the capacity, because they wouldn't be with us, unless they were a moderate to mild."

(P3)

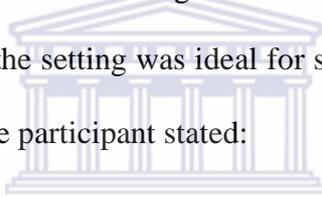
The abovementioned describes a therapist who was working in an acute neurosurgery rehabilitations setting's opinion that the time constraints in this particular setting did not allow her to implement the model in full as clients were often only at the rehabilitation centre

for six or eight weeks post injury. The following categories will discuss the occupational therapists' experiences of how therapist-related factors had an impact on the rehabilitation process: (1) the therapist's work context, (2) the therapist's work experience and (3) the time frames related to rehabilitation.

4.2.1 The implementation of the model is influenced by the context of the therapist

This category describes how the work context of the therapists influenced the way the model was implemented in the various rehabilitation settings. The researcher will explore the various rehabilitation settings and how the circumstances present in those settings affected the rehabilitation programme.

It was noted that therapists who were working at the Work Assessment Unit at a tertiary hospital were of the opinion that the setting was ideal for such rehabilitation, mainly because of the infrastructure available. One participant stated:



“But because this a specialised area, it’s actually kind of the perfect place for that... for voc rehab to happen... and private settings. Because we have the equipment, we have the facilities and we do have the time.” (P1)

Another therapist working in the exact same setting stated:

“... work assessment unit at X hospital is that we have the space, we have the infrastructure we can use ... but because this a specialised area, it’s actually kind of the perfect place for that... for voc rehab to happen... and private settings. So I think it’s a perfect fit for X Work Assessment and any work assessment unit really.” (P2)

The above quotes described therapists' opinions that working in a specialised work assessment area enhanced the rehabilitation process and they were under the assumption that the model would be ideal to implement in a private vocational rehabilitation setting. However, therapists who were actually working in private vocational rehabilitation settings

were of the opinion that the limited amount of rehabilitation session approved by the medical aids caused time constraints. One participant said:

“... in private it is difficult to make this work practically and from us it took a lot of effort...” (P5)

Another added that:

“... Ja. I think the problem that we’re struggling with is the fact that time is limited and the longer the people stay away, especially when you’re in a private practice, it makes it a bit difficult.” (P6)

The above quotes give an indication that implementing the model in a private setting may impact on the rehabilitation process as it is a lengthy process and this made it difficult for therapists to complete the rehabilitation process within the private rehabilitation setting.

One therapist noted that trying to implement the model within an acute rehabilitation setting was unrealistic given the nature of the setting. She stated:

“Not realistic at all... because it’s supposed to be 6 weeks... I mean I think this setting is just too acute.” (P4)

However, it was noted that stage one may be implemented in such a setting after which the client may be referred to another rehabilitation facility where the client may receive rehabilitation on a long term basis:

“... we will obviously we will refer, depending where, so lots of people will go home. Lots of people will go to WCRC once they... they’re at a point where they can participate in proper rehab or intense rehab, so they’re following instructions and they not confused anymore and all of that. And then, when we refer uhm, what I always refer to community” (P3)

4.2.1.1 Medical aids negatively affect the rehabilitation process with clients

This subcategory aims to describe the negative impact medical aids may have on the rehabilitation process. Participants who were working in private vocational rehabilitation settings were of the opinion that while clients had medical aid, the medical aids often only approved a limited amount of sessions, which was sometimes not enough to complete the rehabilitation process. One participant stated:

“... because she is medical aid patient so she is on PMB and so we’ve got... they said we can get twelve sessions.” (P5)

Another stated:

“And that makes it a complicated story, because medical aids will say that you have 10 sessions.” (P6)

And while the therapists stated that they motivated for more sessions when these approved sessions ran out, they found that the medical aids either did not approve the sessions even though the clients still required further rehabilitation as stated in the following quote:

“Because it could happen that we’re running out of sessions and the medical aid does not want to approve further sessions.” (P5)

It was also noted that when a client does not receive a salary, this may affect the medical aid paying their accounts. One participant stated:

“Maybe it’s because she is not being paid. Because if you don’t get paid your medical aid does not get paid. And if your medical aid does not get paid, they don’t pay your bills.” (P5)

Or they do not respond to the correspondence requesting further rehabilitation sessions as described in the following quotes:

“Uhm... we did send the motivation through to the medical aid for further sessions, but we haven't had any... any feedback.” (P6)

“I know that we can motivate, but again now I've motivated for sessions on the 23rd of July and I still haven't received feedback.” (P5)

Due to the medical aid's non-response, the rehabilitation process was impacted on as the client was unable to attend regular rehabilitation sessions because of the limited sessions she had left as described by one therapist:

“We haven't seen N because she only has two sessions left with us like in the benefits and we want to use that for the driving assessment because that was one of the core skills she wanted to be able to do although she has this fear of driving.” (P6)

The limited medical aid benefits the client had, also affected her as she was unable to receive the necessary care from other medical professionals:

“... this is also causing extra stress on her and I that is also part of the problem... because, another environmental problem is the fact that her physiotherapy sessions ran out. So now they have to try and find... and now they didn't pay for a few (physiotherapy sessions).” (P6)

It was noted due to the lack of physiotherapy rehabilitation, the client started developing spasticity again and it affected her mood which affected the vocational rehabilitation process.

4.2.1.2 The work context of therapists affects the time period of the rehabilitation programme

In the previous subcategory, the researcher discussed the effects medical aids have on the rehabilitation process and what came through in this discussion was that medical aids have effect on the time period of the rehabilitation programme. This subcategory will aim to discuss how the different work contexts of the various therapists affected the time period of the rehabilitation programme. The general consensus was that that implementing the Model

of Occupational Self-Efficacy may be a time consuming process as indicated by the following participants:

“It does take up a lot of my time.” (P1, I1)

“... it is a very time consuming model...” (P1, I2)

“... so you’re kind of running against time in a way...” (P5)

“The disadvantages or the downfalls, which I could see in terms of private practice mostly, is that this process is going to take too long.” (P9)

The reasons the opinion differed from therapist to therapist was based on the various settings in which they found themselves. Therapists within community health centres found it difficult to implement the model due to time constraints and the resources to implement the model were not always available to them. One participant stated:

“In this current setting it is difficult, because of time constraints. I don’t always have the resources to visit places. I also don’t have the necessary contacts where I can network and say, can you take this client for a day.” (P4).

Another added that having daily targets to deal with made it difficult for him to be able to go do work visits as these do take up a lot of time:

“It’s a bit inappropriate for us to be doing a whole lot of onsite visits, when I have got a target of dealing with 14 patients a day... And it’s gonna take too much time. So there is a... there is a bit of a time challenge.” (P7)

The above quotes describe difficulties experienced within community health centre settings due to a lack of resources, time and having to reach daily targets as required of them.

While therapists in private vocational rehabilitation settings felt that the model fitted in with their goals as a vocational rehabilitation practice;

“... we really focus on getting people back to work. That’s really one of our main focuses, so it fits in well with our work ethic almost...” (P5)

They were of the opinion that their time challenges are related to financial / economic factors such as approval by medical aids: One participant stated:

“Time... because of the limited sessions granted by the medical aid.” (P5)

Another said:

“... but I think that it is sometimes difficult in private practice when you only have so much sessions and you want to move like this” [snaps fingers] (P6)

It was noted that therapists in private practice often put in extra work for which they were not getting paid. One said.

“I think we put in a lot of extra hours that we’re not getting paid for with this specific client so it makes it very difficult in private because time is money.” (P5)

Another reason identified which affected the time period of the rehabilitation was the availability of staff within the rehabilitation practice. One participant stated:

“... so at the moment I think I’ve got no staff and I can’t do the job I’m supposed to do.” (P3)

Another added:

“Because we are losing our OTT. We have already lost our data capturer... And then there are these reports that you always have to sit and do... a lot of writing. And there are people that you need to see.” (P1)

The above quote describes a therapist's (working in a tertiary hospital) difficulty with the loss of support staff and increasing administrative tasks which interfered with the time she could spend with her clients.

In light of the aforementioned, the researcher found that there are various factors in various types of work settings that affected the progress of the rehabilitation and how the model was implemented. Some of the major factors that came through were time constraints due to economic factors, administrative factors and staffing issues.

4.2.2 Therapists' experience with the model impacted on how the model was implemented

In this category, the researcher will discuss how the therapists' experience in using the Model of Occupational Self-Efficacy impacted on how the model was implemented. The researcher will explore the various aspects of the therapists experience related to their work environment and their experience with the model and how it affected the way they implemented the model.

"I think... personally... I think for a first client it's difficult to actually say because I think we're also getting used to the model... I think it's quite difficult seeing that we've only used the model now with one patient." (P6)

The above quote describes a therapist's (who was using the model for the first time with a single patient) feeling with regard to using the model.

4.2.2.1 How the different work contexts of the therapists affected the way the model was implemented

In this subcategory, the researcher will explore how the different work contexts of the therapists affected the way they implemented the model. Given the different nature of the various work settings in which the therapists worked, there appeared to be a difference in the way they implemented the model within their work settings.

While all the therapists started with assessment of the clients' functional abilities and functional components, the researcher found that their approaches in commencing rehabilitation differed. It was found that the therapists working in private vocational rehabilitation settings reported that their time was limited and as such, they had to get through the process quickly as described by one participant:

"... because I would start with assessment and because in this setting you don't have much time so you really make use of that one hour and you will start assessing right from the start to get an idea and to give feedback to the doctor... so it goes very... you need to work quickly..." (P5)

The limited time with clients in private practice caused the therapist to skip over stage one (reflection and introspection): Participant 5 stated:

"...so then I started looking at the model and so I kind of just jumped into it... you know... started just seeing her, started looking at the model and then I realised that I should have you know... placed a bit focus on introspection and reflection.... then I always back track a little but okay I should've started with reflection." (P5)

The above quote describes a therapists' action of skipping over introspection and reflection and later realising that if she had started with reflection first, she would have been able to identify the client's concerns and the client may have progressed more during the rehabilitation process.

While therapists in the private sector felt that they had limited time, therapists in tertiary hospitals appeared to have a lot more time with their clients which allowed them to go through the stages at a more relaxed pace, allowing them to be able to go through all the stages more thoroughly. One participant stated:

"I'd say I started with him March of last year... Well then it would be a year (P1)

Given the time participant had with her clients, she was able to take her clients through the stages of the model at a pace that was comfortable for the clients, incorporating various activities, life skills training, a work test placement and ultimately returning to work. She stated:

“... and it does give them progress and he helps them to develop... because then they have opportunities to learn how other people interact with each other so they can grow there again. And then obviously they would get positive reassurance if they’re doing something right and you know... they will be able to handle criticism much better... compared to before... I know the manager told me that he’s a very good worker. He’s hard working, he’s precise, because he doesn’t see that in the other workers...” (P1)

Participant 2, who was involved in research based practice, also had more time to work with her clients and had the same experience:

“We have actually been working with the client for about a year now. He is currently in stage four... He is permanent. He’s got a permanent position now.” (P2)

One therapist who worked in an acute neurosurgery rehabilitation facility indicated that due to the acute setting, she was not able to implement the whole model in the setting. She stated:

“We would never be able to use more than stage one.” (P3)

4.2.2.2 The amount of time therapists had to work with the model impacted on how the model was implemented.

In this subcategory, the researcher will discuss how the amount of time the therapists had worked with the model impacted on the way they implemented the model. It was found that therapists who had worked with the model for a longer period (more than one year) went through the stages one at a time and only reverted back to an earlier stage when required as described by one participant:

“So we... we a lot of introspection (in phase one)”...Phase two... we... he didn't have much functional physical deficits, but we did need to work... endurance was a little bit low, muscle strength was a little bit low, so we did activities in the work assessment unit to build up that strength... Uhm... when we moved onto stage three... we worked through a lot of self-reflection, problem solving with a realistic work environment. We got him into a position... a casual position within a company... He is now capable of working... He's in... He is in our phase four.” (P2)

The above quote describes how a therapists moved through the stages from stage one to stage four when the client finally procured permanent employment. Participants one and nine followed a similar format and only reverted back to previous stages as the need arose.

Participant one said:

So you can actually move... you can see that patient... like I said, upgrade, downgrade. Maybe still struggling with memory, a person can move back down. Or do a memory component with him in stage three (P2)

Participant nine added:

“...because she was placed with abled bodied people, she wasn't working as fast and she was in, doing the thing. That we had to go back and do the reflection...” (P9)

However, participants who had been using the model for a shorter period and who were introduced to the model for the first time at the workshop presented by the researcher had a different approach. Some participants skipped over stage one and moved straight into stage two:

“... so then I started looking at the model and so I kind of just jumped into it and... you know... but I think... I think I didn't start there (stage one) because I wanted to give the doctor some feedback as to her physical and cognitive abilities” (P5)

The above quote describes how a therapist who had only been using the model for a short while skipped over stage one as she wanted to give feedback to the referring doctor. Due to the nature of the private practice where the therapist worked, as well as the involvement of a medical aid, it is important to note that the limited amount of sessions the therapist had with

the client which may have impacted on the therapist's rationale when skipping over stage one.

And then in ten sessions they (the medical aid) want... but they don't want me to just give them things about reflected on this and we did this. They want to see, what have you improved... What have you done about this... What have you done about that? And that's, it's quite difficult to do if you have 1 hour." (P6)

Another participant decided to place her clients into learnerships (which served as a work test placement) while they were still in stage two. She stated:

"... before I was even at stage three, I already placed them. So I placed my two participants when I was in stage two... I actually placed them in the learnership"
(P8)

Her rationale for doing this, was because the learnerships offered her clients an income as well as support and work experience while they are going through their rehabilitation.

4.2.3 The earlier intervention commences, the better the outcome of the rehabilitation process

In this category the researcher will discuss the thought of some therapists who were of the opinion that earlier intervention would enhance the rehabilitation process and could possibly enhance the rehabilitation outcomes for their clients. One participant said:

"... but I think once the person has been discharged from hospital, it would be a good time to start." (P5)

Another stated:

"I do think that maybe you can start early when they are discharged from hospital. I think it should start there already." (P6)

The above quotes describes the therapists' perception that rehabilitation should start once the clients have been discharged from hospital in order for the client's to be able to do introspection and gain insight into their new circumstances.

4.2.3.1 Early participation in rehabilitation may enhance the client's ability to RTW

This subcategory will aim to describe the therapists' perceptions that early participation in rehabilitation may enhance the client's ability to RTW. The reasons for this perception varied among therapists. Some therapists were of the opinion that starting stage one sooner after the accident may allow the clients to gain better insight into their new circumstances. One participant stated:

"... but even so, if we could start earlier on getting the person to already build insight and understanding as to what we turn to work in and how it could be different." (P2)

Another added:

"And if I look at stage one... a strong belief in functional ability, the earlier you start working on it the better." (P5)

The above quotes describe the therapists' opinions that early intervention would allow the client to gain insight into their new abilities and how the way they do things may be different.

Other opinions were that if rehabilitation is started earlier, the client may still be able to remember what it would be like to be employed. One participant stated:

"... the worker role to still be fresh in their minds if they had a worker role before as opposed to waiting so long after." (P2)

There was also a perception that the later the client commences rehabilitation, the greater the chance becomes that they may become demotivated and despondent:

“Instead of you know, we staying at home, we becoming very despondent and then you know we loosing that time of gaining some experience in our new role as a worker. So I do, I strongly believe we could do it earlier on.” (P2)

4.2.3.2 A delay in participation in vocational rehabilitation negatively influences functional problems

In this subcategory, the researcher will aim to describe how delayed participation in vocational rehabilitation may negatively affect the clients’ functional problems. It was noted that the longer the client waited to participate in vocational rehabilitation, the more functional problems they may develop, thus influencing their ability to RTW.

“. He was assaulted in 2011 and... Uhm... resulted in a head injury and he’s a right hemi. He’s... he had a previous hand injury so that uhm adds to the non-functional use of his right hand. He mobilises using one crutch, using his left hand. Uhm... His gate pattern is irregular and, but he’s got good balance... he’s also got expression aphasia, severe.” (P4)

“he sustained his injury in 2011... he has communication deficit... a degree of aphasia... because of the time lapse between his injury and the time we actually received him at the work assessment unit... uhm... a lot of neuroplasticity had already occurred.” (P2)

In the above quotes, the therapists describe the deficits their clients still had after having suffered brain injuries between 12 and 18 months prior to the start of the rehabilitation process. It was evident that some of these clients had some severe difficulties which made the rehabilitation process even more difficult. One participant mentioned that starting intervention as early as six months post injury may reduce the chance of functional problems.

She stated:

“And I strongly feel this model... if we can go through stage one and stage two earlier... closer... you know... six month post injury... I think we can move quicker through those phases and even with neuroplasticity happening within those time frames, I think we can use that to our advantage.” (P2)

The above information gives the researcher a sense that therapists would prefer it if clients were referred to them at an earlier stage for rehabilitation. It would appear as though there are various reasons for these perceptions which are related to the clients' roles as workers, their motivation and functional problems that may occur following a TBI.

Theme 3

Table 4.3 Theme three and related categories

<p>Theme three</p> <p>Characteristics of the model that influenced the vocational rehabilitation process</p>	<ul style="list-style-type: none"> • Category 1: The stages of the model were helpful • Category 2: The value of activities used during the rehabilitation process
--	--

4.3 Theme three: Characteristics of the model that influenced the vocational rehabilitation process

The abovementioned theme aims to describe the characteristics of the Model of Occupational Self-Efficacy which facilitated or hindered the implementation of the model and the rehabilitation process. These characteristics include the stages of the model and how activities were used to inform the rehabilitation process.

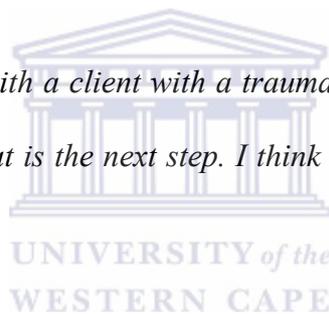
“But the model itself has helped a lot because of the clear four stages...” (P1)

The above quote describes the one participant's opinion that the stages of the model were clear and as such, she found it helpful to navigate the four stages in order to facilitate the rehabilitation and RTW process with her clients. The following categories will discuss the occupational therapists' experiences of the characteristics of the model which influenced the rehabilitation process: (1) the stages of the model were helpful and (2) the use of activities during the rehabilitation process.

4.3.1 Stages of the model were helpful

In this category, the researcher will aim to describe the therapists' perceptions with regard to how the different stages of the model were helpful and how it facilitated the rehabilitation process.

"I think that sometimes with a client with a traumatic head injury it can happen that you... you're not sure what is the next step. I think in that way the model can be very useful." (P5)



The above quote describes a therapist's opinion that due to the nature of a TBI, it may be difficult for someone to plan the rehabilitation process, but the clear four stages of the model allowed her to identify the next step in the process and guided her rehabilitation programme.

While some therapists perceived stage one of the model as the most difficult, it was also described as an important stage as it allows the clients to do introspection and helps them to identify their own difficulties, thus helping the therapist develop the rehabilitation programme. One participant stated:

"I did stage 1... as the journaling right? And the uhm and the self-reflections and all of that. We done that, very difficult to do." (P4)

Another added:

“Stage one is... like I said... I think it is the most important stage because without that stage, without the self-reflection and introspection of themselves they never get to see ... The most difficult, but also the most important I would say is stage one.” (P1)

The above quotes give an indication that while some therapists found that that introspection may be difficult, it was also thought to be an important part of the rehabilitation programme as it may help the therapist inform the rehabilitation process.

While some therapist found stage one to be difficult, other described it as an easy process.

One participant stated:

“I would say in the start, very easy uhm that wasn’t an issue, very easy in the beginning with stage 1 and 2.” (P10)

Another participant was of the opinion that this stage was easier to implement with certain individuals:

“For certain individuals I found stage 1 to be easy going uhm because, and I think it’s also part of their uhm internal ... their personality type.” (P8)

The above quote alludes to the therapist’s opinion that the first stage of the model was easier to implement due to her clients’ personalities. However, other factors which may have affected stage one (introspection) may also be related to the clients’ motivation levels (do they want to go through the rehabilitation process), their compliance (do they do their reflections as homework) and even the pathology of TBI which often affects the clients’ cognitive ability as described by another participant:

“... is stage one... because of the insight level... depending on the insight level and motivation of the client when they come in.” (P1)

This category aims to describe the participant's perception of how the stages of the model were helpful during the rehabilitation process. This category is further described by subcategories related to the stages of the model being clearly defined and the dynamism of the model.

One participant felt that the stages were quite lengthy and that the model can become very time consuming. She stated:

“So I think the time factor is definitely something to take into consideration because otherwise I think these phases can be quite lengthy.” (P5)

4.3.1.1 The stages helped inform the rehabilitation process

In this subcategory, the researcher will aim to describe how the stage of the model informed the rehabilitation process for the therapists. The model guided the therapists with the planning of their rehabilitation programmes and therapists appeared to be clear on what steps they should follow in the different stages. One participant stated:

“I did stage one as the journaling... and the uhm... and the self-reflections.” (P4)

Another added:

“Stage one is... like I said... I think it is the most important stage because without that stage, without the self-reflection and introspection of themselves they never get to see... like they never get to go beyond their set ways.” (P1)

The above quotes give an indication that therapists were aware that stage one required the clients to journal and do self-reflections in order to develop self-awareness and insight into the physical and cognitive difficulties with which they may have struggled.

“So if we're working on memory, like in stage two, we have more component... direct component interventions.” (P1, II)

“Stage two was a lot of cognitive activities, a lot of memory activities. I gave him a lot of home programmes as I call it... home exercises.” (P1, I2)

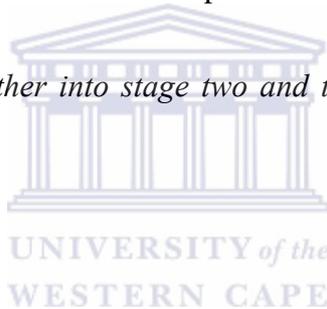
The above quote describes a therapist who allowed the model to guide her intervention and as such, in stage two she was aware that she had to work on her client’s cognitive components, as identified during the reflection of stage one.

During this stage some therapists did life skills activities:

“Uh... ja... so she’s currently in stage two going into stage three and the activities I’ve done is mostly life skills kind of things...” (P10)

While others chose to focus on work skills development. One participant stated:

“When he progresses further into stage two and three we will use computer based tasks a lot...” (P2)



Another stated:

“We did the origami ’coz I wanted to... because we are preparing her for uhm ... doing administrative at work, I wanted to see how she would cope with having the instructions on a piece of paper and uhm... how much feedback she needs.” (P5)

The above quote describes how a therapist used paper based activities to develop a client’s administrative skill, which she would require in order to return to her previous job.

While not all participants were able to take their client through the whole rehabilitation process using the model of occupational self-efficacy by the end of this research study, most therapist were clear that the client should be placed in a work test placement in stage three.

While some had successfully placed their clients in work test placements:

“During stage three we worked a lot... a lot with the SSDV department and gave him a lot of social interaction and instruction, retention and working in a setting, required him to produce certain products in that time and then obviously.” (P1)

“But his still in stage 3 cause we had, obviously this was his first job ever and he used it to, gain a little more experience.” (P2)

The above quotes suggest that therapists were aware that clients needed to be placed in work test placement in order to further develop the work skills that were addressed in stage two, within a practical environment.

Other therapists had some difficulty placing their clients in work test placements as described by one participant:

“Well when we came to stage, where we currently stuck at is stage 3 and that was definitely difficulties with placing.” (P10)

The final (fourth) stage of the model which related to the client having maximum independence in the work place guided the therapists in placing their clients in a job. One participant said:

“The first participant, we have actually been working with for about a year now. He is currently in stage four.” (P2, I1)

“So he’s at stage four... where he is working independently, he no longer needs us to support him within the work place.” (P2, I2)

Another stated:

“Because we are now finished... we are at stage four already and he’s in a work and he is fine.” (P1)

Another added:

“So stage 4 took quite long for her... like for her herself because of the dependence part... She works... well we placed her in Mcdonalds..” (P9).

“So uhm ja. We worked with them and then for me to go through the whole process myself of understanding what the cashiers role was and what the food processing, in making and all of that...”(P9)

During this stage of the model, therapists liaised with their clients’ superiors at their places of work in order to provide guidance and support. One participant stated:

“...initially we did monthly feedbacks with him at the workplace, as well as with the HR manager at the work place.” (P2)

Another stated:

“In stage four it was a lot of liaising with the manager and sending him brochures of what we do in the work assessment unit and how it can benefit him and just to see... and just to see where he is coming from...” (P1)

The aforementioned information suggests that the therapists were able to identify the stages which guided their rehabilitation programmes.

However, some of the therapists felt that some of the terminology in the model was not clearly defined. One participant stated:

“Uhm...I mean, from a therapist point of view, the model uhm is I mean it’s not exactly straight forward because of the terms that explains the steps.” (P10)

Another added:

“I think I’ve always said, it’s kind of a vague step stage model, which I understand that its respecting the therapists’ skills and uhm... for... gives them freedom to do

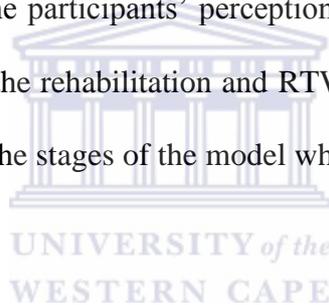
things their way, which is understandable uhm, but it might be helpful to have more a little bit more concrete guidelines.” (P7)

One participant raised concerns with regard to defining work, having measurable goals and identifying assessment tools in order to assess if goals have been reached. :

“... ‘cause I find these stages are uh the goals are not measurable, so I don’t know when he’s achieved... The lack of specific assessment tools to find out where the patient is, that to me that is quite essential... The definition of work should be provided... Because there’s... volunteer work... Work for an income. There’s different types of work...” (P7)

4.3.1.2 The model is dynamic: moving back and forth between stages facilitated the rehabilitation process

This category aims to describe the participants’ perceptions with regard to the dynamism of the model and how it facilitated the rehabilitation and RTW process. It allowed the therapist to move back and forth between the stages of the model when the circumstances needed them to do so:



“... the model is so dynamic and the person is dynamic.” (P1)

“... the models dynamic it allowed us to move between stages.” (P2)

Another participant agreed and added that the model allowing her to move back and forward was less anxiety provoking for the clients:

“The model allows us to be able to move to and from. And because of that dynamic aspect of the model, they find it less anxiety provoking. It’s very approachable and I think they appreciate the fact that it is dynamic.” (P2)

Due to the model being dynamic, it was possible for therapist to go back to the stage of introspection if the client appeared to need that, even though he may have been in stage three where he was placed in a work test placement. One participant stated:

“... what I liked was, you know from a psycho-social point of view we could be in one stage, however from a physical task... you know actual task point of view, we could be in a different stage... That was very nice within the model. So just because in stage... he was in stage one from a psycho-social point of view, it didn't keep everything behind, we could still move on and work on other components.” (P2)

The above quote describes a therapist's experience with her client who had some psycho-social issues that needed to be worked through, but physically he was ready to go through the rehabilitation process. As such, due to the model being dynamic, she was able to work through the client's physical difficulties while helping the client work through his psycho-social issues.

Another participant stated that when her clients lapsed at any point during the rehabilitation process, she was able to go back to a different stage in order to work on the components where the client was having problems. She added that when the client becomes better, she was able to move forward as required:

“And like I said the nice thing about the model is that when the client lapses is that you just go back and go forward again. If they leap then you go there, if they lapse again then you go there. It's like never ending.” (P1)

WESTERN CAPE

The therapists found that the model being dynamic allowed them to cater to the needs of the clients to some extent. One participant integrated the steps of the model in order to accommodate her clients' needs:

“... the whole model how I have applied was quiet integrated. I didn't go to stop at stage 1 and go to stage 2, stop at stage 2. I still find myself going back, and... and because the... some of the participants needs.” (P8)

It was noted that some clients needed more time to do introspection even though they may have already reached stage three or four of the model where they were in a work test or in a job. The model allowed the therapist to go back to a stage when it was required as described in the following quote:

“... and also if you get to stage three then you say oh she needs more time to... she need more time to, she seems to be struggling with this specific aspect... you can go

back to stage one again. So it's not that stage two... you are in stage two and you have to stay at stage two. If you need to go back to stage one even if you in stage four and she is back at work and she need something introspection, so you go back. That's what makes the model so nice work with.” (P5)

4.3.2 The value of activities used during the rehabilitation process

In this category the researcher will aim to describe how therapists used activities during the rehabilitation process and the value of introspection and journaling during the vocational rehabilitation process.

“... the activities that we mostly used was getting her to feel empowered...” (P10)

The above quote describes a therapist's opinion that the kind of activities that she used, such as life skills, empowered her client. Activities were used in many ways for various reasons in order to empower the clients. Some activities were related to enhancing life skills while others were used for cognitive or physical rehabilitations.

4.3.2.1 The process of how activities were used during the rehabilitation process

In this subcategory, the researcher will aim to describe the types of activities used by various therapists and how these activities were used to enhance the clients' abilities. Some of the therapists used a lot of cognitive activities to improve their clients' cognitive deficits:

“...stage two was a lot of cognitive activities, a lot of memory activities. I gave him a lot of home programmes as I call it... home exercises... at home where he had to read pieces of the newspaper and then come back to me and tell me what he remembered and then we would upgrade it by giving... I would give him more specific... I would ask him for more specific detail from that newspaper.” (P1)

The above quote described how a therapist used every day items such as a newspaper to improve her client's memory. She also described how she graded the activity by asking him to give her more details with regard to what he read. She also used every day scenarios as going to shop in order to help develop problem solving skills:

“... it also very... like scenarios... say ... okay... patient x... if I was in a store and the chocolate is R7 and I have a R100. You know, those type of examples. Just for problem solving, reasoning and that.” (P1)

Other activities used to improve cognitive functioning included playing card games, concentration games, memory games and playing dominoes as described by participant one:

“And what I’ve seen helps the most is that... infinity lines... those walks and getting them to stare at a clock while they are busy doing that and getting them to stretch out, coz then they really have to concentrate. And it’s executive function that they have to do that. You’d be surprised how often they actually get it wrong. That helps a lot... then of course it’s the picture diagrams... so this is matching memory... So these are memory games. So, card games, throwing darts, trying to concentrate on that... go fish... five cards... you know all those card games that you really need to concentrate on what you’re doing... even dominoes. Coz it’s that basic numeracy and accounting.” (P1)

“...what I did in that session was an origami session. Because I wanted to look at her uhm... planning and her completion of the task.” (P5)

In addition, the therapists also used physical exercises, as well as adaptation of tasks to help enhance gross motor functioning:

“The physical ones (components) is like I said just the gross motor exercises... weight bearing, balance, mobilisation, adaptive methods of doing things.” (P1)

“... endurance was a little bit low, muscle strength was a little bit low, so we did activities in the work assessment unit to build up that strength.” (P2)

“... mat crawling or responsive reaction time. Lots of balls, balance things...” (P4)

Other activities used were those that would enhance work skills such as typing a CV, administrative work and simulated tasks: One participant stated:

“I used the typing programme to type their CV’s... type his own CV.” (P1)

Another stated:

“I think that’s what she did with her yesterday which is, you know... going more towards administrative tasks and actual clerical administrative work.” (P5)

Another added:

“So it’s quite specific simulated tasks. We do a lot of cleaning tasks. And these are realist ones it’s not just made up” (P2)

The above quotes suggest that therapists were able to use activities that would enhance the clients’ skills and which also gave them skills which they would be able to use in the “real world”. Other work skills therapists addressed were budgeting and travelling:

“So I would do things with her, where I would meet her at home... uhm... walk with her to a taxi and then take, letting her get on, on her own and then driving to the McDonalds and meeting her there. So it was like community mobility. It was budgeting, so how much do I need for taxi fee, for my lunches all of those things.” (P9)

Another important aspect that therapists worked on were empowering clients with life skills.

One participant stated:

“... was his anxiety about entering the totally new environment uh situation he was not use to... a bit of anxiety management, stress management, so it’s a lot of life skills we had to do and it was so interesting.” (P2)

The above quote describes a therapist’s decision to help develop anxiety and stress management skills with a client who was about to go into a new environment in order to help him transition into his new worker role.

Other life skills addressed during the rehabilitation process included promoting insight, assertiveness and communication as described in the following quotes:

“I found from those workbooks you had about knowing yourself ...which I did give him in order to try and promote his insight.” (P7)

“In my sessions with them, we worked on communication style, assertiveness and self-expression and she took that feedback and if you could see her today.” (P8)

It was noted that grading of activities was an important aspect of activities during the rehabilitation process: sometimes when clients were doing well with the activities given to them by the therapists, the activities were upgraded. One participant stated:

“So they were so concrete and then we... we grade. So its gets graded up too more abstract and more items.” (P3)

However, if a therapist found that the client was struggling in one of the higher stages, then the activities or placement would be downgraded. This downgrading was made possible by the dynamism of the model.

“And if I see they not coping with the work setting, then I will downgrade them again, back.” (P1).

4.3.2.2 The value of journaling and reflection throughout the rehabilitation process

In this model, reflection and journaling not only forms part of stage one, but is a process that can be followed throughout the rehabilitation process. While some therapists realised early on that reflection may add value to the rehabilitation process, others only came to that conclusion after using the model for a longer period.

“I think I realised with N the importance of reflecting...” (P6)

The above quote described a therapist’s realisation that reflection is of great value to a client when starting to reflect after almost three months in rehabilitation and had not made any

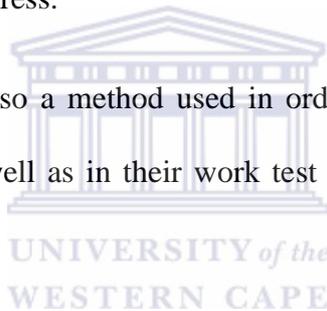
progress and it was discovered that the client was afraid to drive. It was noted that this was of great concern to the client and without having worked through these feelings, she was unable to focus on anything else.

“So now we realised that you know it doesn’t seem that she has worked through that... Uhm those emotions... Uhm... and we are going to be stuck in this phase if we don’t actually address you know... in some way.” (P6)

“... she kind of moved back (did reflections) and she actually took leaps and bounds forward...” (P5)

The above quotes described therapists’ experiences that only once their clients were able to reflect on their fears and difficulties and worked through their emotions, was the rehabilitation process able to progress.

Reflection and journaling was also a method used in order to determine how clients were coping in the rehabilitation, as well as in their work test placements and learnerships. One participant stated:



“... they need to journal every day. So uhm... their highs and the lows and their difficulties and, and you know to reflect on what, how they coping.” (P8)

One participant was of the opinion that group reflections may help the clients as it allows them to share their experiences with each other, learn how others with similar deficits were able to cope and lean on each other. She stated:

“Maybe, it’s that uhm... maybe instead of having it as an individual reflection thing, is having a group of them come together and doing it as a group. So that I’ve got, not just the support of the facilitator, but the support of other members and maybe we can lean on each other in that way.” (P9)

It was noted that clients with traumatic brain injuries positively responded to journaling. One participant thought that this may have been due to the fact that they were able to express themselves. She stated:

“... but TBI’s really respond to journaling. Wow! Because I think no one listens to them. So it’s like a chance for them to write down exactly what they think. Even if sometimes their thoughts are distorted.” (P1)

In summary, this subcategory describes how journaling and reflection by the client can inform the rehabilitation process, not only by clients identifying their own deficits, but also how clients are able to learn from each other while reflecting during group therapy.

Theme 4

Table 4.4 Theme four and related categories

<p>Theme four</p> <p>The job market and the perceptions of employers related to disability affects the vocational rehabilitation process</p>	<ul style="list-style-type: none"> • Category 1: Employers perception of, and attitudes toward TBI influenced the vocational rehabilitation and RTW process • Category 2: The job market influences the client’s ability to RTW
--	---

4.4 Theme four: The job market and the perceptions of employers related to disability affect the vocational rehabilitation process

The above-mentioned theme is related to how the perceptions of employers with regard to disability and the job market affects the vocational rehabilitation and RTW process. These perceptions are related to the employers’ attitudes and understanding toward disability.

“It’s the diagnosis to be honest with you... brain injury... that word... brain injury makes it difficult for them to understand... not realising that there’s more ‘normal’ people that would ‘hak uit’ (lose their temper) compared to people with TBI’s.” (P1)

The above quote describes a therapist’s thoughts that while the possibility to lose their temper may exist for someone who suffered a TBI, there is still a possibility for someone who is considered to be “normal” to also lose their temper. The following categories will discuss how the perceptions of employers and the job market influenced the rehabilitation process: (1) employers’ perceptions and attitudes toward traumatic brain injuries and (2) how the job market influences the RTW process.

4.4.1 Employers’ perceptions of, and attitudes toward TBI impacted on vocational rehabilitation and the RTW process

In this category the researcher will discuss how the employers perceptions of and attitudes toward TBI impacted on the vocational rehabilitation and RTW processes. Employers understanding of TBI impacted on the work environment of the client. One participant stated:

“... they would ask me really questions like ‘is N gonna stab someone?’” (P1)

There appears to have been a perception that people with TBI are violent and that placing them in an environment with others may place other employees in danger.

“At first the environment wasn’t so great because they didn’t understand TBI. But as the days went by now... the more sessions we got, they were also more accepting of him. And that also helped a lot.” (P1)

In the above quote, the therapist describes how a change in the employer’s understanding of TBI changed the environment in which the client worked, and as such, he became more confident and developed a positive attitude toward being employed in the open labour market.

Another concern was that employers of clients who were previously employed, were not willing to take the client back or make accommodations in order to accommodate the client in the work place. One participant stated:

“She does not comply with necessarily that idea of what she use to do and I don’t think the company understands that. You know, they want her back the way she was and they don’t want to accept that things have changed and the only way we can try and get her there is if they open up and say, you know what, come and do filing, but they don’t even wanna do that.” (P6)

The above quote describes how an employer wanted their employee to RTW, but were unwilling to make accommodation for her in order to RTW even if it was in a lesser capacity. They wanted her to RTW and be able to do what she previously did in spite of her current deficits.

Another participant stated:

“I almost think it’s because they want a person to do a job without needing the person to have adaptations ’coz that’s basically what the clients need. It’s for the employers to understand that this person can do the job, however the person might need a notebook with them all the time to write down what they need to do” (P10)

It was noted that the reason employers may have difficulties with understanding TBI is because it is not always something that you can see. One participant stated:

“... ’coz brain injury is something you won’t physically see most of the times.” (P10)

However, if employers were informed about clients’ disabilities, the clients were able to cope better within their jobs / work test placements.

“So what I’ve noticed is, that they coping quiet well at the work placements and uhm... because of communication and explaining to their supervisors about their disability and the difficulties they having or the initial problem of short term memory and following verbal instructions.” (P8)

The above quote describes how she took time to explain her clients' disabilities and needs to their supervisors and with the understanding of these disabilities, the supervisors were able to accommodate the clients and help them cope in their work environments.

Some participants felt that having prospective employers on board and having them understand TBI and disability may facilitate the vocational rehabilitation process. One stated:

"I think that's the, that's the key here... employers.... having the model work" (P2)

Another added:

"I think also you need to get the employer involved." (P6)

The above quotes suggest that having employers who understand TBI and the vocational rehabilitation process may enhance the RTW process.

4.4.1.1 Employers' attitudes toward TBI and disability impacted the rehabilitation process and RTW

This subcategory described how employers' attitudes impacted on the rehabilitation process and RTW. It was noted that employers with positive attitudes toward TBI and disability facilitated the rehabilitation process and employers with negative attitudes toward TBI and disability hindered the rehabilitating and RTW process. One participant stated:

"I think I was lucky to get such an accommodating manager, because there were others that were just not so accommodating... during stage three we worked a lot, a lot with the SSDV department and given him a lot of social interaction and instruction, retention and working in a setting required him to produce certain products in that time and then obviously... a lot of liaising with the manager at I&J which was very accommodating." (P1)

The above quote described how having a manager who was accommodating in the work place was allowed a client to return to his previous place of employment despite having suffered a TBI. The manager took the time to listen to the therapist who explained the client's

disability, as well as the rehabilitation programme which allowed him to make an informed decision with regard to the client returning to his previous place of employment.

It was noted that when employers do not understand the disability, they may become fearful of the disability as described by one participant:

“I just think it’s the word disability that’s just scaring them off.” (P8)

Sometimes employers’ negative attitudes were evident in their lack of support toward the client, which hindered the rehabilitation process. One participant stated:

“... because I feel that we haven’t received much support from the work, whenever I want to make contact with them I have to call them frequently and e-mail them to get back to me and they just don’t... I think if I got more support from the work then we would have been much better by now.” (P5)

One participant stated that her client was receiving threats from her employer:

“... she mentioned that work she had in this time, she had an appointment with the employer and then they started with threats of uhm... what if something comes to order then she needs to write an exam and starting, trying to frighten her, we don’t know what they were up to.” (P6)

The above quote describes how a client felt threatened that she might lose her job as a result of her injury and that she might have to write an examination for purposes not revealed to the client. It should be noted that this client had still not returned to her previous place of employment at the conclusion of the data collection process for the current research study.

4.4.1.2 Employers with an understanding of TBI aided the clients to RTW

In this subcategory, the researcher will aim to describe how employers with an understanding of the disability may aid a client’s RTW. There appeared to be a perception that employers who did not understand TBI hindered the rehabilitation process while employers who have an understanding of this condition facilitated the RTW process.

“The moment you put that thing on, this is a... this is a worker with a disability or impairment, then it’s like, oh no, you know we can’t, but they don’t... I think it’s a lack of knowledge of you know, possibilities that people have uhm... a lot of skill, a lot to give with, in spite of disability.” (P8)

In the above quote, the therapists indicate that employers who have a lack of knowledge of disability are sceptical about employing people with disabilities. They often do not take into account that the person might have the skills to do the job in spite of their disability and that all they may need is a slight adaptation in order to accommodate them.

It was noted that a TBI was confused with other disabilities:

“Firstly I don’t think they understand what TBI is and uhm... how a person would present and how a person would work after having the TBI. TBI often... you know we had employer recently from a big company, you know one of the top five companies in South Africa and they completely confuse TBI with intellectual disability.” (P2)

Another participant was of the opinion that if employers understand TBI better, they may be able to handle employees with this kind of disability differently and make the work experience more pleasant. She stated:

“Because people would stop treating him as if he was disabled which helped a lot.” (P1)

One participant states that clients with TBI were considered to be high risk in the work place despite adaptations made to accommodate disability. She stated:

“...he’s learned to adapt and he probably can be a good welder, but no one is giving him the opportunity, ‘cause no one wants to take the risk.” (P4)

It was noted that even though some employers may be willing to employ a person with a TBI, they do not understand the limitations a person with a TBI may have when it comes to performing certain jobs. One participant stated:

“But not all employers understand that, they willing to take on persons with TBI uhm... but they’re not always understanding of the fact that ok, you can’t work... you can’t necessarily nightshift and produce the same quality of work as you would have if you were day shift.” (P2)

4.4.2 The job market influences the client’s ability to find employment

This category will describe how the South African job market influences client’s ability to find employment in the open labour market. It was noted that there are very few jobs opportunities for disabled people in South Africa. One participant stated:

“... the only thing is obviously, contextually our job market is limited.” (P2)

The above quote indicates that jobs in South Africa is scarce and finding employment as an able bodied person is already difficult. As such, the limited jobs available in South Africa makes it even more difficult to find employment for people with disabilities.

4.4.2.1 The availability of jobs for people with disabilities hindered the rehabilitation and the RTW process

In this subcategory, the researcher will discuss how the lack of jobs for people with disabilities affected the rehabilitation and RTW process. This aspect was considered to be a very difficult part of the model: One participant stated:

“... the most difficult part of the model, currently... is the lack of jobs out there to accommodate people with TBI” (P2)

Another added:

“Well definite barrier is placements (jobs) that are available” (P10)

It was noted that even though a client had a job prior to sustaining a TBI, her employer was unable to accommodate her in a different, less intense job during her rehabilitation, as such a job did not exist within the company. A participant stated:

“The problem is however they are keep on saying that they don’t have any, administrative positions available.” (P6)

One of the participants was of the opinion that the model does not accommodate for instances when a client cannot be placed in the open labour market, while another felt that the model would be more applicable if someone was already in a job prior to sustaining the head injury.

“And... and also this model doesn’t accommodate if a person who can’t be placed in a job.” (P4)

“And I find it most applicable if a person has got a job... So if a person doesn’t have a job or they’ve lost a job before they had the head injury, even if they were previously employed, then I can’t go and get the job description, ‘cause there isn’t one.” (P7)

4.4.2.2 Learnerships act as facilitators in the rehabilitation process

Some of the participants referred their clients to learnership programmes as part of facilitating the RTW programme:

“I have referred him to Siyaya or the learnership because he’s at the stage where he... he will benefit from that.” (P7)

“... the one participant no longer attended the group as much, however that participant has been placed in a learnership programme.” (P10)

While another participant’s clients were in learnerships, but they were also working

“..., the three ladies that I’m seeing, that I’ve taken through the model are in a learner ship, but they also work at a placement.” (P8)

The perception was that learnerships would allow clients to find work easier, that it offers ongoing support for people in the learnerships and that and that these learnerships practices employment equity which makes it easier for people with disabilities to find jobs.

“And I also think the hands-on support from me and the co-ordinators also, you know, is helping them to... to... ja to become more successful... So I think what was really helpful is that there is ongoing support” (P8)

“...being under the wing of the learner ship and going out and looking and sourcing work was more easier, because we had this form of this certified agency and this what we offer and this is how we support the learner... the institute also practices the employment equity and the you know reasonable accommodation support employment.” (P8)

4.4.2.2 Educating employers about the model and the RTW process

During the research study, the participants indicated that there is a need to educate prospective employers about the model and the RTW process, as well as TBI. It was evident that some of the prospective employers did not understand the nature of the traumatic brain injury – as previously discussed – and that some of them were unsure of what to expect when employing someone with a disability; a TBI in particular. As such, the therapists felt that there is a need to educate employers with regard to the model of occupational self-efficacy and the RTW process. One participant did exactly that in stage four:

“... in stage four it was a lot of liaising with the manager and sending him brochures of what we do in the work assessment unit and how it can benefit him and just to see... and just to see where he is coming from.” (P1)

In the above quote the therapists indicated how she was constantly in contact with her client’s manager and giving him resources that would help him understand the client’s medical condition and also the rehabilitation process the client underwent to get to a point where he could finally RTW.

While it was noted that the law does support the employment of people with disabilities, therapists felt that the final decision still rested with the employers. One participant stated:

“...there’s lots of support from the law’s side in the equity act, so she’s got a lot of support legally but somehow the work has just not been able to assist in the process.” (P5)

Another added:

“From a uhm... legislative point of view, we have a leg to stand on, but you know it still resides with the employer.” (P2)

It was noted that therapists should play a more active role in advocating to employers and that employment laws should be applied more stringently. One participant even suggested that incentives other than BEE points could be offered to employers who are willing to employ people with disabilities. She stated:

“... I think we should just be more forceful in our advocating with the employer and using... bringing in laws and you know motivate through legislation... and also try and recommend incentives to employers other than just the BEE points.” (P8)

Another approach was to educate prospective employers and to offer them support when they decide to employ a person with a disability. It was recommended that employers should be educated on the disability, TBI and the model of occupational self-efficacy. This might allow them to have more insight into the disability and allow them to be more supportive of their employees with disability:

“I would say that the enablers is: Like having employers on board, being able to talk them through the process, making them understand what has actually been happening and them being so supportive of the clients.” (P9)

In summary, there appears to be a need for educating employers with regard to TBI, disability and the model of occupational self-efficacy, as well as a need for advocating for clients by the therapists to the extent that when employers find out that a prospective employee has gone through the programme, that they would know what to expect from that employee as described by Participant 1:

“If I say to an employer model of occupational self-efficacy, they must know what it is. That’s how marketing must be.” (P1)

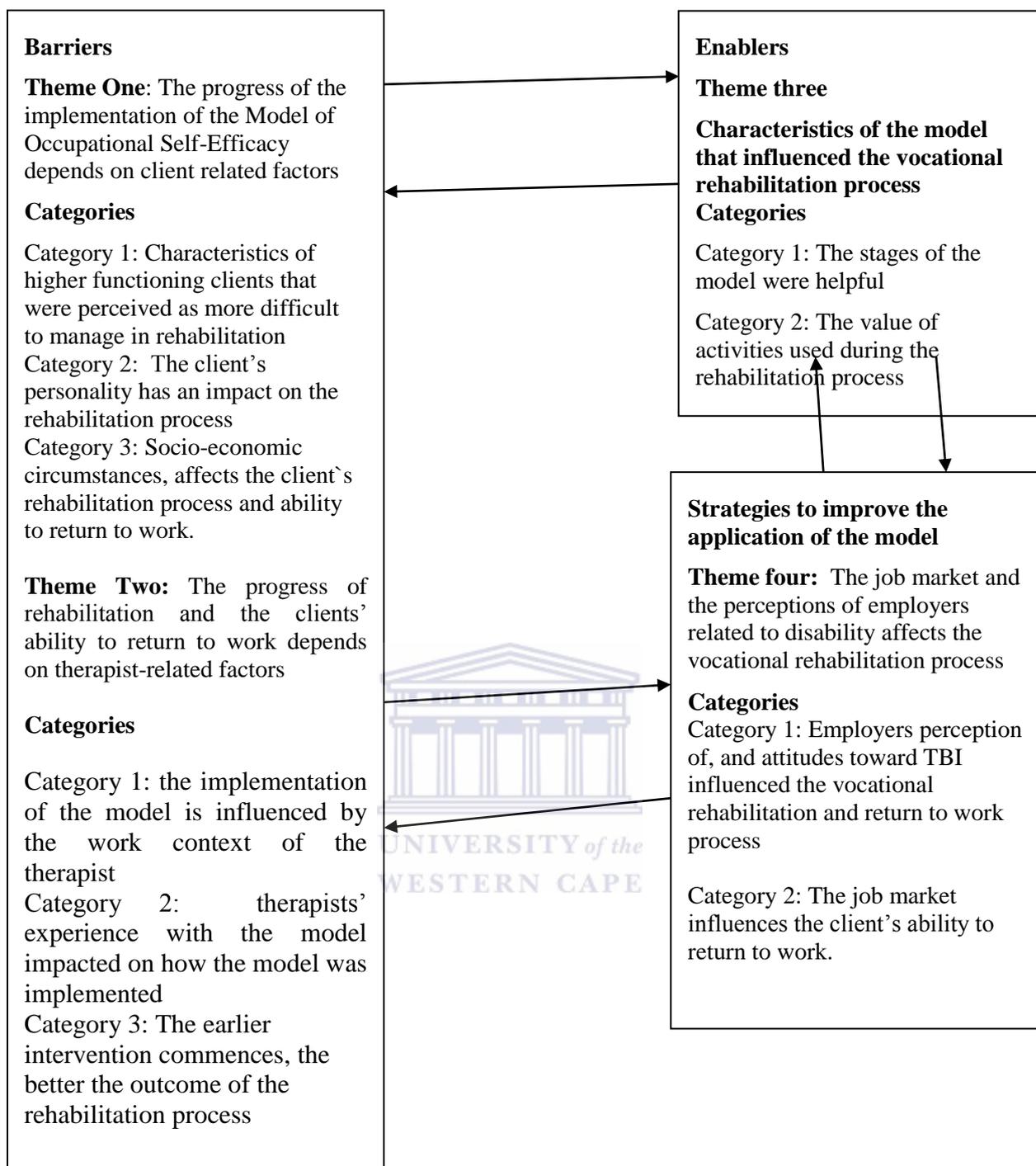


Figure 4.1 Diagrammatic representation of themes and categories

By drawing on the occupational therapists experiences and perceptions with regard to using the model of occupational self-efficacy when returning clients to work, the objectives of the research study was achieved. Theme one and theme two described the participants’ experiences and perceptions of the barriers related to the use of the model in practice. Theme three presented the participants’ experiences and perceptions of facilitatory factors related to

the use of the model in returning individuals with a traumatic brain injury to work. Theme four looked at possible strategies that could be employed to improve the application of the model in practice.

The diagrammatic representation (figure 4.1) reveals the interactions between the themes. The barriers (themes one and two) and facilitators (theme 3) are shown as influencing the development of strategies to improve the application of the model. When the facilitators are able to reduce the impact of the barriers and overcome them, the model can be implemented successfully. However, in the event that the barriers reduce the impact of the facilitators, it becomes more difficult for the model to be implemented successfully. In such cases, it would be important to implement strategies to improve the application of the model, thus enhancing the individual with the TBI's ability to RTW.



CHAPTER FIVE

DISCUSSION

5. Introduction

In this chapter the researcher will discuss barriers and enablers the Occupational Therapists experienced which influenced the implementation of the Model of Occupational Self-Efficacy (MoOSE) in returning individuals with traumatic brain injury to work. It will also aim to highlight some strategies that may be employed in order to enhance the implementation of the MoOSE and the RTW process by means of educating employers and exploring how legislation could be used to enforce the employment of people with disabilities with a focus on TBI.

5.1 Barriers

The World Health Organisation [WHO] (2001) defined barriers to be factors that through their absence or presence in an individual's environment limit the individuals optimal functioning and creates disability. These factors, include an inaccessible physical environment, the absence of relevant assistive technology, and negative attitudes of people towards disability, as well as services, systems and policies that are either non-existent or that hinder the involvement of all people with a health condition in all areas of life. In this research study, a barrier refers to an obstacle to the progress of the implementation of the MoOSE with clients with a traumatic brain injury and the RTW process. The results of the study revealed that there are various barriers which interfered with the implementation of the MoOSE during the rehabilitation process. Theme one described client related factors which served as barriers for the implementation of the MoOSE. These factors related to the clients' level of functioning, their insight, motivation levels and socio-economic circumstances. Theme two described therapist related factors which served as barriers for the implementation of the MoOSE. These factors include the description of how time and medical aids impacted

on the implementation of the model within their various practices whether in the private sector or in the public sector.

5.1.1 Low motivation levels and poor insight

The World Health Organisation WHO (2001) defined motivation as “the mental functions that produce the incentive to act” or “the conscious or unconscious driving force for action” and Chervinsky *et al.* (1998) and Gardner (2012) described it as an important factor which affects the progress of rehabilitation. In addition, Chervinsky *et al.*, (1998) stated that motivation relates to the person’s desire to decrease physical discomfort caused by a deficiency in basic needs and / or remove the threat to health and survival. According to the findings of theme one, category one, subcategory one, therapists were of the opinion that clients’ motivation levels affected the implementation of the MoOSE and the RTW processes of clients with TBI. As such, the researcher will now explore how motivation is linked to successful vocational rehabilitation and RTW.

Low motivation is often reported as the most distressing symptom of traumatic brain injury (Oddy, Catran & Wood, 2008). According to Kant and Smith-Seemiller (2002), apathy and low motivation can be a great challenge and interference in the rehabilitation process. Oddy *et al.* (2008) suggested that a loss of motivation often manifests during rehabilitation and difficulties with participation in everyday life which often includes returning to work. Anderson, Gunderson and Finset (1999) and Kant and Smith-Seemiller (2002) reported that disengagement, a lack of insight and a lack of concern are often associated with brain injury. In a study by Van Velzen, Van Benekom, Van Dormolen, Sluiter and Frings-Dresen (2011), 10 out of 12 participants identified motivation and a strong will to RTW as great influences on the RTW process. It could therefore be argued that motivation or the lack thereof plays a vital part in the RTW of individuals with TBI.

The participants of the study agreed that low motivation levels and poor insight often interfered with the implementation of the MoOSE, the rehabilitation process and RTW. It was noted that even though some clients had high motivation levels, if they presented with poor insight into their condition or the value of rehabilitation, the therapist had great difficulty facilitating the rehabilitation process with them. This is supported by Chervinsky *et al.* (1998) and Przewoźnik, Rajtar-Zembaty and Starowicz-Filip (2015) who were of the opinion that motivation is closely tied to rehabilitation potential and outcome. Shames Treger, Ring and Giaguinto (2002) were of the opinion that motivation is necessary for successful rehabilitation and emphasised that rehabilitation efforts must also focus on increasing self-awareness and motivation (Shames *et al.*, 2007). Berglind and Gerner (2002) indicated that motivation for rehabilitation or to RTW is of great importance in rehabilitation. In addition, Shames *et al.* (2007) explained that impaired self-awareness limits motivation for treatment and interferes with appropriate goals selection, thus affecting a favourable RTW outcome. Anderson *et al.* (1999) indicated that a lack of insight and consequently low motivation can pose major obstacles to rehabilitation efforts. They noted that self-awareness and emotional involvement are fundamental aspects of psychotherapeutic relations.

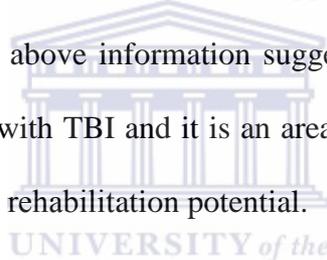
Owensworth *et al.* (2007) reported that individuals with high self-awareness displayed high motivation, while individuals with low self-awareness displayed with low motivation. Anderson *et al.* (1999) added that motivation is closely related to apathy, poor self-awareness and denial and that the neglect of these aspects of neurobehavioural change may cause unrealistic expectations in patients.

Owensworth and McKenna (2004) for individuals with TBI loss of motivation and drive may be a direct result of the injury or low motivation can arise from the individual's psychological reaction to the effects of the injury. As such, rehabilitation programmes also need to target deficits in motivation and emotional disturbances. In addition, factors such as hostility,

expectations, locus of control, individual values, and previous knowledge of medical information have been associated with motivation to engage in treatment (Chervinsky *et al.*, 1998).

Further Isaki and Turkstra (2000) stated that vocational status is often linked to independence, self-respect, status, coping abilities, self-esteem and sense of purpose and, as such, changes in independence and self-esteem may lead to social withdrawal, depression and lack of motivation among patients with TBI. The researcher also noted that it was this poor insight and motivation which often resulted in non-compliance with therapy.

Grut, Mji, Braathen and Ingstad (2012) were, however, of the opinion that non-compliance may be related to poverty and financial constraints as opposed to negligence or poor insight and motivation. In summary, the above information suggests that a lack of motivation and poor insight are often associated with TBI and it is an area where therapists should focus on in order to maximise their clients' rehabilitation potential.



5.1.2 Poor / difficult socio-economic circumstances of clients

Shames *et al.* (2007) indicated that sometimes social and cultural reasons are involved in the failure of clients with TBI to RTW. Category three of theme one described how clients' socio-economic circumstances impacted on the implementation of the MoOSE and the clients' progress throughout the rehabilitation process. According to the participants, some clients came from poor / difficult socio-economic circumstances which often interfered with the rehabilitation process. It was noted that clients who did not have social support and difficult circumstances at home appeared to have more difficulty progressing during the rehabilitation process.

In the International Classification of Function, Disability and Health (ICF), the WHO (2001) indicated that personal factors such as motivation, and environmental factors such as

emotional and cognitive support from the relationships in the clients' lives may affect the clients' performance. These relationships include family, friends, colleagues and employers among others. In this context, it was noted sustaining a TBI and the physical and cognitive changes the person undergoes does not only affect the individual, but that it may also cause a catastrophic disturbance in the social structure of the brain injured individual (Foster *et al.*, 2012).

Kreutzer *et al.* (2009) suggests that the active involvement of family members during the rehabilitation process can determine the degree of recovery of a patient with TBI. Evidence suggest that family involvement in the rehabilitation process, through active participation in the rehabilitation process, can produce a more favourable outcome for the client (Sherer *et al.* 2007, and Foster *et al.* 2012). Lundqvist and Samuelsson (2012) and Sander *et al.* (2011) were of the opinion that support in terms of practical and emotional support to continue clients' social lives is an important factor in managing rehabilitation. In this light, Foster *et al.* (2012) was of the opinion that rehabilitations services that are committed to achieving the best possible outcome, should also give priority to supporting clients' families that would allow them to engage in the rehabilitation process as much as possible.

Therapists also reported that clients were often unable to complete their rehabilitation programmes due to financial constraints. Fukuda-Parr (2006) indicated that poverty is connected to the lack of opportunity to lead a healthy lifestyle and Wagstaff (2002) believed that poverty and reduced access to health services are intertwined. Some of the factors which reduce the access to health services for poor people with disabilities include the unavailability or inaccessibility of health services, as well as financial constraints and the ignorance of clients regarding available health services (Saloojee, Phohole, Saloojee & Ijsselmuiden, 2007).

In this particular study, clients who were receiving rehabilitation services within the public sector had financial difficulties with regard to paying for transport which would allow them to access rehabilitation facilities. Papé (2014) indicated that a fee of R60 was given to each of her clients in order to incentivise them to attend the rehabilitation programme, which assisted with transport and a small portion of food. However, this was identified as unsustainable as it placed an unnecessary burden on the therapist.

Finances for traveling to and from rehabilitation services were also identified as a difficulty for clients in a study by McDermott and McDonnel (2014). Coetzee, Goliath, Van der Westhuizen and Van Niekerk (2011) were of the opinion that unaffordable transport to and from rehabilitation units required subsidisation. Soeker (2009) indicated that participants in his study also had difficulty accessing health facilities due to financial constraints and the Centers for Disease Control and Prevention (2014) revealed that access to rehabilitation services can be negatively affected by a lack of service providers, especially in rural areas and the lack of financial resources available to people with TBI.

The therapists indicated that clients who were receiving rehabilitation care in private rehabilitation settings also appeared to have difficulty receiving appropriate care due to limited amount of rehabilitation sessions being approved by their medical aids. As such, they were unable to complete the rehabilitation process, despite needing more intervention. In a study by Sample and Darragh (1998) on perceptions of care, 14 out of 21 participants identified financial challenges as a barrier to their access to health care, recovery and rehabilitation outcome. The same study revealed that the need for financial assistance were often related to money to cover more rehabilitative care or basic living expenses and that the clients had difficulty accessing their health insurance (medical aid) funds.

The abovementioned studies therefore suggest that while clients need social support in order to progress in rehabilitation and that financial difficulties may interfere with clients' progress

during the rehabilitation process. It was also clear that in some instances, having medical aid to cover rehabilitation services did not always guarantee that the individual would be able to complete their rehabilitation programme as required.

5.1.3 Medical aids

In category one of theme two, the negative impact that medical aids had on the clients' ability to complete their rehabilitation was discussed. The therapists were of the opinion that even though some clients were on medical aids, the medical aids often interfered with the implementation of the MoOSE due to the limited amount of the sessions approved by the medical aid. Some of the therapists struggled to get approval for further occupational therapy sessions even though their clients required further treatment. This led to the clients not being able to complete their vocational rehabilitation process and they were still left with some deficits when the rehabilitation was concluded.

Sample and Darragh (1998) indicated that the participants in their study often criticised their insurance providers because of the effort it took to access money for services and they reported that the processes of following-up, double checking and keeping meticulous records in order to have their services covered by their insurance providers were exhausting. The participants reported that they were repeatedly turned down and one participant stated that after being turned down twice and appearing before a judge to access her funds, she received the benefits a year and a half after sustaining her injury. The Centers for Disease Control and Prevention (2014) also stated that the availability and level of insurance coverage is an area for concern for patients with TBI when it comes to accessing rehabilitation services.

Some of the participants in Sample and Darragh's (1998) study also reported that they received incorrect information with regard to the services covered by the insurance and as such did not access the rehabilitation services they needed as they thought that these services were not covered. In an article by Young (2013), it was noted that medical advisors who

analyse and make decisions with regard to requests from treatment often do not have the specialist training or experience in the field to make such decisions. Section 4.17 of the Health Professional Council of South Africa (2005) policy document on undesirable business practices states “Pre-authorisation procedures should be conducted according to scientifically developed protocols (clinical guidelines) and should include peer-to-peer communication prior to any denial of benefits” which suggests that no request for authorisation may be turned down without the direct “peer to peer” contact with the requesting doctor by a person with equal knowledge and experience. However, according to Young (2013), this is a practice not always followed by the medical aid administrators.

Ferguson and Leistikow (2000) explained that limitations on health care supply and price controls often leads to delayed or inadequate treatment. They further stated that while the majority of health insurance users consume relatively little health care, a minority consumes relatively large amounts of health care, thus using more benefits that they pay. In this context health insurance is a transfer-payment system and net receivers cannot command more than the net payers are willing to pay. Thus, in order to balance out this conflict, the health insurance companies limit the supply of medical care (Ferguson & Lestikow, 2000). As such, the limiting of the supply of medical care by health insurance / medical aid companies resulted in certain clients not being able to receive further rehabilitation even though they still required more care in order to become more stable.

5.1.5 Time constraints

Ptyushkin *et al.* (2010) and Webster *et al.* (2015) were of the opinion rehabilitation following a TBI is almost always a long term and sometimes, a never-concluded process. While the therapists’ reasons for feeling that the model was time consuming differed, there was a consensus among the therapists who used the MoOSE that it was time consuming as discussed in category one of theme two. It was noted that some of the therapists spent

approximately one year taking their clients through the rehabilitation process using the MoOSE, a task which was considered a long time. However, in a study by Lundqvist and Samuelsson (2012), respondents stressed the importance of having enough time to take small steps and an individual place to heal without the pressure of external rules. Rubenson, Svensson, Lindahl and Björklund (2007) stated that rehabilitation is a “long process” and were of the opinion that, in order to achieve balance and obtain a functional worker role, longer follow-up of clients with TBI may be required.

Lundqvist and Samuelsson (2012) reported that their research showed individuals who started their vocational rehabilitation process approximately two years after the onset of the injury underwent at least 18 months of rehabilitation before they reached a stable level and they were of the opinion that having enough time for the rehabilitation process was of highest importance. Collicut McGrath and Lindley (2006) also confirmed long term rehabilitation following and acquired brain injury takes time. This posed a problem for clients who were receiving treatment in private rehabilitation facilities and were dependent on their medical aids for payment of their rehabilitation services as their medical aids only approved between 10 and 12 (approximately three months if the client is seen every week) occupational therapy sessions which were often exhausted before the clients completed the rehabilitation or were stable to RTW. In this light, it should be noted that, clients who RTW before they are ready to do so are more likely to have adjustment problems and tend to develop less successful coping strategies which could affect their job performance, resulting in job loss (Ownsworth & Oei, 1998).

While the abovementioned information suggests that the vocational rehabilitation process is a lengthy process, some of the time constraints identified by therapists were related to the therapists work load and even the setting where they were working. While therapists in CHC settings had time constraints related to their workloads (being required to see 14 clients per

day), which did not leave much time to perform work visits, the therapists in the private rehabilitation settings stated that they often had to work overtime (and not bill the client) in order to reach certain goals, such as sending emails to employers. Therapists also mentioned that medical aids do not pay for work visits, which would require them to use of the preauthorised sessions, thus further cutting into the time allocated for rehabilitation.

5.2 Facilitators

The WHO (2001) describes facilitators as those the absence or presence of factors in an individual's environment which improves function and decreases disabilities. These factors include the physical environment that is accessible, presence of relevant assistive technology, and positive attitudes of people towards disability, as well as services, systems and policies that promotes the participation of all people with a health condition in all areas of life. In this specific research study an enabler refers to a characteristic of the MoOSE which made it possible for the therapists to implement the MoOSE in their respective settings. The results of the study revealed that the enablers to this study were related to theme three which describes the characteristics of the model. These factors related to the stages of the MoOSE, the activities used and journaling.

5.2.1 The stages of the MoOSE

The therapists were of the opinion that the stages of the MoOSE were helpful in guiding the rehabilitation process and ensuring the progress of their clients as discussed in category one of theme three. The stages of the MoOSE served a clear guide for the therapists to help inform the rehabilitation process and gave clear instructions with regard the next step of the rehabilitation process. In addition, the stages identified what would be required of the therapist and the client during each step and also helped the therapist identify what kind of activities should be used during the course of the rehabilitation process. During stage one of the MoOSE, introspection, it not only allowed the clients to work through some difficulties

which they may be going through, but also gave the therapists the opportunity to identify what the clients deemed as important, thus facilitating a client centred rehabilitation programme. Further, the work test placement of stage three helped the therapists to assess the clients' readiness to RTW as well as identify any deficits the clients may have before returning to work.

Johnson (1998) explained that, irrespective of the level of disability, that clients with good support, *in vivo* training (*conducting instruction and coaching of young people in the relevant natural community settings of home, school, work, and community to develop or assist in the generalization of relevant skills to the appropriate people and settings* and time to adapt to the work environment did better in their jobs than those who did not have these advantages (Lieberman, 2008). As such, stage three can be considered a crucial stage in the MoOSE which may give clients who have gone through this model a competitive edge as opposed to clients who have not done so.

The participants felt that the dynamicity of the MoOSE was helpful as they could revert back to previous stages in order to help their clients reach their full potential. They indicated that they did not feel as though their clients were not progressing because, if a client did not progress, they were able to revert back to previous stages i.e. reflection to identify the client's difficulties and as such, they could move forward in the rehabilitation process.

5.2.2 The use of activities

Activity selection is usually based on their potential to improve both sensorimotor and psychosocial activities (Breines, 2001). The findings in theme three, category two described how therapists used activities throughout the rehabilitation process. In this light, the researcher will now explore the value of using activities throughout the rehabilitation process and how activity analysis enhanced the use of activities throughout the rehabilitation process.

The participants were of the opinion that the stages of the MoOSE guided their activity selection and that the use of activities helped them get their client through the stages and enhanced the value of the rehabilitation process. Soeker (2009), indicated that therapeutic activities are used in order to treat brain injured individuals and Papé (2014) was of the opinion that activities should be based on the clients' needs and should be similar to the types of work they did prior to sustaining the TBI. Soeker (2009) further stated that working directly on people's motivation to engage in activities improved their work skills and aided them in returning to work successfully.

The therapists reported that stage one was mostly used for assessment, journaling and reflection which allowed the therapists to identify their clients' deficits and plan the rehabilitation in order to improve those difficulties and deficits. Through journaling and reflection in stage one, the therapists were able to facilitate a "strong personal belief" and identify challenges that the clients may have been facing which helped the therapists identify the clients' needs. During stage two and three they used activities to improve physical and cognitive components, as well as develop life skills and work skills.

Gutman (2001) stated that it is best to engage a patient in activities needed for his or her everyday life and avoid activities that generalise skills from one task to another as the concrete thinking of TBI patients makes it difficult for them to understand abstract concepts. The therapists used work skills such as typing a CV for someone who was looking for a job, administrative and clerical tasks for someone who worked in an administrative field and cleaning activities for someone who was employed as a general labourer / cleaner. The use of work simulated tasks were also useful as these allowed for improvement, not only in work skills, but also physical and cognitive components which may have been impaired by the TBI.

Other activities included “real world” activities such as travelling using public transport and budgeting which would be required of the clients once they returned to work. Life skills such as anxiety management, communication skills, assertiveness, coping skills and self-expression, all skills that would enhance their competency in their occupational roles (Soeker, 2009 and Soeker, 2014) were addressed. The use of activities enhanced the rehabilitation process as the therapists were able to assess the clients’ abilities throughout the rehabilitation process.

In order for therapists to identify and utilise the correct activities for the rehabilitation process, they had to do activity analysis. Activity analysis is a foundational skill for occupational therapy practice (Breines, 2013) and Evetts, Leenerts and Miller (2014) indicated that activity analysis is a skill that sets occupational therapists apart from other professions in the health industry. Activities were graded throughout the rehabilitation process to suite the clients’ level of functioning as well as to challenge the clients more when their level of functioning improved. Grading an activity means to pace it appropriately and modifying it for the client’s maximum performance that they accept the activity and the activity provides the “just right” demand upon performance (Breines, 2001). Evetts, Leenerts and Miller (2014) added that it is important to know your client’s limitations when grading activities. By correct / optimal use of activities and grading of activities, the therapists fulfilled the second stage of the model which was “to encourage the client’s use of him- or herself” (Soeker, 2009).

5.2.3 Journaling and reflection

According to Murray (1997), journaling is a distinct immediate expression of subjective personal experience and introspection and according to Schwitzgebel (2004) introspection is defined as paying attention to oneself or taking notes of experiences, actions and reactions”.

A study in which patients with chronic Depression and their family members were asked to

write about their experiences and list their emotions concluded that journal writing is influential in helping patients and their families overcome negative emotions to adverse circumstances (Smith, Holcroft, Rebeck, Thompson & Werkowitch, 2000). The value that journaling adds to the rehabilitation process was discussed in category two of theme three. The therapists facilitated introspection by means of journal writing and reflection during stage one which allowed the clients to process what had happened to them and helped them identify the difficulties with which they were struggling. Once the clients were able to understand and accept their abilities and limitations, they were able start working toward building a positive self-efficacy (Soeker, 2009).

A journal has been described as "a personal book in which creativity, play and self-therapy interweave, foster, and complement each other a unique unrepeatable story of self" (Rainer cited in Murray, 1997 and Le Navenec & Bridges, 2005). Le Navenec & Bridges (2005) stated that journals and diaries have been successfully used as clinical tools by therapists to monitor identity, mark a continuum of development or recovery and integrate and strengthen what happens during therapy. Unlike traditional diary writing which focuses on the exterior point of view of their daily lives and events, journal therapy focuses on the client's internal experiences, reactions and perceptions of their conditions which may help them feel relief, which has been shown to have mental and physical health benefits (Adams, 1999) and Whitewood (2014). Le Navenec and Bridges (2005) stated that recording what is happening during an illness including one's feelings, and reactions and later reviewing it with a witness can be therapeutic in itself.

According to Adams (1999) and Whitewood (2014), journaling has been effectively used for coping with life threatening or chronic illnesses, increasing communication skills and developing a healthier self-esteem. Le Navenec and Bridges (2005) indicated that journaling can help a client generate insight through self-reflection about reactions to an illness or

disability, explore ways of coping and acting when issues arise during illness, reveal a client's unique and individual progression throughout the rehabilitation experience and help clients process feelings regarding their illness and rehabilitation.

These benefits of journaling allowed the therapists assess and identify the clients' difficulties throughout the rehabilitation process and, as such, the therapists were able to plan and adjust treatment / intervention methods as required (Murray, 1997). Journaling and reflection allowed the clients to express themselves in a safe environment without interruption, therefore improving self-efficacy and also allowing therapists to identify any difficulties with which their clients may have been struggling throughout the rehabilitation process and as such, they could address these issues.

Reflection within a group setting also allowed the clients to learn from each other on how to cope with their level of functioning. This was confirmed by Whitewood (2014), who was of the opinion that journal therapy within groups is very effective and that group members tend to establish a deep sense of connection when they share their experiences with each other. Talking with other persons in a similar situation in a safe environment encouraged them to ask questions, confront each other and facilitated the reflective process (Lundqvist & Samuelsson, 2012). Informants in the study by Lundqvist and Samuelsson (2012) also highlighted how they benefitted from group therapy and that meeting people who were in a similar situation as them supported self-awareness, and finding goals. This allowed them to learn from each other, acquire knowledge about available support structures and learn to cope with the new abilities and situations. According to Bellamy, Rowe, Benedict and Davidson (2012), people who have had similar life experiences are able to assist each other because they have real life testimonials with which the other person may be able to identify.

Gosliz (2009) recommended that clients engage in structured journaling at the end of each treatment session to help them reflect on their activity experiences, identify challenges, and

anticipate what they might do differently the next time. This practice allowed therapists to assess whether the clients were progressing and how their insight was developing after each session.

5.3 Strategies to improve the implementation of the model and RTW

The researcher next discusses some of the strategies which will aim to improve the implementation of the MoOSE as well as RTW of clients with traumatic brain injury. It was noted that employers' attitudes and perceptions play a big part in the clients' ability to RTW, as well as the rehabilitation process which should eventually lead to the RTW of the individual with the brain injury. The strategies that will be discussed pertain to the education of employers about TBI and disability, as well as exploring legislation around employing people with disabilities.

5.3.1 Education of employers

Category one of theme four described how the perceptions and attitudes influenced the rehabilitation and RTW process and the researcher was of the opinion that negative attitudes and misconceptions that employers have about traumatic brain injury and disability may be related to a lack of knowledge about these issues. As such, the education of employers with regard to TBI and disability may be a key strategy that may help improve the implementation of the MoOSE and the RTW process for brain injured individuals.

Oppermann (2004) stated that one of the key barriers which prevent individuals with TBI from returning to work is the lack of knowledge of the general public, including employers as it is difficult to understand the negative effects of TBI when the person's physical appearance is not in any way compromised. A study by Bricout and Bentley (2000) in which employers had to rate their perception of employability of job applicants, revealed that non-disabled applicants were rated as more employable than job applicants with severe disabilities and it was noted that applicants with ABI were rated the same as applicants with Schizophrenia.

Oppermann (2004) indicated that mild TBI which often brings on subtle cognitive deficits, such as fatigue, concentration and memory impairments, which may often go unnoticed and are not usually permanent. However, while a few months is a relatively short time duration to live with a cognitive deficit, Japp (2005) was of the opinion this is certainly enough time to lose a job. As such, this lack of knowledge may lead to employers having (unrealistically) high expectation of employees (Oppermann, 2004).

In a study which described the experiences of 12 individuals' experiences of limiting and facilitating factors during the RTW process following an ABI by Van Velzen *et al.* (2011) employees with TBI identified knowledge (of the condition) and support by the employer as playing an important role in their RTW. In a survey of 1083 human resource professionals in which employer readiness to employ veterans with Post-Traumatic Stress Disorder (PTSD) and TBI is assessed, Rudstam, Strobel Gower and Cook (2012) discovered that while employers were willing to employ veterans with PTSD and TBI and that this would benefit their organisations, they had knowledge gaps around accommodating these employees and believed that employing veterans with disabilities would involve more cost and more of the manager's time.

The data gathered during this research project revealed that employers appeared to have negative perceptions of, and negative attitudes towards, TBI and disability. This may very well be related to their lack of knowledge about TBI. Maja, Mann, Sing, Steyn and Naidoo. (2011) revealed that the general understanding of people with disabilities was that they can only be placed in administrative positions, unable to perform manufacturing or engineering jobs, which is usually perceived as inaccessible and hazardous environment, thus perpetuating the idea that disability is mainly physical in nature. This according to Hofgren *et al.* (2010) often results in employers being more willing to employ someone with a physical

ability as they assume that people with disability are only people in wheelchairs and who have motor deficits.

Papé (2014) reported that TBI is considered the “invisible disability” and there is great stigma attached to it. He further reported that the majority of employers, in South Africa and internationally, are more motivated to train people with a physical disability whose “mind is still functional” rather than a person with a “brain impairment”. Gilworth *et al.* (2008) explored the personal experiences of clients with acquired brain injuries (ABIs) in a study which revealed that the invisibility of the brain injury and the continuing symptoms which affected their abilities to do their jobs influenced the clients’ ability to RTW which may have contributed to the lack of understanding experienced by employers and colleagues. As such, one strategy to improve the implementation of the MoOSE would be educating employers with regard to disability and TBI to broaden their understanding on these issues, thus giving them the tools to permit them to employ people with disabilities, TBI in particular. This kind of liaison with employers about the effects of TBI was also suggested by Radford *et al.* (2013).

In a study by Young (2010), employees with TBI who had returned to work described the continued understanding of limitations and restrictions as being positive influences on their working conditions which helped them maintain their jobs after they had returned to work. One of the misconceptions is that people with disabilities are not as reliable as other workers (Ramsey, 2015). However, in a study by Maja *et al.* (2011), employers revealed that people with disabilities have positive attitudes, are easily trainable and have higher productivity levels.

A useful tool would be to run workshops with prospective employers to educate them on the TBI and disability and how to accommodate them to in their places of business. These

workshops could also include promotion of the MoOSE and how it prepares clients with TBI to RTW and / or function in a new work environment.

Isaki and Turkstra (2000) were of the opinion, that communication with colleagues is an important aspect of re-entering the workforce. Chima (2005) encouraged Employee Assistance Practitioners in the United States to carry out “employee assistance educator roles” on behalf of disabled colleagues which includes personal education (e.g. provide consistent information about disabilities), social education (e.g. provide consistent information about societal stereotypes and misconception about disability) and legal education (e.g. provide information about discriminatory practices).

In this light, employers should be encouraged to employ strategies to help them understand their non-disabled employees. This may help reduce or eradicate the stigmatisation and stereotyping of people with disabilities, especially with relation to TBI.

Further, Maja *et al.* (2011) identified benefits of employing people with disabilities. These benefits include profitability as consumers often favour these companies, as well as equity points which make them more lucrative and competitive. During the study, one of the organisations indicated that the manager of a disabled employee performs better because he / she has to problem solve around making adaptation for the disabled employee.

The above information suggests that employers would require training with regard to people with disabilities, their needs and how to accommodate them. However, Robinson and Robinson (2008) suggested that interventions which aim to bring change in the workplace with regard to accommodating people with disabilities will need to shift from a training to a consultant perspective. Findings by Rudstam *et al.* (2012) suggest that employers should constantly be engaged in ongoing conversations, collaborations and partnerships to help them identify what is possible in employing veterans with disabilities as opposed to one-time

training. As such, the education of employers with regard to disability, TBI in particular, may be a useful step in the rehabilitation process using the MoOSE. This was supported by Van Velzen *et al.* (2011) who stated that providing information and coaching employers and colleagues during the vocational rehabilitation process could produce a more successful outcome.

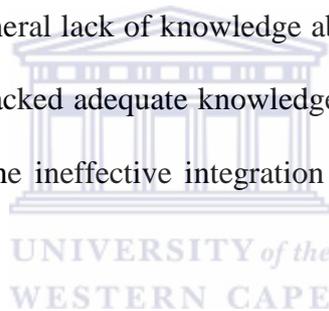
Finance and Accounting Services Sector Education and Training Authority (2015) was of the opinion that there are multiple benefits to employing people with disabilities, including that it makes good sense. The benefits include problem solving skills as employees with disabilities are often incentivised to find creative ways to do tasks others take for granted, dependable hard working employees, increased morale and productivity, a more inclusive corporate environment and employees with disabilities can help employers devise more creative marketing strategies which may have been a previously untapped market.

In addition, by complying with the provisions of the EEA, organisations can avoid claims of unlawful discrimination and retraining employees who have become ill, incapacitated or impaired, as it could be more cost effective than training new staff.

In light of all the aforementioned, the researcher found it valuable to discuss the how employer education may help enhance the vocational rehabilitation of, and RTW process for people with TBI as it may lead to employers being more understanding and receptive of individuals with TBI in the work place. Educating employers will give them the opportunity to learn about and understand TBI and how to accommodate individuals with TBI in the workplace and as such, may contribute to the improvement of the MoOSE and its implementation in returning people with TBI to work.

5.3.2 Applying legislation which mandates the employment of people with disabilities

The findings of theme four, subcategory two, describes how the lack of employment opportunities negatively impact the RTW process for people with disabilities. The researcher is of the opinion that this lack of employment opportunities may very well be related to the way legislation with regard to the employment of people with disabilities is applied. Given the negative attitudes and misconceptions that some employers have with regard to disability and traumatic brain injuries, they often are unwilling to employ people with disabilities. In this section, the researcher will aim to explore the legislation which mandates the employment of people with disabilities and possible incentives to promote the employment of people with disabilities. A survey by the Kessler Foundation (2010) revealed that most employers (in the US) have a general lack of knowledge about disability law and Maja *et al.* (2011) reported that employers lacked adequate knowledge, awareness and understanding of disability which contributes to the ineffective integration of people with disabilities in the work force.



South Africa has developed a number of policies with regard to fairness and equality of race, gender and disability in order to overcome segregation and discrimination. These include the Promotion of Equality and Prevention of Unfair Discrimination Act (Department of Justice, 2000), the National Skills Development Act No. 97 of 1998 (Department of Labour, 1998a) and the White Paper on Integrated National Disability Strategy [INDS] (Office of the President, 1997). The purpose of the legislation is to encourage equivalent employment opportunities and fair treatment to disabled and non-disabled people and it aims to eliminate any stigma and unfair discrimination to previously marginalised groups including people with disabilities.

In addition, according to the Employment Equity Act (Department of Labour 1998), in order to restore equal employment opportunities to all, following apartheid, employers should

employ people from all previously disadvantaged groups including people with disability. The Act provides guidelines for employers and employees on promoting equal opportunity and fair treatment of people with disabilities. In addition, the Department of Labour (1998) indicated that employees with disabilities are often more productive, absent less often and shows great loyalty to their employers.

However, despite legislation promoting the employment of people with disabilities, the National employment figures for people with disabilities are around 1% (Finance and Accounting Services Sector Education and Training Authority, 2015). In this vein, Section 2.2 of the Act indicates that “failure to observe it does not, by itself, render a designated employer liable in any proceedings, except where the code refers to obligations that are required by the Act” and section 3.2 suggests that ultimately it is the employer’s decision to facilitate employment of people with disabilities. As such, it would appear as though the law does not obligate employers to employ people with disabilities and there are no penalties for failure to do so.

In South Africa, companies who employ people with disabilities, qualify for financial incentives such as learnership cash grants, becoming beneficiaries of facet funded projects and tax deductions. Policy frameworks make provision for financial assistance for employers to accommodate for changes made in the work environment to assist the employment and development of people with disabilities (Finance and Accounting Services Sector Education and Training Authority, 2015).

However, Wordssworth (as cited in Maja, 2011) was of the opinion that South African legislation does not provide sufficient support for the employment of people with disabilities as the legislation does not focus on this aspect enough and as such, does not provide sufficient support to support the employment of people with disabilities. In this vein, the Code of Good Practice on Key Aspects of Disability in the Workplace (Department of

Labour, 2002) provides guidelines for employers to encourage equal opportunities and fair treatment between employees with disabilities and their non-disabled colleagues. However, Section 3.1 of the Code states “The Code is not an authoritative summary of the law, nor does it create additional rights and obligations. Failure to observe the Code does not, by itself, render a person liable in any proceedings. Nevertheless when the courts and tribunals interpret and apply the Employment Equity Act, they must consider it”. This suggests that while the Code serves as a guideline, only once a complaint has been lodged, will the courts and tribunal have to consider it.

Shames *et al.* (2007) felt that it is important to promote the legislation aimed at facilitating RTW and stated that it is only through an integrated and systematic effort that the quality of life and functional capacity of people with disability will be improved. Some strategies suggested included the identification of individuals with TBI who are at risk of failure to RTW, a coordinated and structured approach by the rehabilitation team, with skills in managing the problems the unique problems of individuals with TBI who offer supported employment programme in cooperation with employers and community efforts which would increase the availability of accessibility to such programmes.

Given the findings of theme four, subcategory two which describes the lack of employment opportunities for people with TBI and disabilities, exploring the legislation and how it is being applied with regard to employing people with disabilities is an important step in the RTW process. Without the proper legislation and stricter implementation thereof, as well as society’s negative perceptions of people with disabilities, the future of the employment of people with disability, TBI in particular, in South Africa looks bleak.

In summary, the above chapter described the barriers and facilitators that therapists experience while implementing the MoOSE in returning individuals with TBI to work. The researcher highlighted the barriers which were related to client motivation and insight,

socioeconomic status of clients and time constraints. The facilitators which were discussed were directly linked to the characteristics of the MoOSE, such as the stages of the MoOSE, the importance of journaling and reflection, as well as how activities were used throughout the rehabilitation process. During the data analysis process, the researcher also identified that there appeared to be a lack of knowledge in the employment with regard to disability and TBI and as such, the researcher discussed how employers could be educated and the implementation of legislation to accommodate people with disabilities in the work place. The researcher will discuss the recommendations in which will address the abovementioned factors in the next chapter (chapter six).



CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6 Introduction

In this chapter, the conclusion and recommendations from this study that focused on the improvement on the MoOSE and its use in the vocational rehabilitation and RTW process are discussed.

6.1 Conclusions

The study highlighted the experiences perception of occupational therapists who used the MoOSE in the vocational rehabilitation and RTW process with clients with TBI. The study revealed that there were barriers and facilitators to using this model in the RTW process of clients with TBI. The barriers included client related factors and therapists related factors while the facilitators included characteristics of the model. The client related factors which served as barriers were related to motivation and insight levels and poor socio-economic circumstances. Further, the researcher explored how employer education and accurate application of legislation could enhance the outcome using the MoOSE in vocational rehabilitation of people with TBI. It was found that clients' motivation and insight levels impacted on their progress during the rehabilitation and perusal of literature revealed that poor motivation is common with TBI. As such, the researcher will explore ways to incorporate the improvement of motivation in the rehabilitation process.

The socio-economic circumstances which hampered the progress of clients was related to a lack of social support and financial difficulties. The study revealed that clients who did not have support from their families appeared to have more difficulty during the rehabilitation process. In addition, literature revealed that a TBI not only has a profound impact on the injured individual, but that it also impacts on the family and that family involvement in

rehabilitation may enhance the rehabilitation process. In this light, the researcher will explore methods to enhance family involvement in the rehabilitation process of people with TBI.

Employer attitudes and perceptions and legislation also played a vital part in the RTW process. A lack of education of employers with regard to the TBI appeared to be a concern for the participant and the literature explored revealed that employees felt that support their employers can really enhance the RTW process. This prompted the researcher to explore ways to educate and encourage employers how to facilitate the RTW process of employees with TBI. The findings of the study also revealed that there appears to be a lack of jobs for people with disabilities in South Africa, which could be related to the way legislation in with regard to the employment of disabled people is implemented in this country. As such, the researcher will explore recommendation around policies and legislation and how these can be utilised in the RTW process of people with TBI.

In conclusion, the study revealed that despite the barriers encountered by the occupational therapists when implementing the model, the model itself and characteristics thereof were useful in returning clients with TBI to work. Participants gave positive feedback regarding the model, the stages of the model, the use of activities during the model and the use of journaling and reflection as tools for assessment and treatment. However, they also revealed barriers that they encountered when trying to implement the MoOSE within their respective work settings and in South Africa as a whole.

6.2 Recommendations

In order to enhance vocational rehabilitation and RTW processes of people with TBI using the MoOSE, the following recommendations are deemed necessary to enhance the model, the occupational therapy profession and the multi-disciplinary team employers, policy makers in South Africa and future occupational therapy research.

6.2.1 Recommendations to enhance the model

- The study revealed that low motivation and poor insight were barriers to the implementation of the model when using it with patients with TBI. Literature also revealed that a lack of insight and motivation are often associated with TBI and it was further noted that impaired self-awareness limits patients' motivation for treatment. Shames *et al.* (2007) advocated for the improvement of self-awareness, social skills and coping mechanisms for independent living and community reintegration programmes which focus on vocational and social reintegration. The Awareness Questionnaire (Sherer, 2004) was developed in order to evaluate and monitor self-awareness in clients with TBI and Ownsworth and McKenna (2004) recommended interventions to enhance metacognition which includes self-awareness training, group rehabilitation and motivational interviewing; an approach that aims to facilitate and engage intrinsic motivation in order to improve employment outcome. Therefore, in order to improve motivation, clients' self-awareness should be developed and the rehabilitation programme should target motivational disturbances in clients with TBI.
- Occupational therapists should collaborate with placement agencies who specialise in the placement of people with disabilities. By doing this, temporary jobs could be accessed for stage three when clients are placed in their work test placements. Further, if clients are able to function in these jobs, agencies could keep the clients on their books in case more jobs become available.

6.2.2 Recommendations for the occupational therapy profession and multidisciplinary team

- The results of the study revealed that the clients' socio-economic circumstances often impacted on the rehabilitation process. One way of addressing this issue could be to involve clients' families in the rehabilitation process; as literature revealed that active

involvement by family members may enhance the rehabilitation process (Kreutzer *et al.*, 2009, Sherer *et al.*, 2007 and Foster *et al.*, 2012). In this context, family members should be provided with support in the form of education, skills building and psychological support in order to assist them following the TBI of their family. This could be implemented by involving family members in stage one of the MoOSE where they could get the opportunity to also reflect on their feelings within a group setting with other family members and the family member with the brain injury. This reflection might give the family members and the family member with the brain injury the opportunity to find out what the other's struggles are and in this way, may not only foster family support for the individual, but also give him or her an understanding of his or her family's struggles, thus establishing working alliances between patients and their families (Shames *et al.*, 2007).

- In order to encourage working in a multi-disciplinary team, universities should consider inter-professional education at undergraduate level where undergraduate students from different health sciences such as occupational therapy, speech therapy, audiology, physiotherapy and social work collaborate during their fieldwork training in order to foster inter-professional collaboration early on in their careers, thus enhancing their abilities to provide a complete vocational rehabilitation programme.
- Occupational therapists (and other professionals in the multi-disciplinary team) should familiarise themselves with legislation regarding employment of people with disabilities so that they can better inform their clients about their rights and advocate for fairer practices in this light.
- Duggan (2005) stated reflective practice by occupational therapists increases awareness of issues surrounding client centred practice as it increases awareness of our actions and helps us to become mindful of our choices. As such, occupational

therapists should consider integrating reflection into their daily practice in order to enhance the model by making it more client centred.

6.2.3 Recommendations for employers

- Human Resource professionals should consider working closely with occupational therapist in order to come up with strategies to enhance companies' ability to reasonably accommodate people with disabilities. The collaboration could include education of colleagues, applying ergonomic principles and considering adaptive methods for clients with TBI to do their jobs.
- Employers and policy makers could work on, and sign, an action plan to help increase the employment of people with disability within their organisations (Burchardt, 2005). The action plan could contain information regarding how reasonable accommodation would be applied and the employment of occupational therapists in their organisations to make the transition smoother.

6.2.4 Recommendations for policy makers

- The study also revealed that while some clients had medical aid / health insurance, they were still unable to afford and complete their rehabilitation services. In this context, clients should be provided with clearer information on how to access their medical aid benefits and policies which govern medical aid benefits should be revisited. In addition, medical aid administrators should be encouraged to work with vocational rehabilitation service providers in order for clients to receive optimal health services following a TBI. Furthermore, it could be prudent for medical aid companies to work in conjunction with rehabilitation teams in order to develop packages for clients who might require long term rehabilitation.
- Based on the findings of the study, it became apparent that some of the occupational therapists working in the public sector had time constraints which prevented them

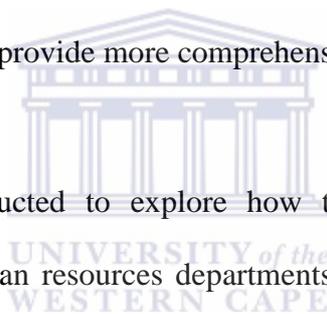
from conducting work visits due to their already heavy work load. In this light, policies regarding funding for rehabilitation in the public sector should be revisited which may allow community health centres to have more than one occupational therapist. This might open the door for occupational therapists to offer more rehabilitation sessions for clients with TBI and even do work visits, thus enhancing the vocational rehabilitation process for clients who access services in the public health sector.

- In addition, government should consider making funds available to create rehabilitation programmes specifically geared at vocational rehabilitation and RTW which could incorporate skills training such as business or a technical trade. Employers in various industries could work with occupational therapists to ensure that people with TBI get sufficient in-service training which would ensure that they are able to successfully RTW and do their job as required.
- Policy makers in South Africa should consider working with the South African Social Security Agency (SASSA) to help people who are undergoing long term vocational rehabilitation to access temporary disability grants that would help them pay for transport and food while they are still undergoing rehabilitation, particularly in the public sector.
- Policy makers in South Africa should revisit policies such as the Code of Good Practice and find ways that would enhance/support employers in order to help them in their efforts to employ people with disabilities.
- Policy makers should engage employers / corporations to join them in working on, and signing, an action plan to help increase the employment of people with disabilities within their organisations (Burchardt, 2005). The action plan could contain information regarding how reasonable accommodation would be applied and the

employment of occupational therapists in their organisations to make the transition smoother.

6.2.5 Recommendation for further research

- Further research should be conducted on how public-private partnerships in the health sector could be used to further develop the MoOSE in the vocational rehabilitation and RTW process of people with TBI.
- Occupational therapists could further explore the reasons why employers are still not motivated to employ people with disabilities despite legislation and tax incentives available.
- A study could be conducted to explore how medical aids enhance the ability of occupational therapists to provide more comprehensive services to clients who require long term rehabilitation.
- A study could be conducted to explore how the employment of occupational therapists within the human resources departments of companies would affect such companies' abilities to employ people with disabilities.



REFERENCES

1. Adams, K. (1999). Journal Therapy. In *The Illustrated Encyclopedia of Mind-Body*. New York: The Rosen Publishing Group.
2. Aday, L. (1989). *Designing and conducting health surveys*. San Francisco: Jossey-Bass Publishers.
3. Allen, J. S., Bruss, J., & Damasio, H. (2004). The Structure of the Human Brain: Precise studies of the size and shape of the brain have yielded fresh insights into neural development, differences between the sexes and human evolution. *American Scientist*, 92(3), 246–253. Retrieved from <http://www.jstor.org/stable/27858393>
4. American Occupational Therapy Association. (2015). *Occupational Therapy and Community Reintegration of Persons with Brain Injury*. Retrieved 14 December 2015, from <http://www.aota.org/-/media/Corporate/Files/AboutOT/Professionals/WhatIsOT/RDP/Facts/Community%20Reintegration%20fact%20sheet.ashx>
5. Anderson, S., Gundersen, P., & Finset, A. (1999). Emotional activation during therapeutic interaction in traumatic brain injury: effect of apathy, self-awareness and implications for rehabilitation. *Brain Injury*, 13(6): 393-404. <http://dx.doi.org/10.1080/026990599121458>
6. Arciniegas, D., Held, K., & Wagner, P. (2002). Cognitive impairment following traumatic brain injury. *Current Treat Options in Neurology*, 4(1), 43-57. <http://dx.doi.org/10.1007/s11940-002-0004-6>
7. Bailey, D. (2003). Research: Discovering knowledge through systematic investigation. In E. Crepeau, E. Cohn & B. Schell (Eds.), *Willard and Spackman's Occupational Therapy* (10th ed., pp. 963 – 974). Philadelphia: Lippincott Williams & Wilkins.

8. Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
9. Bellamy, C., Rowe, M., Benedict, P., & Davidson, L. (2012). Giving Back and Getting Something Back: The Role of Mutual-Aid Groups for Individuals in Recovery From Incarceration, Addiction, and Mental Illness. *Journal Of Groups In Addiction & Recovery*, 7(2-4), 223-236.
<http://dx.doi.org/10.1080/1556035x.2012.705703>
10. Berglind, H., & Gerner, U. (2002). Motivation and return to work among the long-term sicklisted: an action theory perspective. *Disability & Rehabilitation*, 24(14), 719-726. doi:10.1080/09638280210124301
11. Bond, G. R., Drake, R. E., & Becker, D. R. (2008). An Update on Randomized Controlled Trials of Evidence-Based Supported Employment. *Psychiatric Rehabilitation Journal*, 31(4), 280-290. doi:10.2975/31.4.2008.280.290
12. Bradshaw, D., Nannan, N., Groenewald, P., Joubert, J., Laubscher, R., Nojilana, B., Norman, R., & Schneider, M. (2005). Provincial mortality in South Africa, 2000 - priority-setting for now and a benchmark for the future. *South African Medical Journal*, 95(7): 32 – 36.
13. Brede, E., Ikram, F., Howard, K., Aish, S., Knauf, M., & Polatin, P. (2015). Measurement of Return to Work and Stay at Work Outcomes. In I. Schultz & R. Gatchel, *Handbook of Return to Work: From Research to Practice* (1st ed., pp. 181 - 206). New York: Springer.
14. Breines, E. B. (2001). Therapeutic Occupations and Modalities. In L. W. Pedretti & M. B. Early (Eds.), *Occupational therapy: Practice skills for physical dysfunction* (5th ed.). St. Louis: Mosby.

15. Breines, E. (2013). Occupations, Purposeful Activities and Preparatory Activities. In M. Early, *Physical Dysfunction Practice Skills for the Occupational Therapy Assistant* (2nd ed., pp. 204-229). St Louis: Mosby.
16. Bricout, J. C., & Bentley, K. J. (2000). Disability status and perceptions of employability by employers. *Social Work Research*, 24(2), 87.
17. Bright, F., Boland, P., Rutherford, S., Kayes, N., & McPherson, K. (2012). Implementing a client-centred approach in rehabilitation: an autoethnography. *Disability and Rehabilitation*, 34(12), 997-1004.
<http://dx.doi.org/10.3109/09638288.2011.629712>
18. British Society of Rehabilitation Medicine. (2003). *Vocational rehabilitation: the way forward: executive summary*. Retrieved 22 May 2013, from <http://www.bsrn.org.uk/downloads/vrthewayforward2nded-final-revised-text-30-11-03.pdf>
19. Bruns, J. J. & Hauser, W. A. (2003). The epidemiology of traumatic brain injury: A review. *Epilepsia*. 44(10), 2 – 10.
20. Bryan-Hancock, C., & Harrison, J. (2010). The global burden of traumatic brain injury: preliminary results from the Global Burden of Disease Project. *Injury Prevention*, 16(Supplement 1), A17-A17. Abstract retrieved from http://injuryprevention.bmj.com.ezproxy.uwc.ac.za/content/16/Suppl_1/A17.2.full.pdf+html?sid=1869ef56-4852-46b9-8689-05a1551c67d6
21. Burchardt, T. (2005). *The education and employment of disabled young people*. Bristol: Policy Press.
22. Burns, L. (2008). Introduction to Traumatic Brain Injury. *Continuing Medical Education*. 26 (2), 76 – 82.

23. Cassidy, J. D., Carroll, L. J., Peloso, P. M., Borg, J., von Holst, H., Holm, L., Kraus, J. & Coronado, V. G. (2004). Incidence, risk factors and prevention of mild traumatic brain injury: results of the WHO collaborating centre task force on mild TBI. *Journal Of Rehabilitation Medicine (Taylor & Francis Ltd), suppl 43*, 28-60.
24. Centres for Disease Control and Prevention. (2002). *CDC - Leading Causes and Risk Groups - Traumatic Brain Injury - Injury Center*. Retrieved 15 May 2013, from <http://www.cdc.gov/traumaticbraininjury/causes.html>
25. Centers for Disease Control and Prevention. (2014). *Report to Congress on Traumatic Brain Injury in the United States: Epidemiology and Rehabilitation*. Atlanta: National Center for Injury Prevention and Control; Division of Unintentional Injury Prevention. Retrieved from http://www.cdc.gov/traumaticbraininjury/pdf/TBI_Report_to_Congress_Epi_and_Rehab-a.pdf
26. Chapple, A. (1999). The use of telephone interviewing for qualitative research. *Nurse Researcher*, 6(3), 85-93. <http://dx.doi.org/10.7748/nr1999.04.6.3.85.c6090>
27. Chervinsky, A. B., Ommaya, A. K., deJonge, M., Spector, J., Schwab, K., & Salazar, A. M. (1998). Motivation for traumatic brain injury rehabilitation questionnaire (MOT-Q): reliability, factor analysis, and relationship to MMPI-2 variables. *Archives Of Clinical Neuropsychology: The Official Journal Of The National Academy Of Neuropsychologists*, 13(5), 433-446.
28. Chima, F. O. (2005). Persons with disabilities and employment: Implications for social work and rehabilitation roles and advocacy. *Journal of Social Work in Disability & Rehabilitation*, 4(3), 39–60.

29. Coetzee, Z., Goliath, C., van der Westhuizen, R., & Van Niekerk, L. (2011). Re-conceptualising vocational rehabilitation services towards an inter-sectoral model. *South African Journal of Occupational Therapy*, 41(2), 32-37.
30. Collicutt McGrath, J., & Linley, P. (2006). Post-traumatic growth in acquired brain injury: A preliminary small scale study. *Brain Injury*, 20(7), 767-773. <http://dx.doi.org/10.1080/02699050600664566>
31. Conti, G. E. (2007). Traumatic brain injury. In Atchison, B.J. & Dirette, D.K. (Eds.), *Conditions in Occupational Therapy: Effect on Occupational Performance* (3rd ed., pp 231-246). Baltimore: Lippincot, Williams & Wilkins.
32. Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130.
33. DeBaille, A. (2014). *The Effects of Traumatic Brain Injury on Families*. *Opensiuc.lib.siu.edu*. Retrieved 14 December 2015, from http://opensiuc.lib.siu.edu/gs_rp/552
34. Department of Justice. (2000). *Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000*. Retrieved 10 November 2015, from <http://www.justice.gov.za/legislation/acts/2000-004.pdf>
35. Department of Labour. (1998). *Employment Equity Act, No. 55 of 1998*. Retrieved 18 November 2012, from <http://www.labour.gov.za/DOL/legislation/acts/employment-equity/employment-equity-act>
36. Department of Labour. (1998a). *Skills Development Act, No. 97 of 1998*. Retrieved 18 November 2015, from <http://www.labour.gov.za/DOL/legislation/acts/skills-development/skills-development-act-and-amendments>

37. Department of Labour. (2002). *Codes of Good Practice — Department of Labour*. Retrieved 15 October 2015, from <http://www.labour.gov.za/DOL/legislation/codes-of-good-ractise>.
38. Dialsingh, I. (2013). Face-to-face interviewing. In P. J. Lavrakas (Ed.), *Encyclopedia of Survey Research Methods*. (pp. 260-262). Sage Publications.
39. Doig, E., Fleming, J., & Kuipers, P. (2008). Achieving Optimal Functional Outcomes in Community-Based Rehabilitation following Acquired Brain Injury: A Qualitative Investigation of Therapists' Perspectives. *The British Journal of Occupational Therapy*, 71(9), 360-370. <http://dx.doi.org/10.1177/030802260807100902>
40. Duggan, R. (2005). Reflection as a Means to Foster Client-Centred Practice. *Canadian Journal of Occupational Therapy*, 72(2), 103-112. <http://dx.doi.org/10.1177/000841740507200205>.
41. Durheim, K (2002). Research Design. In M. Terre Blanche & K. Durheim (Eds.), *Research in Practice: Applied Methods for the Social Sciences* (2nd ed., pp 29 – 53). Cape Town: University of Cape Town Press.
42. Eriksson, C., Tham, K., & Guidetti. (2013). Occupational Therapists' experiences in integrating a new intervention in collaboration with a researcher. *Scandinavian Journal of Occupational Therapy*, 20 (4), 253-263.
43. Evetts, C., Leenerts, E., & Miller, E. (2014). Updated Activity Analysis Using the Occupational Therapy Practice Framework III: Paralleling Craft Activity Skills to Everyday Occupations. [PowerPoint Slides]. Retrieved 17 October 2015, from <http://www.tota.org/Files/mcc/2014MCCHandouts/2014-107.pdf>
44. Finance and Accounting Services Sector Education and Training Authority. (2004). *Implementing SAQA and SDA Legislation in the Workplace*. Retrieved 3 December 2015, from <http://www.fasset.org.za/downloads/legislation20041026.pdf>

45. Finance and Accounting Services Sector Education and Training Authority. (2015). *Disability Toolkit: Employer toolkit for employing people with disabilities*. Retrieved 10 November 2015, from http://www.fasset.org.za/Downloads/Research/Fasset_disability_toolkit_v8.pdf
46. Ferguson, R., & Leistikow, D. (2000). Problems with Health Insurance. *Financial Analysts Journal*, 56(6), 14-29. <http://dx.doi.org/10.2469/faj.v56.n6.2400>
47. Fukuda-Par, S. (2006). Poverty in Focus. In *The Human Poverty Index: A multidimensional measure*. United Nations Development Programme. Retrieved from <http://www.ipc-undp.org/pub/IPCPovertyInFocus9.pdf>
48. Fielding, N., & Thomas, H. (2008). Qualitative interviewing. In N. Gilbert, *Researching social life* (3rd ed., pp. 245-265). London: Sage Publications.
49. Foster, A. M., Armstrong, J., Buckley, A., Sherry, J., Young, T., Foliaki, S., James-Hohaia, T.M., Theadom, A., & Mcpherson, K. M. (2012). Encouraging family engagement in the rehabilitation process: a rehabilitation provider's development of support strategies for family members of people with traumatic brain injury. *Disability & Rehabilitation*, 34(22), 1855-1862. doi:10.3109/09638288.2012.670028
50. Gamble, D., & Moore, C. (2003). Supported employment: disparities in vocational rehabilitation outcomes, expenditures and service time for persons with traumatic brain injury. *Journal Of Vocational Rehabilitation*, 19(1), 47-57.
51. Gardner, J. (2012). *An Investigation of Motivation and Goal Setting After Acquired Brain Injury: Implications for Rehabilitation* (PhD). The University of Queensland.
52. Gill, M., Reiley, D., & Green, S. (2004). Intra – reliability of Glasgow coma scale scores in the emergency department. *Journal of emergency medicine*, 43 (2), 215-223.
53. Gillham, B. (2000). *Case study research methods*. London: Continuum.

54. Gilworth, G., Eyres, S., Carey, A., Bhakta, B., & Tennant, A. (2008). Working with a brain injury: Personal experiences of returning to work following a mild or moderate brain injury. *Journal of Rehabilitation Medicine*, 40(5), 334-339. <http://dx.doi.org/10.2340/16501977-0169>
55. Goslitz, K. (2009). *Occupational therapy practice guidelines for adults with traumatic brain injury*. Bethesda, MD: AOTA Press, American Occupational Therapy Association.
56. Green, R., Colella, B., Hebert, D., Bayley, M., Kang, H., Till, C., & Monette, G. (2008). Prediction of Return to Productivity After Severe Traumatic Brain Injury: Investigations of Optimal Neuropsychological Tests and Timing of Assessment. *Archives Of Physical Medicine And Rehabilitation*, 89(12), S51-S60. <http://dx.doi.org/10.1016/j.apmr.2008.09.552>
57. Grosswasser, Z. (1995). A national service: coma to community. In M.M. Chamberlain, V. Neumann & A. Tennant (Eds.), *Traumatic brain injury rehabilitation: services, treatments and outcomes*. San Diego: Champan and Hall.
58. Grut, L., Mji, G., Braathen, S., & Ingstad, B. (2012). Accessing community health services: challenges faced by poor people with disabilities in a rural community in South Africa. *African Journal of Disability*, 1(1). <http://dx.doi.org/10.4102/ajod.v1i1.19>
59. Gutman, S. A. (2001). Traumatic brain injury. In L. W. Pedretti & M. B. Early (Eds.), *Occupational therapy: Practice skills for physical dysfunction (5th ed.)*. St. Louis: Mosby.
60. Hammell, K. (2013). Client-centred occupational therapy in Canada: Refocusing on core values / Recentrer l'ergotherapie au Canada sur les valeurs fondamentales de la

pratique centree sur le client. *Canadian Journal of Occupational Therapy*, 80(3), 141-149. <http://dx.doi.org/10.1177/0008417413497906>

61. Health Professional Council of South Africa. (2005). *Policy Document on Undesirable Business Practices*. Retrieved 18 November 2015, from http://www.hpcsa.co.za/downloads/conduct_ethics/undesirable_business_practices.pdf
62. Heinemann, A. W., Sokol, K., Garvin, L. & Bode R. K. (2002). Measuring unmet needs and series among persons with traumatic brain injury. *Archive of Physical and Medical Rehabilitation*. 83: 1052 – 1059.
63. Hofgren, C., Esbjörnsson, E., & Sunnerhagen, K. S. (2010). Return to work after acquired brain injury: facilitators and hindrances observed in a sub-acute rehabilitation setting. *Work (Reading, Mass.)*, 36(4), 431-439. doi:10.3233/WOR-2010-1039.
64. Holloway, I., & Wheeler, S. (2010). *Qualitative research in nursing and healthcare (3rd ed.)*. Oxford: John Wiley & Sons.
65. Hoofien, D., Gilboa, A., Vakil, E., & Donovan, P. J. (2001). Traumatic brain injury (TBI) 10–20 years later: a comprehensive outcome study of psychiatric symptomatology, cognitive abilities and psychosocial functioning. *Brain Injury*, 15(3), 189-209. doi:10.1080/026990501300005659
66. Hoogerdijk, B., Runge, U., & Haugboelle, J. (2011). The adaptation process after traumatic brain injury: An individual and ongoing occupational struggle to gain a new identity. *Scandinavian Journal of Occupational Therapy*, 18(2), 122-132. <http://dx.doi.org/10.3109/11038121003645985>

67. Huberman, M. A., & Miles, M. B. (1994). Data management & analysis methods. In N.K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (428–444). Thousand Oaks, CA: Sage.
68. Humphreys, I., Wood, R.L., Phillips, C., & Macey, S. (2013). The costs of traumatic brain injury: a literature review. *Clinicoeconomics and Outcomes Research*, 281. <http://dx.doi.org/10.2147/ceor.s44625>
69. Huntstiger, T. & Thompson, G. (1998). Vocational rehabilitation of people with traumatic brain injury. *Hawaii Medical Journal*, 57(9), 618-623.
70. Hurt, G.D. (1991). Mild Brain Injury: Critical factors in vocational rehabilitation. *Journal of Rehabilitation*, 57(4), 36-40.
71. Hurst, J., & Krizaj, T. (2012). Perceptions of a client-centred approach among Slovenian occupational therapists. *International Journal Of Therapy & Rehabilitation*, 19(2), 70-78.
72. Hyder, A. A., Wunderlich, C. A., Puvanachandra, P., Gururaj, G. & Kobusingye, O. C. (2007). The impact of traumatic brain injuries: A global perspective. *NeuroRehabilitation*. 22(5), 341-353.
73. Iankova, A. (2006). The glasgow coma scale clinical application in emergency departments. *Emergency Nurse*, 14(8), 30-35. <http://dx.doi.org/10.7748/en2006.12.14.8.30.c4221>
74. Innes, E., Bootes, K., & Chapparo, C. J. (2002). Cognitive and behavioural assessment of people with traumatic brain injury in the work place: Occupational therapists' perceptions. *Work*, 19(3), 255. doi:10.1037/0090-5550.44.1.52
75. Isaki, E., & Turkstra, L. (2000). Communication abilities and work re-entry following traumatic brain injury. *Brain Injury*, 14(5), 441-453. doi:10.1080/026990500120547

76. Japp, J. (2005). *Brain injury and returning to employment*. Philadelphia, PA: Kingsley Publishers.
77. Johnson, R. (1998). How do People get back to Work after Severe Head Injury? A 10 year Follow-up Study. *Neuropsychological Rehabilitation*, 8(1), 61-79. doi:10.1080/096020198389997
78. Jongbloed, L. (2000). Choosing the methodology to explore the research. *Using qualitative research: A practical introduction for occupational and physical therapists* (13 – 21). In Hammell K. W., Carpenter C. and Dyck I. (Eds.), Edinburgh: Edinburgh: Churchill Livingstone.
79. Kalyan, S., Nadasan, T., & Puckree, T. (2007). The epidemiology of Traumatic Brain Injuries (TBI) - a literature review. *South African Journal of Physiotherapy*, 63(3), 32-36.
80. Kant, R., & Smith-Seemiller, L. (2002). Assessment and treatment of apathy syndrome following head injury. *Neurorehabilitation*, 17(4), 325-331.
81. Kanuka, H. (2010). Deliberative inquiry. In M. Sivan-Baden & C. H. Major (Eds.), *New Approaches to Qualitative Research: Wisdom and Uncertainty*. (1st ed., 100 - 107). London: Routledge.
82. Kelly, S.E. (2010). Qualitative interviewing styles and techniques. In I. Bourgeault, R. Dingwall & R. G. De Vries. *The SAGE handbook of qualitative methods in health research*. (307 – 326). Los Angeles: SAGE.
83. Kendall, E., Muenchberger, H., & Gee, T. (2006). Vocational rehabilitation following traumatic brain injury: A quantitative synthesis of outcome studies. *Journal Of Vocational Rehabilitation*, 25(3), 149-160.

84. Kessler Foundation. (2010). *NOD survey of employment of Americans with disabilities*. Retrieved 10 November 2015, from <http://www.2010disabilitysurveys.org/octsurvey/pdfs/surveyresults.pdf>
85. Khan, F., Baguley, I., & Cameron, I. (2003). Rehabilitation after traumatic brain injury. *Medical Journal Of Australia*, 178, 290 - 295.
86. Kowlakowsky-Hayner, S. A., & Tyerman, A. (2012). Vocational rehabilitation after traumatic brain injury: Models and services. *Neurorehabilitation*, 31(1), 51-62.
87. Krefting, L. (1991). Rigour in qualitative research: the assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45, 214-222.
88. Kregel, J., West, M., Wehman, P., Sherron, P., & Kreutzer, J. (1995). Return to work for persons with severe traumatic brain injury: A data-based approach to program development. *Journal of Head Trauma Rehabilitation*, 10(1), 27-39. <http://dx.doi.org/10.1097/00001199-199502000-00005>
89. Kreutzer, J. S., Stejskal, T. M., Ketchum, J. M., Marwitz, J. H., Taylor, L. A., & Menzel, J. C. (2009). A preliminary investigation of the brain injury family intervention: Impact on family members. *Brain Injury*, 23(6), 535-547. doi:10.1080/02699050902926291
90. KwaZulu-Natal Department of Health. (2010). *World Head Injury Awareness Day: 20 March 2010*. Retrieved 23 April 2013, from <http://www.kznhealth.gov.za/headinjury.htm>
91. Law, M. (1998). *Client centered occupational therapy*. Thorofare, NJ: SLACK.
92. Lawyers of Human Rights. (1992). *Disability Right Charter of South Africa*. Retrieved 18 November 2015, from http://www.vut.ac.za/drop/disability/DISABILITY_RIGHTS_CHARTER.pdf

93. Lefebvre, H., Cloutier, G., & Josée Levert, M. (2008). Perspectives of survivors of traumatic brain injury and their caregivers on long-term social integration. *Brain Injury*, 22(7/8), 535-543. doi:10.1080/02699050802158243
94. Le Navenec, C., & Bridges, L. (2005). *Creating connections between nursing care and the creative arts therapies*. Springfield, Ill., U.S.A.: Charles C. Thomas Publisher.
95. Liberman, R. P. (2008). *Recovery from disability: Manual of Psychiatric Rehabilitation*. American Psychiatric Publishing: Arlington, VA.
96. Lincoln, Y. S., & Guba, E. A. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
97. Lundqvist, A., & Samuelsson, K. (2012). Return to work after acquired brain injury: A patient perspective. *Brain Injury*, 26(13-14), 1574-1585. <http://dx.doi.org/10.3109/02699052.2012.698363>
98. Lynn University Library. (2015). *Research Methods: Exploratory Design*. Retrieved 2 September 2015, from <http://lynn-library.libguides.com/researchmethods/researchmethods8>
99. Maas, A. I., Stocchetti, N., & Bullock, R. (2008). Moderate and severe traumatic brain injury in adults. *Lancet Neurology*, 7(8), 728-741. doi:10.1016/S1474-4422(08)70164-9
100. Maja, P. A., Mann, W. M., Sing, D., Steyn, A. J., & Naidoo, P. (2011). Employing people with disabilities in South Africa. *South African Journal of Occupational Therapy*, 41(1), 24-32.
101. Malec, J., Buffington, A., Moessner, A., & Degiorgio, L. (2000). A medical/vocational case coordination system for persons with brain injury: An evaluation of employment outcomes. *Archives of Physical Medicine and Rehabilitation*, 81(8), 1007-1015. <http://dx.doi.org/10.1053/apmr.2000.6980>

102. Mateer, C., & Sira, C. (2006). Cognitive and emotional consequences of TBI: intervention strategies for vocational rehabilitation. *Neurorehabilitation*, 21(4), 315-326.
103. McClain Nhlapo, C., Watermeyer, B., & Scheinder, M. (2006). Disability and Human Rights: The South African Human Rights Commission. In B. Watermeyer, L. Swartz, T. Lorenzo, M. Scheider & M. Priestley, *Disability and Social Change: A South African Agenda* (1st ed., pp. 99-107). Pretoria: Human Science Research Council Press.
104. McDermott, G. L., & McDonnell, A. M. (2014). Acquired brain injury services in the Republic of Ireland: Experiences and perceptions of families and professionals. *Brain Injury*, 28(1), 81-91. doi:10.3109/02699052.2013.857790
105. Meadows, L., & Dodendorf, D. (1999). Data management and interpretation: Using computers to assist. In B. Crabtree & W. Miller, *Doing Qualitative Research* (4th ed., pp. 195 - 210). Thousand Oaks, CA: Sage.
106. Meadows, L. (2004). Qualitative Data Management. In M. Lewis-Beck, A. Bryman & T. Liao, *The SAGE Encyclopaedia of Social Science Research Methods* (1st ed., pp. 891 - 892). Thousand Oaks, CA: Sage.
107. Merriam, S. B. (2001) *Qualitative Research and Case Study Application in Education*, San Francisco: Jossey-Bass.
108. Mollayeva, T., Shapiro, C. M., Mollayeva S., Cassidy, J. D. & Colantonio, A. (2015) Modelling community integration with works with delayed recovery from mild traumatic brain injury. *BioMed Central Neurology*, 15: 194.
109. Mouton, J., & Marais, H. C. (1996). *Basic concepts in the methodology of the social* (5th ed.). Pretoria, South Africa: Human Sciences Research Council.
110. Murray, S. (1997). The benefits of journaling. *Parks & Recreation*, 32(5), 68.

111. Naidoo, D. (2013). Traumatic Brain Injury: The South African landscape. *South African Medical Journal*. 103 (9): 613 – 614.
112. National Health and Research Ethics Committee. (2007). *National code of health research ethics*. Retrieved 6 September 2014, from <http://www.nhrec.net/nhrec/offline.html>
113. National Institute for Neurological Disorders and Strokes. (2013). *Traumatic Brain Injury Information Page: National Institute of Neurological Disorders and Stroke (NINDS)*. Retrieved 15 May 2013, from <http://www.ninds.nih.gov/disorders/tbi/tbi.htm>
114. National Institute for Occupational Health. (2013). *National Institute for Occupational Health | Topical Issues | Traumatic Brain Injury (head Injuries) - World Head Injury Awareness*. Retrieved 23 April 2013, from <http://www.nioh.ac.za/?page=topical&id=13&rid=214>
115. National Institute for Occupational Health. (2013a). *National Institute for Occupational Health | Topical Issues | World Head Injury Awareness Day*. Retrieved 20 October 2015, from <http://www.nioh.ac.za/?page=topical&id=13&rid=56>
116. National Institute of Health. (1999). *NIH Consensus Development Conference on Rehabilitation of Persons with Traumatic Brain Injury* (p. 42). Bethesda, Maryland: National Institute of Health. Retrieved from <https://consensus.nih.gov/1998/1998traumaticbraininjury109program.pdf>
117. Novick, G. (2008). Is there a bias against telephone interviews in qualitative research?. *Research in Nursing Health*, 31(4), 391-398. <http://dx.doi.org/10.1002/nur.20259>

118. Oddy, M., Cattran, C., & Wood, R. (2008). The development of a measure of motivational changes following acquired brain injury. *Journal of Clinical & Experimental Neuropsychology*, 30(5), 568-575.
119. Office of the President. (1997). *Integrated National Disability Strategy*. Retrieved 10 December 2015, from <http://www.independentliving.org/docs3/sa1997wp.pdf>
120. Olson, D. (2014). *Head Injury: Practice Essentials, Background, Pathophysiology*. *Emedicine.medscape.com*. Retrieved 25 November 2015, from <http://emedicine.medscape.com/article/1163653-overview>
121. O'Neill, J., Hibbard, M., Broivn, M., Jaffe, M., Sliwinski, M., Vandergoot, D., & Weiss, M. (1998). The Effect of Employment on Quality of Life and Community Integration after Traumatic Brain Injury. *Journal of Head Trauma Rehabilitation*, 13(4), 68-79. <http://dx.doi.org/10.1097/00001199-199808000-00007>
122. O'Neill, J., Zuger, R., Fields, A., Fraser, R., & Pruce, T. (2004). The program without walls: innovative approach to state agency vocational rehabilitation of persons with traumatic brain. *Archives of Physical Medicine and Rehabilitation*, 85, 68-72. <http://dx.doi.org/10.1016/j.apmr.2003.08.114>
123. Oppermann, J. (2004). Interpreting the meaning individuals ascribe to returning to work after traumatic brain injury: a qualitative approach. *Brain Injury*, 18(9), 941-955. <http://dx.doi.org/10.1080/02699050410001671919>
124. Ownsworth, T., Fleming, J., Strong, J., Radel, M., Chan, W., & Clare, L. (2007). Awareness typologies, long-term emotional adjustment and psychosocial outcomes following acquired brain injury. *Neuropsychological Rehabilitation*, 17(2), 129-150. <http://dx.doi.org/10.1080/09602010600615506>

125. Ownsworth, T., & McKenna, K. (2004). Investigation of factors related to employment outcome following traumatic brain injury: a critical review and conceptual model. *Disability and Rehabilitation*, 26(13), 765-783. <http://dx.doi.org/10.1080/09638280410001696700>
126. Ownsworth, T. L., & Oei, T. S. (1998). Depression after traumatic brain injury: conceptualization and treatment considerations. *Brain Injury*, 12(9), 735-751. doi:10.1080/026990598122133
127. Papé, C. (2014). *The use of the model of occupational self-efficacy as a model to return individuals with brain injury to work*. (Unpublished Master's Thesis). University of the Western Cape, Cape Town.
128. Patton, M.Q. (1980). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage Publications.
129. Penn, C. & Watt, N. (2000). Predictors and Indicators of Return to Work following Traumatic Brain Injury in South Africa: Findings from a Preliminary Experimental Database. *South African Journal of Psychology*, 30(3), 27-37. <http://dx.doi.org/10.1177/008124630003000305>
130. Petrella, L., McColl, M. A., Krupa, T., & Johnston, J. (2005). Returning to productive activities: Perspectives of individuals with long-standing acquired brain injuries. *Brain Injury*, 19(9), 643-655. doi:10.1080/02699050410001671874
131. Phillips, J., Drummond, A., Radford, K., & Tyerman, A. (2010). Return to work after traumatic brain injury: recording, measuring and describing occupational therapy intervention. *The British Journal of Occupational Therapy*, 73(9), 422-430. <http://dx.doi.org/10.4276/030802210x12839367526138>
132. Ponsford, J., Harrington, H., Olver, J., & Roper, M. (2006). Evaluation of a community-based model of rehabilitation following traumatic brain injury.

<http://dx.doi.org/10.1080/09602010500176534>

133. Preston, B., & Ulicny, G. (1992). Vocational placement outcomes using traditional job coaching model with person with severe acquired brain injury. *Rehabilitation Counselling Bulletin*, 35(4), 230.
134. Przewoźnik, D. A., Rajtar-Zembaty, A., & Starowicz-Filip, A. (2015). The influence of cognitive, emotional and social factors on motivation for rehabilitation in patients after stroke. *Neuropsychiatry & Neuropsychology / Neuropsychiatria I Neuropsychologia*, 10(2), 64-68.
135. Ptyushkin, P., Vidmar, G., Burger, H., & Marincek, C. (2010). Use of the International Classification of Functioning, Disability and Health (ICF) in patients with traumatic brain injury. *Brain Injury*, 24(13-14), 1519-1527. <http://dx.doi.org/10.3109/02699052.2010.523054>
136. Pullaski, K. H. (2003). Adult Neurological Dysfunction. In E. B. Crepeau., E. S. Cohn., & B. A. B. Schell (Eds.), *Willard and Spackman's Occupational Therapy*. (10th ed., 767-788). Philadelphia: Lippincott Williams & Wilkins.
137. Radford, K., Phillips, J., Drummond, A., Sach, T., Walker, M., Tyerman, A., Haboubi, N., & Jones, T. (2013). Return to work after traumatic brain injury: Cohort comparison and economic evaluation. *Brain Injury*, 27(5), 507-520.
138. Ramsey, M. (2015). Ready, Willing and Disabled. *HR Magazine*, 60(8), 48.
139. Rehab Group. (2012). *The Brain Injury Handbook*. Retrieved 1 December 2015, from http://www.rehab.ie/about/pdfs/nov2012/11778_new_brain_injury_2012_web_update.pdf

140. Remondet Wall, J., Rosenthal, M., & Niemczura, J. (1998). Community-based training after acquired brain injury: preliminary findings. *Brain Injury*, 12(3), 215-224. <http://dx.doi.org/10.1080/026990598122692>
141. Restall, G., Ripat, J., & Stern, M. (2003). A Framework of Strategies for Client-Centred Practice. *Canadian Journal of Occupational Therapy*, 70(2), 103-112. <http://dx.doi.org/10.1177/000841740307000206>
142. Robinson, D., & Robinson, J. (2008). *Performance consulting*. San Francisco: Berrett-Koehler Publishers.
143. Ruane, J. (2005). *Essentials of research methods*. Malden, MA: Blackwell Publications.
144. Rubenson, C., Svensson, E., Linddahl, I., & Björklund, A. (2007). Experiences of returning to work after acquired brain injury. *Scandinavian Journal of Occupational Therapy*, 14(4), 205-214. <http://dx.doi.org/10.1080/11038120601110934>
145. Rudstam, H., Strobel Gower, W., & Cook, L. (2012). Beyond yellow ribbons: Are employers prepared to hire, accommodate and retain returning veterans with disabilities? *Journal Of Vocational Rehabilitation*, 36(2), 87-95.
146. Saatman, K., Duhaime, A., Bullock, R., Maas, A., Valadka, A., & Manley, G. (2008). Classification of Traumatic Brain Injury for Targeted Therapies. *Journal of Neurotrauma*, 25(7), 719-738. <http://dx.doi.org/10.1089/neu.2008.0586>
147. Saloojee, G., Phohole, M., Saloojee, H., & IJsselmuiden, C. (2007). Unmet health, welfare and educational needs of disabled children in an impoverished South African peri-urban township. *Child: Care, Health and Development*, 33(3), 230-235. <http://dx.doi.org/10.1111/j.1365-2214.2006.00645.x>

148. Sample, P. L., & Darragh, A. R. (1998). Perceptions of care access: the experience of rural and urban women following brain injury. *Brain Injury, 12*(10), 855-874.
149. Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science, 8*(3), 27 – 37.
150. Sander, A., Maestas, K., Sherer, M., Malec, J., & Nakase-Richardson, R. (2012). Relationship of Caregiver and Family Functioning to Participation Outcomes after Postacute Rehabilitation for Traumatic Brain Injury: A Multicenter Investigation. *Archives of Physical Medicine and Rehabilitation, 93*(5), 842-848. <http://dx.doi.org/10.1016/j.apmr.2011.11.031>
151. Savin-Baden, M., & Major, C. (2010). *New approaches to qualitative research*. London: Routledge.
152. Sbordone, R., Saul, R., Purisch, A., & Sbordone, R. (2007). *Neuropsychology for psychologists, health care professionals, and attorneys*. Boca Raton: CRC Press.
153. Schultz, S. (2007). *Traumatic Brain Injury in South Africa – A Review*. Retrieved 29 April 2013, from <http://www.brainweb.org.za/Documentsfolder/TBI%20in%20South%20Africa.pdf>
154. Schwitzgebel, E. (2004). Introspective training apprehensively defended: Reflections on Titchener's lab manual. In A. Jack, *Journal of Consciousness Studies* (1st ed., pp. 11-17). Thorverton UK: Imprint Academic.
155. Shames, J., Treger, I., Ring, H., & Giaquinto, S. (2007). Return to work following traumatic brain injury: Trends and challenges. *Disability and Rehabilitation, 29*(17), 1387-1395. <http://dx.doi.org/10.1080/09638280701315011>
156. Selassie, A. W., Zaloshnja, E., Langlois, J. A., Miller, T., Jones, P., & Steiner, C. (2008). Incidence of Long-Term Disability Following Traumatic Brain Injury

- Hospitalization, United States, 2003. *Journal of Head Trauma Rehabilitation*, (23), 123–131.
157. Sherer, M. (2004). The Awareness Questionnaire. *The Center for Outcome Measurement in Brain Injury*. <http://www.tbims.org/combi/aq>. Retrieved 8 December 2015.
158. Sherer, M., Evans, C. C., Leverenz, J., Stouter, J., Irby, J. W., Jae Eun, L., & Yablon, S. A. (2007). Therapeutic alliance in post-acute brain injury rehabilitation: Predictors of strength of alliance and impact of alliance on outcome. *Brain Injury*, 21(7), 663-672.
159. Shukla, D., Devi, B., & Agrawal, A. (2011). Outcome measures for traumatic brain injury. *Clinical Neurology and Neurosurgery*, 113(6), 435-441. <http://dx.doi.org/10.1016/j.clineuro.2011.02.013>
160. Smith, C., Holcroft, C., Rebeck, S., Thompson, N., & Werkowitch, M. (2000). Journal Writing As a Complementary Therapy for Reactive Depression: A Rehabilitation Teaching Program. *Rehabilitation Nursing*, 25(5), 170-176. <http://dx.doi.org/10.1002/j.2048-7940.2000.tb01901.x>
161. Soeker, M.S. (2009). Occupational Self – efficacy: An Occupational Therapy Practice model to facilitate returning to work after a brain injury. *PhD Thesis. Department of sport, recreation and exercise science*. Cape Town: The University of the Western Cape.
162. Soeker, M. S., Van Rensburg, V., & Travill, A. (2012). Individuals with traumatic brain injuries perceptions and experiences of returning to work in South Africa. *Work*, 42(4), 589-600.
163. Soeker, M. (2014). Returning Individuals with Mild to Moderate Brain Injury Back to Work: A Systematic Client Centered Approach. In F. Sadaka, *Traumatic*

- Brain Injury*. Retrieved from <http://www.intechopen.com/books/traumatic-brain-injury/returning-individuals-with-mild-to-moderate-brain-injury-back-to-work-a-systematic-client-centered-a>
164. Sorensen, S.B. and Kraus, J.F. (1991). Occurrence, Severity, and Outcomes of Brain Injury. *Journal of Head Trauma Rehabilitation*, 6(2), 1–10.
165. Stock, S. (2006). *Employment for Persons with Brain Injuries in Oregon*. Oregon Government. Retrieved 8 November 2015, from <http://www.oregon.gov/dhs/vr/cep/braininjury-stock.pdf>
166. Sturges, J., & Hanrahan, K. (2004). Comparing Telephone and Face-to-Face Qualitative Interviewing: a Research Note. *Qualitative Research*, 4(1), 107-118. <http://dx.doi.org/10.1177/1468794104041110>
167. Stuss, D. (2011). Traumatic brain injury. *Current Opinion in Neurology*, 24(6), 584-589.
168. Sumsion, T. (1999). *Client-centred practice in occupational therapy*. United Kingdom. Churchill Livingstone.
169. Sumsion, T., & Law, M. (2006). A Review of Evidence on the Conceptual Elements Informing Client-Centred Practice. *Canadian Journal of Occupational Therapy*, 73(3), 153-162. <http://dx.doi.org/10.1177/000841740607300303>
170. Sweet, L. (2002). Telephone interviewing: Is it compatible with interpretive phenomenological research?. *Contemporary Nurse*, 12(1), 58-63. <http://dx.doi.org/10.5172/conu.12.1.58>
171. Taylor-Powell, E., & Renner, M. (2003). *Analyzing Qualitative Data*. Madison, Wisconsin: University of Wisconsin. Retrieved from <http://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf>

172. Tsaousides, T., Warshowsky, A., Ashman, T. A., Cantor, J. B., Spielman, L., & Gordon, W. A. (2009). The relationship between employment-related self-efficacy and quality of life following traumatic brain injury. *Rehabilitation Psychology, 54*(3), 299-305. doi:10.1037/a0016807
173. The World Bank. (2014). *World Development Indicators: South Africa 2014*. Retrieved 26 November 2015, from <http://data.worldbank.org/sites/default/files/wdi-2014-book.pdf>
174. Thurman, D. J., Alverson C., Dunn, K. A., Guerrero, J. & Sniezek J. E. (1999). Traumatic Brain Injury in the United States: A Public Health Perspective. *Journal of Head Trauma Rehabilitation, 14*(6): 602 -615.
175. Tufford, L., & Newman, P. (2010). Bracketing in Qualitative Research. *Qualitative Social Work, 11*: 80-96.
176. United Nations. (2008). *Convention on the Rights of Persons with Disabilities and Optional Protocol*. Retrieved 12 December 2015, from <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
177. Urban, R., Harris, P., & Masel, B. (2005). Anterior hypopituitarism following traumatic brain injury. *Brain Injury, 19*(5), 349-358. <http://dx.doi.org/10.1080/02699050400004807>
178. Van Velzen, J., van Bennekom, C., Edelaar, M., Sluiter, J., & Frings-Dresen, M. (2009). How many people return to work after acquired brain injury? A systematic review. *Brain Injury, 23*(6), 473-488. <http://dx.doi.org/10.1080/02699050902970737>
179. Van Velzen, J., van Bennekom, C., van Dormolen, M., Sluiter, J., & Frings-Dresen, M. (2011). Factors influencing return to work experienced by people with acquired brain injury: a qualitative research study. *Disability and Rehabilitation, 33*(22-23), 2237-2246. <http://dx.doi.org/10.3109/09638288.2011.563821>

180. Vuadens, P., Arnold, P., & Bellmann, A. (2006). *Return to work after a traumatic brain injury- Vocational Rehabilitation*. Paris: Springer.
181. Wagstaff, A. (2002). Poverty and health sector inequalities. *Bulletin of The World Health Organization*, 80(2), 97-105.
182. Webster, J., Taylor, A., & Balchin, R. (2015). Traumatic brain injury, the hidden pandemic: A focused response to family and patient experiences and needs. *South African Medical Journal*, 105(3), 195. <http://dx.doi.org/10.7196/samj.9014>
183. Wehman, P., Kreutzer, J., Wood, W., Stonnington, H., Diambra, J., & Morton, M. V. (1989). Helping traumatically brain injured patients return to work with supported employment: three case studies. *Archives of Physical Medicine and Rehabilitation*, 70(2), 109-113.
184. Wehman, P., Kregel, J., Sherron, P., Nguyen, S., Kreutzer, J., Fry, R., & Zasler, N. (1993). Critical factors associated with the successful supported employment placement of patients with severe traumatic brain injury. *Brain Injury*, 7(1), 31-44.
185. Wehman, P., Kregel, J., Keyser-Marcus, L., Sherron-Targett, P., Campbell, L., West, M., & Cifu, D. (2003). Supported employment for persons with traumatic brain injury: A preliminary investigation of long-term follow-up costs and program efficiency. *Archives of Physical Medicine and Rehabilitation*, 84(2), 192-196. <http://dx.doi.org/10.1053/apmr.2003.50027>
186. Whitewood, S. (2014). *Heal Your Life Workbook: Resources and Tools for Clearing Emotional Baggage so You Can Love Your Life* (pp. 8 - 13). Bloomington IN: Balboa Press.
187. Wilson, A., Wills, P., Pretorius, C., & Swartz, L. (2015). Cognitive rehabilitation groups: A thematic analysis of feasibility and perceived benefits for

- clients with moderate to severe traumatic brain injury living in the Western Cape. *African Journal of Disability*, 4(1). <http://dx.doi.org/10.4102/ajod.v4i1.175>
188. Wood, R., & Yurdakul, L. (1997). Change in relationship status following traumatic brain injury. *Brain Injury*, 11(7), 491-501. <http://dx.doi.org/10.1080/bij.11.7.491.501>
189. World Health Organisation. (2001). *International Classification of Functioning, Disability and Health*. Retrieved 12 November 2015, from http://psychiatr.ru/download/1313?view=1&name=ICF_18.pdf
190. World Medical Association. (2008). *Declaration of Helsinki – Ethical principles for medical research involving human subjects*. Retrieved 5 June 2013, from <http://www.wma.net/en/30publications/10policies/b3/17c.pdf>
191. Yasuda, S., Wehman, P., Targett, P., Cifu, D., & West, M. (2001). Return to work for persons with traumatic brain injury. *American Journal of Physical Medicine & Rehabilitation*, 80(11), 852-864.
192. Young, A. E. (2010). Employment maintenance and the factors that impact it after vocational rehabilitation and return to work. *Disability & Rehabilitation*, 32(20), 1621-1632.
193. Young, M. (2013). *Why do doctors hate medical aids? | Thought Leader*. Retrieved 15 November 2015, from <http://thoughtleader.co.za/martinyoung/2013/06/13/why-do-doctors-hate-medical-aids/levin>
194. Zuger, R., Brown, M., O'Neill, J., Stack, R., & Amitai, H. (2015). *Vocational Rehabilitation, Traumatic Brain Injury, and the Power of Networking*. *Brainline.org*. Retrieved 22 October 2015, from

http://www.brainline.org/content/2009/05/vocational-rehabilitation-traumatic-brain-injury-and-the-power-of-networking_pageall.html



APPENDICES

Appendix 1

Questions asked at face to face and telephonic interviews

1. Can you give me some information about your current client you have been using the model with? How have you been implementing the Model in your work area?
2. At what stage of the Model are you at present? Describe the process you used to get there? What kind of handling of clients? Is the family involved in the therapy? Is he / she writing journals?
3. If the client is in stage 4 client ask the following questions: At what company is / she currently employed? How are his / her colleagues relating to him / her? How have you been supporting the employer and employee?
4. Please share with me your experiences of using the Model thus far?
 - a. What kind of activities have you been using with your client?
 - b. How have these activities been working for you?
5. How have your clients responded to the implementation of the Model?
 - a. Have you experienced any resistance from your clients thus far?
 - b. Have you been seeing your client on a regular basis?
6. What are the parts of the Model that have been the easiest for you to implement? Time? (What stage?) Time consuming? Best part?
7. What are the parts of the Model that have been the most difficult for you to implement?
8. How easy or difficult have you found it thusfar to implement this model in your current work setting?
9. Do you have any suggestions that would make the Model more user-friendly?
10. How realistic do you feel this model is to implement in your current work setting? Why? Do you think this model is a good fit for the setting you are working in?
11. Have you been working in a multidisciplinary team?

Appendix 2

Information sheet provided to participants



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

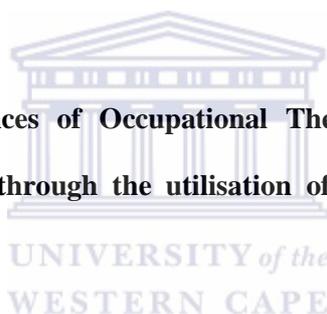
Tel: +27 21-959 9339, Fax: 27 21-959 9359

E-mail: msoeker@ac.za

Consent Form

INFORMATION SHEET

Title of Research: The experiences of Occupational Therapists in returning clients with traumatic brain injury to work through the utilisation of the Model of Occupational Self-Efficacy.



What is this study about?

The study aims to investigate the experiences of Occupational Therapists in the utilisation and implementation of the Model of Occupational Self-Efficacy in returning individuals with traumatic brain injuries to work after rehabilitation. Soeker (2010) developed a four stage model called the Model of Occupational Self-Efficacy as a method to assist brain injured clients to return work. During stage one; the occupational therapist will facilitate a process of introspection and reflection in the client in order to develop new insights into his or her ability to cope in their work and social environment. During stage two; the occupational therapist would continue to act as a facilitator and through a process of introspection and inner strength development, the client would have reached autonomy to participate in more occupational activities such as activities of daily living, work and leisure. During stage three; the client may be referred for vocational rehabilitation and a functional capacity assessment or screening. During the final stage of the Model, the client would view him or

herself as a capable worker and would be able to participate in the worker role with maximum independence and the occupational therapist would gradually withdraw from the role facilitator.

What will be asked if I agree to participate in this study?

If you agree to participate in the study you will be asked to participate in individual interviews and one focus group discussion. The interviews will be conducted at various stages of the implementation of the Model. The type of questions that will be asked will focus on the experience of using the Model of Occupational Self -Efficacy with clients with brain injury.

What are the risks of the research?

There are no known physical or psychological risks involved in this study. However, should you require any assistance; an appropriate referral source will be made available.

What are the benefits of the research?

The research study is intended to develop and complete the Model of Occupational Self- Efficacy, as well as identify any potential difficulties therapists may face, in order to implement the Model with clients with traumatic brain injury. The Model would provide Therapists with an alternative rehabilitation model to return clients with brain injury back to work.

Do I have to be in this research or may I stop participating at any time?

Participation in this research is voluntary. Once you have consented to participate in the research, you may withdraw at any time during the process without penalty.

What if I have questions?

The research will be conducted by Lee-Ann Arendse under the guidance of the Occupational Therapy Department, University of the Western Cape. If at any time you have queries regarding the nature of the study, you could contact the researcher at the details given below:

Researcher: Mrs Lee-Ann Arendse

Cell No: 073 541 9028

E-mail: leeannkruger@gmail.com

Should you have any questions regarding this study and your rights as a research participant, or you wish to report any problems you have experienced related to the study you may also contact:

Supervisor: Dr Shaheed Soeker (Lecturer)

Occupational Therapy Department (University of the Western Cape)

Tel No: 021 959 9339

E-mail: msoeker@uwc.ac.za



Appendix 3

Consent form



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 9339, Fax: 27 21-959 9359

E-mail: msoeker@ac.za

Consent Form

Title of Research: The experience of Occupational Therapists in returning clients with brain injury to work through the utilisation of the Model of Occupational Self-Efficacy.



The study has been described to me by means of the information sheet in a language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity and the identity of my clients may not be disclosed and I may withdraw from the study without giving a reason at any time, and this will not negatively affect me in any way.

Participant's Name: _____

Participant's Signature: _____

Witness' Name: _____

Witness' Signature: _____

Date: _____

Should you have any questions regarding this study or you wish to report any problems you have experienced related to the study, please contact the researcher:

Researcher: Mrs Lee-Ann Arendse

Cell No: 073 541 9028

E-mail: leeannkruger@gmail.com



Appendix 4

Demographic Information Sheet

Demographic Information Sheet

Full Name: _____

What are your qualifications? Please also name courses that you have completed such as

Sensory Integration, Neurodevelopmental Techniques etc.

How long have you been practicing OT? _____

How long have you been working with TBI clients? _____

Do you work in the **PRIVATE** or **PUBLIC** sector? _____

Please described the setting that you are currently working in?

