AN EXPLORATION OF THE EXPERIENCES AND PERCEPTIONS OF EMPLOYERS AND CAREGIVERS OF INDIVIDUALS WITH MILD-MODERATE TRAUMATIC BRAIN INJURY RETURNING TO WORK

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

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DECLAREATION

I, ZAKEERA GANIE, hereby declare that the work on which this thesis: *An exploration of the experiences and perceptions of employers and caregivers of individuals with mild traumatic brain injury in returning to work after completing a vocational rehabilitation programme*, 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.

ZAKEERA GANIE

Signature:

Date: 11/03/2016
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DEFINITION OF TERMS

**Traumatic brain injury:** Is a non-degenerative, non-congenital assault on the brain from an external mechanical force which may lead to permanent or temporary dysfunction of cognitive, physical and psychosocial ability, usually associated with a diminished and altered state of consciousness (Murdoch & Theordoros, 2003).

**Return-to-work:** In the context of this study, return-to-work refers to the resumption of full-time employment in the open labour market.

**Disability:** is the negative aspect of interactions that exist between an individual who has a health condition and the individual’s contextual factors, which include environmental and personal factors (World Health Organization [WHO], 2001).

**Perception:** is the interpretation given to a sensory input or stimulus by the brain. It is also defined as the mental process involving the recognition and meaningful interpretation of sensory information (Crepeau, Cohn, & Schell, 2009).

**Experience:** is defined as the direct involvement in an activity over a period of time (Crepeau et al. 2009).
Rehabilitation: in the context of this study, rehabilitation is defined as undergoing vocational rehabilitation using the Model of Occupational Self-Efficacy administered by an Occupational Therapist.

Enabler to return to work: The World Health Organisation [WHO] (2001) describes facilitators (enablers) as the absence or presence of certain factors within the individual’s physical context that improve functioning and reduce disability.
LIST OF ABBREVIATIONS

TBI: Traumatic Brain Injury

RTW: Return/returning to Work

WHO: World Health Organisation

ICF: International Classification of Function, Disability and Health

UN: United Nations

ILO: International Labour Organisation

OT: Occupational Therapy/Therapist

VR: Vocational Rehabilitation

MoOSE: Model of Occupational Self-Efficacy

QoL: Quality of Life

GSH: Groote Schuur Hospital
ABSTRACT

An estimate of 89 000 cases of new traumatic brain injuries (TBI) are reported annually in South Africa. South African legislation advocates for the employment of persons with a disability. Individuals with mild-moderate TBI that do qualify to return-to-work (RTW) often do not have access to vocational rehabilitation (VR) and, as a result, return to the occupational therapy work assessment units for Disability Grant assessments.

Not having the necessary insight and understanding about the condition influences the affected individual’s chances of returning to work. Failing to return to work results in dependency on a caregiver.

The aim of this study was to explore the perceptions and experiences of employers and caregivers of individuals with mild traumatic brain injury returning to work after completing a VR programme, using the Model of Occupational Self-Efficacy. A purposive sample comprising employers and caregivers of 10 individuals with mild TBI was selected. Semi-structured interviews were completed and data manually managed, with confidentiality and anonymity strictly ensured.

The findings of the study were analysed by means of thematic analysis, from which five themes emerged. Themes one and two described the employers’ and caregivers’ experiences and perceptions that hindered the RTW process. Theme three related to the enabling aspects they derived from engaging in the VR process, along with the individual with mild-moderate TBI. Themes four and five presented the coping strategies that aided the employer and caregiver in playing a continued role in the RTW process.
The International Classification of Function, Disability and Health (ICF) was used to conceptualise the findings and interpret the perspective of the barriers, enablers and coping strategies as seen through the lens of the employer and caregiver.

The results of the study can be used to help individuals with TBI adapt to the work environment, as well as inform policy development regarding social grants and access to rehabilitation services for TBI survivors. Occupational therapists (OT) using the MoOSE should regard the employer and caregiver as key role players during therapy. Employers should gain a better understanding of TBI and allow for sick leave during rehabilitation. Caregivers would benefit from finding or establishing a support network for themselves, and by connecting with employers of the individual with TBI in order to understand the individual’s work environment.

KEYWORDS:

Traumatic brain injury, self-efficacy, quality of life, employment, vocational rehabilitation, return to work, ICF, employer perception, caregiver perception, qualitative research.
1. **Background**

The focus of this study was to explore the experiences and perceptions of employers and caregivers of individuals with mild TBI in RTW after completing a VR programme. While working with individuals with mild TBI as an OT, the roles of their employers and caregivers were highlighted and this inspired the researcher to explore the influence that they have on the RTW process. Their respective experiences and perceptions offered information regarding the barriers and enablers that influence RTW for individuals with mild TBI. The researcher gained a better understanding of how they, as the employer and caregiver, coped with the process of RTW. The information is conceptualised through the World Health Organisation’s (WHO) ICF model. The model provides a structured system to relate information from the employer and caregiver to aspects of functioning of the individual with mild-moderate TBI when RTW. OTs, as well as other vocational specialists, working with individuals with mild TBI during rehabilitation, could use the information contained in the study to improve their rehabilitation strategies.

1.1 **Introduction**

In South Africa, TBI has significantly contributed to the burden of health care as there are few resources available for rehabilitation in the public sector and, as a result, many families are taking responsibility for the care and rehabilitation of the individual with TBI
once he/she has been discharged from hospital (Webster, Taylor & Balchin, 2015). TBI often results in deficits that affect the performance of numerous functional roles, one of which is the worker role (Tsaousides, Warshowsky, Ashman, Cantor, Spielman & Gordon, 2009). During the rehabilitation process it is imperative to engage the individual with goal planning which is client-centred to serve as a motivator for participation (Seigert & Taylor, 2004). Remunerative employment is one of the areas of function that is significantly affected following TBI and the estimated rate of unemployment is as high as 88% (Tsaousides et al. 2009). In the cross-sectional study done by Tsaouside, Ashman and Seter (2008), examining objective and subjective indicators of unemployment with 317 participants under the age of 65 with self-reported TBI, only 21% of the study participants experienced similar levels of pre- and post-injury employment and it was through multiple regression analysis that the researchers found a significant relationship between demographics, objective and subjective indicators. Much emotional and financial stress is placed on the caregiver of the individual with TBI when the person does not return to his previous worker role.

1.2 Rationale

The rationale for this study arose from the development of the Model of Occupational Self-Efficacy (MoOSE) designed by Soeker (2012). The OT using this model will find its dynamic elements very useful in returning individuals with traumatic brain injury to their previous worker role. For this to be successful, employers are vital links for therapists using this model to guide rehabilitation programmes. Statistics reveal that only a small percentage of individuals with TBI return to work due to a challenged job market in
South Africa, as well as the reluctance of employers to hire individuals with brain injury. Secondly, it is well researched that for an individual with a TBI, return-to-work is a strong predictor of the improvement of quality of life (Svendsen & Teasdale, 2006). Conversely, should the person remain in a dependent, ‘sick’ role, much pressure is placed on the individual with brain injury’s caregiver. Caregivers experience a high incidence of depression and emotional stress as a result. Using the Model of Occupational Self-Efficacy to return the individual with TBI to the worker role may then also have a positive effect on the caregivers.

Tygerberg Hospital work assessment unit’s statistics indicate that in 2011 a total of 204 TBI patients were assessed. Out of this total, only 15% qualified for a disability grant; 13% were found to be capable of returning to work, although only 6% managed to do so and maintain their worker role (Tygerberg Hospital Work Assessment Unit, 2014).

1.3. Research design and method

In order to explore, describe and understand the lived experiences of the employers and caregivers of the individuals with TBI as they RTW, a qualitative research design was used. This facilitated the interpretation of the phenomenon of return-to-work with regard to the meaning it held for the study participants (Leedy & Ormrod, 2005). An exploratory and descriptive approach was used. Through purposive sampling, 10 employers and 10 caregivers were identified from the individuals with mild-moderate TBI that had participated in the vocational rehabilitation programme based on the Model of Occupational Self-Efficacy. Semi-structured interviews were conducted with each
research participant in order to explore their experiences and perceptions of the phenomenon. All interviews were recorded and transcribed verbatim. Data management principles of formatting, cross referral, indexing, abstracting and pagination were applied (Miles & Huberman, 1994). Thematic content analysis was done through Tesch’s eight steps of data analysis, which was used to analyse the data (Tesch, 1990).

The study strictly adhered to the ethical principles of conducting research with human participants as prescribed by the World Medical Association in 2013. Informed consent was obtained prior to interviews. Confidentiality and privacy were respected at all times. Guba’s Model of Trustworthiness of Qualitative Research (Kreftling, 1991) was used to determine the trustworthiness. The four basic criteria of truth-value, applicability, consistency and neutrality were applied.

1.4 Research context

The context of the research was in the Western Cape Province, South Africa. The research participants consisted of 10 employers and 10 caregivers of individuals with mild TBI. These individuals had to have participated in the vocational rehabilitation using the Model of Occupational Self-Efficacy and be formally employed for a minimum of 2-3 months. Data was gathered through semi-structured interviews with the respective employers and caregivers of each individual with mild TBI. Interviews took place at the participant’s workplace, home or telephonically.
1.5 Research question

What are the experiences and perceptions of employers and caregivers of individuals with mild to moderate TBI returning to work (the same or an alternative job) after completing a vocational rehabilitation programme using the Model of Occupational Self-Efficacy?

1.6 Overview of subsequent chapters

Chapter One: Brief overview of the study

The first chapter of this thesis provides the background to the study. It introduces TBI and the influencing factors when returning to work. The rationale of the study is presented, together with the research design, methods, context and the research question, followed by an overview of each chapter.

Chapter Two: Literature review

The second chapter of the thesis presents the literature regarding epidemiology of TBI, the ICF that was used as the conceptual framework, statistics on TBI and RTW. Discussions on the meaning of occupation for the individual with TBI and rehabilitation in South Africa and abroad follow. Furthermore, the chapter describes the employers’ and caregivers’ perspectives from documented studies.
Chapter Three: Research methodology

Chapter three states the methodological principles in which the study is grounded. The study design, study setting, sampling strategy, data collection technique and data analysis process are described. Trustworthiness and ethical considerations are also discussed.

Chapter Four: Findings and Discussion

The fourth chapter concentrates on the findings of the study. Through the analysis process the patterns, trends and relationships are described. The findings were presented in themes, categories and subcategories. Furthermore the chapter compares the findings of the study to other relevant literature. This is followed by the interpretation of the findings through the conceptual framework provided by the ICF.

Chapter Five: Conclusion, Limitations and Recommendations

This chapter brings together all the information from the exploration into a comprehensive conclusion, its limitations and recommendations.

Personal background and motivation for the study

In September 2012, I started working as a research assistant on a research project that explored the implementation of the Model of Occupational Self-Efficacy. It was during this experience that I learned about the challenges that face individuals with TBI in Cape
Town, South Africa. The lack of therapeutic follow-up after discharge has left many individuals with TBI in a debilitating position. They are ill-prepared for understanding what TBI is and what its consequences could be. In pursuit of implementing the MoOSE, I needed to interact with many caregivers who became an integral part of the process. It saddened me as I became aware of how little attention was given to their experience of living with the individual affected by the TBI. As the process developed with each individual client and they became ready to assume their worker role once again, finding employers that would give the TBI individuals an opportunity of employment was very difficult. This led me to endeavoring to find out more about employers’ reluctance to employ individuals with TBI, even though South African employment equity laws encourage it, as well as exploring possible perception changes when both the individual and employer had been better prepared through the MoOSE.
CHAPTER TWO

LITERATURE REVIEW

2. Introduction

This chapter describes the current literature relating to the exploration of the TBI and the experiences and perceptions of employers and caregivers of individuals with TBI. The related epidemiology highlights the effect that TBI has on communities, societies and countries. The WHO’s ICF model helps frame the different aspects of functioning for all those affected by the TBI. A focus on the South African statistics as compared to international statistics of RTW and the reasons for the differences is key to sharing knowledge. Literature exploring the meaning of employment for individuals with TBI facilitates the journey towards including these individuals in the South African workforce. The starting point of the journey is access to vocational rehabilitation, which is looked at from South African and viewpoints abroad, as shown in previous studies. The MoOSE is a focal point in the investigation in this study and therefore information regarding the model is pivotal. To conclude, literature regarding the perceptions and experiences of the employers and caregivers are taken into account to ascertain what similarities there are with this study and what can be learned from others’ experiences.
2.1. Epidemiology of Traumatic Brain Injury

The epidemiology of traumatic brain injury (TBI) in both rural and urban areas across the world is influenced by legislation, geography and culture (Chiu, Huand, Tsai, Lin, Tsai, Lin & Huang, 2007). Current research indicates that changes in functional and adaptive behaviour result in significant difficulties in all spheres of life. However, research data is influenced by self-reports done by the injured individuals, who may lack insight (Gouse, Thomas & Solms, 2013).

Prevalence

The occurrence of TBI in both developed and developing countries results in costly treatments for the survivors of moderate and severe brain injury, as returning to full-time employment is not guaranteed (Chiu, Huand, Tsai, Lin, Tsai, Lin & Huang, 2007). Rehabilitation after TBI is thought to be a long-term process that, in some cases, never ends (Ptyushkin, Vidmar, Burger & Marineck, 2010). According to the annual mid-year population estimates from Statistics South Africa for the year 2009, South Africa's population was 49.3 million. The 2011 census estimated disability prevalence in South Africa to be 5% of the total population. An estimate of 89 000 cases of new traumatic brain injuries are reported annually in South Africa (KwaZulu-Natal Department of Health, 2010). The prevalence of TBI in South Africa is said to add to the national burden of disease and perpetuates ongoing violent behaviour (Webster, Taylor & Balchin, 2015). During an internal audit done at Groote Schuur Hospital (GSH), Cape Town, Western Cape, it was found that 10 046 trauma patients were admitted in 2009 and 24% of these patients were classified as head injuries (Webster, Taylor & Balchin, 2015).
Incidence, Risk and Mortality

In a global review of TBI, it's reported that, the incidence of TBI has grown throughout the world and appears to be more prominent in low and middle-income countries, of which countries in Sub-Saharan Africa are included (Hyder, Wunderlich, Puvanachandra, Gururaj & Kobusingye, 2007). In the 2009 audit at GSH it was identified that 82% of assault-related head trauma were experienced by young black or coloured men (Webster, Taylor & Balchin, 2015).

More males than females are affected by TBI (Murdoch & Theodoros, 2003). Adolescents and young adults are most at risk for TBI and after the TBI has occurred, the risk of another TBI increases three-fold (Thornton, Marshall, McComas, Finestone, McCormick & Sveistrup, 2005). This is likely due to the TBI resulting in poorer functional abilities and lack of judgment (Kennedy, 2001). TBI is stated to be a difficult clinical problem and results in multifaceted social issues (Chiu, Huand, Tsai, Lin, Tsai, Lin & Huang, 2007).

TBI is reported to be a major cause of mortality and morbidity in the developed world (Okonkwo, 2008). Studies of developing countries, such as South Africa, suggest that higher rates of TBI mortality are mainly due to road traffic accidents (Corrigan, Selassie & Orman, 2010). In a report based on information from 1,123 patients with TBI from across 22 trauma centres in New York between 2000 and 2004, the researchers identified that organised trauma response systems provide improved patient outcomes with lower mortality rates (Hartl, Gerber, Iacono, Ni, Lyons & Ghajar, 2006). Naidoo (2013), states
that SA does not have a TBI databank and that studies on overall incidence and prevalence are lacking and that older studies suggest that in South Africa more than a third of all deaths resulting from injuries are attributed to TBI. However, with more effective medical resources and emergency services, as well as advancement in neurosurgery, the mortality rate is decreasing and survival rates are increasing (Nell & Brown, 1990). Nevertheless, even though the mortality rate is decreasing, the study by Webster et al. (2015) revealed that, of the 654 head trauma patients admitted to the hospital, only 16 of the patients were admitted to a public rehabilitation facility for a 6-12 week period, which is inadequate for TBI rehabilitation as the process of healing is much longer.

**Causes and consequences**

Kersel, Marsh, Havill and Sleigh (2001) define traumatic brain injury as a non-degenerative and non-congenital injury to the brain due to external mechanical factors such as a blow to the skull with a heavy or hard object. After injury, responses measured according to the Glasgow Coma Scale, determine the severity of the injury. On a scale of 1-15, scores between 13 and 15 are considered mild or minor head injuries and the lower the score out of 15 the more severe it is (Powell & Malia, 2003). This could lead to temporary or permanent cognitive impairment and diminished psychosocial skills.

The leading cause of death and disability worldwide is TBI, which is mainly related to road traffic accidents, falls and violence (Maas, Stocchetti & Bullock, 2008).
The consequence of TBI is predisposed by factors such as premorbid mental ability, level of education, premorbid personality, social circumstances and socio-economic resources (Mokhosi, 2004). Challenges reported in the study exploring problems in functioning after mild traumatic brain injury, which was conducted by means of six focus group interviews with 17 participants, were noted as cognitive and emotional difficulty, lack of energy and drive, and struggling to carry out daily routine and work; in addition associated environmental factors played a big role (Sveen, Ostensjo, Laxe & Soberg, 2013). Multi-tasking in particular is stressful for the person with TBI. Multi-tasking occurs when a person switches between numerous simultaneous tasks requiring the application of a variety of cognitive strategies to succeed in order to execute the task successfully (Bootes & Chapparo, 2010).

Disorder of cognitive processing is one of the leading causes of loss of employment for patients with TBI (Mateer & Sira, 2006). In the study by Sveen et al. (2013) it was also suggested that more than 75% of the patients reported problems with participation in work. Stigmatisation by others and the questioning of the validity of the disability when individuals with TBI appear ‘normal’, were highlighted in the TBI metasynthesis comprising 23 qualitative studies from between 1965 and 2009 investigating the lived experiences of recovery following TBI acquired in adulthood (Levack, Kayes & Fadyl, 2010).
2.2. ICF as the frame of reference used in rehabilitation of TBI

The ICF will be used as the theoretical frame of reference in the study. The WHO’s ICF is a system for classifying health-related functioning and disability that serve as a useful framework for understanding the relationship between factors associated with functioning and disability. Functioning is considered to be a complex interaction between biological, individual and social factors, as well as with contextual factors of the environment and person (Andelic, Stevens, Sigurdardottir, Arango-Lasprilla & Roe, 2012). Disability could be viewed as the cause of the negative interactions between the individual with the health condition and the contextual factors (Pistarini, Aiachini, Coenen & Pisoni, 2011).

Complexity of framing TBI

The ICF has been found to be valuable when working with individuals with TBI as the interactions between the brain impairment, physical abilities, community integration and contextual factors impact on the return to productive work. As a conceptual framework, it facilitates a holistic and structured description of functioning of persons with TBI (Andelic, Sigurdardottir, Schanke, Sandvik, Sveen & Roe, 2010). According to the study done to determine the application of the WHO model of functioning, disability and health to brain injury rehabilitation, the ICF allows a standardised and comprehensive analysis of health-related consequences, particularly in neuro-rehabilitation (Bilboa, Kennedy, Chatterji, Ustun, Barquero & Barth, 2003). Furthermore, Larkin’s (2007) article on the application of the ICF in cognitive-communicative disorders following TBI found that the ICF provided a systematic approach to understanding the cognitive-communicative disorders of individuals with TBI.
How ICF came about and why

The WHO recognised that a more comprehensive description was needed to describe patients’ health conditions. Using the bio-psycho-social view of functioning, disability and health, the ICF emerged. The ICF was developed through a worldwide consensus process spanning a number of years and was adopted by the WHO in May 2001. It is expected to become the generally accepted framework to describe disability and health (Pistarini, Aiachini, Coenen & Pisoni, 2011).

Breakdown of the ICF structures

The ICF is a categorisation that uses alphanumeric codes to describe functioning and disability. Its structure is intricate, comprising two parts. The first part that encompasses functioning and disability is made up of three parts: body functions (using b codes), body structures (s codes), and activity and participation (d codes). The second part comprises contextual aspects, which are made up of the environmental factors (e codes) and personal factors (which are not yet classified within the ICF and therefore not coded) (Tate, Godbee & Sigmundsdottir, 2013). The ICF manual describes personal factors to be socio-demographic variables such as age, sex, race, education and other health conditions, as well as psychological constructs that may include coping styles, behaviour patterns and character. The manual depicts personal factors as a separate entity to the health condition (WHO, 2001).

Researchers in the field of TBI, using the ICF as the conceptual framework or for assessment purposes, maintain that the patient’s experience of functioning and disability
is determined by their interaction with the environment and personal factors and not only health conditions, as was found in the qualitative Italian study of eighteen focus groups and five single interviews (Pistarini, Aiachini, Coenen & Pisoni, 2011).

**Application of ICF**

The ICF is intended to be used in various sectors, namely health, education, insurance, labour, health and disability policy. Within the health domain it can be used for assessment, matching intervention to specific health states, rehabilitation and outcome evaluation. The ICF uses a globally agreed-on language and a classification system to describe function and disability of individuals, as well as at population levels. It is seen as a neutral framework that can describe both the patient’s perspective and that of the health professional (Pistarini, Aiachini, Coenen & Pisoni, 2011).

Furthermore in the Italian study researching the patient’s perspective in developing the ICF core set taking into account the caregiver’s viewpoints, identified the most relevant categories as Body Functions and Activities and Participation (Pistarini et al. 2011). Similarly, the same categories were detailed in a previous prospective study of 85 patients with TBI aged 16-65, that focused on disability, physical health and mental function one year after traumatic brain injury occurred. (Andelic, Sigurdardottir, Schanke, Sandvik, Sveen & Roe, 2010). Of note in the Italian study were restrictions and limitations in activities and participation relating to ‘d845 Acquiring, keeping and terminating a job’, ‘d850 Remunerative employment’ and ‘d870 Economic Self-Sufficiency’ which emerged through the implementation of the ICF framework to the
study. Also acknowledged through the ICF category ‘e310 Immediate family’ is the role that the family play as facilitators (Pistarini et al. 2011). Ptyushkin et al. (2010) state that ‘e310’s Immediate family’ were equally strong facilitators or barriers.

2.3. South African return-to-work rate compared to international statistics

When developing the inter-professional guidelines for vocational evaluation following traumatic brain injury, it was found that large numbers of individuals with TBI are unemployed and the return-to-work rate is only about 40%, one to two years post-injury (Stergiou & Dawson, 2012).

In a study done by O’Connell (2000), whereby data was gathered from retrospective chart reviews and logistical regression analysis performed on variables in order to identify predictors of return-to-work after a TBI for 43 individuals with TBI, it was established that individuals with higher scores for Performance IQ and verbal memory are more likely to return to work and these key areas are significantly related to employability. In a systematic review of 49 studies done between 1992 and 2008, to investigate how many people return to work after a head injury (traumatic and non-traumatic), it was found that changes in occupation and job demands are common following TBI (Van Velzen, Van Bennekom, Edelaar, Sluiter & Frings-Dresen, 2009).

Consistent with these statistics, a statewide surveillance study of 3 522 TBI patients in the state of Colorado, United States of America, aged >15 years, were discharged and followed up yearly by means of telephonic interviews exploring post-injury employment after TBI. It was found that in their study sample, 66% of the participants were employed
pre-injury and only 52% RTW after the first year of injury. However, this percentage rose slightly in subsequent years but did not reach pre-injury levels. It was found that unemployment was a likely cause of poorer QOL for patients and their families (Parks, Diaz-Arrastia, Gentilello & Shafi, 2010).

Van Velzen et al. (2009) also found that return to work appears to increase between a one-year and two-year period. Fraser, Machamer, Temkin, Dikmen & Doctor (2006) investigated 140 workers at the time of their injury and examined RTW and job sustainability in the workers with mild to severe traumatic brain injury, and found that, of the 61.4% of participants who were working three to five years post injury, 25.7% could not sustain employment.

Legislation and social welfare systems vary from country to country and play a role in how many people return to work after injury. In countries where the injured receive an income during sick leave, there is no urgent need to RTW. However, in countries where such luxuries are not available, returning to work is imperative (Van Velzen, et al, 2009).

2.4. Meaning of employment for a person with a TBI

Through a quantative review process and meta-analytic path modeling, work engagement is characterised as unique organisational constructs of well-being, and it is said that job performance is significantly related (Christian, Garza & Slaughter, 2011). Return-to-work is considered an important element of TBI rehabilitation because post-TBI employment is a strong predictor of quality of life (QoL). Tsaousides et al. (2009) reported that the
meaning of employment amongst study participants ranged from financial gain to a means of regaining a place in society. The study further elaborated on employment-related self-efficacy; that is, the individual’s belief in his or her ability to find or carry out work-related tasks successfully, which may play a role in the relationship between employment and QoL. Furthermore, studies reveal that successful return-to-work also results in the reduction of secondary disability and, conversely, unsuccessful return to work can lead to poorer psychosocial adjustments and physical ailments (Stergiou et al. 2012). In agreement with this, Radford et al. (2013) cohort comparison of 94 participants that were working at the time of injury and followed up by postal questionnaire at 3, 6 and 12 months post-hospital discharge, found that returning-to-work participants displayed less anxiety and depression and had a better quality of life. Svendsen and Teasdale (2006), who carried out a longitudinal study consisting of 37 adults that had undergone VR and 13 adults that had not undergone VR, highlighted that working not only contributed to the economy but also to patient wellbeing and that of their family.

2.5 Barriers to return to work

Factors that may hinder an individual with TBI’s ability to RTW range from the severity of the injury, age, education, occupation, pre-injury income and presence of a social network, to marital status. In a multi-centre analysis of 186 individuals with TBI who returned for follow-up at 1, 2 and 3 or 4 years post-injury, who were of working age and were working pre-injury, it was found that younger patients who were employed before the injury were more likely to RTW post injury, i.e. individuals younger than the age of 45 years (Kreutzer et al. 2003). Difficulties in the management of work duties were
reported by more than half of the patients in the Sveen et al. (2013) study. Poor sleep, handling of stress and psychological demands and maintaining friendships were highlighted as contributing factors.

2.6. Facilitators to return to work

46 participants with TBI, which formed part of a prospective cohort study and 14 friend/family controls, all employed at the time of injury, found that the facilitators during the process of RTW for individuals with TBI start with the understanding of the productivity outcomes based on injury severity, physical status and psychological status (Dawson, Schwartz, Winocur & Stuss, 2007). In the same study it was also found that when the rehabilitative process addressed challenges such as pain, depression and coping, there were more positive outcomes in the RTW process. When conducting semi-structured interviews in order to explore the experience of eight individuals with TBI, their families, 22 health professionals and nine physicians, it was found that family members are more likely to support the rehabilitative team when they have been part of the decision-making process from the start, which may yield better results (Lefebvre, Pelchat, Swaine, Gelinan & Levert, 2005).

2.7. Consequences of unemployment

It has been documented that unemployed persons are more prone to divorce, become homeless, access health-care less, suffer from social isolation, become victims of crime and abuse alcohol and drugs (Kapur, Cooper, King-Hele, Webb, Lawlor, Rodway, Appleby et al. 2006). Levack, Kayes & Fadyl, (2010), using qualitative metasynthesis,
searched 15 databases for qualitative research published between 1965 and 2009 investigating the lived experience of recovery following TBI in adulthood, identified that individuals with TBI have been described as feeling disconnected with their pre-injury identity and struggle with emotional and social challenges and feelings of loss.

2.8. Rehabilitation with the TBI population abroad and in South Africa

Resources for rehabilitation in South Africa are few. Access to the rehabilitation facilities in the public sector is limited. In the study by Webster et al. (2015), they conducted interviews with 175 South African families and 354 patients recovering from TBI, and identified that families of the TBI survivor carry the burden of care of rehabilitation upon discharge from hospital.

According to the Brain Injury Association of America, each year an additional 1.5 million people sustain a TBI and, of these, 80 000 begin the process of long-term recovery (Thornton et al. 2005). Tsaousides et al. (2009), state that the clinical implications for professionals working in the field of rehabilitation are that increasing the TBI individual’s confidence in work-related abilities and enhancing their self-efficacy may facilitate return to work, and will certainly have an impact on their perception of well-being.

Parks et al. (2010) recommended that trauma centres work closely with other stakeholders in society such as employers, families, etc. to enable patients to return to work after TBI because their study identified employment as an important long-term
measure of functional outcome that can be tracked to assess patient recovery. In a cross-sectional prospective study done in a neurorehabilitation hospital in Spain, of the 103 patients included in the study it was found that 80% of the patients found health services to be facilitators in the process of rehabilitation. Furthermore the study recognised the importance of family and colleagues (Laxe, Zasler, Tschiesner, Lopez-Blazquez, Tormos & Bernabeu et al. 2011).

The trend in rehabilitation is to move out of the hospital base and into the community. However, in a study comparing the differences of 77 patients with TBI that received either community-based therapy or hospital-based therapy, it was found that there was no significant difference between the two in terms of employment outcomes, independence in personal and domestic ADL, mobility, return to leisure activities, occupation and social integration. However, the participants that received therapy in the community were more aware of their communication difficulties and inappropriate social behaviour (Ponsford, Harrington, Olver & Roper, 2006). In an intervention study conducted in Australia with 14 participants who completed a 12 week outpatient VR programme, the outcomes in home and hospital were compared, and it was found that the therapy process, regardless of the setting, was most important; success was enhanced when a structured, goal-directed, environment-focused approach was used (Doig, Fleming, Kuipers, Cornwell & Khan, 2011).

This Supported Employment Model was explained by Wehman (1996) as a rehabilitative alternative to facilitate the return of individuals with TBI to work. Components of the programme involved job matching and job placement, job training, long-term support and
job skills reinforcement. Minimal pre-training in vocational rehabilitation (VR) is required to use this model as most of the intervention takes place at the work site. It requires job site training, ongoing assessment and job retention. One criticism of this model is that it requires regular reviews of the individual and one could argue that the individuals never truly develop their worker role as they continue to rely on others for job coaching on a long-term basis. Although the benefits of this model cannot be argued, success is only achieved once the individual himself has again become as self-sufficient to his/her optimal capacity with minimal or no assistance from an external source (Wehman & Revell, 1996).

2.9. Disability Rights Policies

Disability Rights Charter

The Disability Rights Charter (1992) was developed in order to reflect the demands of people with disabilities to assert their right to equal opportunities free from discrimination, exploitation and abuse. The Charter highlights the right to employment in the open labour market for a person with disabilities, and states that reasonable accommodation and training programmes should be implemented by government and employers in order to help persons with disabilities compete in the open labour market. The Disability Rights Charter therefore advocates for individuals with TBI, and is an aid to them as they re-enter the open labour market for employment, recognising that despite the disability being “invisible”, accommodations are necessary to ensure equal opportunities.
UN Convention on Disability

The United Nations Convention on the Rights of Persons with Disability highlighted the need to promote, protect and ensure equal enjoyment of human rights with respect for their inherent dignity. The 2006 protocol states that the aims of the protocol are to:

- Prohibit discrimination of disabled people and enable people with disabilities to work on an equal basis with others.

- Protect the rights of people with disabilities with regards to all matters concerning employment, including recruitment conditions, career advancement and safe and healthy working conditions.

- Protect the rights of persons with disabilities on an equal basis with others, to equal opportunities, and favourable conditions at work, including equal remuneration for work of an equal value.

- Enable people with disabilities to have access to training programmes, placement services and vocational training.

- Promote opportunities for self-employment, entrepreneurship, and the development of co-operations and starting one’s own business.

- Employ people with disabilities in the public sector.

- Ensure that reasonable accommodation is provided to people with disabilities in the workplace.

- Promote vocational and professional rehabilitation, job retention and return-to-work programmes for people with disabilities.
The UN’s Convention on the Rights of Persons with Disability is a much-needed tool for both the individual with TBI and their employer in the RTW process. Many employers do not understand the ramifications of employing an individual with a disability such as TBI and this protocol helps protect and promote healthy work relationships.

The UN’s International Labour Organisation (ILO), (2015), facilitates programmes that aid the development of skills, knowledge and employability. Guidance and policy advice are available for governments, employers and workers. The IOL focuses on three areas:

- Training linked to current labour market needs and building competencies for jobs in the future.
- Quality apprenticeship systems and incorporating core skills into training for young people.
- Expand access to employment-related training in rural communities to better equip people for work in the formal economy.

The ILO has established disability-specific programmes and initiatives aimed at overcoming barriers and to promoting the inclusion of persons with disabilities in the workplace. Programmes include skills training, employment promotion, social protection and poverty reduction strategies.

**Skills Development Act of SA**

The Skills Development Act of SA (1998) was developed for the main purpose of improving skills and productivity in order to compete in the global economy. The Act aims to improve the quality of life of workers as well as productivity in the workplace. It also seeks to afford disadvantaged individuals better opportunities. Many individuals
with TBI require the learning of new skills or re-learning of previous skills due to the negative cognitive effects that TBI often has. The Skills Development Act therefore is imperative in the RTW process of the individual with TBI and, as a result, the employer benefits from improved productivity in the workplace.

**Employment Equity Act**

The Employment Equity Act of South Africa (1998) was designed and is being implemented in order to promote equal opportunities and fair treatment in employment. The Act is in-line with the UN Convention’s Article 27 (2006) on work and employment, which acknowledges the rights of persons with disabilities to work on an equal basis with others. Furthermore, Article 27 promotes the realisation of the right to work through appropriate legislation, which safeguards all parties. People with disabilities (PWD) fall within the designated group for whom the act was envisioned. However, research exploring RTW of individuals with TBI using detailed record reviews looking specifically at the communicative, physical, emotional and cognitive outcomes, found that from the individuals who are classified as disabled as a result of a brain injury, only 32% return to work (Penn & Watt, 2000). Contributing to this low percentage is the view that employers have that individuals with brain-injury have the same ability as able-bodied workers and thus have the same expectation in the work environment, with no reasonable accommodation being implemented for them. (Wehman, Yasuda, Targett & Cifu, 2011). This often leads to failure and termination.
2.10. Healthcare plan 2030 in the Western Cape

In October 2013, the Minister of Health in the Western Cape presented the final draft of the 2030 healthcare plan for the province ("Healthcare 2030: A Future Health Service for the Western Cape", 2013). This presentation led to the approval of the Healthcare 2030 plan, which was then published in March 2014. The plan provides a strategic framework that guides the Department of Health in planning for healthcare in the province over the next few years. The plan focuses on addressing the burden of disease, increasing the wellness of communities and ensuring patient-centred quality care. The plan is grounded with four pillars that advocate for:

- A person-centred approach
- Integrated provision of care, that is i.e. various health professionals working in a cohesive manner with the patient
- Continuity of care, i.e. continued support for the patient
- A life course perspective, meaning a holistic approach and continuing treatment for patients throughout their lives, not just once-off interactions.

Through the 2030 Healthcare plan, individuals with TBI should have better access to immediate and rehabilitative care after injury. With better rehabilitative programmes that continue throughout their lives, individuals with TBI have better prospects of adapting to a worker role (Radford et al. 2013).
2.11. The Model of Occupational Self-Efficacy as a tool for return-to-work preparation

The Model of Occupational Self-Efficacy, developed by Soeker (2012), has a dynamic element that encapsulates a client’s belief in his/her ability to succeed. The model has four stages: a strong belief in functional ability, use of self, creation of competency through occupational engagement and capable individual. The aim of each stage is to produce goal-orientated steps that motivate the client towards becoming and maintaining an independent worker role. Using this model as a guide for a vocational rehabilitation programme allows the therapist to engage in client-centred intervention and allows the client self-reflection, better aiding, continued participation in the programme and insight building. These are vital elements, supported by numerous studies as predictors of successful return-to-work.
Fig 1. Diagrammatic representation of The Model of Occupational Self-Efficacy

**Stage 1**: Introspection. During this stage, the individual with TBI is encouraged to reflect and explore their lifestyle, limitations and capabilities. When they have reached the acceptance of their limitations through understanding, they are able to set realistic goals based on their capabilities (Soeker, 2009). This stage is facilitated by exploring feelings related to the injury, looking at how and possible reasons as to why it occurred and looking at any feelings of guilt that emerge. This means that introspection aims to develop insight and prepares for a more realistic and positive goal setting.
Stage 2: Use of Self. The aim of this stage is for the client to resume control of their life situation and realise their self-efficacy (Soeker, 2009). During this stage of therapy, the therapist and individual with TBI work to improve functional components such as cognition and endurance that need intervention which are client-centred and goal-orientated. Through the improvement of components, the client’s participation increases and in doing so self-esteem is impacted positively and in turn self-efficacy strengthened.

Stage 3: Creation of competency through occupational engagement. As the individual with TBI improves, he/she will assume a more positive view and be able to gain more independence. The therapist should provide affirmation in order to explore more occupational engagement and increase independent work-related skills. Work practice placement is an important task during this stage. It is now that the therapist involves the employer and provides education about TBI and prepares the employer for what to expect from the individual. A key to the success of this process is for the therapist to have a good understanding and analysis of the intended job in order to determine realistic suitability, and prepare the client adequately.

Stage 4: Capable individual. At this stage the client is comfortable in the worker role and is engaging in meaningful and gainful employment. The therapist steps back and allows the client to proceed on his/her own.

2.12. Employment of a person with a disability

The Maja, Mann, Sing, Steyn and Naidoo’s (2011) study, in which a purposive sample was used to identify the knowledge, attitude, perceptions and experiences of employers
when hiring people with disabilities (PWD) in South Africa, indicates that there are many perceived and experienced barriers preventing successful employment of PWDs such as lack of knowledge of disability and negative attitudes stemming from fellow employees. Maja et al. (2011) identified that not having an internal policy targeted at recruiting and employing PWD, was a significant barrier, together with the employer’s ignorant view that only physical challenges constituted a disability, and attitudes such as stereotyping and non-supportive behaviour toward PWD from fellow employees. The South African Minister of Labour has stressed that it is the responsibility of the employers to remove barriers that PWDs experience, as the employers themselves created most of these barriers. The lack of knowledge and understanding of disability and the role of the various professionals that could be consulted, contribute to the barriers experienced by the organisations in recruitment, selection and employment of PWDs. It was further highlighted that if it were not for the South African Legislation stipulating that PWDs should be employed, employers would not have recognised the benefits of employing PWDs.

A survey of fifty employers with businesses residing in Midwestern states of the USA that offered VR was carried out to ascertain more in-depth attitudes and perceptions of employers toward hiring PWDs and their view on VR programmes. Findings suggest that employers that had previously hired PWDs were open to do so again; however employers articulated that it was easier to hire a person with a condition such as a heart impairment as opposed to a person with a physical or mental challenge. Furthermore it was noted that employers did not use contact with VR professionals optimally, which, if done
differently, could aid the employer’s better understanding of different disabilities and hiring of all PWDs (Gilbride, Stensrud, Ehlers, Evans & Peterson, 2000).

An article addressing questions arising from economic and social inequalities that PWD experience in the United States postulates that for change to be implemented, companies must understand that corporate culture can create or reinforce obstacles for PWD and it is through attitudinal change that PWD are fully accepted and incorporated in the workforce (Schur, Kruse & Blanck, 2005).

In the critical case study done by Bootes and Chapparo (2010) exploring multi-tasking after TBI, the employer of the participant expressed that, upon returning to work after the TBI, the employee demonstrated significant problems with discriminating strategies which resulted in the employee focusing on unimportant detail. He also stated that the employee was able to remember basic procedures for work routine but not procedures that were more complex. When the employee was given a more complex task he would view it as unreasonable and become verbally aggressive. Timekeeping was another concern. This was viewed as a major obstacle by the employer.

2.13. Caregiver’ experience of living with a person who has a TBI

During the immediate post-TBI phase, the families of the affected individual are forced into a world of hospitals and rehabilitation, and this is followed by the longer-term prospects of being responsible for the bulk of caregiving responsibilities (Bishop, Degeneffe & Mast, 2006). In the cross sectional study done by Calvete, Lopez and
Arroyabe (2012) to determine the role of social support and coping for 223 caregivers of persons with TBI, results indicate that the caregivers experience elevated depressive and grief symptoms. Furthermore, coping strategies are important for the caregivers’ psychological health and therefore interventions that promote functional coping may aid prevention of distress amongst caregivers. Identifying with the above, a correlational study using path analysis with 108 participants on the stress process model of caregiving for individuals with TBI, reported that caregivers present with elevated levels of burden, stress and depression due to the chronic nature of TBI (Chronister & Chan, 2006).

In the South African rural communities 22 individuals with TBI and their caregivers were interviewed using semi-structured interview processes. They examined African families’ perspectives of traumatic brain injury and found that families experienced financial difficulties, particularly when the individual with TBI was totally dependent on the caregiver (Mokhosi, 2004).

Lack of employment for the person with TBI is documented to have a ripple effect on the patient’s family members or caregivers through the loss of income, interpersonal relationships and social interactions (Parks, Diaz-Arrastia, Gentilello & Shafi, 2010). The lack of financial support for the families caring for the individual with TBI has been reported to increase stress and negatively affect the caregiver’s ability to cope (Riley, 2007).

Participation in a rehabilitation programme, such as the one in the study by Thornton et al. (2005), improved cognitive function and concentration and had a positive impact on the participants and their relationships with caregivers. In the qualitative study using
interviews with eight participating family member participants and phenomenological hermeneutic interpretation to explore the meaning of the family members’ experiences when living with moderate or severe TBI, the caregivers expressed that various professionals treated them with indifference and impatience, and some even felt fear when interacting with the professionals (Jumisko, Lexell & Soderberg, 2007). Furthermore, the Jumisko, et al. (2007) study states that open and honest communication with the professionals made the caregivers feel safe.

Mokhosi (2004) states that rehabilitation without a consideration of cultural beliefs and practices of patients is not likely to succeed. He believes cultural beliefs should be identified and, in a respectful manner, negative cultural beliefs that may hamper rehabilitation should be changed without interfering with the local belief systems.

2.14. Conclusion
Within the context of the current study, the caregivers’ and employers’ perceptions about the adaptation process of individuals who sustained a TBI, are pivotal to understanding the return-to-work process for individuals with brain injury. Usually the caregivers are the ones that aid the individual with the TBI in RTW. Information from caregivers enhances the information provided by employers about workplace adaptation and barriers related to return-to-work. A greater understanding of the epidemiology, incidence, risk and mortality prevalence, the causes and consequences were studied. Knowledge of the ICF and how it works helped frame TBI. A closer look at the statistics on TBI in South
Africa and the RTW rate compared to international statistics and RTW, were reviewed. The meaning of employment for individuals with TBI is significant as it provides insight into the importance that should be placed on restoring the worker role. This also aids the understanding of the consequences of unemployment. The barriers and facilitators after TBI are investigated as they inform the VR processes, which are looked at in terms of rehabilitation in South Africa and abroad. Disability rights policies advocate for better opportunities and provide more perspective on inclusive employment. The Healthcare Plan 2030 in the Western Cape stipulates strategic guidelines to help the province achieve better quality care and life for all. A key focus on the MoOSE imparts insights into the foundation of the methods followed during VR, which are connected to this study.
CHAPTER THREE

METHODOLOGY

3. Introduction

This chapter focuses on the research problem, the aim of the study and its objectives. This is followed by a presentation of the research paradigm used in this study and the description of the setting. Thereafter there will be a discussion on the sampling strategy used for the selection of participants, data-collection techniques and data analysis. To conclude, bracketing, trustworthiness and the ethics related to the study are discussed.

3.1 Research problem

The problem that underpins this study is that not much literature exists regarding the perceptions and experiences of employers who employ individuals with TBI. There has been research conducted to support the positive impact of employment after a traumatic brain injury. However, the return-to-work rate of individuals living with a TBI is low, and stigma and misperception continue to exist around TBI and functionality after TBI. In the study done by Doctor et al. (2005) it was identified that a large number of individuals with TBI are unemployed or underemployed. Considering the benefits of employment after a TBI, there is a need to explore what an employer’s perceptions and experiences are when they have employed an individual with TBI after he/she has received the adequate vocational rehabilitation. The study by Webster et al. (2015) recognises the families as the experts in the rehabilitation process and believe that their role is vital in understanding TBI, and that the family members’ advocacy role could be
strengthened. More research is needed to aid a better understanding of the impact that a vocational rehabilitation programme can have on the family, when the focus is on returning the affected individual to his/her worker role. Therefore, the current study focused on understanding the perceptions and experiences of the employer and caregiver of the individual with TBI after participating in the vocational rehabilitation programme.

3.2 Aim of the study

The aim of the study is to explore the experiences and perceptions of employers and caregivers of individuals with brain injury, returning to work after completing a vocational rehabilitation programme using the Model of Self-Efficacy.

3.3 Objectives of the study

1. To describe the barriers that employers experience when working with an individual that has a TBI after they have had vocational rehabilitation using the Model of Occupational Self-Efficacy.

2. To describe the barriers that caregivers experience when the individuals with TBI participated in vocational rehabilitation using the Model of Occupational Self-Efficacy and RTW.

3. To describe the enablers that employers and caregivers experience in the work and home environments when assisting individuals with TBI to adapt to their worker roles after they have had rehabilitation using the Model of Occupational Self-Efficacy.
4. To describe the coping strategies that employers and caregivers utilise when assisting individuals with TBI to adapt to their worker roles after they have had rehabilitation using the Model of Occupational Self-Efficacy.

3.4 Research paradigm

3.4.1 Qualitative research

Qualitative research is fundamentally interpretive; this includes developing a description of the individual, setting, analysing data for themes and eventually drawing conclusions about its meaning (Creswell, 2003). In this study, qualitative research enabled the researcher to better understand the experiences and perceptions of employers and caregivers of individuals with TBI with regard to the return-to-work process. The qualitative paradigm views constructed realities through people’s understanding of their environment. This allowed the researcher the opportunity to explore the complex connections between physical environment, social context and the participant (Hammell & Carpenter, 2002). The lived experiences of the participants, being the employers and caregivers of individuals with TBI, were captured using an exploratory and descriptive approach.

3.4.2 Exploratory Research

The research design is reflective of the purpose of the study. Within this study, an exploratory design was applied as this design is used to clarify a problem through exploration of an experience using the perspectives of the units of analysis (Andersen, Nielsen & Brinkmann, 2012). Exploring the experiences and perceptions of the
employers and caregivers of individuals with a TBI is the purpose of this study. Mouton and Marais (1993) indicate that the aim of exploratory research is to explore an unknown research area in order to gain new insight into the phenomenon of interest but which may not lead to replicable data. To obtain information from the participants, open-ended questions were asked. It is stated that participants usually use descriptions to relate their experiences (Corbin & Strauss, 2008). For this reason a descriptive research design was employed.

3.4.3 Descriptive research

Burns and Grove (1999) describe descriptive research as the exploration and description of phenomena found in real-life situations. In this study, an accurate and authentic description was required of the experience and perception of employers and caregivers of individuals living with TBI regarding their adaptation to their work and home environments. The descriptive approach supports the true representation of attributes of participants (Polit & Hungler, 1999). In this study, the researcher applied the principle of bracketing so as to facilitate the process of data collection through acquiring descriptions of the participants’ experiences and perceptions. This allowed the descriptive process of the phenomenon being researched.

3.5 Description of study setting

The study took place in the Western Cape, which is a province in South Africa. It is the fourth largest of the nine provinces in South Africa, located in the south-western part of the country (Census 2011). It is home to a population of 5.8 million people. According to the census done in 2011, the racial distribution in the Western Cape is 49% Coloured,
33% Black African, 17% White and 1% Indian/Asian. The main languages spoken in the region are Afrikaans, IsiXhosa and English (Census, 2011).

Around two million people in the Western Cape between the ages of 16 and 64 are employed, 1.3 million are not economically active, 552,733 are unemployed and 122,753 have sought employment but were unsuccessful and are now discouraged. (Barnes, 2013).

Fig 2. Map of Western Cape Region

3.6 Sampling strategy

The sampling strategy is outlined below in terms of selection criteria and the description of study participants.
3.6.1 Participants’ selection

A purposive sample was selected of 10 employers and 10 caregivers of individuals who have had TBIs and have undergone vocational rehabilitation as part of a bigger study exploring the use of the Model of Occupational Self-Efficacy. Employers included human resource managers, line managers and supervisors. Caregivers included individuals with whom the person resides.

The criteria used for the selection of participants were as follow:

**Inclusion criteria**

- Employers of individuals with TBI that have had vocational rehabilitation using the Model of Occupational Self-Efficacy.
- Employers needed to have supervised the individual with the TBI for at least two to three months.
- Caregivers of individuals with TBI that have supported them during the period of vocational rehabilitation using the Model of Occupational Self-Efficacy.
- Participants must be able to communicate effectively in English and Afrikaans and able to understand verbal questions.
- Participants must live in Cape Town.

**Exclusion criteria**

- Employers and caregivers that did not have direct contact with the individual with brain injury during the period of work placement.
### 3.6.2 Description of study participants

Ten individuals with mild TBI, who completed their vocational training using the Model of Occupational Self-Efficacy, were identified. The respective employers and caregivers of the 10 individuals with TBI constituted the participants in the study.

<table>
<thead>
<tr>
<th>Individual with TBI</th>
<th>Employer</th>
<th>Caregiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>RK- Male, Mild TBI</td>
<td>Participant 1 (Junior supervisor, Order Picking department at local beverage factory)</td>
<td>Participant 2 (Elderly mother, Currently experiencing ill health)</td>
</tr>
<tr>
<td>Grade 9 education level, Currently employed at a local beverage factory in the order-picking department.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HL- Male, Moderate TBI</td>
<td>Participant 3 (Senior supervisor, main factory plant of the local beverage company)</td>
<td>Participant 4 (Cousin, She aided the individual's mother in nursing him back to health. His mother has since passed away and she has assumed the role of his caregiver.)</td>
</tr>
<tr>
<td>Grade 6 education level, Employed as a general worker at a local beverage factory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST- Male, Mild TBI</td>
<td>Participant 5 (Floor manager at the food outlet)</td>
<td>Participant 6 (Mother, Employed full time as a domestic worker)</td>
</tr>
<tr>
<td>Grade 11 education level, Employed as a host at a food outlet. Job entails</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Participant</th>
<th>Role in Food Outlet</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XN- Male</td>
<td>Floor manager at the food outlet.</td>
<td>Moderate TBI, Grade 12 education level. Employed to work on the grill in the kitchen of a food outlet. Job entails making of different food products on a heated surface. Individual’s aunt assists his mother with his care. His mother is not educated and this affects her understanding of his condition. Her sister therefore assists her in his care.</td>
</tr>
<tr>
<td>JI- Female</td>
<td>Floor manager at the food outlet.</td>
<td>Moderate TBI, Grade 9 education level. Employed to work as a host and general worker at a food outlet. Job entails interacting with customers, clearing tables and general cleaning.</td>
</tr>
<tr>
<td>NR- Male</td>
<td>Owner of the security company.</td>
<td>Mild TBI, Grade 12 education level. Employed as security supervisor for a local security company. Job entails scheduling of ground security staff and monitoring their work.</td>
</tr>
</tbody>
</table>

Participant 5
Participant 7
Participant 9
Participant 10
Participant 11
Participant 12
<table>
<thead>
<tr>
<th>Participant ID</th>
<th>Description</th>
<th>Relationship</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 13</td>
<td>General manager of the food outlet.</td>
<td>Participant 14</td>
<td>Wife. Part time employment</td>
</tr>
<tr>
<td>Participant 13</td>
<td>General manager of the food outlet.</td>
<td>Participant 16</td>
<td>Mother. Employed</td>
</tr>
<tr>
<td>Participant 17</td>
<td>Floor manager of the food outlet.</td>
<td>Participant 18</td>
<td>Friend. Employed at a local distillery.</td>
</tr>
<tr>
<td>Participant 19</td>
<td>Manager at the NGO</td>
<td>Participant 20</td>
<td>Mother. Unemployed</td>
</tr>
</tbody>
</table>
General work at an NGO after completing a learner-ship with a cleaning company.

3.7 Data collection technique

The chosen method of data collection was semi-structured interviews, which were conducted with each participant. Semi-structured interviews allowed the researcher to utilise a set of predetermined questions aimed at understanding the participants’ construction of knowledge and social reality, allowing room for probing and clarification (Maree, 2007).

3.7.1 Semi-structured interviews

The predetermined interview schedules aim to define the line of enquiry. As the researcher, it is vital to be attentive to the responses so as to identify new emerging trains of thought that are related to the study phenomenon (Maree, 2007). This technique involves the exchange between the researcher and participant, where the researcher encourages the participant to play an active role in discussion (Ulin, Robinson & Tolley, 2005).

The researcher conducted one interview per employer and caregiver; further interviews were conducted until the saturation of data was reached with certain participants.

Refer to Appendix D for the interview guide.
3.7.2 Description of interview process

Participants were sourced from the data basis of Tygerberg Hospital who had already completed vocational rehabilitation using the model of Occupational Self-Efficacy and were employed in the open labour market. Participants were contacted telephonically. Introductory meetings were scheduled at a time and place convenient for the participant. All the participants were informed about the nature of the study verbally and in writing. Informed written consent was obtained from the participants. Semi-structured interviews were done either face-to-face or telephonically at the participant’s convenience. All interviews will were audio-recorded.

3.8 Data analysis

Qualitative data analysis is done through examining meaningful and symbolic content by analysing the participant’s perceptions, attitudes, understanding, knowledge, values, feelings and experiences in order to try and construct the phenomenon (Maree, 2007). The data analysis process that follows in this study is described under the headings data management and thematic content analysis.

3.8.1 Data management

There are five key principles involved in data management: formatting, cross referral, indexing, abstracting and pagination. This allows for systematic storage and retrieval of information (Miles & Huberman, 1994). In this study, the raw data from audio-recordings were transcribed verbatim. The service of a professional transcriber was sought.

3.8.2 Thematic content analysis

The data were analysed by means of thematic content analysis.
Tesch’s eight steps of data analysis were used to analyse the data. Tesch believes that data analysis is an eclectic process (Tesch, 1990).

The eight steps are:

1. The researcher read through all the transcripts, making notes of ideas that came to mind.
2. The researcher then proceeded to select one interviewee at a time to extract meaning from the information, writing down thoughts that came to mind.
3. Similar topics were then arranged in groups.
4. Abbreviating the topics as codes was done and codes were noted next to the appropriate segment of text. Observations of the organisation of data led to new categories and codes emerging.
5. Descriptive wording for the topics was sought to convert them into categories.
6. A final decision was taken on the abbreviation of each category and codes were arranged alphabetically.
7. The data material belonging to each category was put together in one place and preliminary analysis performed.
8. Recoding of data was done at the end.

This process helped the researcher build a picture of the participant’s descriptions and capture the underlining meaning. Similar descriptions were grouped together to form categories from which patterns emerged and themes were developed. This was followed by the process of comparing the analysed data with relevant literature in order to establish links between theories.
3.9 Bracketing

Bracketing refers to the casting aside of preconceived opinions and bias about the phenomenon being researched and contextualising data with in-depth reflection (Tuffor & Newman, 2012). Prior to commencement of this study, the researcher worked with individuals with TBI as part of their rehabilitation. Through that process some preconceived ideas were revealed as to employers and their implementation of employment equity in the workplace. When interacting with caregivers, the researcher became aware of their unpreparedness for having to live with an individual with TBI. Therefore, the research in this study reflected on preconceived ideas regarding employers’ and caregivers’ experiences through the process, using a reflective journal and discussions with her supervisor. This was done in an effort to dismiss any bias while investigating.

3.10 Trustworthiness

Guba’s Model of Trustworthiness of Qualitative Research, adapted by Kreftling (1991), was used to determine the trustworthiness of the current study. The four basic criteria are truth-value, applicability, consistency and neutrality.

*Truth value*, according to Kreftling (1991) refers to the truthfulness of the reports given as results stemming from a research project. This was ensured through the utilisation of member-checking by verifying the findings of the study with the participants, and amending findings when necessary. Triangulation, another aspect of truth-value, was achieved by the use of sources of information i.e. caregivers and employers in the current study.
Applicability according to Guba (1981) was referred to as ‘fittingness’ of a study. The criterion applicability was achieved by providing comprehensive descriptions of the research methods, participants and their contexts, and detailed descriptions of participants and their lived experiences.

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.

Neutrality refers to the findings of the study being derived exclusively from the participants and not from any other bias or perspective (Guba 1981). In this study the practice of bracketing was used.

3.11 Ethical statement

De Vos, Strydom, Fouche and Delport (2002) define ethics as widely accepted suggestions from a group or individual formulated into a set of principles regarding rules and behavioural expectations that are most correct when interacting with respondents, employers, sponsors, other researchers and assistants or students. Ethical guidelines serve as the basis on which researchers should assess their conduct (De Vos, 2002). In the context of the current study, informed consent was obtained from the participants before participating in the study. Participants had the right to leave the study at any point, which safeguarded autonomy. Confidentiality was ensured by keeping audio interviews in safekeeping and transcribed data on a password-protected computer, until the study was concluded. After a period of two years the stored audiotape recordings will be destroyed.
In the write-up of the study, no names were used and this ensured confidentiality. The researcher referred to participants as either ‘employer’ or ‘caregiver’. Non-maleficence was adhered to, and every effort was taken to ensure that the participants did not endure any form of stress as a result of participating in the study. Furthermore, principles of beneficence of provision of financial assistance for caregiver participants not able to afford travelling costs in order to participate in the study, was ensured and the ultimate goal of the exploration was to obtain better working conditions for individuals with TBI and ascertain ways in which best to support the employer and caregiver in doing so. Permission was obtained from the Higher Degrees and Ethics Committees at the University of the Western Cape. Permission to conduct the study was also obtained from the relevant authorities at the Department of Health.
CHAPTER FOUR

FINDINGS and DISCUSSION

4. Presentation of findings

The experience and perceptions of employers and caregivers of individuals with TBI returning to work after participating in a rehabilitation programme will be discussed in the following themes and categories:

Theme 1: Business as usual: productivity is essential within the workplace

Theme 2: Life after TBI: Caregivers’ journey

Theme 3: The rehabilitation model as an enabler for the employer and caregiver

Theme 4: Employers: Knowledge is power

Theme 5: Caregiver: A sense of responsibility and duty

The five themes emerged as a result of a rigorous analysis of the various categories.

Themes 1 and 2 relate to the barriers the employer and the caregivers experienced when assisting the individual with TBI on their journey of returning to work. Theme 3 aims to describe how participation in a vocational rehabilitation programme was an enabler for the employer and caregiver in the process of RTW. Themes 4 and 5 narrate the coping strategies implemented by the employers and caregivers to assist the individual with TBI.
Fig 3. Diagrammatic representations of the themes and categories

Diagrammatic representations of the themes and categories
The diagrammatic representation of the themes in Figure 1 represents the integral role both the employers and the caregivers play in the RTW process for the individuals with TBI. When enabling factors for employers and caregivers are stronger than the barriers, the individual with TBI has a greater chance of a successful return to work. However, when barriers for the employer and caregiver are difficult to overcome, the return-to-work process is strained. Coping strategies are vital in keeping the employer and caregiver motivated and active in the process of successful return-to-work for individuals with TBI.

The themes and related categories are presented in tables 4.1, 4.2, 4.3, 4.4 and 4.5.

The results of the study are interpreted through the International Classification of Functioning (ICF) model. The ICF model is used to discuss the employer’s and caregiver’s experiences and perceptions of the return-to-work process for individuals with TBI. The model highlights the essential roles that the employers and caregivers have when assisting the individual with TBI to return-to-work successfully. It also demonstrates how both the employer and caregiver together complement each other in aiding the individual with the brain injury in returning to work.
Table 1: Theme 1 and related categories

<table>
<thead>
<tr>
<th>4.1. Business as usual: Productivity is essential within the workplace</th>
<th>4.1.1. Production line pressures</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.2. The work environment and jobs available</td>
<td></td>
</tr>
<tr>
<td>4.1.3. Co-workers’ position regarding working with individuals with TBI</td>
<td></td>
</tr>
</tbody>
</table>

Theme 1:

4.1. Business as usual: productivity is essential within the workplace

The above theme represents the barriers the employers experienced when the individuals were placed in the work environment. The term barrier relates to factors that the employers perceived to impede the successful return-to-work of individuals with TBI. The WHO defines barriers as factors that, through their absence or presence in an individual’s environment, limit the functioning of the individual, while it also creates disability (WHO, 2001).

The supervisors and employers described their perceptions and experiences in terms of production line pressures, the work environment, jobs available and the reactions of the co-workers to having an individual with TBI in the workspace.

When asked if the presence of the individuals with TBI influenced anything negatively, a supervisor said:
“Yes it did with the production.” (P3: Employer)

This participant described how the structural environment and type of task negatively influenced business by saying:

“…the ability to keep up the pace in which positions we’ve put them in was a problem.”
(P3: Employer)

The frustration when dealing with co-workers of the individual with TBI is explained by the following statement in which a supervisor described how co-workers would find the individual with TBI’s behavioural characteristics amusing and felt that not everybody treated the individual with TBI as an equal co-worker.

“...you know you get staff that think it is funny...so it was not anybody that will handle or treat her the same like a normal person.” (P9: Employer)

4.1.1. Production line pressures

The current South African economy is driven by increasing productivity targets. After a brain injury productivity in the work place can be affected due to physical, cognitive, emotional and behavioural functional limitations. The physical impact of the brain injury can result in a range of limitations that impact on the physical ability to perform a task. A supervisor working with an individual with TBI gave an example of this:
“Well I’ll give you an example…the one with the arm it was very difficult for him, his job was to throw these bottles into a hopper (machine that collects bottles) and because of his handicap he struggled to keep up…” (P1: Employer)

The cognitive impairments resulting from brain injury are most limiting in the workplace. Cognition encompasses executive functioning, memory impairment, speed of information processing, attention deficits, perceptual difficulties, language difficulties and loss of insight. A manager explained his experience when giving instructions to the individual with TBI:

“…taking his own time to do things…he’s not catching on easily…you have to be specific as to say that you want that things done now.” (P5: Employer)

Emotional and behavioural consequences are often erratic. To describe a few: lowered tolerance of frustration, rapid mood swings, emotional liability, emotional flattening, apathy, disinhibition, anxiety, depressed mood and inflexibility.

A commonly observed consequence is the changing of moods. An employer described this in the following statement:

“…he gets cross quickly if you ask him for something and if you don’t know how to treat him he is getting cross quickly and starts swearing…” (P1: Employer)
The individual with TBI may also lack insight into his/her behaviour in different environments, resulting in inappropriate conduct in the workplace. A supervisor observed an individual with TBI at work and described him as:

“...he plays too much, like sometimes he forgets that he is at work...” (P3: Employer)

During this investigation, the employers described the pressure they felt in balancing the production line requirements and the speed at which the employees with TBI were able to work. For reasons related to physical, cognitive, emotional and behavioural functional limitations, the employees with TBI were not able to work at the same speed as the other workers. In the qualitative focus group inquiry done to explore the functional problems after mild traumatic brain injury, more than half of the participants reported challenges with mental functions related to energy and drive, attention, memory and executive functioning and the emotional impact of the TBI. In addition the study identified that one of the five most frequently reported problems in activity and participation was in carrying out employment demands (Sveen, Ostensjo, Laxe & Soberg, 2013). Hartely (1995) explored cognitive communicative abilities following brain injury and found that problems with memory produced difficulties in asking for assistance or direction, following instructions, providing information to co-workers, expressing feelings, and responding to non-verbal and social cues in the work setting.
4.1.2. The work environment and jobs available

Availability of jobs in South Africa is limited. After a brain injury more often than not it is difficult to return to the same job as before because of the change in functioning of the individual affected. Employers have indicated that suitable, safe vacancies are few. One employer said:

“...we haven’t really had any vacant positions where we can use a handicapped person... the way our plant is structured, that could pose a problem for them.”

(P3: Employer)

Reasonable accommodation refers to the adaptations to the job task to enable the disabled person to perform the task. However, the type of accommodation is dependent on the job and its essential functions, the work environment and a person’s specific impairment. As the impairment largely lies within the area of cognition and behaviour of the individual with the TBI, employers have found reasonable accommodation challenging to implement. The process of finding the appropriate job fit is often a matter of trial and error. The supervisor at a food outlet reiterated this:

“(PDP) and (SA) used to work in the kitchen...I’ve taken them off cos you know we have a fast pace.” (P13: Employer)

These two employees were then placed in different positions in which they could work at a slower pace without negative ramifications.
Another supervisor commented on the fact that the individuals with TBI could only be placed on day shifts and were excluded from night shifts as they were found to be less functional on the night shift. He said:

“They normally don’t work late shift...they were only given early shift.”

(P5: Employer)

This was not easy to implement as it was viewed as unfair by many co-workers and made scheduling of staff more challenging.

Employers often made reference to the physical work environment that could be a danger to the individuals with TBI. In the context of this study, that type of work predominantly transpired within a factory setting or a food outlet. Within both of these environments dangers relating to machinery and the ability of the individual with TBI to assess dangers accurately, was a concern. In the qualitative study of 10 participants investigating the use of the MoOSE through semi-structured interviews with individuals with TBI, it was found that this notion highlights that employers perceive dangers such as a box falling on the head of an individual with TBI as a reason not to employ the person, even though this reason would not be applied to a regular employee (Pape, 2014).

Apart from the physical work environment, jobs are scarce. In Pape’s (2014) study, the lack of available jobs in South Africa was also noted as being a result of stigma regarding TBI and a genuine lack of vocational prospects.
4.1.3. Co-workers’ position with regard to working with individuals with TBI

A person with a disability has the potential to develop into a well-adjusted, productive worker within a conducive environment where acceptance is displayed. The individual with TBI is said to have an invisible disability as they look like everyone else, but often it is their behaviour and function that are different. Employers and supervisors have recognised that with some tasks the individual may require assistance from another employee. Some co-workers do not always understand that the individual has impairment, based on appearances, and found it to be a problem to assist.

A manager’s experience of dealing with this type of conflict is expressed in the following:

“…extra worker found that he was having a problem because he had to do his work plus and then he comes to me and say that oh this guy is just slow and I’m doing his work…”

(P3: Employer)

Co-workers who are required to assist have also expressed that they feel they should be paid extra for doing extra work, which in the end would be an extra expense to the business. The manager explained:

“…if they got to work a little harder or they got to take up the slack and it is not easy…it’s difficult because when they do two people’s work then they want two people’s pay…” (P3: Employer)
A caregiver of an individual with TBI also expressed sadness when she observed a co-worker treating her family member with disdain as he was perceived as being intoxicated. However it was because his speech was slurred after the TBI. She said the following:

“Die security het gedink, hy is dronk. Sy spraak is amper soos iemand wat dronk is.”

“The security thought he was drunk. His speech is almost like a person who is drunk.”

(P4: Caregiver)

Employers described the co-workers’ reactions to the individual with TBI as challenging. The co-workers’ understanding of the brain-injured individuals as being classified as disabled, but appearing as ‘normal’, made it hard for them to offer/provide assistance with work tasks. In a qualitative study on the experience of recovery and outcome following traumatic brain injury, the participants described a feeling of social disconnection due to stigmatisation and questions about the validity of their disability when they looked ‘normal’ (Levack, Kayes & Fadyl, 2010).

Some co-workers in the study, who did not understand the ramifications of TBI, would treat the individual with contempt. At times the individual with TBI was mocked, which added to the emotional distress in the return-to-work process. In a multiple case study researching the meaning of returning to work after traumatic brain injury, the two participants described how continuing work was made more difficult by co-workers who spoke down to them and demeaned them (Opperman, 2004).

Conversely, in a study done with nine severe TBI participants and their co-workers, the co-workers were taught how to communicate, explain work steps and model the steps to
the TBI person. Seven out of the nine TBI persons were able to return to work successfully with the assistance of their co-workers (Curl et al, 1996).

Table 2: Theme 2 and related categories

<table>
<thead>
<tr>
<th>4.2. Life after TBI: Caregiver’s journey</th>
<th>4.2.1. The caregiver’s understanding of TBI and its changing consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.2.2. The caregiver’s understanding of the work environment</td>
</tr>
<tr>
<td></td>
<td>4.2.3. The caregiver’s view of independence</td>
</tr>
</tbody>
</table>

Theme 2

4.2. Life after TBI: Caregiver’s journey

The barriers for the caregivers are described in relation to their experience of living with the individual with the TBI and the factors that influenced their role in the RTW process. The caregiver’s limited insight into handling and managing the person with TBI affected the individual’s ability to reintegrate back into their work environments. The TBI may have a direct impact on an individual, but in reality it is the entire family that is affected by its destructive impact. The consequences that the individual with the TBI experiences adds stress to the family and relationships.
A caregiver expressed the devastating effect of having to deal with the individual with TBI and all the responsibilities that were placed on her when she said:

“Ek kan nie meer die dinge hanteer nie…dis vir my baie swaar…”

“I can’t handle this anymore…it is very difficult for me…” (P12: Caregiver)

Another caregiver articulated that she was in a constant state of anxiety. She said:

“I am very much worried about him all the time. Just speaking about him I become very emotional.” (P7: Caregiver)

4.2.1. The caregiver’s understanding of TBI and its changing consequences

More often than not the primary caregivers were not present at the hospital when the individual with TBI was admitted. As a result it was never explained to them what to expect from the individual once he/she was released from the hospital. Most caregivers echoed this statement:

“Nee ek was nie by gewees nie.”

“No I was not present.” (P12: Caregiver)

TBI comes about very suddenly. Unlike a long-term or chronic illness, there is no preparation time to plan for its consequences or to come to terms with it emotionally. The consequences of the TBI change from the onset of having the TBI and continue in the
years that follow. The individual’s caregiver has to adapt to these changes as much as the individual.

A caregiver described the initial adjustment for her when the individual with TBI was discharged from the hospital:

“Ons moes hom geleer loop het, ek en sy ma. Ek moet pille ingeforce het, konnie pille ingekry het nie. Dan moet ek die pille fyn maak in sy kos in. Dit het lank gevat voor hy weer kan gepraat het. Meer as ’n jaar” (P4: Caregiver).

“His mother and I had to teach him how to walk. I had to force him to take tablets (because) he could not swallow tablets. I had to make the tablets fine and put it in his food. It took a long time before he could talk again. More than a year.”

She went on to describe the difficulties she has had to adjust to with the individual now:

“…vandag, hy is aggressive sommige tye...” (P4: Caregiver)

“…today, he is aggressive at times.”

The caregivers’ lack of understanding of TBI was highlighted in this study. It influenced their interactions and reactions to the individual with TBI. A contributing factor was that no communication took place between the caregivers and the health care providers directly after the individual sustained his/her injury. It is documented that active participation from the caregivers/family from the early stages is associated with better outcomes (Foster et al. 2012). Jumisko, Lexell & Soderberg (2007) indicated in their qualitative study that relatives of the person affected by the TBI appreciated open and continuous communication from healthcare providers.
Caregivers also described the changing of the reactions of the individual with TBI from the onset of the injury to after they completed rehabilitation. Reactions changed all the time and caregivers felt ill-prepared. This is consistent with results from the Jumisko et al. (2007) study where caregivers have described living with the ill person as being on a rollercoaster.

4.2.2. The caregiver’s understanding of the work environment

As adults going to work, it is not the norm for your companion or caregiver to become familiar with the activities related to the business in which you work. However, not understanding the workplace was a barrier for the caregiver in encouraging the individual with TBI not to conform to workplace routines and rules.

As explained by a manager of a fast food restaurant, the staff does not take conventional lunch times as their busy period is during lunch when they get customers. A particular individual with TBI did not quite grasp this and complained to her caregiver. Her caregiver’s interpretation of this was therefore skewed and ultimately led to the individual leaving her job with the encouragement of her caregiver.

The following statement explained a caregiver’s interpretation of the work situation:

“...as sy miskien nou op haar lunch break gaan, dan is amper soos die African lady wil nie he sy moet op haar lunch, sy moet nou gewerk deur haar lunch break. En ek mean, which is wrong...Dis hoekom sy gelos het.” (P10: Caregiver)
“...maybe when she goes on her lunch break, then it’s like the African lady does not want her to go on lunch, she must work through her lunch break. And that is wrong...that is why she left.”

Another caregiver described her understanding of the individual with TBI’s adjustment to the workplace as:

“Ek dink nie eers hy het hulp nodig nie...”

“I don’t think he even needs help...” (P14: Caregiver)

This view was in contrast to that of the individual’s supervisor. Therefore, the caregiver was unable to assist the individual with TBI from her side. Thus not knowing was a barrier to the successful return-to-work.

It was apparent that most of the caregivers did not understand the work environments of the individuals with TBI. As a result, when offering support they could not do so from an informed point of view and relied solely on the TBI person’s interpretation of events. This was a barrier as the affected individual’s interpretation was not necessarily accurate due to cognitive deficits. Therefore, advice and support were, at times, inappropriate. In a critical case study conducted by Bootes and Chapparo (2002), on cognitive and behavioural assessment of people with traumatic brain injury in the workplace, cognition is defined as the process of knowing and being able to select relevant information and to understand, retain, express and apply knowledge in specific life contexts. Additionally the latter study states that cognition and behaviour were most frequently identified as negatively impacting on workforce participation.
4.2.3. The caregiver’s view of independence

The Western Cape in South Africa is notorious for its high crime rate. Having a TBI puts these individuals within the vulnerable population, as their reading of potentially dangerous situations may not be accurate. One caregiver said:

“The thing that worries us is that, he gets like more injuries on his way from work maybe or his way to work, because of the skollies (gangsters), you know Cape Town.” (P8: Caregiver)

Caregivers feel much anxiety about this and often resort to measures that encourage dependency. A caregiver’s expression of such measures can be demonstrated by the following quote:

“Ek het haar altyd weggeneem en gaan haal... Ek hettie, daar wat ons gebly het, daai vicinity, ek het nie eintlik getrust nie.”

“I always took her and fetched her. I didn’t trust the area in which we lived.”

(P10: Caregiver)

Another caregiver feels anxiety about independent management of medication. Despite being an elderly lady with health issues herself, she takes it upon herself to manage her son’s medication after the TBI. She said:

“He forgets to take his pills. Now when he don’t take his pills, then he gets sick. I remind him every time in the morning and at night, he must take his pills.”

(P2: Caregiver)
Money management is an important means of encouraging independence. However, many caregivers take it upon themselves to do it. The reason one caregiver expressed was that the individual with TBI could not correctly comprehend that some individuals who claimed to be his friends were only interested in his money. She said:

“Hulle abuse hom met sy geld. As hy geld het, dan se hulle vir hom, gaan haal geld en as sy geld op is dan ken hulle nie vir hom nie, en hy kan nie verstaanie,“

(P4: Caregiver)

“They abuse him with his money. When he has money, then they tell him to fetch the money and when his money is finished, then they don’t know him and he can’t understand this.”

Activities of daily living, such as cooking, pose certain risks for the caregivers and the individual with TBI and this can result in the caregiver not allowing the individual with TBI to develop coping strategies for this skill. To illustrate this a caregiver said:

“Trying to cook something, he will just forget that he just switched the stove on and the other thing or go somewhere out and leave that stove on.” (P8: Caregiver)

Caregivers expressed that they were more comfortable being cautious and in doing so they encouraged dependency. They cited reasons around safety in the community and lack of ability of the affected individual to read situations accurately. Similarly, in the study researching the meaning of the family member’s experiences, caregivers expressed feelings of fear and anxiety when caring for the ill person (Jumisko et al. 2007).
Furthermore, as stated in the study by Jumisko et al. (2007), caregivers who received support from health professionals described the need to control the ill person and to support his or her independence as a balancing act, but understood the important role it played.

Table 3: Theme 3 and related categories

<table>
<thead>
<tr>
<th>4.3. The rehabilitation model as an enabler for the Employer and Caregiver</th>
<th>4.3.1. The worker role and its contribution to RTW</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3.2. Controlling your own reactions</td>
<td>4.3.3. Employers’ and caregivers’ communication with the OT implementing vocational rehabilitation.</td>
</tr>
</tbody>
</table>

Theme 3:

4.3. The rehabilitation model as an enabler for the employer and caregiver

The effective use of the vocational rehabilitation model, i.e. MoOSE, by the attending OT doing the VR in assisting the individual with TBI in RTW, has been a strong enabler of the process when returning to work. The role of the employer and that of the caregiver complement each other in this process. Therefore, the OT’s facilitation of understanding TBI and its effect on function and behaviour of the employer and the caregiver is key to
successful reintegration. A caregiver described her daughter after having participated in the vocational rehabilitation programme:

“Daar, uhm hoe kan ek nou se, daar is `n groot verskil. Voor (OT naam) nou in die prentjie gekom het, was (JI) `n baie anne soorte kind. Baie stil, en uhm, sy hettie nog geworry met kinders of soe nie. Sy was baie vir haarsef soe... Maar soes nou, agter (OT naam) nou vir haar in die werk gekry het, is sy baie, sy meng vir haar en sys hoe kan ek se, sy praat en sy lyk vir uitgaan en soe.” (P10: Caregiver)

“How can I put it, there was a big difference. Before (OT name) came into the picture, (JI) was a very different child. Very quiet, and uhm, she didn’t worry with other children. She kept to herself. But now after (OT name) got her a job, she socialises and talks and enjoys going out.”

An enabler is described as a person or thing that makes something possible (Branford, 2001). The common thread of enablers for both the employers and the caregivers stems from the participation in the vocational rehabilitation programme based on the MoOSE. The model aims to educate all key role players about TBI and facilitates the way forward in the RTW process. Not only is it important that the individual with TBI actively participates in the rehabilitation but the employer and caregiver acquire knowledge and ideas on working/living with the individual with TBI. In the qualitative investigation of the experiences of eight informants, returning to work after acquired brain injury, the brain-injured participants highlighted the importance of educating their families, co-workers and supervisors and their role in the RTW process, as well as the process of
support being a long one before the affected individual was able to reach a balance (Rubenson, Svensson, Linddhal & Bjorklund, 2007).

4.3.1. The worker role and its contribution to RTW

The occupational being encompasses a number of different roles that one has to fulfil. The worker role emerges during early adulthood. Due to the consequences of a brain injury, many individuals experience activity restrictions, particularly in the workplace; hence a disruption in their worker role. The MoOSE works toward restoring that role through active participation in four stages, namely;

Attaining a strong personal belief in functional capabilities, use of self, creation of competency through occupational engagement and becoming a capable individual.

It is during stage three, creation of competency through occupational engagement, that the individual gradually returns to the work environment. As he/she takes on the worker role after the period of non-productivity, changes are evident.

Employers noted the positive attributes of assuming the worker role after the rehabilitation programme. One employer commented on how the individual’s view on disability and ability to work changed:

“*I think it has helped them mentally now they don’t have that thing like we are disabled so we can’t work with other people... we also belong there... they know now that they belong everywhere and that they can do everything.*” (P5: Employer)
Becoming engulfed by the worker role, employers observed professional worker characteristics, such as punctuality, to help with the management of the individual in the work environment. One manager said:

“... he is always on time, he is always reporting when he is not going to be at work and he never uses the condition that he is in for not coming to work.”

(P17: Employer)

Motivation and attitude towards work was beneficial to forming a positive relationship with the employer and shaping his perception to the following:

“...he is a very good worker in the condition that he is in...he is very good because he doesn’t show any lazy attitude.” (P17: Employer)

Likewise, caregivers saw a difference in the individuals once they returned to work.

As mood and aggressive behaviour can add a lot of stress to the relationship between the caregiver and the individual with TBI, the worker role was considered to positively change mood. A caregiver said:

“He is not so aggressive as he was then (before working)....Ja hy is baie entoesiasties met sy werk...hy is stiptelik op sy tyd...hy val 7uur in en dan loop hy al 6uur van die huis af.”

“He is not so aggressive as he was then (before working)...Yes he is very enthusiastic when working...he is punctual...he starts 7 o’clock and he walks from the house at 6 o’clock.” (P18: Caregiver)
Another caregiver reiterated the positive effect of the worker role when she expressed:

“Noordt hy werk is hy bietjie beter…”

“Now that he works, he is a little better.” (P12: Caregiver)

As the individual with TBI becomes more comfortable with the engagement in this form of occupation, a caregiver also noted the following positive changes in other spheres of life. She said:

“What I’ve noticed the more he goes out, the more, the more friendly he is with the people.” (P6: Caregiver)

Working is not only a means to occupy ourselves; it is also time spent on something that brings us satisfaction and contentment (Nochi, 2000). Furthermore, in the qualitative study on community integration from the perspectives of the brain-injured person, a participant expressed that working felt like having a purpose; and not working, waking every day merely to watch TV, felt like she did not have a purpose in life (McColl, et al. 1998). In a study conducted by Johansson and Tham (2006) where 10 participants were interviewed in order to understand the meaning of work after acquired brain injury, participants agreed that there was a sense of purpose in working and further state that it added structure to the day of the individual with brain-injury. Work and the worker-role in the context of this study concur with the above summation. Employers and caregivers believed that through fulfilling the worker role, individuals with TBI attained a degree of
satisfaction and contentment that enabled them to perform well at work tasks and remain motivated to pursue the RTW process.

4.3.2. Controlling your own reactions

Both the caregiver and the employer felt that communication and patience is the key to functioning within social environments. Communication can be negatively affected after a traumatic brain injury, resulting in much stress for the individual with TBI and the person with whom he/she is trying to communicate. For the traumatic brain injured individual, due to the extent of the injury, they may be impulsive. They often have inappropriate reactions and gestures and their assessment of different situations is not always accurate, thus affecting how he/she communicates their feelings about the situation.

As part of the vocational rehabilitation process, it is important to assist the employer and caregiver in gaining a better understanding of TBI and its consequences. In doing so, they are able to prepare for more effective communication and avoid aggravating stressful situations. The employers that played active roles in the vocational rehabilitation and re-integration of the individual with the brain injury had the following to say about reacting to the individual with TBI at times when tempers flared. When an individual with TBI expressed anger toward a supervisor at a beverage manufacturing plant, the supervisor articulated his reaction to be:
“Just ignore him, be cool, he can shout now and then you can see his performance...leave him and go another way and come back again and talk to him.” (P1: Employer)

Another manager felt that patience was the key to fostering better adjustment to the work environment. He said:

“...you got to have patience, you got to accept that he is not going to get any better and you have to give him time.” (P3: Employer)

Understanding that how you communicate can have a positive influence on adjustment to the work environment, a supervisor said:

“...yes they like to be respected, that’s the way he is...you have to have a way to speak to him...not just any way because he gets angry too.” (P5: Employer)

Caregivers resonated with this sentiment. The occurrence of volatile reactions from individuals with TBI toward caregivers was better managed after the caregivers gained a better understanding of the condition. A caregiver sensed that through practising patience, they could yield a more constructive end result; her son might get angry but if she remained calm and patient, the anger would pass quickly. She said:

“Yes, sometimes he gets angry quickly, we must be patient” (P6: Caregiver)

Another caregiver expressed that, even though she was aware that within the work environment the individual with TBI had some limitations, the individual thought his
work was excellent and when he told them work stories they would listen and just encourage him to always try his best. She said:

“He says that he does the best work and we let him talk and he feels he must let us know that the foreman is with him often and that he has learned a lot.”

(P4: Caregiver)

For both the employer and the caregiver, controlling their own reactions to the constant changing mood/behaviour of the individual with TBI enabled them to continue in their active roles. In the study done by Foster et al. (2012) encouraging family engagement in the rehabilitation process, it is documented that skills training for the caregivers ensured the safety of the family and the client during challenging behaviours. In the qualitative study conducted by O’Callaghan, Powell and Oyebode (2006) on the exploration of the experience of gaining awareness of deficits in 10 people who have suffered a traumatic brain injury through semi-structured interviews, it was evident that people become aware of their deficits through others’ reactions to their mistakes. Their initial reactions may be accompanied by surprise and anxiety but it becomes less distressing once explanations are provided to them. During this investigation, employers found it useful to ignore irrational behaviour in the workplace and once the TBI employee had calmed down, a discussion followed.
4.3.3. Employers’ and caregivers’ communication with the OT implementing vocational rehabilitation.

The Occupational Therapist plays a vital role in the process of insight building and support for the employer and the caregiver. During the vocational rehabilitation process, the Occupational Therapist establishes an open line for communication with the employer and the caregiver as a means of support to them in the process of return-to-work for the individual with TBI. Employers using this service proactively have benefitted and developed better strategies to deal with the individual with TBI in the workplace.

One supervisor said:

“If we had a problem we could just call the OT for help to sort our problems because this was the first time working with such people.” (P1: Employer)

Caregivers have expressed that speaking to the Occupational Therapist during stressful times has been a much-needed means of reflection for them. They do not often get an opportunity to express their feelings within the situation and for many the first time they learned about the condition was when the vocational rehabilitation started.

A caregiver described her conversations about challenges with the occupational therapist as helpful when she said:

“Daai tyd toe sien ons mos nou vir Therapie, Arbeid Therapie en ek het altyd vir hulle gemention. Dit het gehelp.” (P20: Caregiver)
“That time we did therapy, Occupational Therapy and I use to mention it to them. It helped.”

Employers and caregivers valued the opportunity to work through their own issues regarding their roles in the individual with TBI’s RTW journey. In the MoOSE, the OT is a key agent in facilitating the return-to-work process through communicating with and educating all role players, which include the employers and the caregivers (Soeker, 2012). This relationship between the OT and the employer/caregiver is mutually beneficial, according to Bootes and Chapparo (2002), who state that the OT relies on information from the family and employers in order to create a coherent picture of the individual with TBI’s current work ability and future potential (Bootes & Chapparo, 2002). Similarly, Jumisko et al. (2007) state that caregivers appreciated the support from healthcare providers as it helped them see their situations more clearly. According to Foster et al. (2012), the caregiver and in this study, the employers, too, appreciated informal catch-ups with the occupational therapist as it gave them the opportunity to ask questions and talk about concerns.
Table 4: Theme 4 and related categories

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Theme 4:

4.4. Employers: Knowledge is power

For most of the employers participating in this study, it was their first time working with an individual who had a disability and for all of them it was their first interaction with individuals who have TBI. One employer expressed:

“This is totally something new to me working with them....I have never worked with handicapped people before.” (P3: Employer)

Coping strategies refer to the specific efforts, both behavioural and psychological, that people employ to master, tolerate, reduce, or minimise stressful events (Taylor, 1998).
In the section that follows there will be a discussion on the factors influencing the ability of employers to cope.

4.4.1. Understanding the disability

Before the individual with TBI is placed in the workplace the employer meets with the OT to broaden the employer’s understanding of TBI and return-to-work. Employers mentioned that information regarding the disability, stereotypes and misconceptions, as well as the legalities around employment, were valuable.

When the employers equipped themselves with a better understanding of what TBI is and the consequences thereof, they were better able to manage the individual and keep the work environment productive. A change in their thinking process and the manner in which they addressed the individual can be demonstrated by the following. One participant said:

“...you guys have placed them here and I’ve learnt how to work with them... we have to adapt to their situation.” (P13: Employer)

Another supervisor learned that extra time to process things is very advantageous. He said:

“... you have to give them another little bit space to think or adjust them according to the situation of their brain problem so if you can get them to do it like that then I don’t think it would be a problem.” (P1: Employer)
The employer participants expressed that they had never worked with individuals with TBI prior to this study. Therefore, their knowledge of TBI was very limited. In order for them to cope with having the individual with TBI in the work environment they needed to acquire the relevant knowledge regarding what to expect when the individual with TBI returned to work, such as the type of communication and reactions that would be most beneficial, the type of work that would best suit the person’s abilities and policies regarding employment of persons with disabilities. This contributed greatly to the successful return-to-work process. Opperman (2004) discusses in her article on returning to work after brain injury that a key inhibitor in returning to work is the lack of knowledge regarding TBI by employers. She explains that it is challenging to grasp the negative effects of the brain injury when often physical appearance is not changed. The lack of this knowledge can lead to employers maintaining high expectations from employees that outweigh their current functional abilities (Opperman, 2004).

In the exploratory study examining communication abilities and work re-entry following traumatic brain injury in 20 adults (10 employed and 10 unemployed), the authors reiterate that the employment of the individuals with TBI does not mean employment without complication but rather that continued assistance from others in the workplace motivated the individual with TBI to continue with pursuing the worker role (Isaki & Turkstra, 2000).
4.4.2. Management of the person with TBI.

As an employer, when managing the person with TBI in the work environment it is important that you, as an individual, remain calm and grounded in your professionalism as a leader. One participant said:

“You see what I have picked up is most of the people or supervisors or the manager they like to show that I am the boss...I am going to tell you what to do...that’s the problem, but if you communicate with the person nice and asks him if he is ok and understand him then it’s fine then I don’t have problem at all.” (P1: Employer)

A valuable lesson for another supervisor was that understanding the learning process for himself in dealing with the individual with TBI, was key to its success. He explained:

“At first it was difficult because I had to repeat myself over and over again...then I got used to them and I say...when I speak to them then I have to speak with them this way...then I had to explain everything in detail then we are getting along with each other.” (P5: Employer)

Employers who help nurture the self-esteem of employees who have brain injuries work toward effective communication, exercising patience and showing compassion (Mayo Clinic, 2011). Employer participants in this study found that through trial and error they were able to figure out the most effective means of communicating with the TBI employee. It was noted by a few employers that different management styles affected the TBI employee either positively or negatively, and therefore had an effect on the RTW process. The managers who displayed patience even during times when the individual with TBI presented with irrational behavior, found that issues got resolved much faster.
However, when managers resorted to confrontational behaviour with the individual, it more often than not resulted in misunderstanding between the two parties and added stress to the work environment.

4.4.3. Realistic work tasks and performance expectations

Realistic placements of individuals with TBI in the workplace rely heavily on the type of tasks they are required to perform and the environment in which they are done. With a better understanding of TBI and through trial and error processes, the employers were able to place the individuals in jobs that were meaningful to the individual and did not affect their production line.

Being sensitive to the individual with TBI, as well as considering the need for productivity to continue, a supervisor made changes accordingly. He said:

“I thought ok let me change them because there are other jobs that won’t interfere too much on their thinking and stuff like that.” (P1: Employer)

Analysis of the work task is important to appropriate placement as it outlines steps needed to yield the end product. After considering this carefully an employer said:

“...we’ve put him in an area where it’s suitable for him and all the work duties that we gave him is work that is duties that he can manage on his time.” (P19: Employer)
At one company the employer understood realistic work task and performance expectation as critical and sought to ensure the appropriateness of the job from the start. He said:

“He is comfortable because he prefers and he chose the day when he started here that he needs to be and he will be better off in an area like this.” (P17: Employer)

In this study, a safety net for employers could be recognised through the employers’ ability to provide work that suited the individual with TBI’s abilities. Employers articulated how the act of realistic job placement was an example of their own coping strategies as it minimised challenges with return-to-work for the individual with TBI and the companies’ production requirements. The idea of job matching is supported in literature, as reviewed in the article regarding the return-to-work for persons with traumatic brain injury (Yasuda, Wehman, Targett, Cifu & West 2001). Furthermore Yasuda et al. (2001) state that security and stability increase when individuals with TBI seek work that matches their current skills. Often, and in the context of this study, the individual with TBI does not know what their current abilities are until they are given an opportunity to experience work in a realistic setting. This was also illustrated in the interpretive study using grounded theory methodology with six participants to explore the return to productive activities from the perspectives of individuals with long-standing acquired brain injury. A participant in the study articulated that she experienced a constant war between what she thought she could do and what she could actually do (Petrella, McColl, Krupa & Johnston, 2005).
The majority of the employers in this study were able to give the individuals with TBI the opportunity to work out their current abilities in the work environment, and this appeared to help both parties.

Table 5: Theme 5 and related categories

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Theme 5:

4.5. Caregiver: A sense of responsibility and duty

The caring for the individual with TBI is one that comes about suddenly. Often the caregivers do not have time to adjust to what is happening and what needs to be done for the individual. This work gets done without much thought as if the caregiver is in automatic mode. The role of caregiver is rooted in the role of many mothers and therefore this is viewed as part of their maternal responsibilities and through that view, this is their means of coping.
Caregivers in this study viewed their own coping through their experiences of coping with their children, companions and family members. Similarly, in the study that examined the meaning of family members’ experiences while living with an individual with TBI, this view was reiterated. The participants described their wellbeing as being associated with the wellbeing of the ill person (Jumisko, Lexell & Soderberg, 2007). Seeing the ill person improving and finding a somewhat meaningful way of living increased hope and gave strength. If the ill person felt well, the whole family felt well (Jumisko, Lexell & Soderberg, 2007).

Caregivers have demonstrated a great willingness to adjust their lives according to the needs of the individual with TBI, which is in accordance with the qualitative study done by Simpson, Mohr and Redman (2000), investigating the cultural variations in the understanding of TBI and brain injury rehabilitation through interviews with 39 individuals with TBI and their families. Similarly in this study, caregivers offered financial, emotional and physical support to ensure the wellbeing of their loved ones.

Discussed below are the findings that relate to the above means of coping for the caregivers of individuals with TBI. The direct actions are in the form of financial assistance and participation in the physical restoration process as well as palliative actions in terms of being emotionally available to guide and comfort the individual with TBI.
4.5.1 Financial assistance after TBI fundamental to successful RTW

After the TBI, many of the participants are unemployed. Heavy financial burdens are placed on the individual with TBI and their families. Caregivers render much of the financial support required to assist the individual in becoming more independent. They would pay for the individual’s transport to go for rehabilitation or to the clinic for medication. Some even pay for the individuals to get to work after they have completed vocational rehabilitation, as this is important for both the individual with TBI and the caregiver. As one participant said:

“I always am looking after him, making sure he goes to work, giving the taxi fare.” (P8: Caregiver)

Another caregiver mentioned that although the income from working was not enough to cover all expenses, the individual with TBI was happy fulfilling that role. She said:

“Daai is nie eintlik baie geld nie, maar hy was gelukkig by die werk.”

“The money is not much but he is happy at work.” (P4: Caregiver)

After injury, the individuals with TBI spend a period of time in an unproductive state. Caregivers identified that if they were able to facilitate the return to a productive state, it is beneficial to the individual with TBI as well as assisting themselves in coping. This often meant bearing the financial burden of participation in a vocational rehabilitation programme or providing transport money for the individual with TBI to get to work, as work was recognised as a stepping-stone toward a productive being. Opperman (2004) articulated that changes in financial independence have a positive impact on self-worth,
and intervention that is geared at facilitating skills for RTW helps empower the individual as well as society.

4.5.2. Emotional maintenance to help the caregiver cope

When the individual with TBI returns to work, it brings about a whole set of other challenges for which the caregiver has to offer support. However, knowing that work is an important part of the individual’s life, the caregiver renders that emotional support at home in order to help the individual persevere in the return-to-work process. Through the emotional support, the individual remains motivated to pursue work.

One caregiver described what she says to her son when he returns from work feeling discouraged:

“Som tyds kla hy die mense is nie lekker met hom nie. Dan praat ek ma met hom en se hy moet maar onderdanig wees.” (P16: Caregiver)

“Sometimes he complains that the people don’t talk nicely to him. Then I talk to him and tell him he must be humble.”

Another caregiver expressed that the individual with TBI gained much inspiration from talking about his problems, which made him a calmer person and therefore the caregiver found it easier to deal with the situation. He said:

“Ek kom loer in by hom, praat oor sy problem en wat hy deurgaan, aanvaar hom en nie afgeskryf nie.” (P18: Caregiver)
“I come pop in by him, talk about his problems and what he is going through, accept him and not write him off.”

Caregivers in this study described the day-to-day emotional guidance they needed to render in order to help the individual with TBI adapt to the return-to-work process. Likewise, in a study by Jumisko et al. (2007), the participants felt that they should guide the ill person wisely in the pursuit of living a normal life (Jumisko et al. 2007). Not only is the emotional support rendered viewed as a means of coping for the caregivers, but a longitudinal study done with ninety participants and their families predicting vocational adjustment following traumatic brain injury, demonstrated an association between familial support and the successful return to work (Kendall, 2003).

In a study conducted by Laxe et al. (2011) relating to the use of the ICF to identify common problems in a neurorehabilitation unit, they identified that family relationships are of great importance, indicating that it was a facilitator for more than 90% of the patients.

4.5.3. Physical restoration a great aid to the caregiver

Long-term rehabilitation required after a traumatic brain injury was not always available to the affected individuals while in hospital. As a result they were discharged in a very dependent and often sick state. Their caregivers played an integral role in the physical
support required to attain a more independent or semi-dependent state in order to start the RTW process.

A caregiver reminisced about the initial period after the individual with TBI was discharged from hospital. She said:

“His mother would carry him at the back, even to go to the clinic to take the medication.” (P8: Caregiver)

She fondly acknowledged the importance of her sister taking her nephew to therapy and how it helped to get him to where he is in his journey now. Without the time and input she put into ensuring he received his therapy, she may have had a more dependent individual to care for.

Another caregiver recalled that when her son came home from the hospital, he could not walk. Being bedridden made him depressed. She said:


“When he came home, he could not walk. We used to carry him to where he wanted to be. This kept him happy.”

Moving him around was a means of curbing depression and it made it easier for her to keep him in a more motivated state of mind.
The caregivers in this study all emphasised that physical restoration was a benefit to them coping, as the invisible disability required more attention. Therefore, many of the caregivers did as much as they could, such as ensuring that the individual received physical therapy to help the process of physical rehabilitation along. Similarly, in the study exploring the experiences of rehabilitated stroke survivors, participants acknowledged that an improvement in their physical health through rehabilitation facilitated the resumption of their worker role (Olaoye, 2013).

4.6. Relation to the International Classification of Functioning (ICF)

The International Classification of Function, Disability and Health (ICF) was used as the conceptual framework to interpret the findings. The ICF has been used effectively in other studies to conceptualise functioning after TBI (Sveen, Ostensjo, Laxe & Soberg, 2013) in identifying common problems in a TBI neurorehabilitation unit in Spain (Laxe, Zasler, Tschiener, Lopez-Blazquez, Tormos & Bernabeu, 2011) and community reintegration following TBI (Salter, Mcclure, Foley & Teasell, 2011). The ICF provides a framework with a range of applications across sectors including employment (WHO, 2001).

The ICF is a framework that organises information of function and disability. It integrates various models of disability, recognising the role of environmental factors in the creation of disability, associated health conditions and its effects. The underlying principles of the framework are universality, parity and aetiological neutrality, neutrality and environmental influence (WHO, 2001).
The ICF Model is multi-dimensional. The components it comprises are body functions and structures, activities, participation and environmental factors. According to Laxe et al. TBI can affect body structures and functions and these may lead to activity limitations and participation restrictions (Laxe et al. 2011). This study will view each component through the lens of the employer and caregiver respectively, as it relates to the return-to-work process for the individual with TBI.

![Diagram of the ICF Model](image)

**Fig 4. Interactions between the components of the ICF (WHO, 2001)**

### 4.6.1 Body functions and structures

The body functions and structures are defined as the physiological functions of the body system, including psychological functions and anatomical structures of the body such as organs, limbs and their components (WHO, 2001). In the context of this study, body functions and structures that mainly influenced the return-to-work process, as perceived
by the employers and caregivers, were mainly mental functions and neuro-
musculoskeletal and movement-related problems. Mental functions, being a key
component of the worker role, either had a positive or negative influence in the RTW
process, which was attributed to whether the employee could cognitively cope with the
work demands. Employers also made reference to the pace at which the employees
worked that stemmed from their physical limitations and the fact that some of the
physical limitations posed a danger in certain work areas. In agreement with the above
summation, the study done in Spain, using the ICF to identify common problems in a TBI
neurorehabilitation unit, more than 80% of patients showed problems in the mental
function category (Laxe, Zasler, Tschiener, Lopez-Blazquez, Tormos & Bernabeu, 2011).
According to Ptyushkin, Vidmar, Burger & Marincek (2010), the use of the ICF with
individuals who sustained a TBI also identified that there are three major groups of
functional problems within body functions, namely mental functions, sensory functions
and mobility. Furthermore it states that after rehabilitation some improvements were
noted in the abovementioned areas but less so for mental function challenges.

In the current study, employers perceived that physical and cognitive limitations
negatively impacted on work production. However, when employers better understood
the mental functions of the individual with TBI, they were able to assist the individual
with TBI in adapting to his/her limitations. In the Italian study by Pistorini, Aiachini,
Coenen and Pisoni (2011), focus groups were conducted with caregivers, and the findings
indicated memory function, temperament and personality and emotional functions to be
important factors in the functioning of the patient with TBI.
Caregivers perceived and approached mental functions and physical body structures of the individual with TBI with much caution. It was through assisting the individual with TBI in healing physically and emotionally that the caregiver was able to cope with the situation of the return-to-work process.

4.6.2. Activities and participation

Activities are tasks or actions executed by the individual and participation relates to involvement in a life situation (WHO, 2001). The aspects of this component of the ICF model that affect the individual with TBI are learning and applying knowledge, general tasks and demands, communication and interpersonal interactions and relationships (WHO, 2001). Ptyushkin et al. (2010) believe that restriction in activities and participation are largely due to, or related to, disturbances in mental function and in their study this functioning indicated minimal to moderate changes from admission to discharge. In a study in Spain conducted by Laxe et al. (2011), restrictions and limitations in this component (activities and participation) of the ICF model seemed to be mainly related to functioning and disability. In the study on evidence-based cognitive rehabilitation, cognitive disability was considered to be reduced efficiency, pace and persistence of thinking, decreased effectiveness in the thinking required for performance of occupations, or failure to adapt to novel or problematic situations (Cicerone et al. 2000).

In this study, the employer participants found that when the individual with TBI was tasked with learning a new skill for the work tasks, he/she took longer than the average
person to master the task. Communication coming from the individual with TBI was either delayed or filled with anger. When employers did not exercise a degree of patience and understanding with the TBI employee, anger and frustration were evoked from both. Therefore, the employer needed to adjust his/her method of responding to the individual with TBI in order to communicate more effectively. Interaction with other members of staff was not always appropriate and often had a negative impact within the work environment. Fellow staff members, who did not consider the TBI employee to have a valid problem, displayed little tolerance for functional limitations affecting task execution. When one TBI employee displayed a constant jovial mood, some employers interpreted this as disrespect or the employee not taking the work seriously enough.

Caregivers reflecting on communication and interpersonal relationships noted the sudden change in the manner in which the individual with TBI communicated and the stress it placed on their interpersonal relationships and its influence on occupational roles. When anger prevailed during communication, caregivers felt saddened and some were scared. With regard to general tasks and demands within the household, many caregivers took the stance of doing them for the individual as they felt it was their duty to do so.

4.6.3. Environmental factors

The physical, social and attitudinal environments in which people live and conduct their lives are perceived as either barriers or enablers. Support and relationships, attitudes and policies impact on an individual’s environment (WHO, 2001). According to Ptyushkin et al. (2010), they found that environmental factors were both facilitators and barriers. They
identified that the role of the family members was as either strong facilitators or equally strong barriers. They state that the potential of the ICF to describe the impact that the environmental factors have is an important feature. Similarly the Italian study articulates that environmental factors play an integral role in ‘good’ and appropriate rehabilitation interventions with regard to the improvement of the individual with TBI’s functioning and life satisfaction (Pistarini et al. 2011).

Within the work environment, employers noticed how attitudes of co-workers more often were a barrier to the return-to-work process. Co-workers found it difficult to understand the invisible disability that is often associated with a TBI, and were not accommodating to the individuals in need of assistance. At the same time the attitude of the individual with TBI could be an enabler to the RTW process. The willingness and motivation to fulfill the worker role to the best of their ability resulted in a loyal employee that was punctual for work and tried his/her best to display professionalism in terms of structures and procedure within the work environment. Within the work environment, employers also felt that certain areas, particularly areas containing heavy-duty machinery and kitchens where hot plates were of a large scale, posed dangers. Employers also noted that South African policies support the RTW process through the Employment Equity Act, which promotes equal opportunities and fair treatment of PWD. The Employment Equity Act (1998) clearly makes reference to reasonable accommodation being made for individuals with a disability, in which TBI is included. However, in reality, because TBI is an ‘invisible’ disability, some employers did not realise what type of accommodation was needed.
Caregivers are key to offering support to the individuals with TBI and this support has an integral role in the success of returning to work for the individual with TBI. However, caregivers perceived that the limited services available to the affected individual after the TBI resulted in them taking on a lot of the responsibility in assisting the individual to become functional and healthy again in order to resume their worker role. Within the environment of the home, some caregivers were cautious when allowing the individual with TBI to perform certain ADL tasks like cooking, as they feared for their safety; however, this could contribute to the dependency of the individual. Caregivers in other studies, as well as this study, made reference to attitudes of friends, family and community members which not only affected the individual with TBI but also the caregiver, leaving them feeling isolated and alone (Jumisko, et al. 2007). Many caregivers in this study perceived the services provided by the hospitals at the time of the injury to be poor, as they did not help the individual with TBI prepare for the big change in their lives that they would experience. However, caregivers also noted that after working with the OT during the vocational rehabilitation using the MoOSE, they gained a better understanding of TBI and were able to address life issues in a more informed manner.
4.6.4 Dynamic relationship between the components of the model

**Fig 5. Application of the ICF to the RTW process of the individual with TBI as perceived and experienced by employers and caregivers. (WHO, 2001)**

**Description of Fig 5**

The multidimensional approach illustrates the dynamic relationship between health conditions, environmental factors and personal factors as perceived by the employer and
caregivers of individuals with TBI as they respectively play a role in the return-to-work process and influence each component within the ICF model.

The effect that the TBI has on body functions and structures can be attributed to problems with mental function. Activities, as related to the work environment, were hindered by longer processing time to learn new skills or relearn old skills and ineffective communication. Participation was viewed as restricted in the work place and in relationships. Environmental factors that influenced the successful RTW were negative attitudes, knowledge regarding TBI and the South African employment equity policies. Lastly personal factors that employers and caregivers believed to affect RTW were the age of the individual with TBI and his/her employment history (before injury).

4.7 Summary

Through the experiences and articulations of barriers, enablers and coping strategies of employers and caregivers, we see the importance of their roles respectively, and the success of RTW for individuals with TBI. Themes one and two described the employers’ and caregivers’ experiences and perceptions that hindered the return-to-work process for individuals with TBI. Theme three related to the enabling aspects they derived from engaging in the vocational rehabilitation process using the Model of Occupational Self-Efficacy. Themes four and five presented the coping strategies that aided the employer and caregiver in playing a continuing role in the RTW process.

This chapter addressed the findings of the study and related it to other studies investigating the phenomenon of TBI and the perceptions of the caregivers and
employers during the RTW process. Despite the various barriers experienced by both employers and caregivers in their consequent engagement in the therapeutic process during vocational rehabilitation, using the MoOSE brought about enabling factors that helped them respectively understand and approach the individual with TBI differently and assist in the RTW process. This is consistent with other studies that have expressed positive outcomes for caregivers that are involved from an early stage and employers becoming more aware of what to expect when dealing with TBI employees. This chapter highlights the combined efforts of the employer and caregiver as imperative to successful RTW for individuals with TBI.
CHAPTER FIVE

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

5.1 Conclusion

The study highlighted the experiences and perceptions of employers and caregivers of individuals with TBI as they embarked on their return-to-work journey after participating in a vocational rehabilitation programme using the MoOSE. Revealed through the findings in this study were barriers, enablers and coping strategies for employers and caregivers respectively.

The barriers for employers participating in the study were identified as “production line pressures”, “the work environment and jobs available” and “co-workers’ position regarding working with individuals with TBI”. Physical, cognitive, emotional and behavioural functional limitations were perceived by employers to interfere with productivity in the workplace. Availability of jobs generally and jobs that were viewed as safe for the individual with TBI were scarce. The reactions of co-workers who were requested to assist the individual with TBI were challenging to manage due to them not understanding the difficulties resulting from the TBI and the fact that the individuals affected looked ‘normal’. Apart from that, they also demanded extra pay for doing extra work.
The barriers that the caregivers experienced were understood as “the caregivers’ understanding of TBI and its changing consequences”, “the caregivers’ understanding of the work environment” and “the caregivers’ view of independence”. Many of the caregivers were not given any information regarding what they could expect after the injury and the types of changes that could happen over time. This resulted in them being ill-prepared and caused much stress for them. The caregivers in this study were not familiar with the work environments that their loved ones had entered, which influenced the type of support they offered. Not knowing the structure and routines of the workplace resulted in them offering inappropriate advice or not knowing when they needed to steer the individual with TBI in the right direction. The fact that the individual with TBI finds intellectual reasoning and communication challenging at times meant that caregivers feared for their safety when alone, bringing about a state of dependency.

Enabling factors for the employers and the caregivers stemmed from the individual with TBI’s participation in the vocational rehabilitation programme that was constructed from the MoOSE. The employers and caregivers identified the following reasons to have enabled the successful RTW process: “the worker role and its contribution to RTW”, “controlling your own reactions” and “employers’ and caregivers’ communication with the OT implementing vocational rehabilitation”. The MoOSE works towards restoring the worker role through active participation in occupational engagement. While engulfed by the worker role, professional characteristics emerged that enabled the employer to better manage the individual with TBI in the workplace. Caregivers noted that when the
worker role was assumed the individual with TBI displayed more positive behaviour and this had a positive effect on familial and social relationships.

Through the vocational rehabilitation, both the employer and caregiver benefitted from learning about TBI and its consequences. It is in stage three, namely creation of competency though occupational engagement, that the OT first meets with the employer and introduces the work environment to the individual with TBI. Meetings take place with the employer regarding the successful placement, as well as meetings with other staff members before work commences. It is during these consultations that they learn how to control their own reactions when the individual with TBI displays trying behaviour, thus minimising the stress that this behaviour could cause and the time taken to calm the individual. Caregivers usually accompany the individual with TBI from stage one until such time as the individual is able to attend therapy independently. This gives rise to a learning opportunity for the caregivers and allows them to ask questions regarding the TBI consequences and how to deal with them.

During the rehabilitation process, the employers and caregivers build a relationship with the occupational therapist. This relationship enables the employer and caregiver to have a network while learning to work and support the individual with TBI through the RTW process. During therapeutic sessions the caregivers could use that time to work through challenges they were experiencing at home as they assisted the individual in returning to work. For the employers, it was when the individual was placed in the work environment that challenges arose and employers who used active communication with the attending OT found that they were able to work through a trial and error process more successfully and with less frustration.
Coping strategies noted by employers were “understanding the disability”, “management of the person with TBI” and “realistic work tasks and performance expectations”. Through becoming more educated in TBI and how individuals with TBI function in the workplace, employers were in a better position to manage the individual and maintain productivity. Learning how to be a leader, while maintaining composure in the face of sometimes-difficult behavior, helped with the management of the individual with TBI in the work environment. A key component of successful RTW for individuals with TBI and a means of coping for the employers was the correct placement within job tasks that suited the individual with TBI’s abilities.

Caregivers equated their coping with the individual with TBI. Caregivers offered support in terms of “financial assistance in the RTW process”, “emotional maintenance” and “physical restoration” in order to cope themselves with the circumstances. Financial assistance was provided for the individual to get to the clinic for rehabilitation or for medication and even to get to work as the caregiver identified this to be important in the RTW process and a benefit for the caregiver. The perseverance of the individual with TBI throughout the RTW process required emotional support from the caregivers, which they dutifully rendered, because if the individual with TBI coped at work, they could cope at home. The physical restoration of bodily functions is the first stepping stone in acquiring independence and the caregivers found it easier to cope when this was in place and therefore assisted the individual with TBI to attain this goal.
The International Classification of Function, Disability and Health (ICF) provided a theoretical framework through which the perceptions and experiences of the employers and caregivers informed the process and influencing factors in the return-to-work for individuals with TBI. The employers and caregivers provided insights into the mental functions of body functions and structures that influence the RTW process. They also identified aspects of activity and participation such as communication, learning and applying knowledge, general tasks and demands and interpersonal interactions and relationships that impacted on the RWT process. Within environmental factors, attitudes and social perceptions were perceived as barriers and supportive relationships were noted as enablers.

The key components of the ICF illustrate the dynamic interaction between the health conditions, environmental factors and personal factors as perceived by the employers and caregivers of individuals with TBI, as they respectively play a role in the return-to-work process and influence each component within the ICF model.

5.2   Limitations

This section of the study provides information regarding the limitations of the study

• The first limitation to the study was that employers had limited time available for interviews. The researcher made a concerted effort to arrange a time that best suited the employer participant but many times the employer was busy.
• Telephonic interviews were often the only means of communication with caregivers due to their own work commitments. However, this prevented the building of the trust that is built through face-to-face interactions.

• Only employers from three types of industries, namely a beverage factory, one type of food outlet and a security company, were available to participate in the study, which could limit the generalisation of the findings.

5.3 Recommendations

The experiences and perceptions of employers and caregivers of individuals with TBI as documented in this thesis, provide findings that relate to certain implications for practice. Therefore, in order to assist in the successful return to work for individuals with TBI the following recommendations are made for occupational therapists working with individuals with TBI using the MoOSE, employers of individuals with TBI, caregivers of individuals with TBI, Departments of Health and Labour in the Republic of South Africa and future research in the field of occupational therapy.

5.3.1 Recommendations for occupational therapists working with individuals with TBI using the MoOSE

• The individuals with TBI in this study only received VR 12-18 months after injury. However, if we consider that caregivers only had the opportunity to actively learn about TBI and get involved at that stage of VR, it is thought that if
OTs started the VR process earlier, caregivers could then participate earlier and in doing so be more prepared for when the individual is discharged from the hospital. Studies have indicated that the provision of early intervention is more beneficial. The dynamic aspect of the model allows the OT to move forward and backward if required, especially when the individual with TBI is adapting to his/her new self and their work contexts.

- It was evident in the study that the time available for employers to decide for themselves which position would be best for the individual with TBI or the type of accommodation needed, was limited. This is a general trend, not only in the context of participating in research. Some employers noted a benefit in the trial and error process when placing individuals with TBI in the work environment, while others did not have the time for this. Therefore the OTs should look more critically at activity analysis of the jobs available to better prepare the individual with TBI and ascertain suitability before placement in order to streamline the process for employers.

- Occupational therapists should advocate for return-to-work programmes for employees that have experienced a TBI and demonstrate to employers that workplace accommodations for TBI employees are not as unrealistic as is generally perceived. The OT should use this as an opportunity to provide much needed disability rights awareness, and provide employers with better knowledge of the ILO’s programmes and initiatives to help them incorporate diversity in the workplace and use this as a platform for much needed advocacy around disability.
• Findings in this study indicate that the open line of communication between the OT, employer and caregiver is valued. The OT should use these key role players, such as the caregivers and employers, more frequently in the process of VR as they influence the process so greatly. Caregivers are key to motivating and encouraging the RTW process if they understand TBI better and employers that are educated with regard to TBI can better adapt the workplace and task to increase the probability of success in the workplace.

5.3.2 **Recommendations for employers of individuals with TBI**

• Employers have indicated in the findings of this study that gaining knowledge about TBI was a great help. They also indicated that co-workers who did not understand TBI were challenging to manage in conjunction with the TBI employee. Co-worker training, whereby co-workers are educated about TBI and taught how to offer assistance to the employee with TBI, should be considered in order to alleviate stresses that arise from co-worker conflict, as well as to use it as an opportunity to prevent production line pressures.

• Employers should consider granting the TBI employee an adequate leave of absence to ensure job security while the employee undergoes VR.

5.3.3 **Recommendations for caregivers of individuals with TBI who embark on returning to work after their injury**

• The stresses that caregivers experience are well documented in this study as well as other studies on TBI. Caregivers should consider joining a support group for
caregivers of individuals with TBI such as HeadsUp or use TBI support groups on social media platforms such as Facebook and twitter.

- Caregivers would be in a better position to render support and appropriate advice to the individual with TBI if they understood the work environments better. Becoming acquainted with the manager/supervisor and demonstrating support to them in accommodating the TBI employee would be of benefit.

5.3.4 Recommendations for the Department of Health in South Africa

- Access to a rehabilitation service that focuses on vocational training is not readily available in Cape Town. The Department of Health should try to implement early intervention programmes based on the Model of Occupational Self-Efficacy, identifying suitable candidates during their acute stage of injury while in hospital and ensuring that therapy filters down to community level in order to reduce the sequele of TBI that too often results in a dormant worker role. Establishing a network of therapists, from tertiary institutions to community therapist, will aid communication at all levels.

- Permanent partial disability grants are recommended for individuals with TBI. The types of jobs available that suit their abilities are scarce and when available they fall in the lower income bracket. Supplementation of their income with the partial disability grant would be valuable and provide a safety net for them. Re-evaluation of the issuing of the grant could be done annually.
5.3.5 **Recommendations for the Department of Labour in South Africa**

- The Department of Labour should look more critically at the implementation of the Employment Equity Act and how certain diagnoses, such as TBI, are marginalised when the individual applies for a job.

- The department should consider occupational therapists as consultants when monitoring and managing the implementation of the Employment Equity Act for employees with disabilities, especially TBI employees.

5.3.6 **Recommendation for future occupational therapy research**

- Occupational therapists working in vocational rehabilitation of individuals with TBI in other parts of South Africa should explore the employment viability after using the MoOSE.

- Occupational therapists should research the most successful industries for TBI employees to RTW in order to compile a list of the most suitable industries to approach and refer candidates to, should they not be able to return to their former occupation.

- Valuable knowledge could be gained from exploring the implications of co-worker training in the South African context for both the OT working in vocational rehabilitation with TBI and employers of TBI employees.
REFERENCE LIST


Tygerberg Hospital Work Assessment Unit. (2014). Available on request (email address of contact person elvin.williams@westerncape.gov.za)


Appendix A: Ethical Clearance letter

OFFICE OF THE DEAN
DEPARTMENT OF RESEARCH DEVELOPMENT

UNIVERSITY of the
WESTERN CAPE

11 June 2014

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by Ms Z Gamie (Occupational Therapy)

Research Project: An exploration of the experiences and perceptions of employers and caregivers about how they adapt to assisting individuals with brain injury in returning to work after completing a vocational rehabilitation programme.

Registration no: 14/5/25

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape
Appendix B: Information Sheet

INFORMATION SHEET

Title of Research: An exploration of the experiences and perceptions of employers and caregivers of individuals with brain injury about adapting to their worker roles after completing a vocational rehabilitation programme.

What is this study about?

The aim of the study is to explore the experiences and perceptions of employers and caregivers of individuals with TBI about adapting to their worker roles after completing a vocational rehabilitation programme using the Model of Self-Efficacy.

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. The interviews will be conducted at premises that are convenient and safe for both participant and researcher. The type of questions that will be asked will focus on the experiences and perceptions of the employer and caregiver, who is working and living with the individual who has a TBI, once the individual returns to their worker role after participating in a vocational rehabilitation programme using the Model of Self-Efficacy.
What are the risks of the research?

The physical and psychological risks involved in this study are minimal. However, should you require any assistance; an appropriate referral source such as a counsellor from a counselling organisation will be contacted and a referral made.

What are the benefits of the research?

The results of the study will be used to better understand how individuals with brain injury adapt to the work environment and community integration.

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 Zakeera Ganie 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 may contact the researcher at the details given below:
Researcher: Zakeera Ganie

Cell No: 083 369 5544

E-mail: zakeeraganie@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:

Head of Department: Prof Lisa Wegner

Dean of the Faculty of Community and Health Sciences: Professor Jose Frantz

University of the Western Cape

Private Bag X17

Bellville 7535

This research has been approved by the University of the Western Cape’s Senate Research Committee and Ethics Committee.
Appendix C: Consent Form

Consent Form

**Title of Research:** An exploration of the experiences and perceptions of employers and caregivers of individuals with brain injury about adapting to their worker roles after completing a vocational rehabilitation programme.

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 will not be disclosed and that 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: .............................................

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

**Study Coordinator’s Name:** Dr. Shaheed Soeker

**University of the Western Cape**

**Private Bag X17, Belville 7535**

**Telephone:** (021) 959-9339

**Cell:** 082 717 5432

**Fax:** (021) 959-9359

**Email:** msoeker@uwc.ac.za
Appendix D: Semi-Structured Interview Questions

**Topic:** An exploration of the experiences and perceptions of employers and caregivers of individuals with brain injury about adapting to their worker roles after completing a vocational rehabilitation programme.

**Interview guide: Employers**

1. Can you describe any challenges/problems that you are experiencing with the individual who has had a traumatic brain injury *(name of individual)*?

   Prompts...when, who, what

2. Can you describe the challenges that the individual experienced when he/she returned to work?

   Prompts...when, what

3. Can you describe the factors that have helped the individual with TBI in the work environment?

   Prompts...work tasks, social interaction, work relationships

4. What processes did you follow to assist the individual with TBI to adapt to their worker role?

   Prompts...changes to the work environment, changes to instruction, your interaction with the individual, changes to the work routine?

5. What suggestions do you have to enable the individual with TBI to better adapt to their worker role?
Prompt...suggestions in the individual work environment, suggestions for the individual’s home environment, suggestions for the health practitioner working with the individual.

6. Could you describe your coping strategies that you have used to enable the individual with the TBI in returning to work?

Prompt...personal strategies taken, strategies in the home environment

**Interview guide: Caregivers**

1. Can you describe any challenges/problems that you are experiencing with the individual who has had a traumatic brain injury *(name of individual)*?

Prompts...when, who, what,

2. Can you describe the challenges that the individual experienced when he/she returned to work?

Prompts...when, what

3. Can you describe the factors that have helped the individual with TBI in the work environment?

4. Could you describe the coping strategies that you have used to enable the individual with the TBI in returning to work?

Prompts...personal strategies taken, strategies in the home environment
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