

**EXPLORING THE CHALLENGES THAT WOMEN WITH
TRAUMATIC BRAIN INJURY EXPERIENCE IN THEIR WORK
ENVIRONMENT AFTER VOCATIONAL REHABILITATION**

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DECLARATION

I, ZAREENA DARRIES, declare that the work on which this thesis: *Exploring the challenges that women with traumatic brain injury experience in their work environment after vocational rehabilitation*, is my own original work (except where indicated otherwise), and that it has not previously or in its entirety or in part been submitted for a degree at this or any other university.

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ABSTRACT

Traumatic brain injury (TBI) has enjoyed extensive research and several therapeutic modalities, approaches and models have been developed where the main outcomes are focused on the successful return to work of individuals with brain injury. Research into women with TBI has, however, been negligible compared to research into the young adult male population. Gaining insight into how women with traumatic brain injury participate in their work environment would contribute valuable feedback to clinicians utilising return to work approaches and models. The study aimed to explore the challenges women who sustained TBI experience in the work environment after vocational rehabilitation. A qualitative research design was used to explore these experiences and perceptions from ten female participants. The method of data collection used to access the experiences and perceptions of the participants was in-depth semi-structured interviews. Furthermore semi-structured interviews were conducted with two occupational therapist, who were selected as key informants. The data from the study was analysed using thematic analysis. The study further aimed to obtain the participants` perceptions and experiences of barriers and facilitators as well as adaptation processes that influenced their ability to resume their work roles. Four themes originated from the findings of this study. Theme one describes the barriers experienced by women with TBI while returning to work in the form of barriers to work participation for women with TBI, loss of functional capacity hindering return to work, experiences of negative stigma and exploitation in the workplace, and contextual hindrances in the form of parental roles as well as public transportation systems. Theme two describes the factors that facilitated the resumption of the work role for women with TBI. Re-establishing a worker identity by means of vocational rehabilitation, utilising the Model of Occupational Self-Efficacy (MOOSE) as an approach, enabled the women with TBI to overcome their barriers and return to work. Theme three describes an inherent adaptation process where participants could come to terms with their losses, accept the present self and aspire towards a future self, by utilising personalised response approaches to overcome demands and challenges in the work context as well as experiencing success at work by adapting to the work environment. Theme four describes the participants` views of changes needed in the rehabilitation program and services as well as policies that would aid in the quick return of women with TBI to productive roles. These suggestions are discussed as attainable through

developing a multi-dimensional rehabilitation program for women with TBI as well as partnering with relevant stakeholders in the promotion of work opportunities for women with disabilities. The Model of Occupational Adaptation (MOA) was used as a framework to interpret the findings of this study; the barriers, facilitators and adaptation process were assessed as they impact on the experiences of the women with TBIs return to work. The return to work of the women with TBI was not observed only to be influenced by the personal characteristics but also by the environmental context within which the return to work process took place.

Keywords: Traumatic brain injury, vocational rehabilitation, employment, women, challenges, occupational adaptation, return to work, self-identity, client-centred, and therapeutic use of self.



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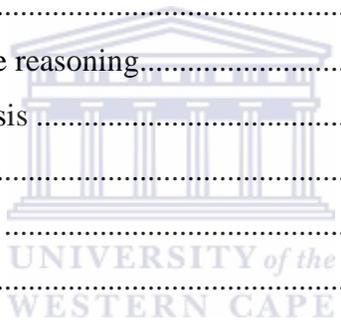
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LIST OF ACRONYMS

BEE	Black Economic Empowerment
EEA	Employment Equity Act
GCS	Glasgow Coma Scale
GSH	Groote Schuur Hospital
HCR	Holistic Cognitive Rehabilitation
HNR	Holistic Neuropsychological Rehabilitation
INDS	Integrated National Disability Strategy
MOA	Model of Occupational Adaptation
MOHO	Model of Human Occupation
MOOSE	Model of Occupational Self Efficacy
OA	Occupational Adaptation
PWD	Persons with Disabilities
RTW	Return to Work
SE	Supported Employment
TBH	Tygerberg Hospital
TBI	Traumatic Brain Injury



CHAPTER ONE: OVERVIEW OF THE STUDY

1.1 Background

This study served as an investigation into the reasons why women with traumatic brain injury (TBI) experience difficulty in resuming their work roles and in re-entering employment settings. In the course of my work as an occupational therapist in a Work Assessment Unit at Tygerberg Hospital (TBH), it came to my attention that females with brain injury being assessed for return to work (RTW) often defaulted on their work assessment program, or struggled to attend their sessions. I also observed that the return to work service statistics for women of the Work Assessment Unit, were consistently below the planned service outcome indicators. The strategic provincial transversal objectives for improving health and wellness across government departments in the Western Cape instructs health care services to prioritise interventions for education and employment facilitation and re-integration of the vulnerable groups, including people with disabilities and women and children, in a bid to reduce poverty and alleviate the burden of disease (Health Western Cape, 2013). Therefore I, as occupational therapist/researcher, aimed to improve the RTW statistics for female clients accessing the unit especially those with TBI. The researcher wanted to assist the occupational therapists in improving the RTW rates of women with TBI; for this to occur there needed to be an investigation into why women with TBI have a low RTW rate. Furthermore there needed to be an exploration of their experiences during and after their rehabilitation process in order to establish what specific factors hinder their resumption of work. This investigation would ultimately provide greater insight into the perceptions of women with TBI of treatment and their RTW, and ensure more realistic and attainable therapeutic and return to work goals for disabled women.

1.2 Introduction

Traumatic Brain Injury (TBI) is a serious global public health problem (Wehman, Kregel, Keyser-Marcus, Sherron-Tagett, Campbell, West & Cifu, 2003) . Globally at least 10 million TBIs are serious enough to result in death or hospitalisation occurring annually. Each year an

estimated 1, 5 million to 2 million US citizens incur a traumatic brain injury, with 70 000 to 90 000 of these individuals experiencing long-term functional impairment. There is substantial health care cost associated with TBI; some individuals with TBI experience significant difficulties returning to work and earning a living, and as result need to rely on government subsidy programmes for basic financial support (Wehman et al., 2003). Because of the significant financial loss and loss to the economy of a country associated with TBI, there is an increasing interest in studying those factors related to the vocational outcomes of person with TBI (Bounds, Schopp, Johnstone, Unger & Goldman, 2003). Studies done by researchers such as Bounds et al. (2003) have consistently shown that it is very difficult for persons with TBIs to find and maintain employment.

TBI occurs when there is a blow or jolt to the head due to rapid acceleration or deceleration, or a direct impact. The consequences of TBI can be mild, moderate, severe, very severe or extremely severe. According to Gill, Reiley, and Green (2004), severity of the injury can be measured using the Glasgow Coma Scale (GCS). The GCS characterises the TBI by assessing three domains of: eye opening, motor response and verbal response, using a scoring system of 0-15. The classification of mild, moderate and severe TBI is determined by the GCS scale: 3 to 8 is defined to be severe TBI, 9-12 moderate TBI, and 13-15 mild TBI (Lombard, 2011). The motor and verbal responses of victims are measured at the rate and level of response after they regain consciousness from the injury. A positive or negative indicator of the prognosis of the sufferers depends on the level of logical reasoning and responses they display, such as orientation to their surroundings, being alert and answering questions, remembering the accident and information prior to their insult. The severity of the injury can also cause the sufferer long-term physical, cognitive and psychosocial impairments (Alston, Jones & Curtin, 2012). Common physical problems associated with TBI are headaches, fatigue, seizures, poor balance, hemiparesis, muscle spasticity, bowel and bladder dysfunction, visual and hearing impairments, sensory impairment, chronic pain and paralysis. Cognitive consequences can include poor memory and concentration, poor visual perception, reduced ability to process information, plan, organise and problem solve, and lack of flexible thinking. Psychological problems include depression, denial, low self-esteem, emotional instability, irritability, impulsive or inappropriate behaviour and inhibition (O'Rance & Fortune, 2007). For individuals who have mild or moderate levels of TBI,

the symptoms may not be obvious to the casual observer and therefore it is often called the “hidden disability” (O’Rance & Fortune, 2007).

According to Nochi (2000), brain injuries often impose a serious challenge to a person’s sense of identity because of the difficulty these individuals have in constructing self-images based on their experiences.

In conclusion, the researcher’s interest in the topic developed in the course of working in the Work Assessment Unit at Tygerberg Hospital and as a result of clinical observations. The researcher specifically wanted to determine how women with TBI go through the adaptation process and to be able to identify the observable characteristics, behavioural changes and phenomenological transitions and experiences that accompany their rehabilitation process.

1.3 Women with TBI

The sex of patients with TBI has long been overlooked as a possible explanation for, or a confounding factor in, outcomes after TBI.

Although Farace and Alves (2000) suggested that TBI outcomes may be worse in women than in men, Crosswasser, Cohen and Keren (1998) found that female TBI patients had a better predicted outcome after discharge from an in-patient rehabilitation programme. While several studies in the literature suggest that women with TBI experience better functional outcome than men, a meta-analysis of TBI studies reported that women fared worse than men on 85 percent of the measured outcome variables (Farace & Alves, 2000). In Holbrook and Hoyt (2004) women with TBI were substantially higher at risk of psychologic morbidity after major trauma than men, with significantly higher rates of post injury depression, symptoms of acute stress reaction and posttraumatic stress disorder (PTSD). According to Cantor et al (2008), women were more likely to report symptoms such as fatigue, headaches, and balance problems compared to men, and that headache have been reported more frequently by women than men post TBI in several studies. It was further stated that gender differences in symptoms of depression and anxiety have been reported with women demonstrating consistently worse outcomes. According to Bounds et al. (2003), women reported the greatest difficulties experienced following TBI included loss of

autonomy, loneliness, depression, discomfort in social settings and a decreased interest in sex. According to Mukherjee, Reis and Heller (2003), women living with TBI typically experience social and emotional sequelae, and TBI can affect the full range of human functioning from activities of daily living to experiencing a coherent sense of self. However, literature examining gender differences in neuropsychological symptoms post TBI is more extensive than literature examining community integration and functional recovery (Cantor et al, 2008)

Alston et al. (2012), in a study that focused on exploring the perceptions of women with TBI in their own lives, found the narratives of participants illustrated that dominant issues were coming to terms with a new sense of self, body image and attempts to "pass" as normal. This study found that how women are able to readjust to life after the TBI is greatly dependent on the severity of the injury. Being able to "pass as normal" has as much to do with their ongoing quality of life as it do with their identity and their ability to reframe a new narrative of self. Even women with mild forms of TBI went to great lengths to disguise their ongoing injuries because of their desire to be viewed as normal (Alston et al., 2012).

Rehabilitation workers are particularly focused on the body and restoring it to its optimal functioning. However, more recent research suggests that there is a lack of systemic attention to the ongoing psychosocial needs of those with TBI and that there exists a need to assist women to develop a new narrative of self that incorporates their broken bodies and reduced capacities (Alston et al., 2012). Although gender differences in many other areas of health research are well recognized, little attention has been directed at the problem of injury in women .Recent evidence indicates that women are at risk for markedly worse quality of life and functional outcomes after major trauma than men, independent of injury severity and mechanism. Reasons for the marked gender differences have not been elucidated (Holbrook &Hoyt, 2004).

Of concern both to medical practitioners and to employers is the fact that women with disabilities (and not just TBI) have been shown to have relatively fewer successful vocational outcomes than men. The findings of Bounds, Schopp, Johnstone, Unger and Goldman (2003) indicate a higher percentage of case of men than those of women cases to be rated in terms of successful vocational closure. The study also found that women are more likely than men to have

their cases closed before rehabilitation services are initiated.

1.4 Health in the Western Cape

The Provincial Strategic Objective “Increasing Wellness” is being undermined by the growing burden of disease of the people in the Western Cape, diseases which are frequently the result of socio-economic deprivation, such as unemployment, poverty and poor housing and sanitation. Woman’s health, healthy lifestyles, violence and road traffic injuries prevention are amongst the focus areas addressing the upstream factors that contribute to the burden of disease. The transversal objectives across government departments in the disability sector are to prioritise interventions for access to education, assistive devices and employment facilitation (Health Western Cape, 2013).

A notable feature of the history of health services in South Africa has been fragmentation, both within the public health sector and between the public and private sectors. Long before 1994 health facilities were racially segregated, and curative and preventative services separated (by the Public Health Amendment Act of 1897). The 1919 Health Act gave responsibility for hospital curative care to the four provinces and promotive health care to the local authorities (Union of South Africa, 1944 cited in Coovadia, Jewkes, Barron, Sanders & McIntre, 2009). When the National Party assumed power in 1948, efforts to further redirect the health service proposed by the Gluckman Commission in 1945 were rejected and the apartheid system further entrenched fragmentation in the health care systems due to racial segregation. The Gluckham Commission recommended the reorganisation of the country’s health system and envisaged a countrywide National Health Service funded through taxation and available to all sections of the people of the country according to their needs and not according to their means.

One of the most important influences on the health of South Africans has been the impoverishment of the black population in the face of general white affluence. In the late 19th and 20th centuries, low wages, overcrowding, inadequate sanitation, malnutrition and stress caused the health of black population to deteriorate, factors that have been inseparably linked with a very high burden of poverty-related diseases. Income inequalities have also had a major effect on the problems of crime and violence (Coovadia et al., 2009).

Embedded in the backdrop of racial discrimination, other key contributors to the health problems were the subordination of women, disrupted family life, poverty and conflict. In 1994, the ANC's health plan proposed a post-apartheid model for health system change in order to address the disempowerment, discrimination and underdevelopment which over centuries had weakened the health system. The model had its antecedents in the concept of primary health care as promoted by Alma Ata, a declaration adopted at the International Conference on Primary Health Care (PHC) on September 1978, which expressed the urgent need for all governments, health development workers and the world community to protect and promote health for all people. The post-apartheid model for the health system change in the country envisioned a system based on community health centres reflecting the recommendations of the Gluckman Commission 50 years ago (Coovadia et al, 2009).

The public health system experienced a transformation into an integrated, comprehensive national service driven by the desire to redress historical inequities and to provide essential health care to disadvantaged people. As stated in Coovadia et al. (2009), there has been a notable lack of progress in implementing some core health policies. As reported in Coovadia et al. (2009) reviews on some of the core health policies suggest that, to meet the Millennium Development Goals, it is necessary to address the unacceptable levels of income inequality, improve access to the full range of social services, introduce a broad ranging development policy and promote gender equity.

Mitra (2008) points out that the rights of persons with disabilities (PWD) are protected by the 1996 Constitution of the Republic of South Africa. The Constitution recognised discrimination based on disability and laid the foundations of subsequent non-discriminatory policies and legislation. The Integrated National Disability Strategy White Paper adopted in 1997 by the Government served as a blueprint for the inclusion and integration of disability in policies and legislation to encourage and improve the employment, or the economic empowerment of PWD. The Employment Equity Act (EEA) of 1998 is one of the major laws against discrimination on the bases of race, gender and disability during the hiring process or while in the workplace. The Code of Good Practice on the Key Aspects of Disability in the Workplace 2001 (the Code) as

well as the Technical Assistance Guide to the Employment of Person with Disabilities of 2004, guides employees and employers in promoting equal opportunities and fair treatment for PWD.

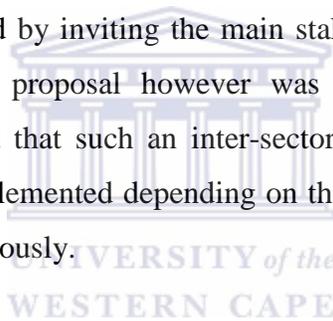
Yet in the course of the 1998-2006 period there was a significant decline of the labour force participation and employment of PWD. Preliminary evidence suggests the decline might be due to the growth of the disability grant programmes. Other possible causes for the decline point to employment rights legislation which may also affect the employment trends of PWD. The EEA imposes cost on the employers through its mandate for reasonable accommodation, which could affect the hiring of PWD by employers seeking to avoid potential litigation for unfair discrimination from the employer. However more research is needed to further investigate the impact of EEA (Mitra, 2008).

The principles of development, empowerment and social integration of persons with disabilities are embedded in the national rehabilitation policies and the roots of the Integrated National and Provincial Disability strategy ratified in 1997. The inclusion of these principles in policy and service provision has the potential to contribute to a process of opportunities being made available to persons with disabilities and for them to reach their optimum potential as productive members of society. A critical action study conducted by Coetzee, Goliath, Van Der Westhuizen and Van Niekerk (2011), found that vocational rehabilitation is usually offered in isolation and with very little integration among the government sectors, non-government sector, non-profit organisations and private sector. Unemployment of persons with already diminished employment prospects, such as PWD, are at further risk of occupational dysfunction, adding to society's burden of care. The devastating effect of unemployment on a person with a disability is closely linked to financial hardship and the inability to meet basic survival needs; thus the combination of disablement and unemployment creates a double burden for individuals, communities and societies (Coetzee et al., 2011).

The current political stance towards tackling social exclusion is towards increasing participation in paid employment (Ross, 2007). Creating more job opportunities for disabled people to join the labour force is viewed as a way of assisting them out of poverty. It has been seen by policy makers as a way of integrating those people, who have until fairly recently been socially

excluded, into society. While there are clear potential advantages for both the individual and society to enabling more people to enter paid work, there are also inherent dangers in making the assumption that securing a job will automatically lead to social inclusion for people with disabilities (Ross, 2007).

Coetzee et al. (2011) propose the adoption of a new integrated, inter-sectoral vocational rehabilitation service model in the Western Cape, after findings from their study conducted to re-conceptualise vocational rehabilitation services in the Western Cape concluded that limited models of employment are being implemented. The focus is on improving access to vocational rehabilitation within the core governmental departments as identified in the national rehabilitation policies. The proposed inter-sectoral vocational rehabilitation service model focuses on the alignment of practice to policy guidelines, and the implementation of the re-conceptualised model was initiated by inviting the main stakeholders to a workshop to present the findings of the study. This proposal however was met with resistance due to cost implications. It was further added that such an inter-sectoral vocational rehabilitation service model would be accepted and implemented depending on the willingness of the stakeholders to take the abovementioned study seriously.



1.5 Rationale

Emanating from the Provincial Strategic Objectives (Health Western Cape, 2013), to improve the health and employment status and outcomes of women, my study focuses on females with traumatic brain injury, a condition commonly observed in the researcher's field of work. As an occupational therapist working in a Work Assessment Unit at Tygerberg Hospital, a clinical unit in the Occupational Therapy Department, my core duties include conducting in-depth Work Assessments to determine the level of work ability of clients. The assessment of components of function is intended to reveal cognitive, physical, psychosocial and emotional difficulties experienced by individuals with TBI. This in turn assists the occupational therapist in providing return to work and disability management recommendations. The literature supports the fact that, although the residual effects of TBI are gender-neutral, women may present with some unique problems (Bell & Pepping, 2001). Women with TBI have not enjoyed the same research focus as men have, and, apart from the different patho-physiological and endocrine functions, factors

such as health and behavioural issues, as well as community and vocational re-integration have not been addressed (Bell & Pepping, 2001). In the researcher's everyday work, in comparison to their male counterparts, women reported a range of unique problems and difficulties, such as coping within their daily occupations. They struggle to cope with daily tasks, including juggling the roles of motherhood and working as well as the general activities they could easily accomplish before the injury. In the Work Assessment Unit, previously managed by the researcher, the statistics on service intake and service delivery reveal that, over a three year span, RTW statistics have increased from 15.6 to 24.7 percent. However, over the past three years less than 8% of the return to work statistics constituted women with disabilities. Referrals to placement and learnership agencies have also shown an increase of 4.6 to 16 percent over the three years, and mainly the women who were placed in learnerships and work placement were the first to default on their vocational plan (Tygerberg Hospital 2012-13). Amongst the diagnoses of the female patients were those with TBI. The aforementioned statistics were an indicator to the researcher that the percentages of women who attended the work assessment unit, and who were eligible to return to work, were significantly lower than those for males and yet their default rate was noticeably higher. The service goal objectives of the Clinical Unit, and broader goals of the Occupational Therapy Department, were to improve the RTW statistics, decrease disability grant assessment, enhance clients' prospects of returning to work, and for them to maintain meaningful occupations. This cluster of goals was intended to feed into the broader aim of enhancing the wellbeing of persons with disabilities through economic empowerment, and to contribute to decreasing the burden of disease to which unemployment and poverty are major contributors. The Unit's service statistics posed a concern that the objectives were not fully being met; the RTW statistics for women remained low with little indication of improvement (Tygerberg Hospital, 2012-13).

1.6 Research question

What challenges do women who have sustained a TBI experience in their work environment after vocational rehabilitation?

1.7 Research aim and objectives

The aim of the study is to explore and explain the challenges that women who have sustained TBI experience in the work environment after vocational rehabilitation.

Research objectives

- To explore and describe the experiences of women with TBI during and after participating in vocational rehabilitation.
- To explore and describe how well women with TBI cope with and participate in their work context after vocational rehabilitation.
- To explore strategies that will aid rehabilitation professionals in the further development and improvement of vocational rehabilitation and work reintegration programmes.

1.8 Definition of key terms

Traumatic brain injury

Traumatic brain injury (TBI) occurs when there is a blow or jolt to the head due to rapid acceleration or deceleration or a direct impact. It is a non-degenerative, non-congenital insult to 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 (Alves, Maccioceni & Barth, 1993).

Disability

“Disability is the loss or elimination of opportunities to take part in the life of the community equitably with others that is encountered by persons having physical, sensory, psychological, developmental, learning, neurological or other impairments, which may be permanent, temporary or episodic in nature, thereby causing activity limitations and participation restriction with the mainstream society. These barriers may be due to economic, physical, social, attitudinal and/or cultural factors” (Integrated National Disability Strategy (INDS), 1997).

Vocational rehabilitation

Is a process which enables people with physical, cognitive, emotional, developmental and psychological impairments to overcome barriers to accessing and maintaining a

successful return to work or other meaningful occupations after an injury, ill-health or disease (Chamberlain , Mosser,Echolm,O'Connor,Herceg &Eckholm,2009).

Occupation

Occupation can be defined as a group of activities and tasks of everyday life, named, organised and given value and meaning by individuals and a culture. Occupation is everything people do to occupy themselves, including looking after themselves (self-care), enjoying life (leisure) and contributing to the social and economic fabric of their communities (productivity) (Townsend, 2002).

Adaptation

Adaptation, in the clinical sense, is defined as a change in a response approach that the client makes when encountering an occupational challenge. “This change is implemented when the clients’ customary response approaches are found inadequate for producing some degree of mastery over the challenge” (Schultz & Schkade, 1992).

Self-efficacy

Self-efficacy is described by judgments that indicate how well one can perform actions to deal with a situation (Bandura, 1993). Self-efficacy is seen as vital for success in occupational performance tasks because of an individual’s feelings of competence (Meriano & Latella, 2008).

Supported employment

Supported employment has been defined as “competitive employment in an integrated setting with on-going support services for individuals with the most severe disabilities” (Cook & Burke, 2002).

Experiences

Experiences are the knowledge or skills gained over a Period time, also defined as the direct involvement in an activity over a period of time (Crepeau , Cohn &Schell, 2009).

1.8 Outline of thesis

Chapter 2 reviews the relevant literature consulted for the study. The chapter firstly highlights

the Model of Occupational Adaptation, the theoretical framework used to underpin this study. The Model of Occupational Self Efficacy (MOOSE) is described, together with its aim to improve self-efficacy to the point where the individual is able to pursue vocational prospects independently and begins to see herself as a valuable and productive member of society (Soeker, 2009). This is followed by a review of the relevant literature on the employment and work of women with TBI and disabilities, as well as relevant rehabilitation approaches and evaluations of the effectiveness of vocational rehabilitation models.

Chapter 3 describes the study's methodology. It outlines the research design, research setting, the participants and sampling strategies, procedures and data collection, data reliability and trustworthiness, data analysis and ethical considerations.

Chapter 4 reports on the results of the study. It commences with providing the socio-demographic characteristics of the participants followed by a brief medical and vocational background.

Chapter 5 commences with a discussion of the findings reported in the previous chapter. During this chapter the researcher attempts to answer the research questions and evaluate the findings against the relevant literature.

Chapter 6: This chapter presents a discussion of the limitations and contributions of the study, followed by the conclusion with final recommendations for future studies and vocational rehabilitation programmes.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction to the literature review

The literature review focuses on employment opportunities and work challenges of women with traumatic brain injury (TBI) and disability. It highlights certain rehabilitation approaches and models used to assist individuals with brain injury and prepare them for return to work. The theoretical framework of this study, Occupational Adaptation is discussed as well as the practice-based Model of Occupational Self Efficacy (MOOSE) that was used as a rehabilitation approach for the return of women with TBI to work.

2.2 Employment and work of women with TBI and disability

2.2.1 Socially constructed gender roles and disability

South African society is still very patriarchal and discriminatory. Although attitudes are changing, women are still typically viewed as second class citizens, subservient to men and in need of protection. Their social role is, by and large, defined through motherhood and homemaking. In the Integrated National Disability Strategy (INDS), (1997:13) it is stated that “Disabled women experience the same oppression as non-disabled women, but often without even the status that women traditionally receive as mothers or wives. In addition, disabled women experience more discrimination than other women from being unable to live up to the demanding ideals for womanhood imposed by society.”

Thus, while it is commonly said that disabled women are women first, then disabled, their circumstances need to be socially contextualised. The very focus of the women's movement – the advancement of an image of women as powerful and competent – has tended to marginalise disabled women. In this context, women with disabilities seem to reinforce traditional stereotypes of women as dependent, passive and needy. The consequent isolation of disabled women means that disabled women are more likely to be poor or destitute, malnourished, illiterate and have a lesser chance of raising a family (The Integrated National Disability Strategy

(INDS), 1997).

2.2.2 Disability discrimination in the workplace

Discrimination against people with disabilities is one of the worst social stigmas that society has not yet been able to overcome (Marumoagae, 2012). South Africa has committed itself, not only to overcoming the legacy of racial and gender discrimination, but also disability discrimination, especially in the workplace, in order to afford persons with disability an opportunity to participate fully in the labour market without being unfairly discriminated against (Habib and de Vos cited in Marumoagae, 2012). Post-1994, the South African state has faced challenges during the implementation of the progressive measures to ensure equality in the labour market for persons with disabilities. Some challenges related to persons with disabilities include lack of reasonable accommodation measures at work, accessible transport to get them to and from work and ignorance about their actual work potential (Marumoagae, 2012). Other factors influencing the slow progress of implementation of these measures could be the lack of basic education and poor socio-economic circumstances in which people with disabilities find themselves. People with disabilities often have both less education and less occupational experience than those without disabilities, and are more likely to experience unemployment spells (Yelin & Cisternas cited in O'Hara, 2004).

Due to the high unemployment rate of 40 percent (Statistics South Africa cited in Van Niekerk et al., 2011), there is strong competition for mainstream employment. An Employment Equity Report (The Commission for Employment Equity Annual Report cited in Van Niekerk et al., 2011) revealed that only 0.9 percent of the number of employees that were reported on were persons with disabilities, of which those in the private sector were reported to be doing slightly better at 1 %, than the government sector at 0.6 percent.

2.2.3 Occupational discrimination by gender

In every economic system, women face constraints in the realm of paid work by reason of their gender. Women face greater demands on their time, notably for unpaid care work and domestic chores, than men. Child rearing and other form of unpaid care work interrupt women's work more than they do men's work. Not only does women's responsibility for unpaid care work help

determine where they are situated in the labour market, but gendered notions of “women’s work” and “men’s work” help shape the structure of the labour market. The segmentation of labour markets by gender and gender gaps in earnings and benefits across and within these segments contribute to the relative poverty and disadvantage of women compared to men, regardless of class, religion or ethnicity (Marumoagae 2012).

Combining gender and disability discrimination, the barrier of wage discrimination may confront women more often and more severely than other impediments to work (O’Hara, 2004). In developing countries many working women face a disproportionate risk of poverty compared to men. Wage discrimination occurs when women with disabilities are paid less than women without disabilities after accounting for productivity-related traits (O’Hara, 2004). Labour force segmentation means that women tend to be confined to activities in which earnings are low and poverty rates high. The risk of poverty among women who are engaged in remunerative work is directly linked to dynamics within the household; women’s labour force participation can help keep a family out of poverty. However, women’s risk of poverty can be much more pronounced in female-headed households or in households where a woman is the primary earner. Studies on gender wage gaps as well as employment and occupational discrimination by gender, concluded that occupational attainment is characterised by unequal distribution, which was predominantly attributed to discrimination. They concluded that it is possible that discriminatory behaviour occurs at the hiring stage (Kingdon & Knight, Rospabe, cited in Grün, 2004).

According to Abu Habib (1995) all disabled persons, women and men, share similar experience of isolation, marginalisation and discrimination. Both disabled men and women are obliged to wage daily battles against socially and culturally imposed restrictions on their activities, such as unavailability of basic services and their identities as well as negative attitudes which set up social barriers to integration and participation. However, disabled women are subjected to additional forms of discrimination in almost every given context. This double discrimination means that disabled women’s experiences are profoundly different from those of disabled men (Abu Habib, 1995).

2.2.4 Legislative protocols for disabled women

In 2005, after the ratification of the African Charter on Human and People's rights on the Rights of Women in Africa in 2003, The African Women's Protocol was accepted. It aimed to promote and protect the human rights of the continent's women, to ensure equality before the law and to eliminate discrimination against women. Despite being ratified by several African States, women's rights on the continent were not being actively enforced, which resulted in women continuing to experience violations of their rights (Banda, 2006).

2.3 Rehabilitation approaches and models used in vocational rehabilitation

Sarajuuri, Kaipio, Koskinen, Niemelä, Servo and Vilkki (2005), evaluating the outcome of a comprehensive neuro-rehabilitation programmes compared to conventional clinical care and rehabilitation for patients with TBI, supports the proposition that neuropsychological-orientated rehabilitation programmes with adequate post-discharge maintenance therapy can improve psychosocial functioning in terms of productivity in post-acute patients with significant TBI. The main elements of such programmes include the promotion of a therapeutic milieu, psychotherapy and cognitive retraining carried out in individual and group settings, supported work trials, family education, therapeutic assistance and follow-up procedures. An essential element in the individualised subgroup neuro-rehabilitation programmes investigated in Sarajuuri et al (2005) is the emphasis on individually tailored placement and supported work trials to help patients find productive activities that fit their interests and abilities after TBI; as productivity is an appropriate outcome variable for assessment of TBI rehabilitation.

2.3.1 Holistic Neuropsychological Rehabilitation

The Holistic Neuropsychological Rehabilitation (HNR) approach may overlap with the basic features of other concurrent programmes and treatment which is provided to improve cognitive skill, practical skill or both. Comprehensive holistic programmes typically provide individual and group-based therapies within an integrated, therapeutic environment. In addition to addressing discrete cognitive limitations, comprehensive holistic rehabilitation programmes may have a more general focus on meta-cognition (e.g. awareness and self-appraisal), interpersonal functioning and emotional regulation. The goal of comprehensive HNR is not only, or primarily,

the remediation of cognitive impairments but the establishment of a meaningful and satisfactory life in the face of persisting limitations (Cicerone et al, 2008).

2.3.2 Holistic Cognitive Rehabilitation

The Holistic Cognitive Rehabilitation model (HCR) is described by Cicerone et al. (2006) as an intervention method that focuses on regaining function through reinforcing previously learnt skills. The goal of HCR is to improve the persons' ability to perform cognitive tasks, retrain coping skills and relearn previous skills that enabled the brain injured person before the injury. It is evident that the literature supports the fact that these approaches address several impairments across the different areas of life and not only cognitive processes. In Tsaousides and Gordon (2009), conclusions drawn from 2 reviews conducted in 1971-1997 and 1998-2002, by a subcommittee of the Brain Injury Interdisciplinary Special Interest Group of the American Congress of Rehabilitation Medicine, supports the effectiveness of cognitive rehabilitation interventions and that it is more effective than traditional types of treatment. Cicerone et al (2006) used the aforementioned reviews to develop evidence-based practice standards, guidelines and options for practitioners working with individuals with TBI in the domains of attention, memory and executive functioning.

2.4 The effectiveness of Return to Work Models for patients with TBI

Supported Employment (SE), as stated in Van Niekerk, Coetzee, Engelbrecht, Hajwani, Landman, Motimele and Terreblanche(2011), is an effective service approach to promote the inclusion of persons with disability in work. SE has been described as competitive employment in an integrated setting with on-going support services for individuals with the most severe disabilities (Cook & Burke, 2002). The concept is based on the assumption that, when the right type of support and intensity is provided, the persons with severe disabilities can (and should be) integrated into competitive employment (Van Niekerk et al., 2011).

Essential steps entailed in SE comprise assessment, job finding, job analysis, job matching and job coaching. Five main activities required for the implementation of an SE programme as proposed in Konig and Shalock (1991) are to establish an innovative programme structure

(sometimes called the “rationale for change”); identification of employment opportunities and communication with possible employers; teaching the skills needed for a specific employment opportunity; organisation of the support necessary to meet the employer’s expectation; assessment of the employee’s performance and the satisfaction given to both employee and employer. The “rationale for change” can be the key driving force to encourage change of attitudes towards the fact that men and women with severe disabilities can become productive and integrated members in society and be accepted as trainees, employees and co-workers in the workplace. Key elements of SE are integration in the workplace of disabled workers with non-disabled workers and the encouragement of inter-agency cooperation and funding for support services.

The quality of SE is to a large extent determined by factors within the employer’s control. In assessing an employer, it should be asked whether the disabled man or woman is provided with adequate and fair compensation; safe and healthy working conditions; the same work, lunch and break areas as other employees; normal work schedules; a variety of jobs; opportunities for continued self-development; a proper balance between his or her interest and capabilities and the requirements of the job. All these factors except the last depend on the employer’s readiness to meet the needs of a disabled person (Konig & Shalock, 1991).

According to Yasuda et al. (2001), studies show that persons with TBI who are referred to SE services are successful in obtaining employment and maintaining it. The importance of workplace accommodation and modification is well emphasised. Essentially the training of the co-workers or employers on how to train the person with TBI gives employees and supervisors a greater sense of control and responsibility. The individual placement model of supported employment uses a vocational specialist to assist the individual in finding employment, and/or provide on the job support such as new employee skills training or identifying accommodations. The programme continues to be efficient and cost effective which is measured in the long-term results of the value of the programme’s benefits (Wehman, Kregel, Keyser-Marcus, Sherron-Tagett, Campbell, West & Cifu, 2003).

2.5 Theoretical Framework

2.5.1 The Model of Occupational Adaptation

The term occupational adaptation (OA) combines the concepts of adaptation and occupation. The broad theoretical frame used in this study is the practice model based on the Model of Occupational Adaptation (Schkade & Schultz, 1992). The OA practice model emphasises the creation of a therapeutic climate, the use of occupational activity and the importance of relative mastery. The theory of OA is described by Schkade and Schultz (1992) as an internal psychic process in which the overwhelming human desire to be engaged in meaningful occupation is integrated with the process for striving for and achieving mastery in desired occupations. Practice based on OA differs from treatment that focuses on acquisition of functional skills, because the practice model directs occupational therapy interventions toward the patient's internal processes and how such processes are facilitated to improve occupational functioning. The theory is based on assumptions that everyone has a strong internal desire to achieve competence in occupation and this involves adapting to demands from the person-occupation-environment interactions. Success can be experienced if the person is able to adapt well enough to satisfy themselves and others (Schkade & Schultz, 1992). The OA practice model is holistic. The model reflects the uniqueness of occupational therapy and integrates the profession's historical practice with contemporary interventions and methods.

According to Wilcock (1993:18), occupation is “the mechanism by which individuals demonstrate the use of their capabilities by achievements of value and worth to their society and the world.” As stated by Watson and Fourie (2004:19), “Occupation offers an ideal channel for the realization and utilization of human potential and poses opportunities through which people can create and transform their lives, pursue aims, overcome barriers, learn new ways in achieving health and happiness and discover meaning and purpose in life.”

Occupation and identity are closely related. In Klinger (2005), Kielhofner states that occupation is the main means through which people develop and express their identity. Based on one's history as an occupational being, occupational identity is one's sense of the present and the future self. How well someone fulfils expectations, maintains roles and responsibilities, remains

true to their values and pursues life goals is considered to be occupational competence.

Illness or trauma may disrupt the internal processes to achieve occupational competence, which may result in maladaptive responses to daily occupational challenges. The OA model guides therapists to facilitate the restoration of a functional internal adaptation process, engaging patients in personally meaningful occupational activities. Adaptive responses will result in the patient achieving greater relative mastery in his/her occupational activities, which can be measured by efficiency, effectiveness and satisfaction (Schkade & Schultz, 1992).

In Jackson and Schkade (2001) they compared the effectiveness of the OA frame of reference with the Bio-mechanical-rehabilitation model in the treatment of hip fractured individuals, and found the OA was associated with a more efficient outcome and greater patient satisfaction. The OA intervention focuses on the occupational goals determined by the patient, regardless of diagnosis. As stated by Dolecheck and Schkade, cited in Jackson and Schkade (2001), a patient engaged in personally meaningful occupational activities will most likely experience restoration of a functional adaptation process. Occupational therapy practices are guided by basic assumptions based upon occupational perspectives of humans and health. Assumptions include, that humans have an innate need and capacity to engage in occupation; occupation affects health and wellbeing, it organises time and brings structure to living, occupation is rich with individual and contextual meaning and it offers therapeutic potential (Polatajko et al., 2007, Wilcock 2006).

In a study by Klinger (2005) to understand the OA after traumatic brain injury, adds further evidence that the ability to re-define one's self-identity is a necessary factor in developing OA. According to Klinger (2005) participants in this study spoke of many adaptive responses developed in response to the brain injury, to enable them to participate in meaningful occupations, tasks and activities. These adaptations were carried out in the context of occupational environments in which participants found themselves. In several cases, respondents also indicated that they actively selected (or rejected), and sometimes influenced, the occupational environment. The profound changes these participants experienced in their sense of self however, as a result of the experience of having a brain injury, seem to fit well with Kielhofner's notion of occupational identity (that is "being") as a component that interacts with

occupational competence (that is, one's sense of satisfaction at being able to engage in valued occupations) to arrive at OA (Kielhofner, 2002; Kielhofner, Forsyth & Barret, 2003). In support of the above, adopting a client-centered practice is of importance to assist in identifying needs that will enhance competency in occupational roles and eventual transformation of the participant into a capable person. Client-centeredness stems from the humanist philosophy foundations of occupational practices, where the aim is to enable clients to participate in the occupations they want to do personally, as well as the things they need or are expected to do socially and culturally (WFOT position statement on human rights, 2006) Human rights in relation to human occupation and participation are guided by the principles stemming from the World Federation of Occupational Therapist position statement on human rights (2006): that people have a right to participate in a wide range of occupations that enable them to flourish, fulfil their potential and experience satisfaction in a way that is consistent with their culture and beliefs. They also have the right to be supported to participate in occupation and, through engagement in occupation, to be included and valued as members of their family, community and society.

2.5.2 Model of Occupational Self Efficacy

In the current study the study participants had undergone vocational rehabilitation by means of the Model of Occupational Self Efficacy (MOOSE). Developed by Soeker (2009), the MOOSE as an occupational therapy practice model aims to improve the self-efficacy of individuals with brain injury to the extent that they independently pursue vocational opportunities and begin viewing themselves as productive and valuable members of society. As stipulated in the Model, individuals with a brain injury are less despondent over their restrictions once they have accepted their functional abilities. They are more inclined to take charge of their rehabilitation and will be more able to envision and develop healthy and suitable goals for themselves. The aim to enhance self-efficacy will ultimately encourage the individual with the brain injury to recognise his/her new work role and will encourage a return to the workforce. The model focuses on the development of internal processes such as self-efficacy through performance accomplishments. It aims to use the ability of the client's beliefs in their existing and developing skills to succeed in certain situations that they find themselves in. In Bandura (1993) self-efficacy is defined as the beliefs people have in their abilities and capabilities in their life situations and it allows for

evaluation on their own performance and productivity, stimulates their interaction and motivates them to do well in tasks specific to their lives. Self-efficacy can be described as the individual's perception and belief of his/her ability to master tasks. It motivates the individual to engage and perform. A person with a high self-efficacy is more inclined to persevere when faced with a challenging situation. They have a greater sense of self-worth and high expectations therefore experience a greater sense of accomplishment and wellbeing. Whereas an individual with a low self-efficacy is less likely to pursue a difficult task and would rather avoid or withdraw from it, being less likely to keep their commitment to their goals.

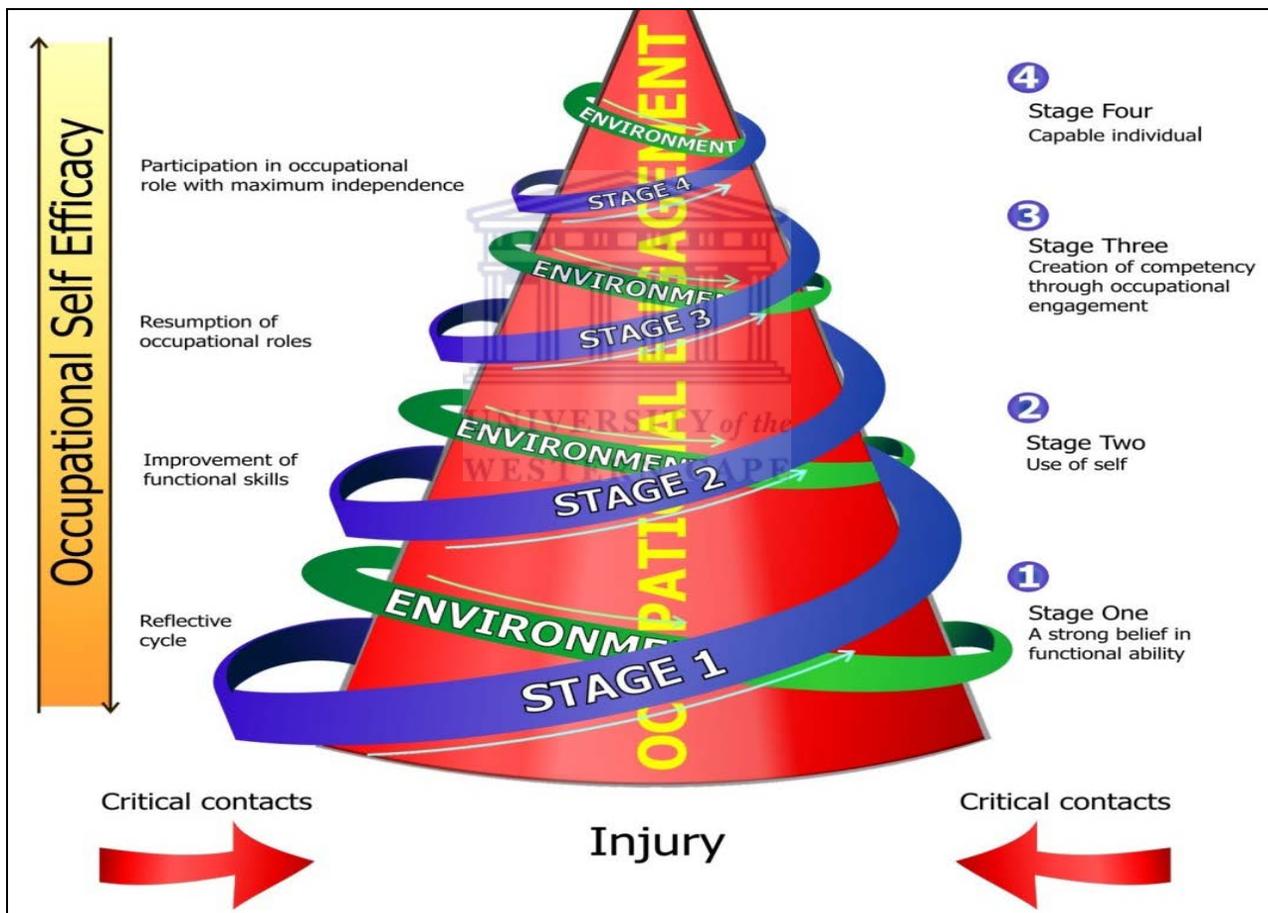


Figure 2.1: Model of Occupational Self Efficacy: Returning Individuals with Mild to Moderate Brain Injury to Work.

Source: Soeker, 2014.

The brain injured individual is required to complete four characteristic stages as directed by the

Model. Stage 1, known as *A strong belief in functional ability*, is to facilitate self-reflection and introspection and the feelings surrounding the accident and the person's altered life situations after the TBI. During Stage 1, the brain injured individual is encouraged to work through their feelings about the accident: how it occurred, any feelings of despair, guilt or anger surrounding their circumstances. The brain injured individual is encouraged to assess his/her circumstances and to reflect on their limitations and capabilities, to look within themselves to try and formulate solutions to their dilemma. Self-reflection is strongly encouraged, using the steps of reflection as advocated by Gibbs (1998). According to Soeker (2012), once the individuals are able to understand their situation and have accepted their limitations and are aware of their abilities, they will be able to more able to formulate realistic goals for themselves, which is part of establishing a positive self-efficacy. At the completion of this stage, the brain injured individual is ready to move onto the next stage of the Model.

Stage 2 is known as the *Use of Self stage*. According to Soeker (2012), once self-efficacy is established the person can start to regain control of his/her life circumstances. During this stage a platform for exercising independence is provided for the clients. Performance components such as cognition and physical shortfalls are addressed. Intervention is based on a client-centered approach in which the formulation of goals is directed by the clients. As performance skills improve so does the ability in mastering tasks; this enhances self-worth, motivation and with the positive input and encouragement from the therapist, their self-esteem grows and eventually their self-efficacy increases. Once self-efficacy is enhanced the brain injured individual has a less distorted perception of his/her functional abilities and are more likely to have greater self-awareness. Through greater success they are more likely to participate in more work-related activities which will allow them to continue with the next stage of the Model.

Stage 3 is the *Creation of competency through occupational engagement*. The client is steadily improving and evolving into a more motivated and independent individual. The client is less likely to stagnate in the sick-role, and the view of "I am unable" is now shifted to "being able to do." The therapist is actively participating by motivating, providing affirmative input so that the client aims for higher levels of occupational engagement, ultimately improving the work performance. Stage 3 aims to enhance self-efficacy through independent functioning in work

tasks to the extent that, through continuous successful engagement, their abilities are improved until they are fully competent and have the ability to return to a job and successfully sustain that job based on their individual capabilities.

The brain injured individual is now ready to move forward to the next stage known as the *capable individual*. Stage 4 is where the individual can view him/herself successful in work-related occupations. The person's self-efficacy is improved to the extent that he/she actively attempts to engage in healthy and meaningful occupations. Their improved volition and work role and successful work participation is an indication that the ultimate goal of the Model is achieved

2.6 Summary

In the literature, evidence suggests that women with disabilities are exposed to unfair treatment and marginalisation in the workplace, especially during the hiring process, and often experience stigma and attitudinal barriers which impacts on their work reintegration post-injury. The review also identified that legislative protocols against discrimination and protecting the rights of women with disabilities are not without faults, particularly in their effective implementation and enforcement. Several rehabilitation models have been identified to aid in enhancement of function for persons with TBI, as well as return to work (RTW) approaches that promote workplace integration. Theoretical frameworks for occupational therapy practice have been identified to aid in the occupational adaption of women with disabilities and enhance their prospects of returning to meaningful occupations and maintaining paid employment. The Model of Occupational Adaptation (MOA) and Model of Occupational Self Efficacy (MOOSE) have been applied in this study which is aimed at investigating the experiences of women disabled as a result of TBI.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In section 3.2 the research paradigm of this is discussed. Section 3.3 provides a discussion on the sampling strategy used for the selection of participants. In Section 3.4 the procedure that was followed for ethical approval of this study is highlighted. In section 3.5 a discussion and description of participants are provided. In sections 3.6 and 3.7, the data collection technique and data analysis are discussed. Finally, in sections 3.8, and 3.9 research trustworthiness and the ethical statement of the study are discussed.

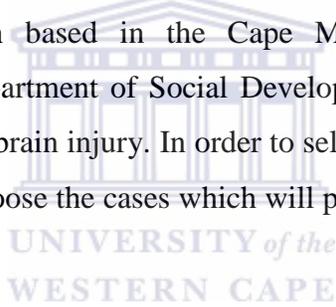
3.2 Research design

The study uses an exploratory design, utilising a qualitative approach. According to Robson (2002), exploratory design is a design which seeks to find out what is happening, especially in a little understood situation and asks questions, generates ideas and new insights for future research. The motivation to conduct the study is to explore the challenges women with traumatic brain injury (TBI) and/or disability face when returning to work after vocational rehabilitation. Brink, Van der Walt and Van Rensburg, (2006) assert that exploratory designs are utilised when there is very little known about the phenomenon under investigation. Babbie (2007) recommends exploratory design as a strategy which leads to new insights into a topic. This approach allows for the exploration of the individual's own perspectives and the descriptions that characterise their experiences on the topic of enquiry, without the control or manipulation of the participants involved (Denzin, 2005).

Semi-structured interviews were conducted with participants in order to understand the personal experiences and challenges they faced. In the current study, the participants were asked to describe their experiences in their workplaces after receiving vocational rehabilitation. The qualitative methodology provided the opportunity to explore the participants' experiences in great detail through one-to-one interviews. It enabled the researcher to uncover and reveal the deeper meanings of the experiences of the participants.

3.3 Sampling

According to Patton (1990), sampling is the act of selecting a suitable part of a population for the purpose of determining parameters of the whole population. De Vos, Strydom, Fourie and Delpont, (2005) state that the sample that is used should compose of the elements that contain the most characteristics, representatives or typical attributes of the population. Purposive sampling was utilised to select the participants of this study, because the sample had particular features and characteristics which enabled detailed exploration and understanding of the topic. According to Sandelowski (2000), purposeful sampling allows the exploration of the common and unique manifestations of a target audience of a target phenomenon across a broad range of phenomenally and/or demographically varied classes. Therefore ten participants were purposively sampled utilising telephonic enquiry and statistical records from the Occupational Therapy Department at a health institution, Tygerberg Hospital. Participants were also sourced from the Heads-Up organisation based in the Cape Metro. Heads-Up is a Non-Profit Organisation managed by the Department of Social Development and runs support groups for individuals who have experienced brain injury. In order to select the most appropriate sample the researcher developed criteria to choose the cases which will provide the most in-depth data about the study.



3.4 Procedure

This study forms part of another research study, which has already received ethical clearance from the University of the Western Cape. The current study was granted approval from the Higher Degrees Committee of the University of the Western Cape and received ethical clearance (registration number 14/5/29). Ethical approval was formally requested and granted from the Ethics Committee at Tygerberg Hospital, to utilise their statistical records to source potential participants. The Head of Department of the Occupational Therapy Department also granted permission to use their Work Assessment Unit to conduct initial screenings and interviews.

3.5 Participants

Participants were telephonically contacted after their details were provided from medical records and referral sources. By conducting screening interviews, a group of 10 female participants were

selected to participate in the study. Due to the limited female clients with TBI that have undergone vocational rehabilitation using The Model of Occupational Self Efficacy (MOOSE), three participants who qualified for the study first needed the necessary therapy before they returned to work in order to obtain their perceptions and experiences in the work environment after rehabilitation. Due to three participants' unemployed status during the time of their rehabilitation they were provided with a light meal and transport money when they attended follow up rehabilitation and interview sessions. According to Steward and Shamdasani, cited in Soeker (2004), incentives in the form of snacks, transport money and baby sitters are of great value for ensuring participation. Participants were provided with the explanation and rationale for the study and were given an information sheet regarding the detail and purpose of the study (*See Appendix A*). Participants were also provided with information on their involvement in the study as well as the risk factors and benefits of partaking. Their right to remain anonymous and their right to withdraw from the study at any time were emphasised. The participants were informed of the methods of ensuring confidentiality and the safekeeping of their personal information and records. Once the prospective participants agreed to participate, they were provided with a consent form to sign of which both the researcher and a witness co-signed (*See Appendix B*). The criteria for selecting participants included confirmed diagnoses of mild to moderate TBI, that they should have received the necessary multi-disciplinary vocational rehabilitation through the use of the MOOSE of which outcomes are strongly directed at vocational integration, they must have been involved in gainful employment before their injury and must have returned to employment after rehabilitation, they must be able to understand and communicate as well as comprehend the English and Afrikaans languages, and that they should be residing within the Cape Metropole and be 18 years of age and older. The exclusion criteria for this study were that participants should not have a dual diagnosis, including classified psychiatric conditions or other medical conditions which might influence the sequelae of TBI, nor be experiencing active symptoms such as confusion or dizziness as a result of the TBI.

3.5.1 Key informant technique

Two key informants were purposively sampled as a means to source more information and gain deeper insight into the topic at hand. According to Marshall (1996), a key informant is an expert source of information and selected as part of a study because of their formal role which exposes

them to the kind of information being sought as well as their professional knowledge, allowing meaningful interpretation and information to be shared.

The key informants, as a result of their personal and professional skills and their hands-on experience with the study topic, held valuable information sought after by the research. As part of the inclusion criteria, the two occupational therapists that were sampled as key informants to the study needed to be experienced in the field of vocational rehabilitation as well as in rehabilitating/treating individuals with brain injury for at least 6 months. Both key informants should have utilised the MOOSE with women who had suffered a brain injury, with the aim to return them to work.

3.5.2 Description of study participants

Ten participants were sampled between the ages of 20-49 years. In terms of race, one participant is Caucasian, two are Coloured and the remaining seven are African. Two of the participants presented with a co-morbidity of retroviral disease and are receiving ARV's at their local clinics.

Participant 1 (P1): JI is a 22 year old single Coloured woman with a grade 9 level of education. She resides in Lotus River and lives with her parents and siblings. She was involved in a car accident in 2011 and sustained a moderate TBI with right sided weakness and cognitive fallout. JI worked as a child-minder in a crèche and at McDonald's fast food restaurant after her accident. According to collateral information, JI lives in a low socio-economic household and her parents frequently misuse alcohol.

Participant 2 (P2): YG is a 29 year old African single mother of one, with a grade 11 high school education. She resides in Khayelitsha. She was involved in a pedestrian vehicle accident (PVA) in 2011 and sustained a moderate TBI. She was admitted to Groote Schuur Hospital (GSH) where she woke up from a coma after three weeks. She sustained multiple fractures as well as soft tissue trauma. After the accident she returned to work as a cashier but failed to cope due to the memory fallout as well as physical discomfort when performing repetitive light work tasks.

Participant 3 (P3): LT is a 33 year newly married Coloured woman with a grade 12 level of education as well as a certification in human resource management. She resides in Mitchells Plain. She was involved in a motor vehicle accident in 2009 and sustained a mild TBI and was admitted to Tygerberg Hospital (TBH). According to the medical information she was treated for post-traumatic stress disorder (PTSD) soon after the incident and was discharged in 2011. Before the accident LT worked as a bank teller as well as personal assistant. She did not return to work after the accident.

Participant 4 (P4): LB is 29 year old single White woman with a grade 12 level of education and a diploma in jewellery design and manufacturing. She was involved in a head-on motor vehicle accident in 2005 which left her with a moderate TBI, right sided weakness and expressive language difficulty. After her accident she returned home to live with her single mother. She previously worked as a jewellery designer, but has not returned to work since her accident.

Participant 5 (P5): NG is a 37 year old African woman currently estranged from her husband and has two school going children. She obtained a grade 10 school education. She currently resides in Khayelitsha. She was involved in a pedestrian vehicle accident (hit and run) in 2009 and was admitted to GSH. She sustained a mild TBI with multiple fractures. She has a co-morbid condition of hypertension. Prior to the accident she worked as a cleaner but struggled to find employment since the incident.

Participant 6 (P6): GG is a 33 year old single African woman with a grade 10 level of education. She currently resides in Makaza, Khayelitsha. In 2004 she was indecently assaulted and subsequently sustained a mild TBI after being hit over the head by her attacker. Part of her medical intervention and rehabilitation included being admitted to Lentergeur Psychiatric Hospital as an in-patient for two months to treat her substance abuse. GG also has a co-morbid condition of retroviral disease. Prior to her accident she worked as a home-based carer, after the accident she attempted to work as a housekeeper, but left due to the high expense in travelling compared to the low wages she earned as a worker.

Participant 7 (P7): ZM is a 39 year old African married woman with two children. She currently

resides in Khayelitsha. She completed grade 10 schooling and previously worked as a team leader at a cleaning service in the V&A Waterfront. She sustained a mild TBI in 1997 after being involved in a motor vehicle accident. She also sustained multiple fractures. She still experiences frequent lower back pain. Ever since her accident she found it very difficult to find employment.

Participant 8 (P8): TT is a 48 year old African married woman with no children. She resides in Site B, Khayelitsha and has a Grade 8 level of schooling. She previously worked as a nanny. She was involved in a motor vehicle accident in 1989 and was admitted to an Eastern Cape hospital. She also has a co-morbid condition of retroviral disease.

Participant 9 (P9): EP is a 25 year old African single mother and resides in Ravensmead, Parow. She obtained a Grade 10 level of schooling. She was assaulted by her former boyfriend in 2013, was admitted to TBH and woke up from a coma 5 days after the incident. She was left with moderate TBI with right sided weakness. She previously worked as an assistant nurse and was engaged in completing a home-based nursing certificate. Since the assault she has not worked.

Participant 10 (P10): SK is a 32 year old African woman. She is single with one child. She currently resides in Langa, Cape Town. She attended school until grade 9 and had been performing domestic work on a casual basis before her accident. She was involved in a hit and run pedestrian vehicle accident in 2013 and sustained a moderate head injury. She was admitted to GSH and was discharged with no further follow up. She has been experiencing frequent headaches since and has not been working after her accident.

Key Informant 1 (KI1): Is a female occupational therapist currently performing locum work at a private practice. Since July 2014 she has been assisting with a research study in returning brain injured individuals to work using the MOOSE.

Key Informant 2 (KI2): Is a female occupational therapist who has recently concluded her service working as a locum in the Vocational Rehabilitation Unit at Tygerberg Hospital. Since 2013 she was actively involved in applying the MOOSE to return brain injured individuals to work as part of her post-graduate studies.

3.6 Data Collection

3.6.1 Data collection technique

The research employed face-to-face semi-structured interviews to collect data. The interview is a useful way of obtaining large amounts of data quickly and also of obtaining in-depth data (De Vos et al, 2005). The reason for using semi-structured interviews is to ensure focus on the topic of enquiry while interviewing the participants, but at the same time gathering in-depth information on the participants' beliefs, perceptions, experiences and meaning they attached to this study (De Vos et al., 2005). The semi-structured interview was found to be suitable for this study because it allowed the participants to express their experiences during the rehabilitation process and challenges or facilitators they encountered within their work environment. An interview is not a dialogue; it is aimed at the participant to tell the story. The interviewing techniques were applied by posing a broad question and allowing the participants to talk freely. During the interview the researcher used probing to further unpack a topic of interest brought up by the participants (*see Appendix C for interview guide*). In De Vos, Strydom, Fourie and Delpont . (2011), adapted from Jarbandhan and Schutte (2006), the authors suggest that the participant must do 90 percent of the talking. The researcher struggled to achieve this, but with the assistance of the participants' supervisor, this requirement was successfully acquired.

The duration of interviews with individual participants alternated between 45-60 minutes and a second interview was arranged with participants where needed. The conversation with the respondents during the interview was recorded and then transcribed verbatim by an individual skilled in the task. The recording of interviews avoided the unreliability of memory; it is not easy to remember or note things like pauses, overlaps and "in breaths." By studying the tapes, one is able to capture the actual details; also tapes can be replayed and transcripts improved. The researcher also monitored the effect of the interview on the participants by observing body language to detect any discomfort. The participants had first option to select the venue for interviews since the researcher wanted the participants to feel comfortable and relaxed during the interview process. However some participants preferred meeting in public spaces such as coffee shops, fast food outlets and restaurants where the noise levels had an intrusive effect on the

interview. Some participants were not familiar with the researcher and felt more comfortable with people around them while being interviewed, therefore meeting in public spaces made them feel less intimidated during interview sessions. All the materials that were used for the interviews were prepared in advance and were ready before interviews started.

3.7 Data Analysis

Data analysis refers to a process of bringing order, structure and meaning to the mass of collected data (De Vos et al., 2011). A number of data analysis techniques were applied to the data collected in this study. These techniques are described in the following sections.

3.7.1 Deductive and inductive reasoning

The research utilised deductive and inductive methods of reasoning. Applying the deductive approach, the research set out to test the hypothesis generated from the theories on the topic at hand. In the current study the theoretical evidence implies that women with TBI present with unique manifestations of personal factors during their rehabilitation process. Women with TBI or a disability also experience greater challenges within their work environment and do not enjoy the same rights or accommodation as advised and ratified by related national legislative policies of the South African government. The research applies the inductive approach parallel to the deductive method to explore the possibility of new emerging themes developing from the collected data and observations. The objective is to identify possible theories that could be utilised in the development and implementation of new rehabilitation strategies for returning women with disabilities to work. As stated in Guest, MacQueen and Namey (2012), inductive thematic analysis is probably the most common qualitative data analysis method employed in the social, behavioural and health sciences.

3.7.2 Thematic content analysis

Patton (1990) stated that qualitative designs are naturalistic, in that the researcher does not attempt to manipulate the research setting; rather that the qualitative method is used to understand naturally occurring phenomena in their natural occurring states. Furthermore, a qualitative inquiry strategy emphasises and builds on several interconnected themes (Patton,

1990). Guided by the work of Creswell (2007), thematic data analysis was the method used to analyse this data. Data was analysed adopting a method adapted from, amongst others, Tesch (1990).

To gain a deeper understanding of the information recorded from the participants of the study, the researcher read and re-read through the transcripts several times. During this time the researcher made notes next to participants' quotes which elucidated the researcher's understanding and correlation with the relevant literature. Thereafter coding was conducted, analysing and underlining meanings of text in each transcript. The research made use of the cut and paste method to compare codes in the transcripts and look for similarities in meanings. The coded data was then further analysed and classified into categories which held common meanings and linkage with the relevant literature and theories. As categories became more apparent, patterns of relationship emerged from the categories to formulate themes, which would later be discussed in the study.

3.7.3 Reflexivity

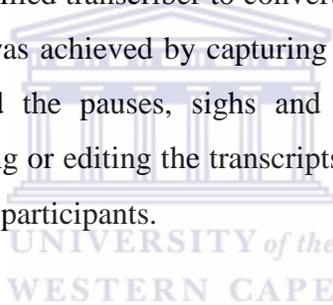
The researcher had to reflect on preconceived ideas and possible biases influencing the study findings. She made use of a personal reflexive journal to record feelings, observations and ideas that might deter the objectivity of the study. The maintenance of a journal can enhance researchers' ability to sustain a reflexive stance by including the reasons for undertaking the research; assumptions regarding gender, sexual orientation, race/ethnicity, socio-economic status; the researcher's place in the power hierarchy of the research and the researcher's personal value system (Tufford & Newman, 2010). Thus the researcher made use of a technique called bracketing, by isolating personal assumptions and opinions from the study, which enabled the researcher to observe all the facets of the phenomenon more objectively and formulate new constructs. Another method of bracketing employed by the researcher was to engage in consultation with and seek supervision from the university supervisor as well as formal conversations with peers on her assumptions, to encourage an objective interface between the researcher and research data.

3.8 Establishing trustworthiness

Rigour of the study was achieved by employing four aspects of trustworthiness in Guba's Model as recommended by Krefting (1991); (a) truth value, (b) applicability, (c) consistency and (d) neutrality. The researcher also applied further strategies as suggested by Krefting (1991) to achieve credibility.

3.8.1 Truth value

In qualitative research, truth value is usually obtained from the discovery of human experiences as they are lived and perceived by informants. It establishes how confident the researcher is with the truth of the findings based on the research design, informants and context (Krefting, 1991). To ensure original and truthful data the researcher made use of an audio recording of the semi-structured interviews and used a skilled transcriber to convert audio data verbatim. In addition to using the truth value, credibility was achieved by capturing the essence of participant's natural way of speaking which included the pauses, sighs and repetitions during sentences. The researcher refrained from modifying or editing the transcripts from interviews in order to ensure a rich and true view point from the participants.



3.8.2 Member checking

In Creswell and Miller (2000), member checking consists of taking data and interpretations back to the participants in the study so that they can confirm the credibility of the information and narrative account. In the study, member checking involved checking the data with the participants to make sure that the data was true to their experiences. Some participants were telephonically contacted whereas some were met in person. The participants were able to clarify points that they felt were inadequately presented while confirming other descriptions and explanations about their perceptions and experiences of their rehabilitation process and returning to work. Discussions with regard to the initial interpretations of the categories and sub-categories and possible conclusions were discussed with the members. Any changes or suggestions from the participants were then further analysed and incorporated into the study.

3.8.3 Triangulation

Triangulation is a technique used to strengthen research rigour through combining multiple methods, namely theoretical, methodological, investigator and data (Guba & Lincoln, 2005). Data triangulation was used in the current study to ensure that the information that was collected is reliable. Three methods of data collection were utilised: interviews conducted with the various women with TBI in the study, collecting data from key informants who provided rehabilitation to the study participants and the researcher's reflective notes.

3.8.4 Interview techniques

The research makes use of semi-structured interviews as well as observations. As advocated by Babbie and Mouton (2001), simple observation was used as a data collection method. During observations the researcher made field notes in an attempt to capture a comprehensive account of the respondents themselves, the events taking place as well as the respondents' attitudes and feelings. Taking field notes is a measure of observation whereby the behaviour and activities of individuals are documented (Creswell, 2003). Observing the participants in their expressive movements and language assisted in clarifying and strengthening the findings of the study. This method enabled the researcher to obtain additional visual information and to understand the perceptions and experiences of the participants returning to work after the TBI. Personal biases were bracketed to ensure that the findings are a reflection of the participants' experiences.

3.8.5 Bracketing

Researcher reflexivity is the process whereby the researcher reports on personal beliefs, values and biases that may shape their enquiry. As a validity procedure it is important for the researcher to acknowledge and describe their beliefs and biases early in the research process and then to suspend or bracket those biases as the study proceeds (Creswell, 2000). Reflexive analysis took place by documenting experiences and conducting reflective journaling which was useful to ensure neutrality during the study.

The researcher, an occupational therapist who worked closely with women with disabilities on their return to work, developed preconceived assumptions on the challenges women face

returning to work. In addition, the researcher unwittingly used her personal experience of a working mother as an initial motivation for the research study. The researcher is a married woman with children and working an 8 hour work day, with the assumption that working women generally face more challenges within the work environment than their male counterparts. The researcher believes that women's work performances are influenced by external factors such as family responsibilities, child rearing, home management, the amount of social support as well as environmental factors such as community unrest, disruption in transportation, etc. The researcher also assumed that women are more attuned to their emotions and are continuously evaluating themselves, the success of the family and success in the job, performance and job satisfaction. When these factors experience imbalance or are undesirably influenced, women tend to experience greater strain on their work performance than men in similar circumstances. The researcher had a preconceived notion that there is less leniency towards women in the work environment and that the aforementioned points are not always taken into consideration by the employer. The researcher felt that being a woman with a disability, especially those with "invisible disabilities," will result in increased everyday work challenges compounded by the fact that the employer and work colleagues are less supportive and accommodative in the work environment. The researcher believes that women with disabilities need advocating because, with added disability, they lack the ability to stand up for their rights, are more inclined to be exposed to discriminative treatment and are generally suffering from low self-esteem, poor self-efficacy and are prone to suffer from poor job satisfaction, loss of meaning in their work role as well as drop out of wage earning jobs.

The researcher soon realised, based on her clinical reasoning and expertise that she needed to suspend her preconceptions and capture thoughts, assumptions and realisations in a journal. Journaling allowed the researcher to reflect, relate and realise similarity, differences as well as emerging information regarding the study. Reflective writing ensured that the researcher was constantly aware of her bias or assumptions as the study progressed.

3.8.6 Peer debriefing

The researcher selected colleagues who are experienced with qualitative research strategies and methods to discuss the research process and findings as well as the researcher's own thoughts

and assumptions. These colleagues could provide the researcher with objective feedback due to their impartial relation to the study at hand. Constructive criticisms from these colleagues kept the researcher alert to bias assumptions in order to prevent the distortion of information and ensure credibility.

3.8.7 Applicability

Applicability refers to how transferable the findings are to another setting. The research attempts to provide thick descriptions of the research population, sampling, sample settings, participants and data collection and analysis to ensure that transferability is achieved should this study be evaluated for its applicability if it was conducted in a different context or setting. The findings of a qualitative study are not intended to be generalised to other populations, even though qualitative inquiry has been discussed in various literature (Soeker; 2010), there is an expectation however that the findings of a study have similar meaning to other studies conducted in similar context.

3.8.8 Consistency

The exact methods of data gathering, analysis and interpretation in qualitative research must be described. In Krefting (1991), such dense description of methods provides information as to how repeatable the study might be or how unique the situation. By providing a detailed account of the methods used, phases of enquiry and peer evaluations, the consistency of this study was further ensured.

3.8.9 Conformability

In Krefting (1991), it is noted that a researcher should provide documentation for every claim or interpretation from at least two sources to ensure that the data support the researcher's analysis and interpretation of the findings. The researcher used the strategies of member checking, peer evaluations as well as reflexivity to instil a greater awareness of her influence on the research data. By utilising the neutrality criterion the researcher aimed for the presentation of data that could be audited by the researcher's supervisor. The researcher's supervisor was able to follow the methods and processes that were employed during the study and came to an understanding on

how or why certain conclusions or decisions were made during the study.

3.9 Ethical statement

The research study commenced after obtaining approval from Committee of Human Research at the University of the Western Cape, followed by permission from the Medical Superintendent at Tygerberg Hospital, to conduct part of the study at the Occupational Therapy Department. As suggested in Orb (2000), ethics pertains to avoiding harm; and that harm can be prohibited or diminished through the application of appropriate ethical principles. Verbal and written informed consent from participants was obtained after providing the participants with a written description of the study aim; objectives and rationale. Participants were also assured about their confidentiality and their right to remain anonymous. Participants were informed that their personal information will be locked away and soft copies will be secured and coded on the researcher's computer. The researcher informed participants that the well skilled transcriber, who will be transcribing the audio data from interviews, will be informed about the confidentiality of the data that he will be handling. Participants were allowed to read through an information leaflet of the study and were given time to reflect upon their possible decision. It was emphasised that they are participating under no obligations and have the right to withdraw from the study at any time without any consequences.

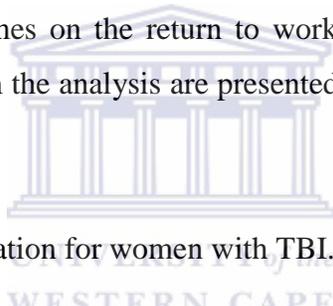
3.10 Summary

In conclusion, in this chapter the research methodology was presented that was employed to investigate the experiences of women with TBI regarding their resumption of work. An exploratory design and qualitative approach was employed to describe these experiences. In the next chapter the findings of this study will be presented which include the themes and categories derived from the data obtained from research participants.

CHAPTER FOUR: RESEARCH FINDINGS

4.1 Introduction

This chapter presents the findings of the study, which explores the challenges that women with traumatic brain injury (TBI) experience in their work environment after vocational rehabilitation. The findings are presented according to themes, categories and sub-categories. Theme 1 is related to the barriers that might hinder the resumption of work participation following TBI. Theme 2 presents the rehabilitation process as a facilitator in the resumption of work. Theme 3 presents the strategies utilised by the TBI survivors in adapting to their work roles. Theme 4 presents strategies which could form part of the planning, development and implementation of vocational rehabilitation programmes on the return to work (RTW) of women with TBI. The main outcomes which emerge from the analysis are presented in Theme 4. The four main themes are presented in Figure 4.1



Theme 1: Barriers to work participation for women with TBI.

Theme 2: Re-establishing a worker identity by means of vocational rehabilitation.

Theme 3: Adaptation strategies that enhances the work participation of women.

Theme 4: Promoting access to work by utilising a multi-sector RTW approach.

Figure 4.1 is a diagrammatical illustration of the interactions between the presented themes. Theme 1 (barrier) and Theme 2 (facilitator) are presented as influencing the women with TBI's adaptation process of resuming their work roles. When the integration of the facilitators overcomes the inflictions of the barriers then the adaptation process is deemed successful. However if the barriers are too challenging and the facilitating factors too weak to withstand these barriers then the adaptation process is not successfully obtained. In theme 4, further development and implementation of such recommended strategies will further enhance the success rate of the adaptation process of women with TBI and returning them to work and sustaining their work roles.

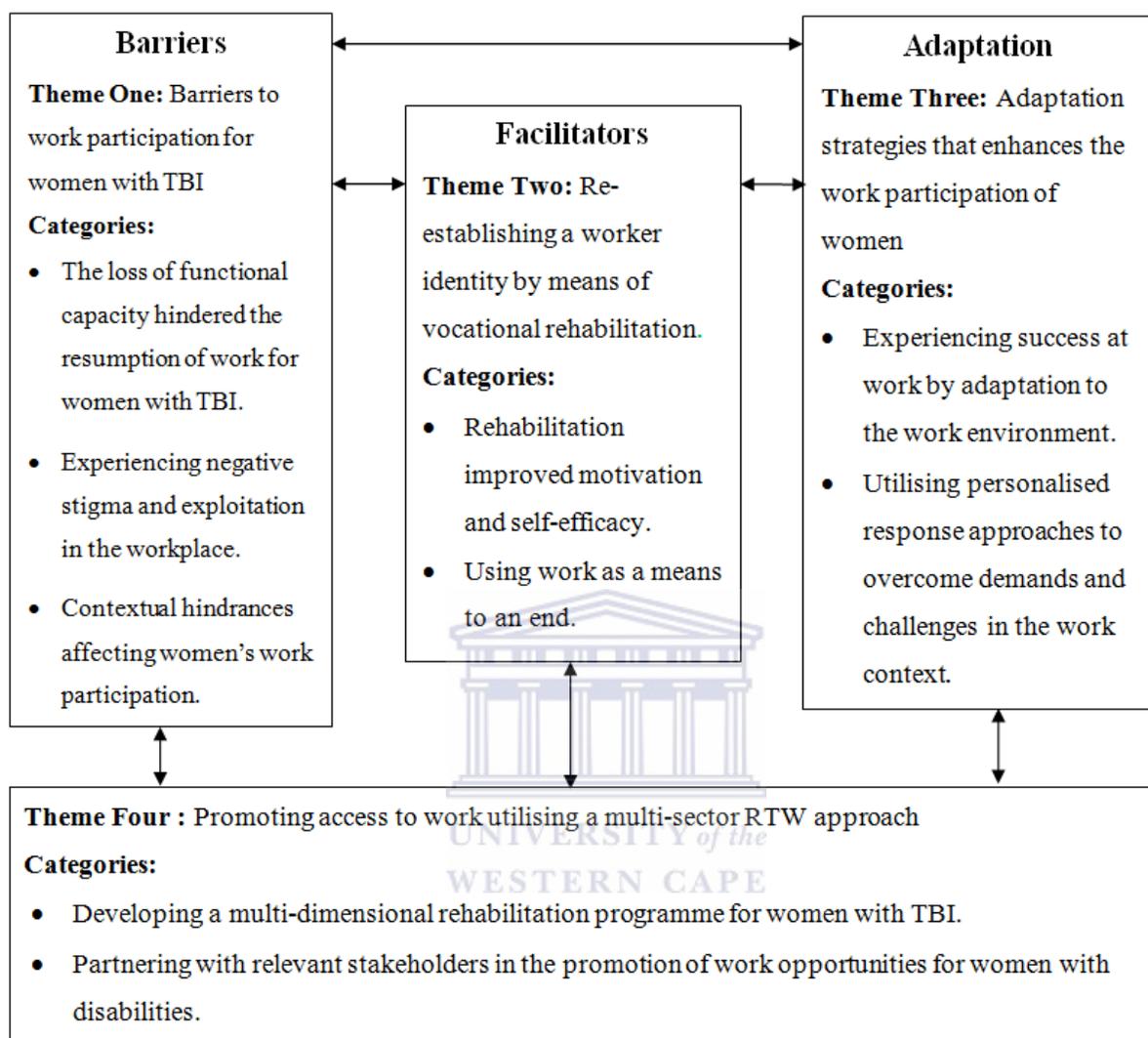


Figure 4.1: Diagrammatical presentation of themes

Tables 4.1, 4.2, 4.3 and 4.4 present the themes and categories respectively following a written explanation.

4.2 Theme 1: Barriers to work participation for women with TBI

Theme 1 represents the participants' experiences of the effects of TBI on their former selves and the evident shift in capabilities as a result of altered psychosocial, emotional, physical and cognitive skills. The essence of the theme highlights the changes participants experienced and what they were able to do well up until the TBI and what they were no longer able to do after the

injury, depicting the change in functional performances.

Table 4.1: Theme 1 categories and related sub-categories

Theme 1	Categories
Barriers to work participation for women with TBI	<ul style="list-style-type: none"> • The loss of functional capacity hindered the resumption of work for women with TBI. • Experiencing negative stigma and exploitation in the workplace. • Contextual hindrances affecting women’s work participation.

One participant’s quote emphasises the person she was before the injury and the person she became after the injury. She said:

Before the accident, I was fine. I was strong a strong memory and doing things right and my memory to me it was right. After I got the accident, everything was changed for me (P5: NG).

4.2.1 The loss of functional capacity hindered the resumption of work for women with TBI

This category describes the participants altered capacity to perform a wide range of occupational roles and tasks as a result of their injury. During the introspection stage of the MOOSE, there was a clear lack of knowledge and insight to what was happening to their mental and physical states and why they behaved and felt in certain ways. One participant, describing their state during the first stage of the process, stated:

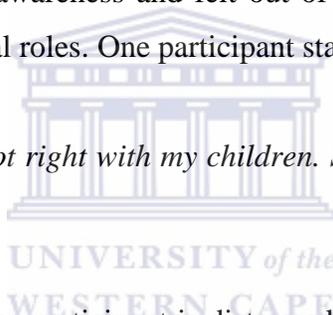
In a sense of being stagnated and not going anywhere, because I didn’t know how to move forward with the disability (P3: LT).

The above indicates that, without sufficient knowledge and skills on the injury and their life situation, the participants remained stagnant in a phase of occupational dysfunction. Their ability in “doing” is directly related to their “being,” which implies that their functional performances will be influenced by their state of mind and emotions, their sense of control and what they know about their own abilities and inabilities. They also had difficulty in monitoring their own occupational performance and making meaningful adaptations if they didn’t possess the necessary insight into the disability and its correlation to their functional losses.

- **Lacking the knowledge and skills to improve their ability to return to work**

The participants revealed their experiences and distress of not knowing what was happening to them, what they were feeling and why. Participants experienced difficulty in drawing from their previous self-knowledge and self-awareness and felt out of control because an altered identity was infringing on their occupational roles. One participant stated:

Yes and at home I'm not, I'm not right with my children. Sometimes I shout my children. I don't know why (P5: NG).



The above statement reveals that the participant is distressed because her behaviour towards her family is conflicting with her previous behaviour and engagement with her family. It shows that the participant could not control her actions because she did not know where it came from, why she was behaving in that manner and how to deal with it. Further statements revealed participants were seldom informed on the way forward after their medical discharge. Participants expressed a clear need to know and understand, to make sense what is happening to them and who the distorted person is they turned into after the injury.

I think it if you can even ask the doctors to look at what is wrong you see, because sometimes you can't see everything that is in my body (P7:ZM).

- **Fear, frustration and anxiety caused doubt in themselves and their ability to work**

During the introspection phase of the MOOSE, participants expressed their lack of trust in

themselves as capable beings. Upon exploring their hopes and future aspirations to return to work, hindering factors emerged. Poor insight into their abilities, unstable emotions and vulnerability became an evident interference in facilitating and developing future work goals and visions. A statement by a participant clearly reflects the doubt she feels within herself:

I want to talk, but I don't know why I'm shy. I try, but I'm afraid, I don't know, think maybe I don't trust myself (P5: NG).

Another participant indicated that the injury had consumed her positive belief in herself and her ability to independently engage in her work roles. The experiencing of a lack of the inherent sense of “being able to do” and master occupations or activities has influenced her ability to envision, plan and implement strategies to return to work:

I can see myself in the situation (work), but I can't see myself coping (P3: LT).

A key informant revealed that participants found it difficult to detach themselves from the time of the injury and move forward, exploring interests and job alternatives. She stated:

I mean the participants they found it difficult to use themselves as like capable of what they would do like they find it difficult to explore what their passions are and what they are capable of doing. Like they would sometimes fixate on the fact that they had an accident and now they can't do anything (KI 1: AJ).

The participants' lack of ability and trust in themselves to move forward impacted on the therapeutic process as it was emotionally draining for both the therapist and client. The antagonistic reaction of the participants' emotions and view of themselves versus the facilitating therapeutic input from the therapist affected the progress of rehabilitation:

I mean there was one participant specifically who became very emotional when speaking about her past and speaking about the accident and the incident that happened and how it affected her life. Uhm, so with that it was (pause) quite draining because she became very

emotional when speaking about it or even when doing exercise that where she needed to use her memory and she struggled at it (K11: AJ).

Experiencing fear and anxiety was a common factor that was presented amongst most participants. In this case fear was experienced both subjectively and objectively. The participants measured their functional abilities and self-worth based on their activity engagement as well as perceiving the thoughts and feelings of other people's reactions to them. With the lack of knowledge, competence and adaptation skills that the participant experienced after the injury, their expectations of failure in doing tasks were high. A participant said:

I think what makes me feel uncomfortable is the fact that I need to now go and find a job somewhere else, because they (Placement Agency) were gonna find me a job, which they didn't, so now I have to go and find my own. Now all of a sudden I have to go do that one thing that I fear the most (P3: LT).

With fear and anxiety experienced by participants, a primitive anger developed within participants towards the injury. Participants expressed that their anger and frustrations often emerged within situations where their functional competencies were challenged due to the residual effects of their injury. One participant had particular difficulty to come to terms with the anger she felt towards her situation; this directly affected her performance in the work environment. Several statements exposed the anger she was feeling towards her situation:

I was not number one, I was struggling to identify the things that you showed us and I was scared for the first time and I was, I was angry.

I was angry. I have I had too much anger for that accident.

Like before yoh I was very angry... If someone talks to me something that I don't understand, yoh I get angry. Or if you talk something that I don't like, I also get angry (P2: YG).

Another participant stated:

I don't know if it's because of the accident, but I do have a temper that kind of, I become snappish or whatever and I don't... I try to control myself, because sometimes I don't even know half of the things that are coming out of my mouth when I'm speaking (P3: LT).

During rehabilitation the agitation and frustration became evident amongst certain participants. The need to address this aspect played a crucial part in the enhancement of the resumption or retaining of work. A key informant stated:

It had a lot to do with the individual personalities as well and the area of brain affected. So I noticed a lot with the frontal lobe damage, they would be more agitated and frustrated Uhm where is maybe the parietal lobes and the temporal lobes weren't as irritated, almost as they could cope with more, so, just educating the employer and the work staff as well (KII: CP).

- **Experiencing the loss of cognitive and physical ability negatively affected work performance and productivity**

This sub-category describes the participants' experience of loss which manifested in the physical, cognitive, communicative and functional abilities post-TBI. The participants placed emphasis on who they were and what they could do before the injury utilising the necessary components and what was left of them after the injury. Participants' work participation was also hindered because of residual effects of the TBI. A participant stated:

Voorheen kan ek geskryf het en my memory was goed gewees, nou kan ek dit nie doen nie. Ek kan nie skryf nie, die memory is nie altyd daar om te kan onhou wat om te kan doen nie. Before I could write and my memory was good, now I cannot do that anymore. I cannot write the memory is not always there to remember what to do (P9: EP).

Loss of memory or inability to retain memory was the most severely impacted component of brain function amongst all the participants. The memory loss that the brain injured individual experienced after the injury was the most concrete functional deficit that they could identify after

the head injury. A participant stated that even that which was innate to her, such as her mother tongue, at times was difficult to recall:

I'm forgetting, I forget, because sometimes I forget even in Xhosa, I got a problem after the injury (P8: T).

Poor memory skills had an effect on work and the ability of the participants to cope with the work tasks and overall job demand. One participant said:

It's like when my memory becomes worse in a sense. When I'm too overworked I can't remember things (P3: LT).

She also stated that work pressure and production demand also influenced her work performance:

Now, it's like when I do get too busy, I get disorganised and disorientated because at one stage, I was filing incorrect information in the wrong uhm folders and if it wasn't for the supervisor checking up on the work, I wouldn't have known. (P3: LT).

One participant stated that she copes within the work environment but her poor memory skills causes strain on her work performance. She stated:

My facilitator, she said I'm good at work. I know how to do my work, but sometimes I get struggle, because I forgot most of the time about things. (P2: YG).

Memory loss also restricted the participants' confidence in the prospects of resuming and retaining a job. Participants were quite aware of their problem and anticipated struggling to find work or perform work because of their memory shortfalls. This further enhanced their lack of trust in themselves and their concerns of struggling when returning to work. A participant stated:

I'm worried because I want to work, but I can't find a work that they can understand me

and then I think, I have to finish the school (practical learnership) but my worry is my memory, my memory is not 100%” (P7: GG).

During the early phase of vocational rehabilitation a key informant stated that participants had great difficulty in recalling information on prior topics which was addressed during therapy sessions:

I basically tell them or even ask them later on (pause) what can I do to help you with poor memory? They couldn't give me an answer and say you need to write it down. Uhm so those were things that I mean we go through it one week and the next week they almost forget what we done the previous week and ja so... (K11: AJ).

Participants' poor memory skills impacted on the rehabilitation process, since it took longer for some participants to grasp the concepts and integrate the therapeutic input that was provided. Participants also experienced physical deficits and pain after their TBI due to the upper motor neuron lesion and its resultant disturbance of motor function, pain, sensitivity and altered muscle tone. Some participants' TBI occurred as a result of motor vehicle accidents or pedestrian vehicle accidents, therefore secondary to the TBI participants also suffered multiple fractures and lacerations, which later became a factor that impacted on their functional capacities. One participant revealed how her spastic dominant hand impacted on her functional independence:

Die physical (Spasticity) van die hand wat dit vir my swaar gemaak het. Laat ek nou uhm die ongeluk gebeur het want voor daai kan ek alles vir myself gedoen het en nou agterna kan ek niks gedoen het nie. Tog vind ek dit a bietjie baie beter

The spasticity of the hand made it difficult for me, after this accident happened, because before the accident I could do everything for myself now afterward I cannot do anything for myself. Still I find it is going a little better (P9: EP).

During Stage 2 of the MOOSE, rehabilitation came to a shift from the introspection stage1 into Stage 2 which focuses on remediation and retraining of component skills. A key informant stated that participants experienced challenges during simulated work activities. One participant

experienced difficulty when she needed to use the affected upper limb in bilateral work tasks. She became quite frustrated and unmotivated; this impacted on their job interest and overall work goals. Participants had an inclination to evaluate their functional capacity and future success in their work based on a particular physical deficit. They would then overlook their other positive work attributes and skills that would serve as assets in their work roles.

It was difficult with I mean certain physical things, she couldn't do it and it frustrate her and then she wouldn't want a job in that area, but adapting things using their, using methods of adaptations was difficult for them (K11: AJ).

Another participant stated:

I think I can find work, but the problem is, I'm gonna struggle. Because of my knee and my head, it's getting pain (P2: YG).

Pain was also a subjective experience, which added to their anxiety of coping in work. One participant stated that after the accident she experienced frequent headaches and whenever she became emotionally charged or frustrated her headaches would increase:

I'm shouting and then, I'm shouting after that I'm feeling a pain and my eyes were painful also. Then, I'm feeling pain (P5: NG).

A participant also expressed her difficulty with pain whilst performing in her duties at her workplace:

Yes I'm doing well at my workplace and I'm not doing too much work, but the mob and the broom yoh it's killing me here (P2: YG).

In addition to the physical and pain fallout, communication and language difficulties further influenced the self-confidence and esteem of participants. In conjunction with the expressive aphasia some participants experienced, there were also language barriers. Rehabilitation was

conducted in English and so were all cognitive and physical exercise and work preparation tasks presented to participants. One statement of a participant aims to describe how she experiences her communication problem:

Even I'm talking in Xhosa it is a lock (she can't express herself), because I know what I'm talking and I know, the question you asking me, but it's not coming out right (P8:TT).

Participants were also afraid to ask questions, express concerns and provide feedback on their progress during rehabilitation because of their difficulty with self-expression and effective communication with others:

I'm shy and then I'm shy, I'm not talking, talking English perfect. I'm shy to ask, "Miss I don't understand what you, say to me" (P5: NG).

Participants also held the perception that they will be seen as incompetent in their work environment because they cannot express themselves eloquently. One participant revealed that even though she has language paucity she has full understanding of what is being said and that she will actually be able to perform the job tasks:

I'm not good at talking fast and I'm sometimes take a long time before I want saying and you must understand for me because I'm in need of work and I promise, find some job for me, I'm doing right whether I'm not good for talk, but I promise I will be doing right when you find out a job for me (P8: TT).

- **Loss of identity**

A loss that participants placed special emphasis on was losing the identity that their family and friends and other social associations granted to them previous to the injury. The effects of the TBI inflict damage to the self-identity and the physical, cognitive and emotional loss impact severely on the sense of self. Losing the validation of the positive views of others of their former self contributed to the emotional devastation participants expressed. One participant stated:

Mother said I was always her bravest child, like doing things and, whereas now, like even just being alone at home. I would look for that opportunity to be alone at home and now it's like, there needs to be somebody around me for some reason (P3: LT).

A key informant noted that during the early rehabilitation stages, participants would become quite emotional, especially as they started to realise the extent the injury has impacted on their previous standards of competence. She stated:

Then she would often compare herself to the standards that she could do before and she even got tearful and she would, you know, maybe just become demotivated, stop it or she would actually refer to herself as, I'm stupid now (KI2: CP).

A key informant also stated it was not easy for them during rehabilitation to commence component and skills remediation and training at a level far below what they used to function at. As implied by this statement:

Like some participants really struggled with that because, some of them, they had degrees maybe or they were functional, very independent and now after the injury there has been so much loss, physical loss, just the loss of independence and they really struggled with it (KI2: CP).

Participants would also hold onto or formulate work goals that were unrealistic or unattainable for them. The therapist had to facilitate their reasoning and judgment skills to compare the job's key rating requirements to their own work capacity. Participants had to rely on external objective input of their standard of performance, which added to their frustration.

I think some of them were very ambitious of what they wanted to become or what they wanted to do uhm and it's almost like you you ... it's like very hard to tell a participant that that's not actually their functioning (KI: AJ).

A general feeling of dismay amongst participants was the realisation of the loss of social identity

and how they are now viewed or perceived in public. One participant's quote clearly expresses the difficulty she experienced:

I was in the town centre and I got lost in the town centre and I'm from Mitchells Plain, so it's like, she (mother) spent an hour or two looking for me and I was searching for her, which was a bit too much, cause I'm very emotional, so I actually broke down in the shop and everyone was laughing at me because you are this grown woman and you crying for your mommy (P4: LT).

Participants expressed that not all losses were obvious to onlookers. It was sometimes the private and more personal experiences that they have lost as a result of their injury that were the most difficult to accept. That which was most natural to express emotion, like crying or sadness, was lost. One participant stated:

Ek is nog steed's soe. Ek kannie ek kannie, so ek kannie droom nie. Ek kannie onthou as ek droom.

I am still like that, I cannot, I cannot, so I cannot dream. I cannot remember when I dream (P4: LB).

She also stated:

Ja maar, daai wat weg is, is wat jy moet gebruik. Is soes ek, ek kan nie huil nie. Ek kan sad wees maar ek kan nie huil nie. Daar kom nie trane voor uit nie.

Yes but, that which is gone is what you must use. Like me, I cannot cry, I can be sad but I cannot cry there are no tears that can come out (P4: LB).

4.2.2 Experiencing negative stigma and exploitation in the workplace

In this category a participant conveyed her experience and perceptions of stigmatisation and exploitation in the workplace. One participant expressed her anxiety about revealing her disability status:

The approaching people and explain. I know you not supposed to be shy of your disability, but I don't know, I don't feel comfortable explaining to people what's wrong, because of the negative stigma (P3: LT).

- **Exposed to unfair treatment in the workplace**

Three participants expressed their experience of unfair treatment within their work environment. Their unique reports and perceptions of incidences were also expressed, highlighting the diverse manifestation of stigmatisation in behaviour and actions from within the work environment. Participants were routinely subjected to exploitation and unfair treatment as well as unfair work demands and expectations that were imposed on them. One participant felt especially vulnerable because she was not able to express her concern over what was happening to her in her work environment. She perceived the unfair treatment towards her as a personal grievance and was also not able to understand what she had done “wrong” to deserve her unfair treatment. She said:

This one lady, every time when I must go on break. It's my lunch time, then she come fetch me. Uhm on my lunch time, just clean some few bins... Yes. That lady don't like me (P3: LT).

Another participant, as well as her mother, vividly expressed her experience of poor treatment at the workplace, which was recorded in the researcher's reflexive diary as follows:

[JI] still presented with expressive language fallout and struggled to adequately convey the information about her bad working experience to me. Towards the end of the interview her mother reported that after working at the local McDonalds for 9 months [JI] resigned her job and refused to return. For some weeks after a new employee started, [JI] was targeted, her mother reported that she was never allowed to take her lunch breaks and was always given extra work to do while the rest of the staff take their breaks. They would give her a break 20 minutes before home time; she had to work from 7 am till 4pm and didn't have anything to eat for the entire day. According to her mother the manager never addressed the issue after several complaints about the situation her daughter was in and [JI] could

not stand up to this unfair treatment. [Researcher's reflexive diary – 25 /10/2014]

Another participant expressed her anxiety about being shouted at in the work environment due to unrealistic work demands:

Like some people understand that you have a disability and then there are others that know you have a disability, but they still expect too much from you and if you can't do it, they become upset and I don't like being shouted at, really I don't (P3: LT).

Participants struggled to integrate into their work environment due to work demands that exceeded their capability as well as demands and attitudes of workers and employers who exploited their disabled status. Participants expressed despondency and poor job satisfaction due to the above factors and found it difficult to employ correct self-regulation and coping skills within such hostile work situations. One participant resorted to resigning from her job even though she once enjoyed working there. She stated:

Yes I resigned from this work. I don't wanna work here anymore. No, this people aren't right (P3: LT).

- **Stigmatisation in the workplace due to misconception of TBI**

Apart from being exposed to unfair treatment and exploitation in the workplace, participants also faced a negative stigma as a result of misconceptions about the TBI sufferers' behaviour and abilities. The participants experienced attitudinal barriers from co-workers and supervisors, which impacted on their social participation and activity engagement within their work environment. As stated by a participant:

People get scared that you gonna maybe lose your temper to that extent where you maybe take out a knife or grab a pen and stab somebody or throw things, computers around and things like that (P3:LT).

Participants faced instances where few or no accommodations were made within the work

environment because they were expected to perform at the same level as the able bodied workers. Due to the invisible deficits TBI inflicts, such as memory problems, participants' impairments were not taken into consideration and thus they were subjected to unreasonable work demands. A statement conveys this:

Soos die onderwyser vestaan nie almal se challenges nie, som van ons is disabled en som is nie en som was net stadig, hy verwag van almal om hulle deel te bring, want hy sien nie ons is disabled nie.

The facilitator does not understand everyone's challenges, some of us were disabled, some of us were not disabled and some were just slow. He had the same expectation from all of us, because he does not see us as disabled (P9: EP).

Some participants became frustrated and unhappy about how their TBI status was viewed by others; as a sub-standard level of intellect, and as a result treated in a demeaning way. As a participant stated:

Mense se houdings teenoor mense soos ek en mense wat jou dom treat, dan wanneer jy nie dom is nie

Its people's attitude towards people like me, as well as the people that treat you like you are dumb, especially when you are not dumb(P4: LB).

Participants revealed they would like to see change in the work environment, especially the attitudes and mindset of co-workers and supervisors about women with a TBI or disability, since it impacts on their motivation to remain in their work environment and to strive towards greater job satisfaction. A statement from one participant revealed this:

It's the people within the work situation or the learning department that's been more of a problem for me personally. The negative stigma attached to a person with a brain or mental disability (P3: LT).

A key informant corroborated the aforementioned statements on how the effects of stigma and

marginalisation impacts on the disabled person in his/her work environment as well as the risk this poses of losing more disabled persons from the workforce:

Because now that they got the skill and they were saved, they were placed in a place, where there was still a lot of stigma and marginalisation and a lot of them, I know of two participants that were placed, like through Siyaya, through the learner ship but because of the stigma and how they were being treated or even being perceived as you know, their perception of how they were being treated, they moved on to maybe a different section or sometimes they would get, de-motivated, they didn't want to continue anymore (KI2: CP).

- **Black Economic Empowerment (BEE) as a barrier in returning women with TBI to work**

This sub-category describes the participants' experiences on how the legislative measures of Black Economic Empowerment (BEE) have impacted in their resumption of work. BEE was introduced by the ANC government in a bid to overcome the economic legacy of apartheid and to broaden participation in the economy, especially for the vulnerable and marginalised individuals. In the MOOSE, Stage 4 is when participants are placed within a work environment as they have been rehabilitated with the necessary work skills and knowledge to perform with minimal facilitation and assistance. Stage 4, also known as the *capable individual*, aims to see that participants have successfully engaged in work tasks that ultimately improve their volition and work roles. Thus their view of themselves improves as they succeed in work-related occupations. However, some participants were declined the opportunity to engage in job opportunities at companies who actually advertise potential work or learnership prospects for disabled people. Participants who met the requirements for these jobs or learnerships were faced with unsuccessful application statuses due to their race. Participants became quite despondent about their situation, as one stated:

Personality en knowledge en al daai goed is da. Maar ek is nie die regte kleur nie. Ja behalwe dat ek disabled is, dis net die kleur, Dis`n problem, ons is nie swarttie

Personality and knowledge and all that stuff is there but I am not the right colour. Yes

apart from being disabled, it is the colour. The problem is we are not black (P4: LB).

A key informant expressed her frustration about the situation of her client, whom she struggled to place in a job. After numerous job applications and interviews her client is still without a job, which she believes was heavily influenced by the BEE status of the companies they applied at. BEE seems to have an influence on the company's selection and recruitment process. The key informant stated:

Then there is one participant that is you know, that she's still without a job, she never got to Stage 4 basically, because of the BEE situation (KI2:CP).

The researcher reflected on this situation in the researcher's reflexive diary following discussions with the key informant and participant as follows:

I understand that BEE core's aim is to redress the inequalities in the workplace, specifically towards the economic legacy of apartheid and to broaden participation in the economy, especially by those perceived to have been previously excluded or denied access; I know it is aimed at the most vulnerable groups and marginalised including women but yet this equity and empowerment policy seems so unfair and actually causing the marginalisation itself. The frustration of the key informant and the absolute dismay of the participant over her situation was evidence of this. The employment equity act, disability rights charter and the UN convention on disability seem overshadowed by BEE. Disability knows no colour, race, religion, culture or gender [Researcher's reflexive diary – 24/11/14]

4.2.3 Contextual hindrances affecting women's work participation

In this category the participants shared their experiences on how contextual factors influenced their participation in work. This category also conveys how the related occupational performance domains of these participants had significant impact on the participants' area of work.

- **Parental roles and responsibilities influence work attendance**

In this sub-category, participants' parental roles and family responsibilities bear equal importance to them as work. Work offered financial freedom for these participants and alleviated the strain of financial hardship, whereas parental roles were just as important to balance as it is closely associated with the participants' occupational identity. Many participants in the current study are single mothers and the sole bread winner in their household with little financial or other support from their estranged or absent partners. Their occupational role of being a mother and main caregiver is equally significant to their role as worker, and both these roles have a significant influence on the participants' lives and wellbeing. One participant would often come late or miss her rehabilitation sessions because of family responsibilities. In one statement she expresses:

Sometimes the time is too early come for Rehab because I have to prepare for children before I come (P7: ZM).

Participants were also forced to stay out of work to attend to sick children as there is no other assistance with these tasks and responsibilities.

My children are not well. He's sick. right now and my daughter who got a problem, so I try to help her, but she don't understand to me if I'm talking to her she don't understand to me (P5: NG).

Being the sole breadwinner as well as carer at home, work participation was often negatively influenced. Participants in some instances were viewed as unmotivated to participate in the rehabilitation and their goals to return to work (RTW) were questionable.

In the researcher's reflections, this state of affairs was particularly evident in the case of one participant, as illustrated in this extract:

[NG] has quite a lot of challenges with her kids; they fell ill as a result of contracting TB and needing to be admitted. This certainly put a lot of strain on [NG], being the only

breadwinner she definitely need to work to put food on the table yet she needed to be there for her child. These two areas of work and children certainly affect her; just observing her I can pick up the anxiety and almost desperation about her situation. [Researcher's reflexive diary – 22/11/14].

A key informant stated that a participant stayed absent from rehabilitation sessions which was later revealed to be because she had no one to look after her child and she was not able to bring her child along to the rehabilitation sessions. The therapist initially assumed that she had a lack of interest in her rehabilitation. She stated:

One of the participants would come to the group and later she would stop coming to the group and I almost thought ...does she really want (pause) work I mean she didn't come. She went to Stage 1 and 2, but I mean when it came to needing to place her she wasn't really there, but I mean, I almost got a feeling like, does she wants to work? (KII: AJ).

- **Travelling and transportation systems have an impact on access to the workplace**

In this sub-category the participants expressed their difficulties utilising transport systems and how it influenced their participation in their rehabilitation programmes and attendance of work. One participant stated:

Even here at school (workplace) I must start at 8 am, but I'm always late. It's the train problem. I woke up at home at quarter two six, then my train is five to seven to Ysterplaat, then from Ysterplaat that train that comes from here, it delays (P2: YG).

Some participants also expressed their anxiety of travelling to their workplace using public transport. A participant stated:

I don't actually like being on the road. It mustn't happen (panic attack) on the road, because I get paranoid and I start panicking and I get anxious and not everybody knows how to deal with it, so it's, then I become a problem and that makes my self-esteem image just drop even further (P3: LT).

Participants also expressed their concern for travelling alone and walking to isolated taxi pick up points:

Yes because this place is too quiet to take transport, sometimes you alone and use two taxis especially when you go early (P7: NG).

Participants have even given up their job because of distance and safety concerns while travelling to their work site. One participant shared that she gave up her job because of the fear of travelling on the trains as the taxis are too expensive. She stated:

Ek het Siyaya gelos, because why die travelling dit het begin gevaarlik raak op die treine I left Siyaya, (work placement organisation) because of the travelling, it started becoming dangerous on the trains (P9: EP).

In this sub-category participants not only expressed the impact transport systems have on their access to work and that unpredictable timeframes of trains affects their attendance of work, but also that travelling and the mode of transport also pose safety risks to these participants in a sense that they are female and often vulnerable to undesirable crime activities. This is illustrated by the last participant's statement that participation and remaining within the work environment can be compromised due to fear of getting hurt, robbed or attacked whilst travelling to and from work.

4.3 Theme 2: Re-establishing a worker identity by means of vocational rehabilitation

This theme represents the participants' transition towards self-reliance within the work context through participation in vocational rehabilitation. By utilising the MOOSE during the rehabilitation process, its goal or clinical expectations is that participants will integrate the work-like behaviours, such as being on time, dressing appropriately, employing a good work ethic and achieving productivity, within their work environments.

Table 4.2: Theme 2 categories and related sub-categories

Theme 2	Categories
Re-establishing a worker identity by means of vocational rehabilitation	<ul style="list-style-type: none"> • Rehabilitation improved motivation and self-efficacy • Using work as a means to an end

4.3.1 Rehabilitation improved motivation and self-efficacy

Under this category participants reported that engaging in the rehabilitation facilitated their recovery and acceptance towards their situation as well as enhancing their skill and knowledge to resume a work role. A participant stated that returning to a work environment has created purpose and direction. Participating in a learnership allowed her to become part of a work community where she could employ her work skills, utilise coping and adaptation strategies and improve her confidence in herself. She stated:

Ek voel baie beter oor myself because why ek sit nie by die hys nie en net dink nie. Eks nou in a college (learnership) wat klomp kinnes is, veskillend disable en ons het almal different challenges, en ek voel baie happy because why ek voel nou ek issie net al een wat so issie I feel much better about myself because why I don't sit at home anymore and just thinking. I am now in a learnership programme with a lot of other people, they are different and some are disabled and we all have our different challenges. I feel very happy because why I now feel that I am not the only one like this (P9: EP).

The participants' experience of and attitude towards entering the work environment and becoming part of a work team will allow her to build onto her social relations, financial independence, self-respect as well as purposeful engagement such as structured work tasks. A statement from a participant illustrates this:

Ja ek is baie excited (laughing) want ek gan nou in in a werk in, eks nou in a werk environment so ek moet vir my nou ma inpas, aanpas. So eks baie excited om it te kan

doen..

Yes, I am very excited (laughing) because I am now going into a job, I am in a work environment; therefore I will have to fit-in and adapt. So I am very excited to be able to do that (P9: EP).

The above quote emphasises the importance of work to participants as it promotes a sense of who they are and builds onto an identity which has been lost due to the trauma inflicted by the TBI.

- **Feeling supported in a therapeutic environment enhanced drive and motivation to work**

There was a clear need for participants to feel supported and contained in their situation as indicated in earlier discussions. Fear, anxiety and frustration were evidently a negative factor in the participants' process of recovery. Emotional instability, poor self-concept and a loss of hope were restricting participants' ability to resume their work roles. During the stages 1-2 of the MOOSE, the therapist facilitates the participants to perform introspection, looking into the self for answers and reflecting on their lives, limitations and capabilities. During these stages the therapist aimed to establish the participants' autonomy by improving functional skills, whilst adopting a client-centered approach and applying a goal-orientated intervention strategy. The therapist also played a crucial part in enhancing a therapeutic relationship using the therapeutic use of self. The therapist could thus create an environment of trust, information sharing and enablement of participants by remediating performance skills. Participants were strongly motivated to engage and aim towards participating in work-related activities. Facilitating success in activities and providing positive praise by the therapist improved self-esteem, self-worth and eventually improved self-efficacy. A key informant's statement conveys this:

I think Stage 1 and 2 was quite appealing because we could do a lot of exploring of their feelings and emotions and working on their skills and what adaptations they could use to help with their disability (K11: AJ).

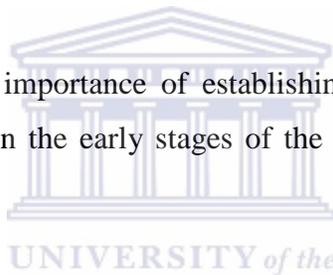
Participants expressed their positive experience and improvement of their emotional condition by attending the rehabilitation sessions. A participant commented:

I would like to say that I feel better when I come here, because when I was here for the 1st time, I was so emotional too, I was getting touchy when I tell everyone what happened to me, but I feel better now (P7: NG).

Another participant expressed how support, patience and encouragement during rehabilitation enhance self-esteem and motivation to move forward. She stated:

I like to say thank you to the therapists, because, someone else they didn't have the patience, so for me, I try by all means, because I know now what I need to do (P6: GG).

A key informant emphasised the importance of establishing a strong foundation of personal belief and acceptance, especially in the early stages of the rehabilitation programme. The key informant reported:



Most of the participants actually spent a good amount of time or a lot of sessions in Stage 1, but like I said, once they've reached that goal, it was the other stages became easier. Once they got through the introspection phase, everything else sort of fell into place, because now they have that realisation of what I can and what I cannot do and it's no reflection of, you know "like I'm a reject" or anything (K11: AJ).

- **Through the use of the MOOSE, gaining insight and understanding of the condition assisted with acceptance of impairments**

In this subcategory participants describe their experiences of how their improved self-knowledge, which related to their pre- and post-injury status, allowed them to come to terms with their situation. Having knowledge of their condition and the reasons for their loss of cognitive and physical ability enabled them to focus on building on existing skills and developing new skills. A participant reported that attending the rehabilitation sessions increased her awareness and insight into her disability:

I think it helped me a lot in terms of dealing with my disability, which I wouldn't accept because the word normal for me and normal for an able body is completely different. I think slowly it helped me to develop more in a sense of the functioning of my brain... So with the rehab I got to know more about what was wrong with me and it kind of helped me (P3: LT).

Participants that once felt anger and frustration towards their situation reported that, since their attendance of rehabilitation, their knowledge and awareness of themselves and their condition has improved. This indicates that acceptance of their situation minimised personal turmoil and they are more inclined to engage in their rehabilitation with less apprehension. A participant said:

Anger, I don't have that much anger now, like before yoh, I was very angry, but I have accepted my situation (P2: YG).



4.3.2 Using work as a means to an end

This category describes the participants' experiences of being exposed to work-related tasks and activities that improved their work skills to enhance their prospects of returning to work. Stage 3 of the MOOSE is also known as *Creation of competency through occupational engagement*, which aims to improve their self-efficacy to the extent that they engage independently in their work tasks. As they are exposed to continuous practice in tasks, they are able to perform work-related tasks with greater success and mastery until they become capable individuals and return to work while successfully maintaining their jobs.

- **Rehabilitation of performance skills enhanced work performance**

In this sub-category the participants expressed their experiences engaging in exercises to improve their performance skills. Participants also reported that they encountered better functional outcomes as a result of the exercises they were exposed to. One participant said:

So elkeen het sy eie challenge gehad, maar soos my. Ervaring was it my hand en dit (Rehabilitation) het baie gehelp because sy't vir my oefening gegee om te doen met die hand en dit het baie vebeter.

So everyone faced their own challenges. Like with my experience it was my hand and the rehabilitation helped a lot because she gave me exercises to do with my hand and it improved a lot (P9: EP).

A key informant stated that Stage 3 appealed to her as it allowed her to actually practice work tasks with her clients. She stated:

Stage 3 appealed to me because that was the stage where I could actually physically take them through like practical steps. So say if we working on concentration then it's not just maybe a cognitive game that I'm doing with them or a skill that I'm teaching them, I'm actually, we actually practicing now. So I'm not just teaching them, they go through it and then they can practice the skill that maybe, the shopkeeper wants, like say for merchandising or floor assistance or cleaning aspects of work gardening (K1: AJ).

Participants were exposed to compensatory methods and encouraged to utilise strategies to improve memory such as activities of recalling or retaining relevant information. A participant stated:

What I like is, I found out how to refresh my memory, to write down, to set my phone for the reminders and to keep something closer to the place so that I keep a reminder of something important. Phone reminders, stuff like that (P7: TT).

Another participant also stated:

I write down with my pen and then I take paper. I write down, my jeans, my scarf, my book, my phone and then I remember, I didn't forget.. Ewhe (Yes). It always helps me (to remember) when I'm writing down. (P6: GG).

- **Self-directed work tasks lead to greater gains in functional skills**

As part of the goal-setting process as indicated by the Model, participants' rehabilitation was not only directed towards improving performance skills to engage in work, but also towards engaging in desired occupations, as indicated by the participants. Many of the participants prior to their accident were engaging in housekeeping work as well as administrative work activities. During the participants' transition phase from Stage 3 to Stage 4 of the Model, the therapist facilitated together with the participants the return to work process by making an application to various companies as well as skills institutions which offer learnerships and work placements. Part of the RTW process was preparing them for work placement screening tests, social presentation and interviewing skills. Participants were eager to resume work tasks they were previously engaged in since they could draw from previous experience and skills from their prior jobs. To this end a participant stated:

Was dit nie ve die rehab nie, dan dink ek nie ek sal nou vedag nou hier by die college (learnership placement) kan gewies het nie, because why ek het meer dinge gedoen by die rehab as wat ek by die hys gedoen het. So ek het baie geleer hier by die rehab.

If it was not for the rehab, I don't think I would have been here at the college (learnership placement), because why I could do more at the rehab compared to what I did sitting at home. So I have learnt a lot here at the rehab (P9: EP).

Another participant expressed her excitement about being able to return to a job she was good at and finds meaning in. She stated:

Cleaning it is right; it's good, because I'm good in the kitchen. I'm good, even when you say, Sylvia you gonna sweep and mop, you see, I'm good. It is right because there is not a lot for instructions to follow (P7: TT).

4.4 Theme 3: Adaptation strategies that enhance the work participation of women

This theme is a description of the participants' utilisation of adaptation strategies which aided

their improvement to resume their work roles as well as functioning as capable workers. The theme also aims to depict the dynamic process participants have undergone towards achieving Occupational Adaptation (OA).

Table 4.3: Theme 3 categories and related sub-categories

Theme 3	Categories
Adaptation strategies that enhances the work participation of women	<ul style="list-style-type: none"> • Personalised response approaches to overcome demands and challenges in the work context. • Experiencing success at work by adapting to the work environment.

4.4.1 Personalised response approaches to overcome demands and challenges in the work context

In this category participants express their experiences of adjustment and coming to terms with their present and future aspirations. This category aims to depict the transformation of participants and how their adjustment to emotional, cognitive and physical changes has contributed to developing an internal need and drive to adapt themselves within their daily occupations and specifically their new roles as workers. In earlier discussions it has been stated that, through self-reflection, introspection and realisation of their situation, participants reached a level of self-acceptance and developed motivation for restoring their unbalanced lives. This acceptance of themselves further improved with the enhancement of knowledge and insight into their disability.

- **Exposure to the workplace, structure and income**

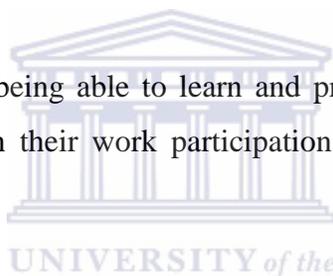
Participants experienced an innate need to become part of the productive workforce. During the rehabilitation process, return to work goals were developed with participants, performance skills and work components were remediated to restore and establish occupational skills. By exposing participants to work activities, work environments, routines and structure facilitated the enhancement of their inner drive to return to work. A participant said:

I want to see myself doing work, earning more money to satisfy my needs (P2: YG).

Participants also presented with their individual construct of the purpose and meaning that work brings to their lives. Where one participant emphasised the financial gain and independence derived from work, another participant described work as a measure to practice and exercise her body. She made reference to work as it caused her to feel “powerful” in a sense that she is capable of “doing” and she finds meaning in this. She stated:

Yes, I'm powerful, I'm powerful for this (work) it is right for me so long I'm doing something for, for me. Yes is it right for me, even I'm a volunteer, for my body it's training and for good I'm looking after my body, it is right for training, it is right for me (P7:TT).

Some participants expressed that being able to learn and practice actual work activities had a significant and positive impact on their work participation and performance. One participant said:



Here I learn, I'm learn everything about cleaning. I know how I must clean. What you must use to clean. The chemical, I know how, I know everything now (P5: NG).

Participants also reported that being in an environment of work, exposure to work structure and routine has had a positive impact on their work performance. A participant stated:

Here they taught us how to behave at work, how to do your job. You must do your job properly, you must respect. Mustn't stay absent (P6: YG).

- **Utilising compensatory skills to cope within the workplace**

Participants reported that they were able to utilise practical compensatory skills that they were taught during their rehabilitation process, within their work environments. A wide range of compensatory skills were introduced to the participants who struggled with short-term memory, following oral instructions, having difficulty setting priorities and controlling emotional

episodes. During the rehabilitation process, short-term memory fallout was addressed and participants employed the notebook strategy to capture relevant information during activities and kept a log in which to reflect and capture key learning topics they encountered. Communication strategies such as assertiveness and effective listening skills were also participant' needs that were addressed to aid their successful transition into the workplace. A participant stated that jotting down key information assisted her in doing her housekeeping job:

If the boss tell me, you must look at my babies and you must feed my babies and you must cleaning my house, is it simple for me I write down what I'm doing in the house and putting it by the fridge (as to remind) and the other thing I'm doing it's I'm cleaning the bath and I'm doing the ironing when the baby is sleep. It, like simple, simple and I'm doing. I haven't then got a problem (P7: TT).

Another participant reported that she has learnt to make use of meditation skills to calm her down when she starts feeling overwhelmed at work. She stated:

Meditation, which I did with the occupational therapist at one stage, like I kind of start off, before I start the day just to clear my mind, but because this day for me is so long, because you have to get up early to be here (learnership placement) on time (P3:LT).

Another participant mentioned that she was able to express herself better than before and could relay to her work supervisor about her situation, and that even with a disability she could still perform the job. She said:

No I don't keep quiet. I tell them, but not for all of the people. I didn't tell them about my story, I told my supervisor, because of he was asking me (P6: GG).

A similar statement was captured form another participant:

I think I can tell the employer that, I'm willing to work, but I've got a problem of the disability. I can't work for long, I can't stand for a long time, but I can work (P7: TT).

4.4.2 Experiencing success at work by adapting to the work environment

This category captures the participants' descriptions of their experiences achieving positive output within their work environments. Participants expressed that part of attaining a feeling of pride is that their success in the work environment was recognised by work colleagues, customers and even supervisors. Participants expressed contentment since the effective service they were delivering in their job emerged from minimal facilitation and they could extract relevant skills and adaptation strategies from within their own internal resources to adjust and meet the demands of the work environment.

- **Participating in desired work activities enhanced self-reliance and contentment**

This sub-category contains the participants' reports of feeling satisfied with their situation and their work environments as it serves as a stepping stone for greater achievements in their lives. One participant was quite eager to return to her previous type of work as a cleaner and welcomed the therapeutic input of remediation and restoring her skills in this area of work. She stated:

To be here (learnership-work placement), I don't have a problem. It's right for me. It makes me see things differently. So I like to be here too clear my mind and to learn what I want and to know about my cleaning job. I like that (P5: NG).

Another participant reported that it was important for her to reach her goal of finding any type of employment, being financially independent meant being more self-reliant, which instilled a feeling of satisfaction and happiness. The participant stated:

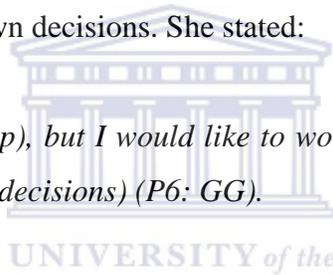
You see now, I'm better (smiling) now, because I'm earning money at the end of the month, then I'm doing something for me. Like I can buy toiletry for me, I can buy, my child school things (P2: YG).

The researcher's reflections with respect to a particular participant illustrate the positive effects of success in work roles on their pride and self-esteem:

[GG] has left the placement agency much to my surprise since she was doing so well. The feedback provided from the placement agency was that [GG] worked well and made good progress in her work environment they were not sure why she resigned. I was worried that now she is losing her monthly salary which will surely affect her life situation. After many weeks of trying to get hold of [GG], I finally learnt from her that she has found a better and higher paying job at a hotel in Woodstock, Cape Town, where she is working as a cleaner. She said a friend got her the job. She reported that even though she felt happy at her work placement she felt more confident in her ability to seek better employment options and she wanted to improve her life by earning more money [Researcher's reflexive diary – 21/04/15].

A statement from this participant supports the above extract. She voiced the desire to improve her work situation and make her own decisions. She stated:

It is very fine (In the learnership), but I would like to work permanent and then to do my own rights (Make my own work decisions) (P6: GG).



- **Performing effective and efficient work leads to satisfaction in the work environment.**

Participants expressed their positive feelings and perceptions based on positive external reviews of their quality of work and meeting the standard of performance of their respective jobs. They placed particular emphasis on how meaningful it is that their quality of work was rated by their work skills and performances as well as conduct within their work environment. Participants also reported that being able to bring into their work environment some of their own basic knowledge of how to be a worker, how to behave and do the job effectively, improved their motivation at work. A participant who works at a community hospital as a cleaner conveys some of the positive feedback she has received at her work:

They say “You Sissie (participant) you cleaning; you clean very nice here, just because the toilet it was very dirty before. So we did not like to enter inside there. So hai hai, I like to say thank you, just because it's smelling nice this toilet and then you give us the toilet paper, the time you were not here, it was no toilet paper here, so I was also asking which

kind of hospital is this ? They don't give the people their respect." So all of the patients there, they like me and also the supervisor, she like me (P6: GG).

Another participant who works as a general assistant at a primary school made particular reference to the fact that she is able to work “freely” and she does not receive a lot of negative feedback from her superiors. The participant stated:

I'm working nice in my workplace. Uhm. Cause no-one at work shout me. I'm working freely and my supervisor and principal, no one talk to me bad. Treat me nice. I'm feeling happy (P5: NG).

The participant indicated that she could apply herself and master the job tasks using her work skills and knowledge. This form of social affirmation of good work performance further strengthens the subjective validation of the participants new and developing work roles.

4.5 Theme 4: Promoting access to work utilising a multi-sector RTW approach

This theme investigates the participants’ perceptions and feedback on factors that should be addressed towards the promotion and development of programmes to speedily return TBI women back into work. The theme is further explained using the following two categories.

Table 4.4: Theme 4 categories and related sub-categories

Theme 4	Categories
Promoting access to work utilising a multi-sector RTW approach	<ul style="list-style-type: none"> • Developing a multi-dimensional rehabilitation programme for women with TBI • Partnering with relevant stakeholders in the promotion of work opportunities for women with disabilities

4.5.1 Developing a multi-dimensional rehabilitation programme for women with TBI

This category captures the participants’ descriptions of how the rehabilitation programme can be

made more user-friendly for women with TBI. There was also a need expressed to have more counselling support to assist with trauma inflicted by their injury. A need was identified to equip family and close acquaintances with the skills and knowledge to facilitate further integration of rehabilitative input with participants and to further enhance functional capacity and social integration. This theme also captures the need to equip women with TBI with the necessary work skills that would suit the demand of the South African labour market.

- **Utilising a user friendly programme to enhance holistic intervention**

In this sub-category the participants expressed their perceptions and experiences on how they related to the MOOSE during their rehabilitation process. Participants reflected on finding certain aspects of the stages of the model difficult to understand and made suggestions of what would suit them better. A key informant stated:

The module uhm the programme need to be looked at making it more user-friendly because it's definitely a bit (pause) higher grade (K11: AJ).

A participant reported that she would be able to integrate information better if she was demonstrated some practical examples of what is taught during the rehabilitation. She stated:

Ek vebeter meer in symbols en pictures om te laat wys sodat `n mens dit kan meer kan memorise as wat a mens moet skryf en vir my om Engels te skrywe is baie swaar as wat ek uhm dit kan gedoen it, ma nou kannit ek dit nie doen ne want die memory wil net nie insink nie dan leer nie, so ek sal meer kies vir `n foto.

I improve more with using symbols or pictures to be shown because I can memorise it better, instead of writing. Because writing in English is very difficult because I could do it but now I cannot, and because the memory doesn't want to sink in I'm not learning, so I prefer to see more pictures (P9: EP).

Participants also expressed the need have sessions with other women with TBI so that they can learn from each other and share experiences and coping strategies. A participant stated:

No I think it's only this. If you can do practical stuff and discussions and bring more people like us and give understand what happened to us (P7: NG).

A key informant also suggested that, because of the trauma inflicted on the brain, her clients struggled to grasp the concepts of introspection and reflection and gain true insight into their life situations before and after their accidents. They also struggled to understand setting goals for themselves because they could not relate to these concepts. The key informant stated:

When asking them the questions after each stage I had to explain the model to them again. So I never really got the feeling that they really understood what it was about (KII: AJ).

Apart from their difficulties relating to the Model and rehabilitation process, participants also expressed their need to undergo counselling, especially because of the traumatic experiences of their injuries. One participant suggested:

They must get counselling also, I was waiting for at GSH they said I was going to get counselling then I didn't ... because when I see an accident I always cry (P10: SK).

A key informant stated that participants were quite vulnerable and inclined to emotional outbursts during their rehabilitation. She stated:

I said earlier with regards to the emotional aspect of it with them being females and I mean that women generally are more emotional beings which I found, I mean if I would ask a question that wasn't really highly emotional, that it would be an issue but because I think (KI gives a little laugh) maybe because they are females it was easier to cry (KII: AJ).

Another need for holistic intervention emerged during an interview session after which the mother of the participant requested assistance on how to handle her daughter at home and what tasks and activities she could provide her daughter with to enhance her social and work skills. An

extract from the researcher's reflexive diary reads:

[LB's] mom appeared hopeless and tired. They were struggling to get [client] into a job but met dead end all the time. [LB's mother]'s request for assistance with a home programme for [LB] made me realise that the assumption and expectation is always that the strong family and social support structure will contribute positively to the rehabilitation of TBI sufferers. [LB] is not an easy person to cope with, her emotional state has gone from mature adult to adolescent age and stage mentally and immature emotional ability. This just made me realise how challenging is must be for the family at times. [Researchers reflexive diary – 24/11/14]

- **Skills development for the South African labour market**

This sub-category conveys that successful applications to open labour market jobs were difficult to attain. A key informant stated:

What I find challenging is placements, I mean (sigh) it was back and forth about them going to the placement (pause) having gone for interviews or doing a test and then not hearing anything about it, them asking me what's next, I don't have answers for them (KI:AJ).

Participants also experience limited job opportunities that are suited for females. A key informant stated:

Then the females, they were, there was just more job opportunities for the males, cause in our country, the economy, they are looking for the labourers and you know the tradesmen and that... (KI2: CP).

Some participants' level of education and previous job skills impacted on their attainment of work. Having a higher level of education and expertise posed as a hindrance to the resumption of work for the participants, since the availability of jobs in the labour market are mainly for the low-skilled which falls within the low income bracket such as the domestic and general worker

jobs. A key informant statement revealed:

Whereas the ladies they had more, they had, they just had a better education, even before, prior to the injury and because of that, they found it, it was more difficult for them to be placed, because the type of skills that they had wasn't what people were really looking, So it was difficult to place them (KI2:CP).

4.5.2 Partnering with relevant stakeholders in the promotion of work opportunities for women with disabilities

Participants expressed a need for financial support as lack of funds impacts on their prospects of returning to a job. Emphasis was also made to return or be placed in a paid job as soon as the rehabilitation process reaches its final stages to assist with alleviating the burden of poverty and hardship for the participants.

- **Financial support for women with TBI undergoing rehabilitation**

Many participants' disability grant application was declined during the early stages of their rehabilitation. Because their impairments were not visible to the untrained eye, participants were perceived as fit to return to work thus not qualifying for a temporarily or permanent disability grant. One participant expressed her experience of a disability grant application:

I was not working, I was not getting disability grant. I tried to make application and then they said I must go do it (work), because I'm still young (P6: GG).

Another participant describes that she is the sole provider in the household and does not always have money for anything else other than basic needs to be met. She stated:

Because at home there is no one who's working. I must buy grocery, toiletries everything depends on me (P2: YG).

Another participant stated a disability grant would assist with the financial burden:

I would like to have a disability grant now just to give me more money because I support a lot of people with that money, it is not enough. Sometimes I don't have enough money to get to the learnership (P10: SK).

The occupational therapist can play a role in advocating using their expertise and knowledge of the disability and its functional implications. By working closely with the social assistance service providers, motivation for financial support for women with TBI could be explored, especially if they are following a structured and accredited vocational programme.

- **Collaborating with skills institutions to improve work placement for women with TBI**

In this sub-category the principles of advocacy are identified as a prelude to approach potential RTW resources for women with TBI. Occupational therapists working in the field of Vocational Rehabilitation are well familiarised with potential stakeholders who can be involved in the early RTW process for disabled individuals. Many corporate companies, in this case learnership agencies, can provide work opportunities for the person with a disability, by skills training and development and then providing a work placement for their learners. On this issue, a key informant remarked:

Maybe the learnerships and those kinds of companies, like the institutes could focus on the types of skills that women are capable of doing. I'm not saying women are not capable of being a labourer, but the reality is that the employer is gonna take a male labourer before he takes a female labourer (KI 1: CP).

Being familiar with the perspectives of stakeholders on employing people with disabilities, as well as the organisational culture of these companies, places the occupational therapist in an advantageous position to advocate on behalf of their clients. An informant said:

So if we could focus on skills that they maybe had and we can work on them and something that will also still be appealing to certain companies and maybe like you said, create a data base and then draw from that data base, ok, this recruitment agency is looking

specifically for clerical work or specifically for what else (work skills), you get, you understand (KI2: CP).

A key informant also expressed the importance of promoting disability awareness and de-sensitising employers and staff to the disabled worker. Having knowledge and sharing with stakeholders will also allow better advocacy by identifying relevant job modifications and accommodations and also to encourage better communications about expectations between the employer, the disabled worker and the therapist. To this end, a key informant stated:

Just educating the employer and the work staff as well, on the lobes of the brain and what's the functional capability of that person and how that person might react in the work (KI2:CP).

4.6 Summary

By drawing on the participants' experience and perceptions regarding their vocational rehabilitation and their participation in their work context after rehabilitation of women with TBI, the study objectives were achieved. Theme 1 described the participants' experiences and perceptions of the barriers that hindered the resumption of work for women with TBI. Theme 2 presented the experiences and perceptions of participants regarding factors that aided or facilitated the return to work process. Theme 3 described the participants' experiences and perceptions of their process of adaptation to fit in their roles as workers. Theme 4 presented the possible strategies rehabilitation professionals can utilise to further develop vocational rehabilitation and work integration programmes for women with TBI.

When the integration of the facilitators overcomes the barriers then the adaptation process is deemed successful. However, if the barriers are too challenging and the facilitating factors too weak to withstand these barriers, then the adaptation process is not successfully achieved. In Theme 4, further development and implementation of such recommended strategies were described that further enhance the success rate of the adaptation process of women with TBI to enable them to return to work and sustain their work roles.

CHAPTER FIVE: DISCUSSION

5.1 Introduction

This chapter discusses the factors that influence the return to work (RTW) of women with traumatic brain injury (TBI). The main aim of the study is to explore the challenges that women with TBI experience in their work environment after vocational rehabilitation. In this chapter there is a discussion on the barriers and facilitators that affected the participants during the vocational rehabilitation period and after returning to work. The adaptation process is discussed highlighting the relationship between occupational self-efficacy and occupational adaptation. Finally, there is a discussion on the possible strategies for future enhancement of vocational rehabilitation programmes for TBI affected women.

5.2 Barriers

Barriers is a term used here to describe the factors that hinder the return to work process for women with TBI. The World Health Organisation (2001) defines barriers as factors through their absence or presence in an individual's environment that limit an individual's functioning. In Theme 1, participants were demonstrated to experience barriers stemming from the sequelae of the TBI causing functional limitations to return to productive work. The barriers of negative stigma, marginalisation and attitudes within the work environment, as well as systems and policies that hinder the work reintegration of women with TBI, also emerged. The barriers experienced by participants show strong similarity with the factors identified by the WHO (2001).

5.2.1 Barriers to work participation for women with TBI

The participants experienced a negative change in their functional performances after their TBI. They came to a realisation that tasks and activities which they could perform before the TBI, they could no longer do because they have lost former knowledge and abilities. Klinger (2005) reveals that people who sustain a brain injury report experiencing a loss of self in three spheres including a diminution in self-knowledge related to pre- and post-injury amnesia, loss of self in

comparison to pre-injury self-image and reduced self-esteem in the eyes of others that is related to being stigmatised and discredited.

Participants struggled to move past the initial stages of the TBI because of insufficient self-knowledge, limited true insight into the impact of the TBI on their functioning, as well as lacking former work-related skills. The participants struggled to monitor their functional performance and abilities as well as subjectively evaluate the effectiveness of their performances. This in turn impacted on their emotional status and motivation to move forward with their lives. They could not employ effective coping or adaptation strategies to overcome the challenging experiences of the TBI and has thus developed a sense of not being in control of their own performances. According to Kielhofner (2002:38), “self-efficacy includes one’s perception of self-control and how much one is able to bring about what one wants.” It is further stated that a strong sense of efficacy is impossible if one believes that one is challenged by overwhelming emotions and uncontrollable thoughts.

- **Lacking the knowledge and skills to improve their ability to return to work**

The women in the current study expressed personal uncertainties about their understanding of the TBI and how and why it impacted on their functional performance in the manner it has as well as the unfamiliar set of behaviours they were exhibiting after their injury. The clinical meaning and symptoms of TBI were too complicated for the participants to understand and in some cases not enough information and education on the management of symptoms were provided upon their medical discharge. The women in the current study also experienced the effects of the condition on their personal lives and their roles of being mothers and carers to families. In a qualitative study on women with chronic illness conducted by Dyck (2000) women found the language of biomedicine inadequate to describe dimensions of illness that were not purely physical, such as the uncertainties of day-to-day performance in particular social contexts of home, neighbourhood and the workplace. The participants in the current study therefore had difficulty to make the association of symptoms of their injury and its relation to some of the functional fallouts they have experienced in other areas of occupations.

- **Fear, frustration and anxiety caused doubt in their ability to work**

Stated in Mukherjee, Reis and Heller (2003), emotional functioning after TBI is another broad area that includes post-traumatic stress symptoms, loss of self-esteem, anxiety, depression, anger and shame. The participants were overcome by a host of emotional states that interfered with their daily activities and wellbeing in various ways. While expressing catastrophic feelings of inadequacy, fear and anxiety, participants also reported uncertainty in what they were capable of doing, which indicated that they struggled to appraise themselves. Losing trust in their personal competence hindered motivation and desire to resume work roles. In occupational therapy theory, it is argued that occupation is a way in which people show others who they are (Kielhofner, 2002; Schkade & McClung, 2001). These findings of emotional disturbance demonstrate that the participants' identities as workers have been affected because they struggled to identify with past experience and lacked the abilities to construct new goals and visions for future work roles. In addition, the participants' fears were heightened with feelings of insecurity about other people's judgment and views on their competence, which the participants interpreted as a measurement of their own capability. According to Schkade and McClung (2001), we adapt our (occupational) performance when we meet challenges in our everyday lives. Hence the participants suffered emotional sequelae as a result of the TBI, whereby they seemed to be aware of the challenges that they encounter and were yet to encounter, however they were unable to rely on their own assessment and how well they were able to do things and adapt their performance appropriately. Therefore they relied on external feedback to facilitate their adaptation, with all the pitfalls that entails.

- **Experiencing the loss of cognitive and physical ability negatively affected work performance and productivity**

Participants conveyed their realisation that the loss of physical and cognitive ability caused functional impairment and restricted performance in work-related tasks. According to McNamee, Walker, Cifu and Wehman (2009), TBI has a holistic negative impact on post-injury RTW and that TBI sufferers have to endure a variety of physical, psychological, emotional, cognitive and behavioural problems, which all limit their ability to adapt to their work roles.

Loss of memory or inability to retain memory was the most severely impacted brain function component amongst all the participants. According to Allen et al. (2004) deprived memory is one of the most common deficits after TBI. According to Pansford (2004) short-term memory in brain injury is often the most affected but long-term memory is often a problem as well. The brain injured individual has difficulty in remembering routes, details, hospital appointments, messages, names and details of what they have heard or seen. In the current study, the participants struggled to retain information that was shared during rehabilitation sessions, which impacted on the progression of the rehabilitation process. Key informants revealed that, during the rehabilitation process, the brain injured participants became very emotional and demotivated to continue with therapy because of struggling to remember relevant information. According to LeDoux (2003), memory is stored in various areas of the brain, but emotions seem to have a major impact on transferring information from short to long-term memory via the Amygdala and Hippocampus regions of the brain. Participants struggled to cope with the volume of information that was provided in their work environments and had difficulty retaining and reapplying what was learnt in their jobs. According to Dawson, Schwartz, Winocur and Stuss (2007), memory impairment can contribute to activity limitation such as forgetting to attend to an important meeting at work. In turn, activity limitations result in participation restrictions such as not being able to maintain an independent work role. According to participants, experiencing increased work pressure and variety of demands seemed to have worsened their ability to retain memory and bring order to their work output. In Cicerone, Levin, Malec, Struss, Whyte. (2006) it is stated that impairments of higher level cognitive functions include difficulties with the effective allocation of attention and the organisation of multiple tasks demands.

Experiences of physical deficits and pain impacted on the participants' functional performances and created challenges during their rehabilitation process. Pain impacted on work performances by slowing production and work speed. Experiencing pain also increased their anxiety about coping with the job. In Dawson et al. (2007) physical factors are prevalent in self-reports of recovery following injury and clearly relate to employment. In addition, pain was also elected as a measure of physical impairment in relation to return to productivity, as it is a substantial problem following mild, moderate and severe TBIs. Communication and language difficulties also negatively impacted on self-confidence and self-esteem of the participants and would often

restrict them from gaining clarity on work tasks or instruction because of the fear and insecurity of being judged.

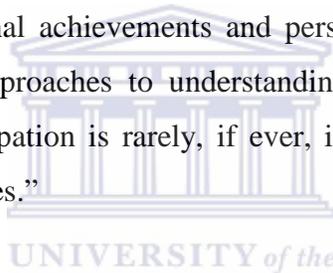
- **Loss of self-identity**

A loss of self-identity expressed by participants impacted on their ability to cope with their injury and hindered their progress of resuming work. In Dickie (2003), identity and self are closely related concepts; self is defined as more personal and identity as a more social or interactional construct. Participants had difficulty relating to who they were before the accident; they had poor self-knowledge and a general lack of belief in themselves. In Alston et al. (2012) in a study that focused on exploring the perceptions of women with TBI on their own lives, the narratives of participants illustrated that dominant issues were about coming to terms with a new sense of self, body image and attempts to “pass as normal.”

Participants experienced emotional turmoil with their realisation that they can no longer skilfully perform tasks compared to what they used to. In Dawson et al. (2007), it is stated that TBI survivors experience changes in their abilities in day-to-day life, for example experiencing difficulties to do grocery shopping after their accident. This “failure” at something easily performed pre-injury influences the person’s locus of control and acts as a stressor to which particular behaviour is directed. Initially, the person might attempt their pre-injury approach: “I can do this, I’ll figure it out,” but when this is not successful their internal locus of control is negatively affected and they may adopt less problem-focused coping behaviours such as avoidance or wishful thinking. In the current study participants showed poor judgment, reasoning and a lack of insight and struggled to formulate realistic work goals. The lack of skills in turn impacted on their self-esteem, efficacy and choices to engage in productive activity which in this study is viewed as meaningful and paid work. Furthermore Meriano and Latella (2008) suggest that enabling people to engage in occupations that are meaningful to them, such as work-related tasks, fulfils their human need for occupation and in so doing, facilitates the process of them redefining themselves in their occupational identities. In this study results depicted a clear connection between being engaged in meaningful occupations (work tasks) and developing positive and healthy occupational identities (participants identifying with emerging new worker roles). Findings of this study revealed that the participants in the study were engaged in

simulated work and actual work tasks which allowed them to develop skills and competencies that were appealing to employers and were able to maintain a healthy worker role after completing the program. Therefore work related tasks and occupational therapy were used to improve the participants' abilities to return to work and maintain a worker role successfully.

Participants also evaluated their competence and success through the external affirmation of others as this served as an external construct of their previous identities. According to Unruh (2004), what we do defines us in social settings. In this study participants revealed that their identities were influenced and shaped by social approval, as well as the approval gained from undertaking occupations that the participants previously chose to engage in. Theoretical assumptions view the individual being at the core of identity formation where the dominant discourse focuses on self-efficacy, self-confidence, self-esteem, personal success, personal motivators, personal goals, personal achievements and personality traits. Dickie, Cutchin and Humphry (2006) advocate for approaches to understanding occupation that value collective understandings, stating that "occupation is rarely, if ever, individual in nature" and is "larger than what the individual experiences."



In Mukherjee, Reis and Heller (2003) narratives of women with TBI illustrate the difficulties women face in coping with real and perceived losses in status and identity and the challenges inherent in re-authoring their life stories in a positive way. Challenges narrated by the women with TBI were to regain self-esteem after losing the identity they have worked so hard to foster and accepting a new identity (Mukherjee, Reis & Heller, 2003). The literature on brain injury rehabilitation rarely discuss the need to address self-identity as it is commonly focused on the physical, cognitive and other visible fallout of the condition (Klinger, 2005). Intervention which pays particular attention to reframing self-identity might further enhance and speed up the rehabilitation process for women with TBI as it is fundamental to their successful occupational adaption.

5.2.2 Experiencing negative stigma and exploitation in the workplace

Participants experienced negative stigma and marginalisation within their work environment. Marginalisation is a consequence of material and social deprivation and the powerlessness that

results from inequitable access to employment and other rights of citizenship (Devlin & Pothier, 2006). Exploitation is the social process by which work is organised to enact relations of power and perpetuate inequality (Charlton, 1998). Participants encountered acts of exploitation and marginalisation in the workplace where they were abused for the benefit of other workers.

- **Exposed to unfair treatment in the workplace**

Wilcock and Townsend (2000) employ the term occupational justice to refer to the “equitable opportunity and resources to enable people’s engagement in meaningful occupations.” In their work environment, the participants were subjected to unfair treatment as well as unreasonable job demands. Some participants were vulnerable to exploitation because they lacked the communication ability and assertiveness to address discriminatory actions and behaviour from colleagues and superiors. Occupational marginalisation is one of the four manifestations of occupational injustice (Townsend & Willcock; 2004). In Hammel (2008) powerlessness can be viewed as a derivative of a lack of decision making power and inability to enact choices and exposure to the disrespectful treatment that results from occupying a marginal situation. Powerlessness deprives people both of the ability to choose their occupation and of the resources to control their own lives. Three of the ten participants felt anxious and powerless against the hostile and oppressive work situations they were in. As a result the participants experienced despondency and lack of job satisfaction due to the lack of coping skills and internal adaptation skills to overcome the challenges in the work environment and as a result one participant resorted to resigning from her job.

- **Stigmatisation in the workplace due to misconception of TBI**

The participants experienced social barriers within their work environment because of their TBI. Due to misconceptions about brain injury within the participants work environment, they were socially isolated and faced attitudinal barriers. Mukherjee, Reis and Heller (2003) describe how women with TBI face social isolation in the form of marginalisation in multiple communities, invisible cognitive disabilities add to difficulties in interpersonal relationships, with employment and access to transport.

According to Marumoagae (2012), persons with disabilities have not only experienced unfair discrimination in the past, but they continue to be at the receiving end of “unjustified” perceptions by employers, which leads to their continued discrimination and marginalisation in the labour market. It has also been argued that the marginalisation of people with disabilities still arises in large part from biased attitudes and a lack of awareness and knowledge rather than a lack of economic resources alone, yet persons with disabilities remain among the most vulnerable and marginalised (Marumoagae, 2012). Participants also encountered work demands which were not reasonable in relation to their functional skills; therefore the unaccommodating work environment led to feelings of inferiority and despondency. Hammel (2008) indicates that wellbeing is unattainable in conditions of oppression and that there is a relationship between wellbeing and occupation.

- **Black Economic Empowerment (BEE) as a barrier in returning women with TBI to work**

The participants in this study were turned down for jobs at organisations and companies who explicitly advertised for work opportunities for people with disabilities. However, some of the participants were declined because they were not classified as being black. They also expressed their frustration when the inherent job requirements were met but they would not be considered because of the companies’ BEE status. Krüger (2011) states that South African businesses need to adopt and comply with certain legislative measures aimed at BEE. BEE was introduced by the current ANC government in a bid to overcome the economic legacy of apartheid and to broaden participation in the economy, especially by those perceived to have been previously excluded or denied access. Participants in the study expressed feelings of dismay and resentment towards the fact that, because they are “white and disabled,” their disability status was not considered as part of the criteria suggested by the Employment Equity Act (EEA). The purpose of the EEA is to promote equal opportunity, fair treatment and affirmative action to redress disadvantages. The designated group under this Act is black people, i.e. Africans, Coloureds and Indians, women and people with disabilities.

The EEA aims to do away with unfair discrimination which goes beyond the inherent requirements of a position, e.g. discrimination based on race, gender, religion, age, culture and

disability. Participants in the study expressed this experience as a direct discrimination towards being a “white disabled person,” and that BEE contradicts the EEA. In retrospect, BEE principles are contradicting other legislative protocols and principles for the inclusion of PWD, including standpoints made by the UN convention on the Rights of Persons with disabilities and recommendations of the Disability Rights Charter. Even though the EEA of 1998 is one of the major laws against discrimination on the bases of race, gender and disability during the hiring process or while in the workplace, it is fair to say that “Legislation has contributed to the social exclusion of people with disabilities. First, legislation fails to protect the rights of people with disabilities and, second, through legislation, barriers are created to prevent people with disabilities from accessing equal opportunities” (Integrated National Disability Strategy: White Paper, 1997:12). However it is also mentioned that one of the main reasons why legislative discrimination continues to take place is that discrimination is not always obvious merely from reading a statute. Problems often arise when the law or statute is applied. Although the rights of people with disabilities are enshrined in the Constitution, there is, as yet, no disability specific legislation (INDS: White Paper, 1997).

5.2.3 Contextual hindrances affecting women’s work participation

The participants’ resumption of work was influenced by contextual hindrances. Context has two aspects; temporal and environmental. Temporal aspects include the individual’s developmental stage or phase of maturation life cycle such as parenting cycle and career cycle. Environment includes the physical aspects of context such as natural terrain, buildings furniture and tools. It also includes social and cultural aspects of the individual. The Model of the Ecology of Human Performance developed by Dunn, Brown and McGuigan (1998) states that context can either support or hinder the person in their execution of tasks and that the context can offer cues for task performance and behaviour, but if the person’s skills and abilities are not at a certain stage of competence, they will not perceive these opportunities (Dunn, Brown & McGuigan, 1998).

- **Parental roles and responsibilities influence work attendance**

According to Kielhofner (2008) the internalised role can be defined as an incorporation of socially and/or personally defined status and a related cluster of attitudes and behaviours. The

patterns of action of individuals also reflect the roles they internalise. In this study the participants' roles as parents impacted on their work roles. Participants viewed work as financial sustainability and for caring for family by providing food for the household. Most of the participants were single parents and received little financial or social support elsewhere. Attending to the needs of family and children impacted on the rehabilitation and work attendance of the participants. According to Kielhofner (2008), roles are self-defined and shaped by the interrelated and ongoing nature of a set of tasks for which one feels responsibility. In this study the participants struggled with an altered identity after their TBI and the quest to re-frame occupational identity did not come without its own challenges. Having a compliment of roles gives one rhythm and change between the different identities and modes of doing (Kielhofner, 2008). The participants struggled to meet the demands of juggling the work role and parent role. Having insufficient coping skills and strategies in such challenging situations resulted in the participants becoming disinterested in their work goals.

- **Travelling and transportation systems impact on access to the workplace**

Transport systems impacted on the participants' attendance of work. The participants' travelling and arrival times to work were impacted by the unpredictable time delays of trains in the Metropole. By arriving late at work due to delayed systems reflected negatively on the work habits and performance of the participants. The participants' work roles were negatively impacted on due to external environmental factors, in this case the delayed train systems. Participants also experienced spells of anxiety attacks when using public transport such as taxis. Due to the nature of the participants' TBI, public transport evoked post-traumatic symptoms and spells of anxiety attacks when travelling alone. Another disabling factor to the resumption of the participants work is the unsafe conditions of the transport modes of the City. According to Kielhofner (2008) environmental impacts include opportunities, support, demand and constraints that the physical and social environment have on a particular individual. Due to the crime and dangers on trains, many participants resorted to resigning their jobs out of fear of falling victim to crime. In this case participants were negatively affected by their environmental context which acted as a constraint on their work roles.

5.3 Facilitators

Facilitators are described by the WHO as those factors that, in their absence or presence in an individual's environment, improve functioning and reduce disability. These factors include the physical environment that is accessible, presence of relevant assistive technology and positive attitudes of people toward disability, as well as services, systems and policies that promote the participation of all people with a health condition in all areas of life (WHO, 2001).

5.3.1 Re-establishing a worker identity by means of vocational rehabilitation

According to Wilcock (1993), occupation is a way by which individuals demonstrate the use of their capabilities by achievements of value and worth to their society and the world. Watson and Fourie (2004:19) concur that "Occupation offers an ideal channel for the realisation and utilisation of human potential and poses opportunities through which people can create and transform their lives, pursue aims, overcome barriers, learn new ways in achieving health and happiness and discover meaning and purpose in life." In Ross (2007), work is a complex term to define, as it is dependent on the individual's experience and the purpose of the task. In Dickie (2003) identity as a worker includes personal constructions of the purpose and meaning to work. Drawing from Gray's (1998) article on "occupation as ends" and "occupation as means," the major therapeutic modality utilised during the rehabilitation stages was work and related activities, as it served as both the process and goal of rehabilitation.

The Model of Occupational Self Efficacy (MOOSE) facilitated the participants' autonomy within the workplace. Sub-goals of the vocational rehabilitation process were clinical expectations for the participants to integrate work-like behaviours such as being on time, dressing appropriately, employing good work ethic and achieving productivity in their work environment. According to Dickie (2003), taking on a worker identity is central to the rehabilitation process. Soeker (2012) describes the MOOSE working directly on people's motivation to engage in activities that improve their skills so that they are capable of achieving a successful RTW process and maintaining positive work roles.

- **Rehabilitation improves motivation and self-efficacy**

Meriano and Latella (2008) state that enabling people to engage in occupations that are meaningful to them, such as work-related tasks, fulfils their human need for occupation and in so doing, facilitates the process of them redefining themselves in their occupational identities. Participants indicated that by attending the rehabilitation programme they attained skills and knowledge of their condition and the management of it which allowed them to return to a work environment filled with improved confidence and abilities. According to Klinger (2005), if someone becomes impaired their ability to adapt can become overwhelmed, and when that occurs the person may experience dysfunction. The MOOSE is a well-defined and structured model with each stage having its own guidelines and goals to be achieved before individuals move on to the next stage of intervention. Yet stages of the Model are interrelated and dynamic, to be applied according to the individual's progress during rehabilitation. Stages of the MOOSE are designed to address factors that impact on occupational identity and competence, to enable the individual to achieve occupational adaptation (Soeker , 2012).

- **Feeling supported in a therapeutic environment enhances motivation to work**

During the rehabilitation process participants felt supported and contained because they could work through their fears, anxieties and express their losses and shortfalls within a therapeutic and safe environment. A holistic approach was utilised by considering all aspects of the participants' lives as part of their rehabilitation plan. By using a holistic approach the occupational therapist is interested in engaging and developing the whole person in all of their life roles, activities of daily living, work and social participation to ensure that the client receives optimal therapy in all of their life areas and occupations (Corring & Cook, 2000).

In Stage 1 and 2 of the MOOSE, the participants became motivated to initiate their journey to return to productive work. A client-centered approach served as an outline to direct intervention with participants. A client-centered approach, also known as person-centered therapy, is a counselling approach that uses the individual needs of the patient/client as tools to produce the best therapy the person needs. In client-centered therapy the therapy is based on what the client needs and it's the therapist's role to promote self-understanding and

independence in their rehabilitation (WHO, 2001)

The therapeutic use of self was an important factor during the stages of rehabilitation. Participants struggled to reclaim their occupational identity and were overwhelmed by the many factors of loss which impacted on their previous occupations. According to Kielhofner (2002) occupational identity is one's sense of the present and future self, based on one's history as an occupational being. Through encouragement and being empathetic towards the participants, the therapist stimulated their motivation. In Pierce (2003), professional optimism includes the occupational therapists' encouragement, consistent support and firm expression of belief that people can make changes in their lives. The aim of the MOOSE is to facilitate greater self-efficacy in the participants, but because participants were quite emotional and not fully in charge of themselves and their environments, the therapist initially had to take greater control and create a supportive environment that meets the abilities of the participants. This correlates with a notion in Schultz and Schkade (2003) that the more the person is unable to manage his or her personal systems the more the practitioner must manage the occupational environment to facilitate the person's potential to achieve the highest possible level of relative mastery. Participants developed trust in the therapist because of the therapeutic environment shaped by the therapist. By acknowledging participants' fears and anxiety, listening to their despair and losses, allowed the therapist to assess and plan individual intervention strategies for each participant. As the participants established commitment to take action they were ready to start working on their goals to reclaim occupational identity. The therapist could further improve motivation and self-efficacy by continuously assessing clients, formulating and applying relevant strategies throughout the rehabilitation programme.

- **Gaining insight and understanding of the condition through acceptance of impairments**

The participants' self-awareness and insight increased by attending their rehabilitation sessions. Stage 1 of the MOOSE aims to establish a strong belief in functional ability (Soeker, 2009). Participants were encouraged to perform introspection and reflection around the incident and feelings around their new life situations after their TBI. According to Achinstein (2005) introspection is a process where people reflect on their lives and their circumstances. A strategy

utilised by the therapist to encourage self-reflection and introspection was introducing the participants to journaling, by reflecting through writing about their feelings, emotions and thoughts of losses, fears and hopes and possible future aspirations. According to Pierce (2003) journaling is the ultimate tool for self-reflection. Fleming et al. (2006) indicate that impaired self-awareness is a complex phenomenon, which is often described by clinicians as the central obstruction to clients achieving progress in rehabilitation and good outcomes; it is also associated with poor motivation for rehabilitation. To further encourage self-reflection the therapist introduced the Gibbs reflective cycle (1998) which is a useful method of reflection especially for persons with self-awareness shortfalls. Participants were provided with information about the condition and its effects on functional performances and various strategies to cope with the negative effects of the TBI. The therapist also encouraged dialogue amongst participants who attended rehabilitation sessions in a group to promote an information sharing and supportive environment for the participants. The therapist acted as an external support and strongly encouraged participants to explore their feelings and visualise future goals and hopes for themselves. In Fleming et al. (2006) recommendations have been made in the literature regarding the treatment for impaired self-awareness; a key theme is the importance of building a positive therapeutic alliance with the client in order to guide him or her towards more realistic self-awareness.

- **Rehabilitation of performance skills enhanced work performance**

Stage 3 of the MOOSE appealed to key informants since the participants could practice work tasks and activities addressing components and skills they would need to return to their work environment. Known as *Creation of competency through occupational engagement*, Stage 3 of the Model aims to improve self-efficacy to the extent that clients engage independently in their work tasks. The therapist facilitated sessions to allow the participants to develop a sense of achievement and satisfaction and encouraged the use of various coping strategies which enabled the participants to start to control and direct their own performance.

Participants' performance skills, such as hand function, physical endurance, cognitive skills and psychosocial skills, improved during the rehabilitation process. Participants were actively involved in client-directed activities, simulated and actual work tasks. The therapist utilised both

component-based and occupation-based intervention approaches during sessions with participants. Areas of intervention, such as hand function and memory, were firmly grounded in the component-based approach as suggested by Pierce (2003). This approach is strongly focused on evidence-based practice and pertinent literature. By utilising neuro-developmental principles and techniques during sessions, participants with physical fallout experienced improved functional performance. The participants were exposed to techniques for preparing their affected spastic upper limbs to functionally use in work tasks. The therapist demonstrated and practiced techniques of positioning and weight-bearing with the participants during simulated work, and through constant practice motor function not only improved, participants could use their spastic hands more functionally in work tasks. By providing a home programme it enabled participants to continue applying the exercises at their homes or in their work context.

Memory and concentration skills were addressed using various strategies. Participants were introduced to external aids to improve recalling and retaining pertinent information. Making short notes, cell phone reminders and a notebook were used by participants either as an adaptation or restoration of the performance skill. Powel and Malia (2003) in their brain injury work book, provide guidelines and strategies to address cognitive deficits. Some of these guidelines were introduced to participants, facilitating the use of internal memory strategies and encouraging them to use their senses to assist with paying attention, making visual pictures in their mind and making up stories or rhymes that contain information they need to remember. Occupation-based interventions were guided by the needs of participants and working towards goals and objectives which were developed in conjunction with the participants. By engaging in work activities participants could monitor their work performance based on their session's goals. The therapist could facilitate memory strategies during work tasks while the participants could actively practice and evaluate their performances.

In Dawson (2011) meta-cognitive strategies are recommended for adults with executive dysfunction and should include acknowledgement or generating goals, self-monitoring and recording of performance. Meta-cognitive strategy training improves problem solving in personal relevant and/or simulated problem situations. Therapeutic use of self played a critical part in the rehabilitation sessions as the therapist consistently applied her clinical judgment and

reasoning to facilitate the participants to practice their skills and abilities and adapt by drawing from their own internal and unique responses to the demands of the work tasks. A hallmark of the occupational adaptation approach to intervention is that the individual evaluates his or her own progress in therapy by self-assessing the properties of relative mastery, and by eliciting an adaptive response will result in the individual achieving relative mastery in his or her occupational activities. Relative mastery is measured by three properties, namely efficiency, effectiveness and satisfaction (Schkade & Schultz, 1992). During Stage 3 of the MOOSE, the participants displayed with heightened satisfaction and a sense of achievement because they could experience visible success in their “doing” during work activities.

- **Self-directed work tasks lead to greater gains in functional skills**

The participants could engage in self-directed work activities which were decided upon in the planning and goals setting for their RTW. By utilising client-centered principles the participants were encouraged to exercise choice, which aimed at increasing the participants’ sense of control. In Kielhofner (2008) it is stated that by allowing clients to make choices and decisions the client can shape the nature of their own therapy and what the therapy aims to achieve. Choice is central to therapy as it represents the client’s volitional involvement in the therapy process (Kielhofner, 2008). In this case many participants chose to resume work they have done before their TBI, despite some anxiety and fear of failure. The therapist assisted the participants in the job application process which included teaching them how to draw up a CV, preparing for an interview, communication practice and social skills. The participants displayed with heightened motivation and self-efficacy levels. Self-efficacy is defined as people’s beliefs about their abilities and capabilities in relation to their lives; it tells them how productive they are and incites their performance in tasks to do well (in any of the three areas, activities of daily life, work and leisure) (Bandura, 1993). It can be described as what people think and feel about themselves and enables them to believe in themselves in order to master tasks. Participants were eager to return to their work activities also because they were familiar with their previous work tasks and expectations. Participants could also anticipate success and possible challenges in the workplace because of re-establishment of work skills and abilities as well as a renewed sense of self. As stated by Dolecheck and Schkade cited in Jackson and Schkade (2001), a patient engaged in personally meaningful occupational activities will most likely experience a restoration of a

functional adaptation process.

5.4 Adaptation strategies that enhance the work participation of women with TBI

This section makes reference to the views of Schultz and Schkade (2003) and Kielhofner (2002) on occupational adaptation (OA). In this study the participants could function as capable workers within their work context because they could adaptively respond to occupational challenges and utilise various adaptation strategies to aid in their work roles. Implicit in the Model of Human Occupation (MOHO) is the belief that people's occupational performances are influenced by the interaction among the person, their motives, life patterns, performance capacity and their physical and social environment (Kielhofner, Forsyth & Barret, 2003). The MOHO defines occupational adaptation "as the construction of a positive occupational identity and achieving competence over time in the context of one's environment" (Kielhofner, 2002:121). The MOHO facilitated motivation and self-efficacy in participants, to take charge of their lives and pursue their work goals with renewed confidence. The participants' functional performances were enhanced to the extent that they became competent while engaging in work tasks. The participants reached a stage where they could achieve satisfaction and adapt to the challenges in their work environment while continuing to experience job satisfaction.

5.4.1 The elements of occupational adaptation

OA consists of three aspects of mastery as depicted in the Model of Occupational Adaptation (MOA), namely "a desire for mastery" seen on the left side of figure 5.1 below, "the demand for mastery" seen on the right side and the "press for mastery" in the middle of the diagram (Schultz & Schkade, 2003).

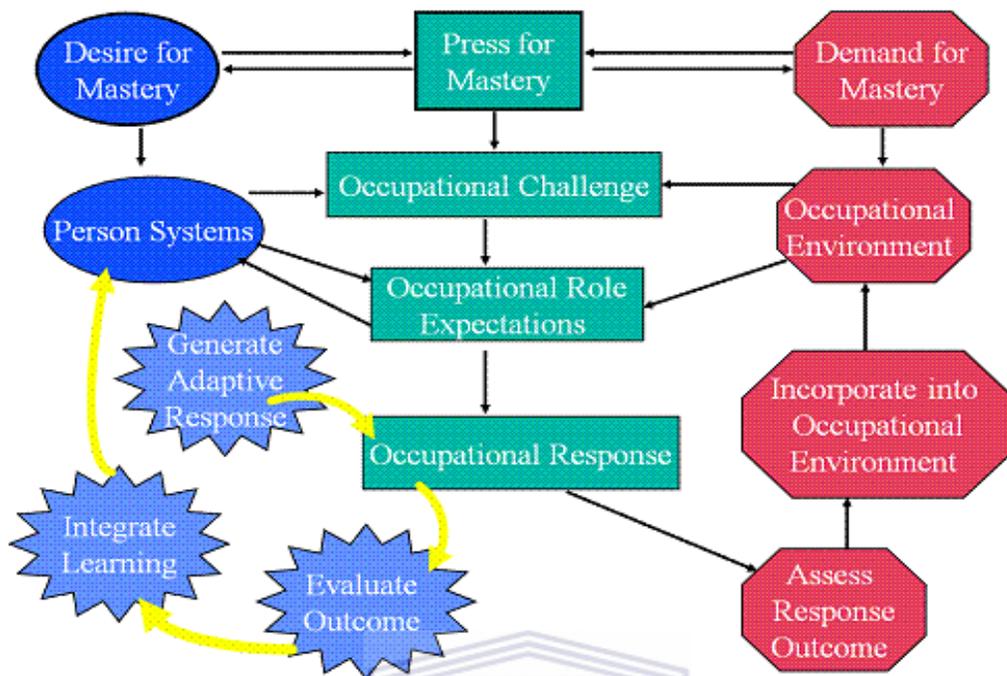


Figure 5.1: Model of Occupational Adaptation

Source: Schultz & Schkade, 2009.

In Theme 3 of this study it highlights that the findings are in line with the “press for mastery” proposed by the model of Schultz and Schkade (2003). The person is represented on the left side of the MOA diagram and focuses on the personal internal factors. In this study the TBI caused dysfunction in the lives of the women by disrupting the unique systems that each participant is made up with. In this study, as a result of the physical, cognitive and emotional losses inflicted by the TBI, participants’ desire for mastery was interrupted and therefore they could not achieve mastery within their environment. The occupational environment is represented on the right side of the diagram and it focuses on the external factors of the OA process that affect the person. In this study the environment is the work context that the women with TBI returned to. According to Schultz and Schkade (2003) the process in the occupational environment begins with a constant demand for mastery. Any circumstance in the occupational environment presents a demand for mastery. In this study the work environment presented with various demands and challenges, which included the inherent requirements of the work that participants needed to do, the demand for productivity and quality of work, constant reviews of work performance as well as work ethics. These can be seen as the physical demands of the context. The social demands

that the participants faced in this study were of the marginalisation and attitudinal barriers experienced in their work context and the cultural influences that impacted on the participants' experiences of the workplace's legislative guidelines, the organisational culture and how the women with TBI were integrated into the workplace (Schultz & Schkade, 2003).

Findings of this study highlight that the women with TBI elicit adaptive strategies to an internal adaptation process. This correlates with the "press for mastery" section of the MOA. The women in the current study experienced a demand for adaptation when expectations of the work context overlap with their roles as workers. The study participants acknowledged that their adaptive strategies improved coping within their work environment, which became evident in their work productivity, work quality and psychological tolerance towards the work demands. Schultz and Schkade (2003) confirm that the occupational response is the observable by-product of an adaptive response. For the women in this study their internal adaptive responses enabled them to effectively and efficiently perform their work roles.

5.4.2 Personalised response approaches to overcome demands and challenges in the work context

Theme 3 of research findings, *Personalised response approaches to overcome demands and challenges in the work context*, (section 4.4.1) recognised how women with TBI adjusted to their work environments, how they used skills and strategies acquired during their rehabilitation and how internal adaptations enhanced the desire for mastery. Likewise, the section *Experiencing success at work by adapting to the work environment* (section 4.4.2) identifies how participants attached their own unique meaning to their work and the internal desire for occupational engagement intensified, participants could monitor their performance and success was also verified by their employers. The participants could also seek out alternative employment and higher paying jobs which serves as an indicator that they are able to seek out new learning opportunities and adapt accordingly. According to Schultz and Schkade (1992) achieving success in occupational performances is a direct result of the person's ability to adapt with sufficient mastery to satisfy the self and others.

Many of the participants experienced transformation by adjusting to their present abilities and

aspiring towards future endeavours in their lives. A dynamic shift of capabilities occurred within participants as they could adjust to the emotional, cognitive and physical changes which they had undergone after their TBI. According to Unruh (2004:294) “reconstructing and occupational identity may not be possible without grieving for what is lost or changed.” In Klinger (2005) it is stated that the process of adapting to bodily and mental changes eventually results in a redefinition of self-identity. In this study the participants could utilise the strategies they were exposed to during their rehabilitation, but also draw from their internal adaptation resources to cope with change and challenges within their work environment. The participants were also more driven and drew from internal desires to gain control of their lives. They accepted the new identity they have developed after their TBI and were ready to improve their work roles. This correlates with the notion of Schultz and Schkade (2003) that the internal and external factors continuously interact through the occupational modality. Therefore the ongoing interaction of the person’s desire for mastery and the occupational environment for mastery creates a constant press for mastery.

- **Exposure to the workplace, structure and income**

In Brown (2009) the person chooses specific tasks to perform within a specific context, according to the person’s inherent skills and ability. In a specific context there is potential for a range of task performances. Within the context of the rehabilitation programme the participants were exposed to a variety of work tasks and actual work where they could practice their skills and prepare themselves for entering the labour market. The theory of occupational adaption (OA) posits that all occupations are holistic and that all occupations involve the sensory-motor, cognitive and psychosocial systems. During the initial stages of the MOOSE, the therapy focused on teaching the participants adaptive methods and skills to engage in the work tasks which were aimed at improving occupational readiness as proposed by Schultz and Schkade (2003). Participants were introduced to occupational activities that were self-directed and meaningful to them. The therapist facilitated the participants to implement skills that were addressed in sessions, by improving work skills such as conflict management, improve productivity, quality and competence as well as improve self-esteem and work habits. In the work environment participants were able to apply techniques of decreasing spasticity in their affected limbs by positioning and weight-bearing through the limb to prepare for bilateral work tasks. Participants

could also use the notebook strategy to ensure that they remembered all the relevant information they needed to carry out the work activities.

Participants could use these skills when they were confronted by conflicting situations in their work environment and felt less apprehensive doing so, since the role-play sessions on communication and assertiveness assisted them to practice and improve these skills which also improved self-assertiveness and self-esteem. According to Schultz and Schkade (1992) individuals are most inclined to discover their own ability to adapt when they are challenged with occupational activities, that is, occupational activities that are meaningful, have a beginning and end, are process orientated and have an end product.

Participants could also anticipate what was expected of them in the work environment in terms of productivity and quality of work because they were exposed to the concepts prior, but mostly participants were aware of their own abilities in relation to the above expectations, in terms of how long they can stand and work before needing a break, how well they can attend to detail of the work task and that they can adjust to meet the demand of the job task using their own skills and abilities. By exposing the participants to real life work situations, work structuring and processes, the therapist focused on increasing the participants' abilities to adapt and become adaptive, as proposed and guided by the stages of the MOOSE, specifically Stage 3 of the model. This proved helpful in their work environments because participants could now draw from previous experiences and contribute to their job tasks using their unique style and skills that they have adopted through practice. As the participants returned to the work environment their self-efficacy improved even more as they could now actively participate with less restrictions; their desires were further directing their need for occupational engagement.

In this study the participants developed their own sense of what work means to them. For some participants work meant that they will earn money to be able to attend to their basic living needs, attain self-reliance, enhanced self-esteem and feelings of wellbeing. For most adults paid work is a major if not principle source of purposive activity, social relations, independence, identity and self-respect, which leads to people becoming integrated and acknowledged members of the larger community (Dickie, 2003). She further adds that identity as a worker includes a personal

construction of the purpose and meaning of work. For some participants, engaging in volunteering work activities helped improved fitness and health and a form of exercise to improve and develop lost functions. Ross (2007) argues that volunteering for some individuals can be a valued, meaningful and purposeful occupation which contributes to developing a positive social identity. For the participants in the current study, work provided opportunities for increased confidence and self-esteem, social support, a feeling of active participation and inclusion in community and replacing lost roles.

Participants could still utilise their work skills in work activities that did not provide monetary compensation. Participants found that memory skills, physical strength and endurance are still needed to ensure productive and quality work whether it is paid work or not. Participants could therefore employ their work practice experiences in their voluntary work context which indicated that participants could achieve mastery within in the environment in an occupational role of a volunteer. Engaging in voluntary work could therefore have a positive influence on the participants' health and wellbeing (Ross, 2007). It may also be some form of stepping stone into paid employment. In light of the above the participants in this study expressed the value of work, irrespective if it was paid or unpaid, as the meaning of work to these participants was unique to their context, therefore indicating that the meaning value of work for these study participants aided in achieving adaptation.

- **Utilising compensatory skills to cope in the workplace**

As participants returned to work, they found that the work environment was demanding and that job expectations challenged them to perform effectively within the work context. In Schultz and Schkade (2003) the occupational environment represents the overall context in which a person engages in a particular occupation in an occupational role. The participants in this study found that they were able effectively perform jobs which required attention and memory by using the strategies that they learnt during their rehabilitation phase. The theory of occupational adaptation (OA) proposes that any circumstance demands a degree of mastery; in this case the work environment presented its challenges and demands on the participants to perform in their work roles. The press for mastery emanate from the occupational environment's demand and the individual's desire to master demands (Schultz & Schkade, 2003).

As the participants' motivation and self-efficacy improved throughout the rehabilitation process their internal drive to engage in work, do well and succeed, improved. Their confidence in their abilities increased because through continuous work skills practice during the rehabilitation phase, their efficiency drastically improved. The study participants experienced unique challenges within their work environment as it interceded with their worker identity and its related roles. Participants needed to use their memory to retain relevant work task information they also needed to consult and effectively communicate in their jobs and at the same time they needed to regulate emotional upsets or confrontations within the work context.

Throughout the sessions, the therapists were vigilant with regards to the participants' emotional status because during the initial stages of therapy their emotions got the better of them when they could not cope with their functional challenges. For some participants the work environment's challenges became too overwhelming in terms of the work load and multiple tasks that needed to be done and they were just not able to cope, primarily because of inadequate memory systems. According to Schultz and Schkade (2003) a function-dysfunction continuum is observed during the person's inability to generate an appropriate adaptive response as a result of personal factors or environmental factors that could lead to dysfunction. In this case the therapist needed to assist by negotiating reasonable accommodation for alternative methods of work instruction, i.e. written or audio-recorded, to ensure and demonstrate to the employer that the participant could still meet the production demand if they are accommodated by modifying or adapting. In this case it proved that, as the environment became too demanding, the participants could not achieve mastery since there was still a lack in the person system and, through modification of the environment, the participant could once again achieve mastery in her job tasks.

Many of the participants however could utilise various strategies to cope and overcome challenges in their work and felt contented and at ease with their performances. According to Schultz and Schkade (2003) an occupational response is the outcome – the observable product of the adaptive response. As intended by the MOOSE, increased self-efficacy was attained by participants to the extent that they depicted competency in their work activities and broader work context. In this study many of the participants could adaptively respond to challenges in their

work context and deliver effective work in spite of the challenges they faced

5.4.3 Success at work by adapting to the work environment

During the final stage (Stage 4) of the MOOSE, the participants showed a renewed type of vigour in expressing their perceptions and experiences in their new work environments. The essence and energy of the participants' feedback almost took on a collective meaning: of them becoming their own "agents of change," derived from notions of Schultz and Schkade's (2003) theories on occupational adaptation. In conjunction with achieving their goals to return to work, the participants measured their failure and successes in work with less apprehension and could adapt to maintain their work roles. The researcher found that the participants' feelings of satisfaction and expressions of future visions and desires for success transcended across the boundaries of the work context. For the participants in the study success at work meant that they could take care of themselves and others by being able to buy what they need with the earnings they worked for. The desire to attain better jobs and higher earnings also demonstrated that self-efficacy has been successfully integrated and manifest in the participants' capabilities as workers. Here it recognises that the participants' experiences fell in line with the statements of Schultz and Schkade (2003) that the occupational challenge originates from the intersection of the occupational role expectations and the occupational environment, which created a demand for adaptation and creates internal adaptive responses.

- **Participating in desired work activities enhanced self-reliance and contentment**

In this study the participants' expressed a passionate longing to return to and engage in meaningful work. In Schultz and Schkade (2003) the individual's attraction to the activity fuels the desire to adapt. Some participants welcomed the fact that they returned to their previous type of employment while some participants just wanted to reach their goal to work and earn an income for sustenance. According to Dickie, Cutchin and Humphry (2006) identity as a worker includes a personal construction of the purpose and meaning of work, supports the participants' views and experiences in work which in part fuels their desire to become more efficient and reach higher goals. Most feedback from the women with TBI in this study was that they felt satisfied and happy to be in a job where they wanted to be. Schkade and Schultz (1992) indicate

that occupations provide the means by which human beings adapt to changing needs and conditions; the desire to participate in occupation is the intrinsic motivational force leading to adaptation.

- **Performing effective and efficient work leads to satisfaction in the work environment**

In Schultz and Schkade (2003), most occupational therapy is driven by assumptions that as clients become more functional they will be able to adapt, however the OA theory view is quite opposite. The practice based on OA is driven by the assumption that the more adaptive the individual becomes the more functional he or she becomes. In this study the majority of the participants were able to perform optimally in their workplace and this was corroborated by the positive feedback they received from supervisors and customers they interacted with. This also correlates with the theory of Schultz and Schkade (2003), that the participants could elicit internal adaptive responses to the adaptive demands that arose from the occupational challenges and therefore they could produce occupational responses, which in this case is the observable work performance and sustainability of their worker positions.

When participants returned to their work environment, higher self-efficacy levels were observed and this promoted mastery of tasks and greater achievements as well as greater satisfaction levels. The participants could employ internal adaptive responses to challenging situations in their work environment and still possess the ability to continue with their work roles and adjust and rectify their performances in the demanding work context. As stated by Schkade and Schultz (1992), an adaptive response will result in the individual achieving greater relative mastery in his or her occupational activities. Self-assessing properties of relative mastery include efficiency (use of time, energy and resources), effectiveness (extent to which the desired goal was achieved) and satisfaction to self and society (extent to which the patient feels personally satisfied with progress and satisfaction of others with progress) (Jackson & Schkade, 2001). For the participants, their productivity and quality of work performances within the structure and requirements of their work context served as a measure of self-evaluation. Satisfaction and positive feedback from others about their work further enhanced their aspirations to achieve better outcomes for themselves which resulted in ongoing positive work performances. Although OA theory is not about mastery per se, it is the constant presence of the desire, demand and press

for mastery that offer the impulsion for individuals to adapt (Schultz & Schkade, 2003). Lastly the participants in this study have reached a degree of occupational adaption which might excel or become interrupted depending on the processes of ongoing interaction of the person, the environment and the adaptive processes that occur when people engage in their activities of daily living (Schkade & Schultz, 1992).

5.5 Promoting access to work utilising a multi-dimensional RTW approach

Participants in this study expressed that their return to work (RTW) would further be enhanced through a collaborative stance of key governmental sectors to promote employment for women with disabilities. As mentioned in the literature review, an inter-sectoral vocational rehabilitation service model in the Western Cape was proposed by Coetzee et al. (2011), after findings of a critical study concluded that limited models of employment are being implemented with the focus on improving access to vocational rehabilitation within the core governmental departments as identified in the national rehabilitation policies. However the proposed Model for inter-sectoral vocational rehabilitation services was met with resistance from key stakeholders due to the cost implications to implement the proposed actions of the model. The findings of the current study reveal that facilitators and barriers for participants returning to work arose from various programmes and structures originating from different governmental sectors, including its legislative acts and policies.

According to Coetzee et al. (2011), research in the counselling and vocational rehabilitation literature provides strong evidence that the working alliance between major role-players is a crucial factor in the success and failure of counselling and vocational rehabilitation. They further refer to the working alliance as a model for interdisciplinary collaboration. This working alliance and its inter-related components lead to an increase in client satisfaction and successful outcomes. In the current study the participants' need for continuation of care, sustainability and maintenance in their work roles transcended the parameters of the Health Departments core service packages. The feedback from participants suggested that if there is a more closer inter-link with different government departments such as the Health, Labour, Transport and Social Development Departments it might assist with the quicker resumption of work because the barriers and needs of the women with TBI will be more transparent and departments would

clearly be able to see which department could or should ideally assist in relieving that barrier. In this study for example the transport limitation could be addressed by the Department of Transport instead of the Department of Health trying to address all barriers encountered by participants. This would be the ideal, as if there was a smooth and well-coordinated streamline of services across sectors, it would allow for a seamless transition of care and management of the service users.

However in the current study the participants could not enjoy the easy access and accommodation measures as proposed by the Integrated National Disability Strategy and the Provincial Disability Strategy, which is intended to achieve total equality for people with disabilities through inter-sectoral and coordinated approaches for action. The experiences of study participants supports the findings in Coetzee et al. (2011: 34) that vocational rehabilitation services outside the Department of Health, which includes the Department of Education, Labour and South African Social Service Agency (SASSA), are not supported by referral pathways between government departments for vocational rehabilitation services. Furthermore there are insufficient vocational rehabilitation services provided by the identified government departments. They were therefore not fulfilling their role and functions in relation to their legislative mandate to remove barriers that slow down the active participation and integration of persons with disabilities in the employment sector.

As mentioned earlier, a study exploring the perceptions of women with TBI in their own lives, the narratives of participants illustrated that dominant issues were about coming to terms with a new sense of self, body image and attempts to “pass as normal” (Alston et al., 2012). Participants in this study indicated that they would benefit and further enhance their job satisfaction if their RTW is supported by an all-encompassing holistic intervention strategy. Health and wellbeing for women with TBI could be enhanced by adopting a multi-dimensional and multi-disciplinary approach towards their vocational rehabilitation. The sensitive nature of women, which has been demonstrated by the participants in the study, should not be overlooked, not to imply that all women are helpless but emotional instability has been noted as a barrier to return to work. A holistic intervention approach means that the occupational therapist is interested in engaging and developing the whole person in all of their life roles, activities of daily living, work and social

participation to ensure that the client receives optimal therapy in all of their life areas and occupations (Corring & Cook, 2000). Statements of the participants in the current study indicated that different modes of interventions in different settings may positively influence their wellness outcomes.

- **Utilising a user-friendly programme to enhance holistic intervention**

The participants proposed that the model should be presented using less desktop- and paper-based activities as they struggled to cope with the reading and writing of certain cognitive exercises; they coped better with visual aids and demonstration and could remember information better in a story form. Occupational therapists are skilled in developing innovative ways of facilitating integration of information and utilising relevant theory. Treatment should also transcend the language barriers. Possible strategies to enhance intervention could be role-plays on work scenarios as these allow for interactive and practical application of skills and knowledge. According to Ledoux (2003) without arousal we fail to focus on what is going on and we don't attend to the details. Ledoux (2003) further states that arousal is important in mental functions, as it significantly contributes to attention, perception, memory and emotions. Rehabilitation sessions for women with TBI should focus on practical information sharing or presentation of activities with more diagrammatical representations. The participants could remember better through pictures, symbols and make the link with concepts covered in the rehabilitation sessions such as body language when communicating, good work habits and personal presentation and so forth. This correlates with work done by Thurstone (2012) that the use of dramatic visual imagery positively aids brain injured individuals with memory encoding; the results can be seen in both academic and social aspects of the individual.

The need for more counselling and support groups was proposed as the participants still struggled to cope with the post-traumatic effects long after the accident. The need to share and learn from other women with TBI was also expressed. During the initial stages of the MOOSE, the therapist acted as a counselling support for the participants going through emotional problems. Even with the need and recommendation for further psychological intervention, the participants often ended up on long waiting lists or fall through the cracks in the rehabilitation process. Early detection and the need for psychotherapeutic intervention is important, however

the occupational therapist often has to adopt the role of the counsellor, because of time constraints and available resources.

A need for education for family and care-givers of women with TBI was identified as a need to assist with follow through and reinforcement of therapeutic input. Providing the family with basic strategies to facilitate and encourage positive participation and structuring the social environment to encourage ongoing self-efficacy and motivation is essential. Close family members often bear the brunt of the brain injured individual's negative symptoms. By providing the family and other social support structures with necessary information for support and counselling, this could influence the rehabilitation process of the brain injured individual more positively. In Ross (2007), the role fulfilled by the worker in the family, and the attitudes and responses to the worker's disability from family members, may also influence the outcome of the disability management process either positively or negatively. Family support networks may potentially influence an individual's RTW in different ways. Where family members might not see the importance or need for the brain injured person to return to work, their input and support might not be geared towards supporting the TBI patient to return to work, which might lead to permanent cessation of the RTW endeavours. It is quite the opposite when family and other support structures are invested in the patients RTW, and with their input and support the patient is more likely to aspire and return to work.

- **Skills development for the South African labour market**

A need to up-skill women with TBI for the South African Labour market is needed as mainly the manual or blue collar jobs are available. The participants with a higher education and work experience had the most difficulty being hired because there was not a need in the market for people with higher skills and work experiences. It was proposed that seeking for conventional jobs might not be attainable; therefore alternative types of work may need to be explored such as entrepreneurial and small business skills development.

Strategies that can further enhance suitable job placement for women with TBI include implementing job search support techniques. Within the vocational rehabilitation literature, job search support has been identified as one of the services likely to lead to successful placement

outcomes (Weston, 2002). Job support activities include establishing a job register or job information sources, advertising the clients on community job information resources, e.g. private employment agencies, specialised employment agencies for people with disabilities and state employment agencies.

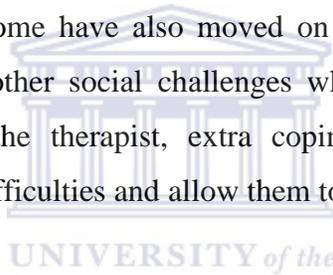
- **Financial support for women with TBI undergoing rehabilitation**

Financial support for women with TBI will enhance greater rehabilitation successes. Participants faced many challenges to partake in rehabilitation or attend work because of financial constraints. Stated in Palmer (2011) people with disabilities (PWD) are prone to economic deprivation for three main reasons, first PWD have lower earning capacity, secondly expenses attributable to disability can create an extra drain on resources, and thirdly, assistance and caring by other family members can detract from the available household labour.

During the application of disability grant benefits the participants' eligibility was often denied based on their outward appearance of not seeming disabled. The participants would rather buy a loaf of bread for the family to eat than spend the R10 on taxi fare to get to their rehabilitation sessions. To encourage attendance to the rehabilitation sessions participants were provided with transport money and a meal. The meal was often taken home to share with family. In Van Niekerk et al. (2011) it was highlighted that views held on the disability grant in South Africa are that it contributes to a disabling environment rather than enhancing independence for PWD. As stated in Engelbrecht and Lorenzo (2010) the positive effects of finding employment in the open labour market can be negated for someone with a disability grant by his/her dependence on a social security grant that was cultivated over an extended period. The experiences of participants suggest that obtaining a disability grant might assist with easier access for rehabilitation and places of work. In having enough money for food and transport, the participant also has better options of using different modes of transport thus avoiding the more dangerous train systems. The occupational therapist is a key role player in advocating for the women with a TBI for financial assistance to partake in rehabilitation. Having the clinical knowledge of the effects of the condition and its impact on functioning, the occupational therapist can confidently express why financial support should be granted even when the person with the TBI appears outwardly

fit for work.

The need to return women with TBI to work as soon as possible is necessary to prevent loss of motivation and to enable them to earn an income to provide for themselves and family. Being placed in a job as soon as participants enter Stage 3 of the MOOSE proved effective as the therapist could identify difficulties experienced in the real work set up, and focus addressing the real time work performance and overall work participation of the participants. The risks with early work placement are that it can lead to early drop out due to immature coping skills and readiness for work activities; this can inflict a negative blow to self-esteem and motivation. The therapist continued with monitoring and support on the job to assess and identify possible external risk factors that might impact on the participants' work roles. A positive indication of the above suggestion is that participants who were followed up until 6-8 months into their return to work are still employed and some have also moved on to apply for work elsewhere. The participants encountered several other social challenges while being employed, but with the support and encouragement of the therapist, extra coping skills and strategies could be introduced to deal with personal difficulties and allow them to sustain their work roles.



- **Collaborating with skills institutions to improve work placement for women with TBI**

Liaising with relevant therapists working in the private sector could enhance prospects for RTW for women with TBI because of their strong advocacy skills, knowledge in relevant work legislation and clinical expertise on work capacity. Within occupational therapy, advocacy has been defined as “initiatives taken by the therapist on behalf of a client, to pursue a change in the environment that will ultimately enhance occupation” (McColl, 2003:5). Stergiou-Kita, Moll, Walsh and Gewurtz (2010) indicate the importance of having knowledge that is relevant to advocacy in the RTW process. In the study it is stated that the therapist should promote the person with the disability's work skills and also enhance work skills that are sought after by places of employment. The therapist would be in a more advantageous position to advocate for the RTW of individuals living with a brain injury by having a good understanding of the fit between the clients' needs and goals, their work abilities and how the disability might impact on work performances. Organisational culture can also have a significant influence on people with disabilities in the workplace. Organisational culture can be defined as the shared values, beliefs

and expectations of members of an organisation by dictating norms, rules, expectations, differences and diversity (Spataro, 2005). In the current study the therapist emphasised the importance of creating disability awareness and de-sensitising employers and staff to the disabled worker. Having knowledge and sharing with stakeholders will also allow better advocacy by identifying relevant job modifications and accommodations and also to encourage better communications about expectations between the employer, the disabled worker and the therapist.



CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

In conclusion, this study focused on exploring the challenges that women with traumatic brain injury (TBI) experience in their work environment after vocational rehabilitation. It highlighted the experiences and perceptions of the study participants during their rehabilitation process and upon returning to work. Four themes emerged from the findings of this study, namely *Barriers to work participation for women with TBI*, *Re-establishing a worker identity by means of vocational rehabilitation*, *Adaptation strategies that enhance the work participation of women* and finally *Promoting access to work by utilising a multi-sector return to work (RTW) approach*.

Findings of this study revealed that the participants encountered barriers and facilitators that influenced their adaptation to their work roles. The barriers identified in this study, known as *Barriers to work participation for women with TBI*, are those factors where women with TBI experienced several hindrances to their resumption of work. A loss of functional ability encompassed several factors such as a lack of knowledge and insight on their condition, evident physical and cognitive fallout that impedes their daily lives as well as the emotional characteristics that further imposed on their damaged and vulnerable self-identity. Parental roles and transports systems emerged as contextual hindrances in the return to work (RTW) process. In addition, stigma and marginalisation in the workplace also impacted on the resumption of the participants' work roles, as well as legislative guidelines which contradicted the fair and equitable return to work for the study participants.

Facilitators that assisted the participants in regaining their worker identity and resuming their work roles emerged under the theme *Re-establishing a worker identity by means of vocational rehabilitation*. The well-defined practice Model of Occupational Self Efficacy (MOOSE) facilitated a supportive and enabling environment which enhanced the participants return to work prospects. Participants in the current study experienced a dynamic reformation of occupational identity and competency. Coming to terms with their losses and accepting their condition facilitated motivation to move forward to resume a work role. Re-established work skills and

coping strategies further enhanced self-efficacy and their desire to succeed in a work role. Observations were made of an internal adaptation process amongst participants and their value and meaning of work participation that transcended the materialistic gains. Validations of occupational adaptation were confirmed by the exposure to challenges and successes encountered within their work context. The participants could achieve mastery within their work roles and environmental expectations by means of unique adaptive responses, by measuring their success through meeting the demands of the job, identifying challenging aspects, rectifying and adjusting within their roles and finally receiving external positive feedback on their performance.

6.2 Limitations of the research

- A shortcoming identified was the interview technique of the researcher and her difficulty employing efficient probing skills during semi-structured interviews. Data obtained might have been richer in content if the researcher overcame her shortcomings before commencement of the study. During peer debriefing the researcher obtained valuable input on interviewing techniques from colleagues who were impartial to the study. With practice on improving her interview probing techniques, the researcher started becoming more comfortable during interviews.
- Some of the participants found difficulty expressing them during the interview, which could have been due to the residual effects of their injury. Therefore the researcher resorted to excessive probing and clarification during the interview. In so doing, she might have coerced the participants to respond in a particular manner. The researcher acknowledged the possible benefits in using a translator; however participants mainly presented with expressive aphasia while receptive language was intact. The participants who were Xhosa speaking could understand English; therefore the need for a translator was not a priority, however a translator could have picked up and provided valuable information if the participants were allowed to speak in their mother tongue.
- The researcher has taken three of the participants through the MOOSE, subsequently placed them in work, and is still following up with them every two months. The fact that some participants were so closely involved with the researcher might have impacted on the

researcher's perceptions of the participants' experiences and might have influenced the data collection process.

- During the final stage of the data collection process, the tenth participant withdrew from the study and therefore another participant was selected and needed to be taken through the MOOSE. The timeframe spent with the participant was quite short compared to the other participants, which could have had an impact on the quality of the data that was obtained from this participant because she went through the first two stages quite fast and was placed in work before the start of Stage 3.
- Another limitation was that participants were not all sourced from the medical health institutions and therefore full medical information could not be obtained. The researcher used the collateral data from the interviewee and referral source to clinically infer the degree of the head injury. This might also have impacted on the quality of the data collection.
- Some participants' TBI occurred more than five years ago whereas other participants' injuries were more recent. The discrepancy between the occurrences of injury amongst participants could have impacted on the quality of the data. For future studies the time of occurrence of the injury or disability of participants should be considered as an inclusion criteria to select a set timeframe of injury to encourage consistency.

6.3 Recommendations to improve the MOOSE rehabilitation programme

The study revealed limitations of the rehabilitation programme which hindered the successful return to work for the women with TBI. The following are recommendations on how the programme may be improved.

- Occupational therapists should make use of innovative treatment modalities such as role-play, utilising more visual and audio aids in rehabilitation sessions with TBI clients to accommodate for reading and writing impairments as well as memory shortfalls.
- Occupational therapists should focus on skills training for women that are more sought after

and available in the South African labour market to align their work skills to job requirements. In Coetzee et al (2011:35), the authors recommend that therapists must work closely with placement agencies to get individuals into learnerships and placements to provide them with the above mentioned training.

- To enhance access to the vocational rehabilitation program, advocacy for financial assistance should be strengthened for women with TBI. Therapist should aim to develop a clinical protocol which supports the SASSA guidelines for temporary or permanent disability grant. The protocol should allow for monitoring and evaluation of the rehabilitation process, providing SASSA with an outcome indicator of service as well as occupational participation of clients receiving grants in the rehabilitation program.
- The occupational therapist should also provide support to the women with TBI when they return to work for at least 6-8 months and continue reinforcing strategies such as note-taking for memory, effective communication in the workplace, conflict management as well as addressing social factors that might impact on the clients' work roles.
- The occupational therapist should ensure that some form of support structure is in place for women with TBI once rehabilitation and follow up has concluded, e.g. provide contact numbers of other TBI survivors within support groups, provide a "what to do, where to go" information booklet which can provide information on where to go and assist with health-related concerns, workplace or social-related concerns.
- To enhance communication between different government departments and working towards a holistic multi-dimensional and multi-disciplinary approach to the RTW for women with TBI , a consultation process should be initiated with the relevant stakeholders and role-players across the relevant sectors. Occupational therapists working in the field of vocational rehabilitation should promote the development of a comprehensive framework for health and well-being, a framework which will encourage networking and streamlining interventions and measure outcomes of health, personal activities, societal and work participation as well as environmental factors relevant to the main service objectives of

designated sectors.

- Occupational therapists should strive to enhance an accommodative and conducive work environment for the women with TBI and disability. Employers need to be made aware about the capabilities and potential of women with disabilities to reduce doubts about their work performances. This can be achieved by conducting sensitisation and awareness training sessions within the workplace about disability and related issues. Co-workers often become more accommodating when they are educated on the topic and this breaks down stigma and prejudiced attitudes.
- Women with disabilities should also be educated on their rights within the work environment as well as provided with self-advocacy skills to share their views in the workplace and minimise discrimination and stigmatisation.

6.4 Recommendation for future occupational therapy research

- Future research in vocational rehabilitation programmes should consist of occupational therapists investigating the factors that disrupt or facilitate the ongoing process of adaption of women with TBI, and to report on what the personal and environmental determinants are that facilitate the maintenance of the work role or cause premature retiring from the work role.
- Occupational therapists should explore the accommodative processes and the experiences of workplace integration of women with disabilities in major corporate companies and smaller or local businesses and report on how the related legislative guidelines and statute were applied within the different work contexts.
- Occupational therapists should investigate and report on the use of the MOOSE on women with disabilities during self-directed employment initiatives such as small business enterprises or those working in co-operatives controlled by disabled persons.

REFERENCES

- Abu Habib, L. (1995). Women and disability don't mix: Double discrimination and disabled women's rights. *Gender and Development*, 3(2), 49-53.
- Achtinstein, P. (2005). *Scientific evidence, Philosophical Theories and applications*. Baltimore. The John Hopkins University Press.
- Allen, J., Bruss, J & Damasio, H. (2004), The structure of the human brain. *Journal of American scientist*, 92(2), 246-253.
- Alston, M., Jones, J., & Curtin, M. (2012). Women and traumatic brain injury: "It's not visible damage". *Australian Social Work*, 65(1), 39-53. doi:10.1080/0312407X.2011.594898
- Alves, W, Macciocni, S., & Barth, J. (1993). Post-concussive symptoms after uncomplicated mild head injury. *Journal of head trauma rehabilitation*, 8(3), 48-59.
- Babbie, E. E & Mouton, J, (2001). *The practice of social research: South African Editions*, Cape Town: Oxford University Press.
- Babbie, E. R. (2007). *The practice of social research*. (11th ed.). Cape Town: Oxford University Press.
- Banda, F. (2006). Blazing a trail: The African protocol on women's rights comes into force. *Journal of African Law*, 50(1), 72-84.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Journal of Educational Psychology*, 28(2), 117-148.
- Bell, K. R., & Pepping, M. (2001). Women and Traumatic Brain Injury. *Physical Medicine and Rehabilitation Clinics of North America*, 12(1), 169-182.

- Bounds, T. A., Schopp, L., Johnstone, B., Unger, C., & Goldman, H. (2003). Gender differences in a sample of vocational rehabilitation clients with TBI. *Neurorehabilitation*, 18(3), 189-196.
- Brink, H., Van der Walt, C., & Van Rensburg, G. (2006). *Fundamentals of research methodology for health professionals*. (2nd ed.) Cape Town: Juta and Co.
- Brown, E. C. (2009). Ecological models in occupational therapy. In E. B. Crepeau, E. S. Cohn, & B. A. Schell, *Willard and Spackman's occupational therapy* (11th ed.). Philadelphia: Wolters Klover Lippincott Williams & Wilkins.
- Chamberlain, M., Mosser, V., Ekholm, K., O'Connor, R., Herceg, M., & Ekholm, J. (2009). Vocational Rehabilitation: an educational review. *Journal of Rehabilitation Medicine*, 41(11), 856-869.
- Charlton, J.I. (1998). *Nothing about us without us. Disability, oppression and empowerment*. Berkley,CA: University of California Press.
- Cicerone, K., Levin H., Malec, J., Struss, D., & Whyte, J. (2006). Cognitive rehabilitation interventions for executive function: Moving from bench to bedside in patients with traumatic brain injury: *Journal of Cognitive Neuroscience*, 18(7), 1212-1222.
- Coetzee, Z., Goliath, C., Van Der Westhuizen, R., & Van Niekerk, L., (2011). Re-conceptualizing vocational rehabilitation services towards and inter-sectoral model: *South African Journal of Occupational Therapy*, 41(2).
- Cook, J.A, & Burke, J. (2002). Public policy and employment of people with disabilities: Exploring new paradigms. *Behavioural Sciences and the Law*, 20 (6), 541-557.
- Corring, D., & Cook, J. (2000). Client-centred care means that I am a valued human being. *Canadian Journal of Occupational Therapy*, 67(1), 15-21.

Coovadia, H., Jewkes, R., Barron, P., Sanders, & McIntyre, D. (2009). The health and health system of South Africa: *Historical roots of current public health challenges*, 374, DOI:10.1016/S0140-6736(09)60951-X.

Crepeau, E. B., Cohn, E. S., & Schell, B. A. (2009). *Willard and Spackman's occupational therapy* (11th ed.). Philadelphia: Lippincott Williams & Wilkins.

Creswell, J.W. (2003). *Research design: Qualitative, quantitative and mixed methods approach*. (2nd ed.). London: Sage Publications.

Creswell, J.W. (2007). *Qualitative enquiry and research design: Choosing amongst five approaches* (3rd ed.). Thousand Oaks: Sage Publications.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130.

Crosswasser, Z., Cohen, M., & Keren, O. (1998). Female TBI patients recover better than males. *Brain Injury*, 12(9), 805-808.

Dawson, D. R., Schwartz, M. L., Winocur, G., & Stuss, D. T. (2007). Return to productivity following traumatic brain injury: Cognitive, psychological, physical, spiritual, and environmental correlates. *Disability & Rehabilitation*, 29(4), 301-313. doi:10.1080/09638280600756687

Dawson, D.R. (2011). Occupational therapy: Activities of daily living and community reintegration. In F.S. Zollman, *Manual of Traumatic Brain Injury Management*. New York: Demos Medical Publishing.

De Vos A.S., Strydom, H., Fourie C.B. & Delpont, C S.L. (2011). *Research at Grassroots: For social sciences and human service professions* (4th ed.), Pretoria: Van Schaik.

De Vos, A.S., Strydom, H., Fouche, C. B. & Delpont, C.S.L. (2005). *Research at Grass Roots for the*

Social Science and Human Service Professions (3rd ed.) Pretoria: Van Schaick.

Denzin, N. (2005). *The sage handbook of qualitative research* (3rd ed.) Thousand Oaks: Sage Publications.

Devlin R, & Pothier, D. (2006). Introduction: Toward a critical theory of di-citizenship. In D. Pothier & R. Devlin (Eds), *Critical disability theory: Essays in philosophy, politics, and law* (pp 1-22) Vancouver: UBC Press.

Dickie, V.A. (2003). Establishing worker identity: A study of people in craft work. *American Journal of Occupational Therapy*, 57, 250-261

Dickie, V., Cutchin, M. P., & Humphry, R. (2006). Occupation as a transactional experience: A critique of individualism in occupational science. *Journal of Occupational Science*, 13, 83-93.

Dunn, W., Brown, C. & McGuin, A. (1998). The Ecology of Human Performance: A Framework for considering the effect of context. *The American Journal of Occupational Therapy*, 48(7), 595-607.

Dyck, I. (2000). Working with theory in qualitative research: An example from a study of women with chronic illness (multiple sclerosis). *Using qualitative research: A practical introduction for occupational and physical therapists*, 85-95

Engelbrecht, M.E. & Lorenzo, T. (2010). Exploring the tensions of sustaining economic empowerment of persons with disabilities in the Cape Metropole. *South African Journal of Occupational Therapy*, 40(1), 8-12.

Farace, E., & Alves, W.M. (2000). Do Women fare worse: A Meta-Analysis of gender differences in traumatic brain injury outcome. *Journal of Neurosurgery*, (93), 539-545.

Fleming, J. M., Lucas, S. E., & Lightbody, S. (2006). Using occupation to facilitate self-awareness in

people who have acquired brain injury: A pilot study. *Canadian Journal of Occupational Therapy*, 73(1), 44-55.

Gill, M., Reiley, D., & Green, S. (2004). Intra-reliability of Glasgow coma scale scores in the emergency department. *Journal of emergency medicine*, 43 (2), 215-223.

Gibbs, G. (1998) *Learning by Doing: A Guide to Teaching and Learning Methods* London: Further Education Unit.

Gillworth, G., Eyres, S., Corey, A., Bhakta, B. & Tennant, A. (2007). Working with brain injury: Personal experiences of returning to work following a mild to moderate brain injury. *Journal of rehabilitation medicine*, 40, 334-339.

Gray, J. M. (1998). Putting occupation into practice: Occupation as ends, occupation as means. *American Journal of Occupational Therapy*, 52(5), 354-364.

Grün, C. (2004). Direct and In-direct gender discrimination in the South African labour market. *International Journal of Manpower*, 25 (3/4), 321-342.

Guba E. G., Lincoln Y. S. (2005). Competing paradigms In qualitative research. In Denzin N. K., Lincoln Y. S. (Eds.), *The Sage handbook of qualitative research* (3rd ed), pp. 191–216. Thousand Oaks, CA: Sage

Guest, G., MacQueen, K., & Namey, E. (2012). *Applied Thematic Analysis*. Thousand Oaks: Sage Publications.

Hammel, K.W. (2008). Reflections on well-being and occupational rights: *Canadian Journal of Occupational Therapy*, 75(1).

Health Western Cape. (2013). *Healthcare 2030: Health Western Cape's plan for ensuring equal access to*

quality health care. Western Cape, Cape Town: Department of Health.

Jackson, J.P., & Schkade, J.K., (2001). Occupational Adaptation model versus bio-mechanical-rehabilitation model in the treatment of patients with hip fractures. *American Journal of Occupational Therapy*, 55, 531-537.

Jarbandhan, D. B., & Schutte, D. W. (2006). Using the survey procedure and interview data collection technique. *Journal of Public administration*, 41(3), 669-681.

Kielhofner, G., Forsyth, K., & Barret, L. (2003). The model of human occupation. In E.B. Crepeau, E.S. Cohn & B.A.B. Schell (Eds), *Willard & Spackman's occupational therapy* (10th ed), pp.212-219. Philadelphia: Lippincott Williams & Wilkins.

Kielhofner, G. (2002). *Model of human occupation: Theory and application* (3rd ed.). Baltimore: Lippincott Williams & Wilkins.

Kielhofner, G. (2008). *Model of human occupation: Theory and application* (4th ed.). Baltimore, MD: Lippincott Williams & Wilkins.

Klinger, L. (2005). Occupational Adaptation: Perspectives of People with Traumatic Brain Injury. *Journal of Occupational Science*, 12(1), 9-16.

Konig, A., & Schalock, R. L. (1991). Supported employment: Equal opportunities for severely disabled men and women. *International Labour Review*, 130(1), 21-37.

Krefting, L. (1991). Rigour in Qualitative Research: The Assessment of Trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214-222.

Krüger, L.P. (2011). The impact of Black Economic Empowerment (BEE) on South African businesses: Focusing on ten dimensions of business performance: *Southern African Business*, 15(3), 207-

- LeDoux, J.E. (2003). *Synaptic self: How are brains become who we are*. New York: Penguin Publishing.
- Lombard, L.A. (2011). Characterization of traumatic brain injury severity. In F.S. Zollman, *Manual of Traumatic Brain Injury Management*. New York: Demos Medical Publishing.
- Marumoogae, M. C. (2012). Disability discrimination and the right of disabled persons to access the labour market. *PER: Potchefstroomse Elektroniese Regsblad*, 15(1), 344-365.
- Marshall, M. N. (1996). The key informant technique. *Familiy Practice*, 13, 92-97.
- McColl, M.A., (2003). Introduction: A basis for theory in occupational therapy. In McColl, M.A., Law, M., Steward, L., Doubt, L., Pollock, D., Krupa, T., (Eds), *Theoretical Basis of Occupational Therapy*, pp.1-6. Thorofare, New Jersey: Slack.
- McNamee,S., Walker Cifu.D., Wehman. (2009). Minimizing the effect of TBI-related physical sequelae on vocational return. *Journal of Rehabilitation Research & Development*,46(6),893–908.
- Meriano, C. & Latella, D. (2008). *Occupational therapy interventions: functions and occupations*. New York: Slack.
- Mitra, S., (2008). The recent decline in the unemployment of persons with disabilities in South Africa, 1998-2004, *South African Journal of Economics*, 73(8), 480-49.
- Mukherjee, D., Reis, J.P., & Heller, W. (2003). Women living with traumatic brain injury: Social isolation, emotional functioning and implication for psychotherapy. *Women and Therapy*, 26 (1/2), 3-26.

- Nochi, M. (2000). Constructing self-narratives in coping with traumatic brain injury. *Social Science and Medicine*, 51, 1795-1804.
- O'Rance, L., & Fortune, N. (2007). *Disability in Australia: Acquired brain injury* (Bulletin 55). Canberra: Australian Institute of Health and Welfare (AIHW).
- O'Hara, B. (2004). Twice penalized. *Journal of Disability Policy Studies*, 15(1), 27-34.
- Orb, A., Eisenhauer, L., Wynaden, D. (2000). Ethics in qualitative research. *Journal of research nursing and health*, 14(1), 73-74.
- Palmer, M. (2011) Disability and poverty: a conceptual review. *Journal of Disability Policy Studies*, 21(4), 210-218.
- Powel. T. & Malia, K. (2003). *The brain injury work book: Exercises for cognitive rehabilitation*. United Kingdom: Speechmark Publishing Ltd
- Pansford, J. (2004). *Cognitive and behavioural rehabilitation*. New York: Guilford Press
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed). London: Sage Publications.
- Pierce, D.E. (2003) *Occupation by design: Building therapeutic power*. Philadelphia: FA Davis
- Polatajko H. J., Davis J., Stewart D., Cantin N., Amoroso B., Purdie L. et al. (2007). Specifying the domain of concern: Occupation as core. In E. A. Townsend. & H. J Polatajko (Eds.), *Enabling occupation II: Advancing an occupational therapy vision of health, well-being and justice through occupation* (pp. 13–26). Ottawa, ON: CAOT Publications ACE.
- Robson, C., (2002). *Real world research: A resource for social scientist and practitioner-researchers*, (2nd ed.). Oxford: Wiley Publishing.

- Ross, J. (2007). Theoretical frameworks in vocational rehabilitation. In J Ross (Ed) *Occupational Therapy and Vocational Rehabilitation*, pp.51-75, Chichester: John Wiley and Sons Ltd.
- Ross, J. (2007). *Occupational Therapy and Vocational rehabilitation*. Chichester: John Wiley and Sons Ltd.
- Sandelowski, M. (2000). Focus on research methods: Whatever happened to qualitative description? *Research in Nursing & Health*, 23, 334-340.
- Sarajuuri, J. M., Kaipio, M. L., Koskinen, S. K., Niemelä, M. R., Servo, A. R., & Vilkki, J. S. (2005). Outcome of a comprehensive neurorehabilitation program for patients with traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*, 86(12), 2296-2302.
- Schkade ,J., & Schultz, S. (1992). Occupational adaptation: Toward a holistic approach for contemporary practice, Part1. *The American Journal of Occupational Therapy*, 46,829-837
- Schultz ,S., & Schkade, J.K. (2003). Occupational adaption. In E.B Crepeau, E.S Cohn & B.A.B. Schell (Eds.), *Willard & Spackman's occupational therapy* (10th ed), pp.212-219. Philadelphia: Lippincott Williams & Wilkins.
- Schkade, J. K., & McClung, M. (2001). *Occupational adaptation in practice: Concepts and cases*. Slack Incorporated.
- Schultz, S., 2009. Theory of Occupational Adaptation. In E.B Crepeau,, E.S Cohn & B.A., Schell (Eds.), *Willard's & Spackman's Occupational Therapy*. (11th ed.) Philadelphia: Lippincott Williams & Wilkins.
- Soeker, S. (2004). *I'm going back to work: perceptions and experiences of back rehabilitated clients regarding their worker roles* (Doctoral dissertation, University of the Western Cape).

- Soeker, M.S. (2009). *Occupational Self – efficacy: An Occupational Therapy practice model to facilitate returning to work after a brain injury. PhD Thesis.* Department of sport, recreation and exercise science. Cape Town: The University of the Western Cape.
- Soeker, M. S. (2010). *Occupational Self Efficacy: An occupational therapy practicemodel to facilitate returning to work after brain injury. Ph.D Thesis.* Department of Sport, Recreation and Exercise Science. Cape Town: The University of the Western Cape.
- Soeker, S. (2012). *Occupational Self Efficacy: An occupational therapy practice model to facilitate returning to work after brain injury.* Cape Town: University of The Western Cape.
- Spataro, S. (2005). Diversity in context: How organizational culture shapes reactions to workers with disabilities and others who are demographically different. *Behavioural sciences and the law*, 23, 21-38.
- Stergiou-Kita, M., Moll, S., Walsh, A., & Gewurtz, R. (2010). Health professionals advocacy and return to work: taking up the challenge. *Work: A journal of prevention, assessment and rehabilitation*, 37,217-223
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools.* New York: Falmer Press.
- Thurston, R. (2012). Cognitive rehabilitation for traumatic brain injury. *International Journal of Health, Wellness & Society*, 2(1), 15-20.
- Townsend. E. (2002). *Enabling Occupation: An occupational therapy perspective,* Ottawa: Canadian Association of Occupational Therapists.
- Townsend, E., & Wilcock, A. A. (2004). Occupational justice and Client-Centered Practice: A Dialogue in Progress. *Canadian journal of occupational therapy*, 71(2), 75-87.

- Tsaousides, T., & Gordon, W. A. (2009). Cognitive rehabilitation following traumatic brain injury: Assessment to treatment. *Mount Sinai Journal of Medicine*, 76(2), 173-181.
- Tufford & Newman. (2010). Bracketing in Qualitative Research. *Qualitative Social Work*, 11(1), 80-96: DOI: 10.1177/1473325010368316.
- Unruh, A. M. (2004). Reflections on: "So what do you do?" Occupation and the construction of identity. *Canadian Journal of Occupational Therapy*, 71, 290-295.
- Van Niekerk, L., Coetzee, Z., Engelbrecht, M., Hajwani, Z., Landman, S., Motimele, M., & Terreblanche, S., (2011). Supported Employment: Recommendations for successful implementation in South Africa. *South African Journal of Occupational Therapy*, 41(3), 85-90.
- Watson, R. & Fourie, M. (2004). Occupation and occupational therapy. In R. Watson & L. Swartz (Eds), *Transformation through occupation* (pp.19-31). England: Whurr Publishers Ltd.
- Wehman, P., Kregel, J., Keyser-Marcus, L., Sherron-Tagett, P., Campbell, L., West, M., & Cifu, DX. (2003). Supported employment for persons with traumatic brain injury: A preliminary investigation of long term follow-up cost and programme-efficiency. *American Academy of Physical Medicine and Rehabilitation*, 84, 192-196.
- Weston, J. (2002). Supported employment and people with complex needs: A review of research literature and ongoing research. *Journal of Social Work*, 2(1), 83-104.
- Wilcock, A. (1993). Keynote Paper: Biological and socio-cultural aspects of occupation, health and health promotion. *British Journal of Occupational Therapy*, 56(6), 200-3.
- Wilcock, A. A. (2006). *An occupational perspective of health*. Slack Incorporated.
- Wilcock, A., & Townsend, E. (2000). Occupational terminology interactive dialogue: Occupational justice. *Journal of Occupational Science*, 7(2), 84-86

World Health Organization. (2001). International classification of functioning disability and health (ICF), 1-303. Geneva.

World Federation of Occupational Therapists (WFOT). Position Statement on Human Rights (2006).
<http://www.wfot.org/AboutUs/PositionStatements.aspx>

Yasuda, S., Wehman, P., Cifu, D., & West, M. (2001). Return to work persons with traumatic brain injury. *American Journal of Physical Medicine and Rehabilitation*, 80 (11), 852-864.

Online sources

1. Conceptual Frameworks (Second Edition) by Matumo Ramafikeng, Health Sciences UCT, 2011, https://vula.uct.ac.za/access/content/group/9c29ba04-b1ee-49b9-8c85-9a468b556ce2/Framework_2/lecture2.html. [Accessed: 04/06/15]
2. Employment Equity Act (1998), <http://www.labour.gov.za/DOL/legislation/acts/employment-equity/employment-equity-act> [Accessed: 10/08/15]
3. Integrated National Disability Strategy: White Paper Office of the President, <http://www.independentliving.org/docs5/SANatIDisStrat1.html> [Accessed:9/01/15]
4. Shaheed Soeker (2014). Returning Individuals with Mild to Moderate Brain Injury Back to Work: A Systematic Client Centred Approach, Traumatic Brain Injury, Dr. Farid Sadaka (Ed.), DOI: 10.5772/57309. Available from: <http://www.intechopen.com/books/traumatic-brain-injury/returning-individuals-with-mild-to-moderate-brain-injury-back-to-work-a-systematic-client-centered-approach>. [Accessed: 13/06/15]

Email Addresses:

Tygerberg Hospital Work Assessment Unit Statistics (2012-2013)
Available: on request from Elvin.Williams@westerncape.gov.za



UNIVERSITY *of the*
WESTERN CAPE

APPENDICES

APPENDIX A: RESEARCH INFORMATION SHEET

UNIVERSITY OF THE WESTERN CAPE



Private Bag X 17, Bellville 7535, South Africa

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

E-mail: msoeker@uwc.ac.za

INFORMATION SHEET

Title of Research: Exploring the challenges women with traumatic brain injury experience in their work environment after vocational rehabilitation

What is this study about?

The study intends to explore and describe the experience of women with TBI during and after their vocational rehabilitation and how they subsequently participate in their work context. Furthermore the aim of the study is to explore the challenges that women who sustained TBI experience in the work environment after vocational rehabilitation

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

You can choose whether to be in this study or not. If you volunteer to be in this study you will be requested to participate in individual interviews which will be audio taped ensure all the information is correctly recorded. The interviews will be held at the health institution which is most accessible to you. The interview questions will be focus on your experience during your vocational rehabilitation stages and how you experience participation upon your return to work.

What are the risks of the research?

It is foreseen that the study holds minimal risk to cause physical or psychological harm. If you are asked or something comes up in a conversation that makes you uncomfortable, you can choose not to answer. If you should require the assistance to deal with a sensitive matter, you

will be brought into contact with the relevant individuals.

What are the benefits of the research?

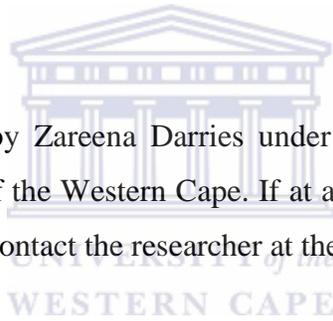
To share information gained on the workplace experience and participation of women with TBI, to assist with related assessment and intervention planning. The results of the study may assist clinicians and rehabilitation professionals with recommendations for further development of vocational programmes and workplace reintegration strategies for women with traumatic brain injury.

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

You are participating in this study voluntarily, and may withdraw your consent at any time and discontinue participation without consequences.

What if I have questions?

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



Researcher: Mrs Zareena Darries
Cell No: 0732026228
E-mail: nazeemdar@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:

Study Coordinator's Name: Dr. Shaheed Soeker

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: (021)959-9339

Cell: 082 7175432

Fax: (021)959-9359

Email: msoeker@uwc.ac.za

APPENDIX B: CONSENT FORM



UNIVERSITY OF THE WESTERN CAPE
Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-959 9339, Fax: 27 21-959 9359
E-mail: msoeker@uwc.ac.za

Consent Form

Title of Research:

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 7175432

Fax: (021)959-9359

Email: msoeker@uwc.ac.za

APPENDIX C: INTERVIEW GUIDE

Question: Can you tell me about your experience during your rehabilitation process, how did you feel about the process and is there anything else that you would like to share about your situation.

Interview probing guide:

- How did you find the rehabilitation experience thus far? What, why, how...
Probing
- From your viewpoint what did you find beneficial or not during your rehabilitation experience. Probe for what, why, when etc ...
- Could you use or apply what you were taught during rehabilitation in your work environment?
- How do you feel about your own work ability.
- Do you think you will be able to apply what you were taught in another work environment other than your existing one?
- Can you describe how the model of occupational self-efficacy assisted you in your return to work process.
- What aspects or stage of the model appealed or was most applicable to your situation.
- Do you feel comfortable in your work environment
- What would you like to see changed in your work environment
- Are there any suggestions you would like to make with regards to the rehabilitation process.

APPENDIX D: DATABASE OF PARTICIPANTS

Names	Age	Education	Marital status	Diagnosis	Employment prior to injury	Tx prior to Rehab	RTW after vocational rehabilitation
Participant 1: JI	22	Grade 9	Single	Moderate TBI	Child minder	None	RTW as packer at Pick and Pay
Participant 2: YG	29	Grade 11	Single	Moderate TBI	Cashier	Support group	RTW as a cleaner at a primary school
Participant 3: LT	33	Tertiary	Single	Mild TBI	Bank teller	Post-traumatic stress intervention	RTW as administration clerk
Participant 4: LB	29	Grade 12 and national diploma	Single	Moderate TBI	Jewelry designer	Speech, occupational therapy and physical therapy	Not employed
Participant 5: NG	37	Grade 10	Separated	Mild TBI	Cleaner	Support group	RTW as a cleaner
Participant 6: GG	33	Grade 10	Single	Mild TBI	Home-based –care	Treatment for substance abuse	RTW as office tea lady
Participant 7: ZM	39	Grade 10	Married	Mild TBI	Team leader For cleaning company	None	RTW as cleaner at learnership

							placement
Participant 8: TT	48	Grade 8	Married	Mild TBI	Nanny	None	Volunteer at crèche
Participant 9: EP	25	Grade 10	Single	Moderate TBI	Assistant nurse	None	RTW as office assistant. Resigned due to transport problems
Participant 10	32	Grade 9	Single	Moderate TBI	Cleaner	None	RTW as general worker at community centre



APPENDIX E: RESEARCH APPROVAL



OFFICE OF THE DEAN DEPARTMENT OF RESEARCH DEVELOPMENT

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:
Mrs Z Darries (Occupational Therapy)

Research Project: Exploring the challenges that women with traumatic brain injury experience in their work environment after vocational rehabilitation.

Registration no: 14/5/29

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*

Private Bag X17, Bellville 7535, South Africa
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E: pjosias@uwc.ac.za
www.uwc.ac.za

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a place to grow, from hope
to action through knowledge

APPENDIX F: RESEARCH PERMISSION



Western Cape
Government

Health

Tygerberg Hospital

REFERENCE: Research Projects

ENQUIRIES: Dr G Marinus

TELEPHONE: 021 938-4141

ETHICS NO: 14/5/29

Exploring the challenges that women with traumatic brain injury experience in their work environment after vocational rehabilitation.

Dear Mrs Z Darries

PERMISSION TO CONDUCT YOUR RESEARCH AT TYGERBERG HOSPITAL

In accordance with the Provincial Research Policy and Tygerberg Hospital Notice No 40/2009, permission is hereby granted for you to conduct the above-mentioned research here at Tygerberg Hospital.

DR D ERASMUS
CHIEF EXECUTIVE OFFICER
Date: 12 August 2014



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