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**EXPLORING OCCUPATIONAL THERAPY WORK INTERVENTION  
PROCEDURES FOR THE PUBLIC HEALTHCARE SECTOR IN  
GAUTENG PROVINCE**

by

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Submitted in fulfilment of the requirements for the degree

**Master of Occupational Therapy (MOccTher)**

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## DECLARATION

Student Number: 16239662

I, July Masango, declare that the study **EXPLORING OCCUPATIONAL THERAPY WORK INTERVENTION PROCEDURES FOR THE PUBLIC HEALTHCARE SECTOR IN GAUTENG PROVINCE** is my own work and that all sources that have been used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted for any other degree at any other institution.



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**Signature**

10 January 2020

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**Date**

## ABSTRACT

Occupational therapists form part of the vocational rehabilitation multidisciplinary team, in returning patients back to work after any form of injury or illness. Among the services that they provide is work intervention procedures, which is comprised of different components that are implemented to rehabilitate patients' work occupation, in order to ensure entry into, and/or return to the open labour market.

The right of South African citizens' opportunity to work is protected by specific legislation. When this right is affected by illness, injury or disability, the National Health Insurance system intervenes and ensures adequate healthcare services that are delivered equitably. The public healthcare services are delivered to over 84% of the South African population, of which a majority is dependent on public healthcare for medical intervention, including rehabilitation from different professions such as occupational therapists. To rehabilitate patients' work occupation, occupational therapists follow different procedures as part of intervention. When researched, however, it was found that when this intervention was executed, it occurred haphazardly.

The aim of the study was to explore the occupational therapy work intervention procedures that should be implemented by occupational therapists in the Gauteng public healthcare sector.

A qualitative, explorative and descriptive research design was used. Data was collected through a workshop, working from an appreciative stance. Purposive sampling was used. Seventeen occupational therapists who practised in vocational rehabilitation and implemented work intervention procedures in the Gauteng public healthcare sector attended the workshop. Data was analysed using the creative hermeneutic data analysis method.

The work intervention procedures for occupational therapists were generated. Client-centredness was identified to be at the heart of work intervention procedures, which entail different components, such as legislation, empowerment, assessment, planning,

prevocational and vocational skills, work visit, job analysis, work hardening and conditioning, placement and follow-up.

Occupational Therapy work intervention procedures for the public healthcare sector in the Gauteng province, were successfully explored and generated. The results showed that although there are procedures that can be followed in work intervention, the implementation process is not linear, and the procedures should be customised to individual patients.

**Keywords:** vocational rehabilitation, work intervention procedures, work, public sector.

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*“Eye has not seen, nor ear heard,  
Nor have entered into the heart of man  
The things which God has prepared for those who love Him.”*

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## LIST OF ABBREVIATIONS

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ABBREVIATION	MEANING
FCE	Functional capacity evaluation
OTASA	Occupational Therapy Association of South Africa
WFOT	World Federation of Occupational Therapists
HPCSA	Health Professions Council of South Africa
PILIR	Policy and Procedures on Incapacity Leave and Ill-health Retirement
AI	Appreciative inquiry
DPSA	Department of Public Service and Administration

# CHAPTER 1

## ORIENTATION TO THE STUDY

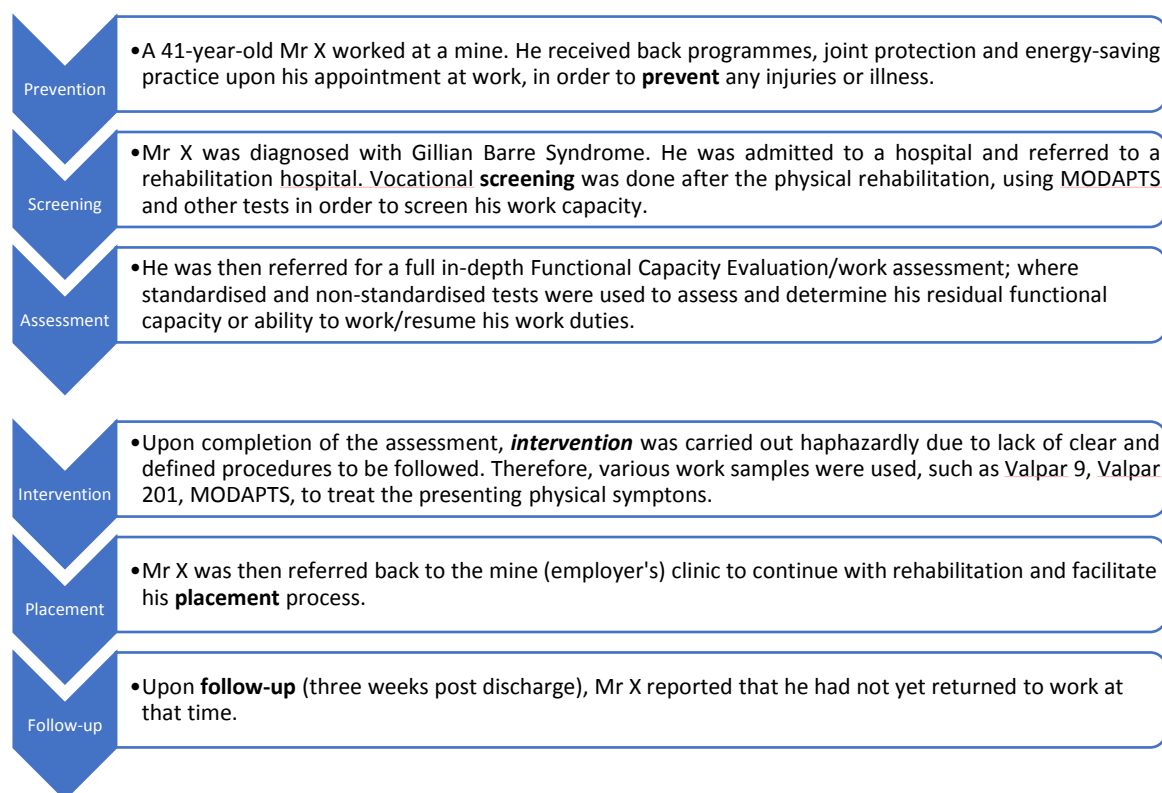
### 1.1 INTRODUCTION

The occupational therapy profession considers human work as a key occupation, as well as an integral part of the treatment process and outcome following rehabilitation.<sup>1</sup> Work is defined as productive activity, paid labour and a place of employment.<sup>2</sup> Occupational therapists use various analysed work-related activities to treat a client's work occupation after any form of injury or illness and facilitate the return to work process.

Buys<sup>3</sup> supports the statement that different terminologies are used in occupational therapy literature when referring to delivery of work-related services to clients. 'Work preparation'<sup>3-5</sup> and 'work rehabilitation'<sup>6-7</sup> were commonly used during the 1980s in occupational therapy literature. In the 1990s the concept vocational rehabilitation emerged, which is the term that is now used when referring to work-related services delivered to clients.<sup>8-10</sup> The World Federation of Occupational Therapists (WFOT), of which South Africa is a member,<sup>3</sup> broadly defines vocational rehabilitation as "*the provision of various services to assist people to enter, re-enter, return and/or remain in work*".<sup>11</sup> In their position statement on vocational rehabilitation, the WFOT acknowledge the occupational therapists as the professionals who have the appropriate expertise to play a significant role in provision of vocational rehabilitation services to clients.<sup>12</sup>

According to van Biljon et al,<sup>13</sup> vocational rehabilitation includes six interlinked phases, which are concurrent with the existing phases practised within Gauteng public healthcare sector. The phases are: 1) Prevention of injury at work, through educative services, 2) Screening, 3) Assessment, 4) Intervention, 5) Placement, and 6) Follow-up. The six interlinked vocational rehabilitation phases were applied through the following case scenario of a patient who was treated at one of the hospitals in the Gauteng public healthcare sector. See Figure 1.1.

In Figure 1.1, the vocational rehabilitation process that is applied and followed by occupational therapists in Gauteng public healthcare sector is described. The example of a fictitious case study depicts the sequential phases, with different vocational rehabilitation services that are rendered, and an identified gap in the intervention phase (work intervention procedures). The work intervention is carried out haphazardly among occupational therapists and there was no sharing of best practises.



**Figure 1.1: Summary of the six vocational rehabilitation phases**

It was evident from the information provided about the patient's treatment described in Figure 1.1, that he was adequately assessed and involved in work intervention procedures (Phase 4). However, as a result of not having defined procedures to facilitate therapy in providing the work intervention services to treat the patient's presenting dysfunction, he was treated haphazardly. This was due to not having documented work intervention procedures for practice.

Buy's<sup>3</sup> further supports the view of the researcher that the occupational therapy vocational rehabilitation services development in South Africa is not well published. To date, 84% of the South African population is accessing public healthcare sector for medical intervention,<sup>14</sup>



which includes rehabilitation from various professions, of which occupational therapy was one. Ill or injured workers or persons who fall within 84% of the population mainly accessed occupational therapy services through public healthcare sector facilities.<sup>15</sup> Among the services that occupational therapists offered to the clients in Gauteng public healthcare sector was vocational rehabilitation, where the main focus was on the human occupation of work.<sup>15</sup>

In her doctoral study conducted through the University of Witwatersrand, completed in 2016, Hester van Biljon embarked on an Action Learning Action Research study with an attempt to transform the vocational rehabilitation services of occupational therapists in the public healthcare sector in Gauteng.<sup>15</sup> Van Biljon's research study yielded significant results that generated vital evidence in this regard. In 2010, a '*Vocational Rehabilitation Task Team*' (VRTT) was established with an intent to metamorphose and resurrect vocational rehabilitation services in the Gauteng Province.<sup>15</sup> The VRTT comprised occupational therapists who work in the public and private healthcare sector, as well as academics from various higher education institutions in Gauteng Province. The members had expertise in vocational rehabilitation, shared the same professional interests and were concerned about the execution of all the vocational rehabilitation phases, including work intervention procedures, in the Gauteng public healthcare sector.

In 2013, the VRTT in collaboration with van Biljon joined forces in resuscitating the Gauteng public healthcare sector's vocational rehabilitation services.<sup>15</sup> It was through this process that awareness of vocational rehabilitation services was created. The rejuvenation of various vocational rehabilitation processes occurred and the services of vocational rehabilitation were re-introduced in most parts of Gauteng public healthcare sector institutions, except for work intervention procedures. Despite these developments, van Biljon asserted that "*there is still a lot of work to be done to achieve successful and sustainable vocational rehabilitation services in Gauteng's public healthcare sector*".<sup>15</sup> Van Biljon acknowledged her transformative efforts through a PhD study as "*a small contribution to a large and multi-faceted problem*".<sup>15</sup>

A haphazard implementation of the vocational rehabilitation phases such as intervention transpired, due to lack of consensus on the procedures to follow and poor sharing of best practices among therapists. Embarking on this research about the work intervention procedures yielded valuable evidence on procedures that are followed by occupational therapists to ensure adequate service delivery. The focus of the study was on exploring the intervention strategies that occupational therapists use as part of vocational rehabilitation to

develop a common procedure that occupational therapists could use in practice, to prepare clients for successful return to work, in Gauteng public healthcare sector.

## 1.2 BACKGROUND TO THE STUDY

The VRTT meeting (2013) discussions and minutes showed that clients who were not fully rehabilitated ended up being unemployed and found it difficult to compete in the open labour market, which added to the unemployment rate in South Africa. Unemployment rate in South Africa was noted to be at 26.7% in the third quarter of 2017,<sup>16</sup> which was found to be similar compared to the previous two quarters and remained the highest rate in the previous 13 years.<sup>16</sup> In South Africa, a developing country, “4.3% of the population is disabled”.<sup>17</sup> Considering the high unemployment rate, people with various forms of disabilities found it more difficult to find, compete for, and secure suitable employment in the open labour market due to lack of skills and training. Most of the time, people with disabilities were not fairly accepted within the society as individuals who were capable of performing tasks efficiently.<sup>17</sup>

Gauteng is one of the nine provinces in South Africa. Gauteng is the smallest province,<sup>14</sup> which comprises the largest share of the South African population.<sup>14</sup> According to Stats SA,<sup>16</sup> roughly 14.3 million people (25.3%) lived in this province for various reasons such as employment opportunities and furthering careers. In view of the increased population size in Gauteng, it was clear that there was a high demand for medical intervention required from various professions, including occupational therapy services, within Gauteng public healthcare sector.<sup>14,18</sup> Occupational therapists in the public healthcare sector work with injured and disabled people to help them enter into and/or re-enter the open labour market.

The Gauteng VRTT together with van Biljon,<sup>15</sup> embarked on research with an attempt to further develop and implement the components of vocational rehabilitation and define the steps involved in conducting these services. The VRTT developed referral systems for clients to various vocational rehabilitation units and a work ability screening tool and assessment forms. Occupational therapists working in public healthcare sector are involved in skills training workshops on assessment of clients' work capacity and use of various standardised and non-standardised tests. Report-writing templates were developed with adequate mentorship systems to provide support to the junior occupational therapists in Gauteng public healthcare sector.

However, among other things that still needed to be explored and well-established were the work intervention procedures that occupational therapists practising vocational rehabilitation used in rehabilitating their clients' work occupation. The researcher had the privilege of mentoring some occupational therapists in the Gauteng public healthcare sector and worked closely with various experts in the field of vocational rehabilitation. It was observed that there were no clear procedures to guide and inform the work intervention procedures and programme.

The purpose of this study was to explore the procedures of the existing work intervention that was used by occupational therapists in the public healthcare sector in Gauteng and collaboratively design ideal work intervention procedures. These procedures may then be executed to better the current services, which may lead to successful rehabilitation of clients' work occupation and ensure their return to work. As a result of this, the unemployment of people with disabilities in Gauteng may be indirectly addressed, as many clients would be adequately rehabilitated by fully engaging them in structured and well-established work intervention programmes.

### **1.3 PROBLEM STATEMENT**

The South African Constitution<sup>19</sup> and the Labour Relations Act<sup>20</sup> protect the rights of citizens to equal opportunity to work. When illness, injury or disability affects the ability to work, the National Health Insurance system<sup>21</sup> reinstates this constitutional right by ensuring all citizens have access to quality healthcare services that are delivered equitably and appropriately, based on social solidarity and progressive universalism as a public good and a social investment.

Occupational therapists form part of the healthcare professionals who assess, treat and rehabilitate most of the 84% of the South African population that is dependent on public healthcare sector for medical intervention.<sup>14</sup> Work intervention is one of the treatment components of vocational rehabilitation that is offered by occupational therapists in rehabilitating clients' work occupation. The Gauteng VRTT meeting (2013) discussions and minutes showed uncertainties with regard to the work intervention procedures that should be followed to guide therapy in rehabilitating clients' work occupation, owing to not having well-established and defined work intervention guidelines with set procedures.

When work intervention was implemented by occupational therapists within the Gauteng public healthcare sector, it occurred haphazardly, with few clients returned to open labour market. Furthermore, there was inadequate sharing of the best practices among occupational therapists. The outcome of the vocational rehabilitation process was seldom achieved, leading to disabled clients staying at home unemployed, which contributed to the 26.7% unemployment rate<sup>22</sup> in South Africa. There were no clear work intervention procedures that could be followed by occupational therapists practising vocational rehabilitation in Gauteng province, in the public healthcare sector.

#### **1.4 CONTEXT**

In Gauteng's public healthcare sector, work intervention is implemented by occupational therapists. It forms part of the vocational rehabilitation process and it is inherently implemented following work evaluation (screening and assessment). However, due to lack of standardisation and sharing of best practices, occupational therapists tend to use different procedures in their current practices. The work intervention procedures are done in order to prepare the clients for return to work, to enter and/or re-enter the open labour market, following injuries or any form of illness.

#### **1.5 RESEARCH QUESTION**

What occupational therapy work intervention procedures should be implemented by occupational therapists in the Gauteng public healthcare sector?

#### **1.6 AIM AND OBJECTIVES**

The aim of the study was to explore the occupational therapy work intervention procedures that should be implemented by occupational therapists in the Gauteng public healthcare sector. In order to address this aim, the objectives were to:

- Explore the current work intervention procedures implemented by occupational therapists; and
- Explore the ideal work intervention procedures that should be implemented by occupational therapists

## **1.7 DELINEATION**

To ensure adequate demarcations, this research focused on the views of the occupational therapists working in, and/or who have worked in, Gauteng province public healthcare sector, and have implemented the work intervention procedures. Therefore, the views expressed by the participants are based on the reality that is experienced in the Gauteng public healthcare sector and not in the other eight provinces of South Africa.

The researcher focused on the vocational rehabilitation field of occupational therapy. It is noted that vocational rehabilitation services are generally offered in a multidisciplinary team approach, however this study is limited only to the perspectives and field of occupational therapy. Based on the researcher's experience, vocational rehabilitation was used as per the current definition, and it is described as per the occupational therapy practice framework and context.

## **1.8 SIGNIFICANCE OF STUDY**

The vocational rehabilitation services in Gauteng public healthcare sector have been transformed among the occupational therapists, as the evaluation phase is well established with adequate screening and assessments conducted at all levels of care. The evaluation protocols are published and occupational therapists voiced confidence in carrying out work evaluations. However, the work intervention remained a concern and there was less sharing of best practices among occupational therapists.

Therefore, the process of this research study facilitated a process of sharing best practices and collaboratively designing ideal work intervention procedures for clients. This collaborative effort will benefit the occupational therapists by providing guidelines and components to consider and implement when treating their clients' work occupation. The research findings will ensure effective treatment of the work occupation with specific content and procedures to use. Occupational therapists will benefit from this study as it may yield easy to follow and clear procedures that they may adopt and implement in their various vocational rehabilitation practices.

The use of researched work intervention procedures will lead to implementation of evidence-based intervention, which will ensure good quality of output and improvement of clients. When

ill and injured clients' ability (body function and body structures) to work is successfully rehabilitated through proper, easy to follow and step-by-step work intervention procedures, there will be more disabled people who will be returned to, and employed in, the open labour market, which may decrease the unemployment rate in Gauteng Province, and South Africa at large.

Furthermore, the research findings of this study may contribute to the development and generation of the body of knowledge in the field of occupational therapy, and stimulate further research and ensure sharing of best practices.

## 1.9 CONCEPT CLARIFICATION

In the context of this research, and for simplicity and consistency throughout this dissertation, the following key concepts were defined:

- **Occupational therapy** *“is a client-centred health profession concerned with promoting health and well-being through occupation. The primary goal of occupational therapy is to enable people to participate in the activities of everyday life. Occupational therapists attain this outcome by working with people and communities to improve their ability to engage in the occupations they want to, need to, or are expected to perform, or by modifying the occupation or the environment to better support their occupational engagement”*.<sup>23</sup>
- **Public healthcare sector** *“is one of the two healthcare sectors in South Africa (private and public).<sup>15</sup> “Government funds all public healthcare services with tax money and private healthcare is funded by private citizens from a variety of sources such as medical aids, insurance funds or out-of-pocket”*.<sup>15</sup>
- **Vocational rehabilitation** refers to *“the provision of various services to assist people to enter, re-enter, return and/or remain in work”*.<sup>11</sup> For the purpose of this study, vocational rehabilitation is a process that consists of six interlinked phases (Prevention of injury at work through educative services, Screening, Assessment, Intervention, Placement and Follow-up) that are implemented in the Gauteng public healthcare sector by occupational therapists<sup>13</sup>.
- **Work intervention procedures** *“refers to programmes and activities that are aimed at correcting or compensating for ability to work deficits”*.<sup>24-25</sup> For the purposes of this study, work intervention refers specifically to the fourth phase ‘Intervention’ of the vocational rehabilitation process, see Figure 1.1.

- **Work refers to paid labour; or a place of employment”.**<sup>2</sup>

## 1.10 PARADIGM AND PHILOSOPHICAL ASSUMPTIONS

The researcher adopted and assumed an interpretive paradigm as this was relevant and consistent with the research question at hand. It focused on the internal reality of work intervention procedures that are implemented by occupational therapists in Gauteng public healthcare sector. This was considered as a subjective experience and, through interaction, invaluable insights and best practices were unearthed. In this inquiry, the researcher worked from an appreciative stance, supported by Appreciative Inquiry (AI).<sup>26</sup>

The ontological, epistemological and methodological assumptions are provided in Sections 1.10.1 to 1.10.3.

### 1.10.1 Ontological assumptions

The ontological assumptions for the study were adopted and applied, as described by Hammond.<sup>26</sup>

- *“In every organisation or group, something works”.*<sup>26</sup> In Gauteng public healthcare sector, there were already work intervention procedures that worked, however these could be improved and become better. Therefore, this study sought to dwell on existing strengths to maximise the potential.
- *“What we focus on becomes our reality”.*<sup>26</sup> Since the problem of not having clear work intervention procedures existed, the focus was shifted from focusing on problems to focusing on the strengths and collaboratively sharing and designing suitable procedures.
- *“Reality is created in the moment, and there are multiple realities”.*<sup>26</sup> Although there were work intervention procedures implemented in the past, occupational therapists were encouraged to focus on the current practice and what is happening at the moment.
- *“The art of asking questions of an organisation or group influences the group in some way”.*<sup>26</sup> The research questions were structured in a manner that elicited and caused participants to look within themselves and their practices for answers, and made them realise that they are the change that they need in the occupational therapy context.

- *“People have more confidence and comfort to journey to the future (the unknown) when they carry forward parts of the past (the known)”*.<sup>26</sup> The participants were encouraged to reflect on their best practices regarding what they have done well and were currently doing in work intervention. The good things were appreciated and harnessed to grow and positively move the human system forward.
- *“It is important to value differences”*.<sup>26</sup> The diversity of participants was ensured by inviting occupational therapists who had different background and years of experience in work intervention, to ensure multiple strengths and resources.
- *“The language we use creates our reality”*.<sup>26</sup> Since everything tangible was born out of an idea first and brought forth into reality through words in the form of a language, rich questioning was used to seed the minds of the participants and guide the discussions on work intervention.

### **1.10.2 Epistemological assumptions**

The researcher positively appreciated and harnessed the existing practice of the work intervention procedures of vocational rehabilitation, from a positive stance.<sup>27</sup> The good that occupational therapists were doing was acknowledged as a way of facilitating change, which commenced when the initial question was asked,<sup>28</sup> and further elicited new ideas. In this study, the process was facilitated by asking exact questions relating to the strengths and achievements of the work intervention procedures with an aim of exploring and generating an improved plan for specific procedures of a programme [work intervention].<sup>29</sup>

### **1.10.3 Methodological assumptions**

A qualitative explorative research design was employed. Occupational therapists, including clinicians from both the public and private healthcare sectors and academia working in Gauteng Province were invited to participate in an interactive work intervention procedure workshop. The participants were actively part of the data collection and data analysis.

## **1.11 RESEARCH DESIGN AND METHODS**

A qualitative research design, working from an appreciative stance, was used. A summary of the research methods used is provided in Table 1.1.



**Table 1.1: Summary of the research methods**

<b>Population</b>	<b>Sampling</b>	<b>Sample size</b>	<b>Data collection</b>	<b>Data analysis</b>
Occupational therapists working in vocational rehabilitation, have worked in public sector and/or academia who have had experience in work intervention procedures.	Purposive sampling – occupational therapists who have practiced vocational rehabilitation and implemented work intervention procedures.	Out of the 50 invited occupational therapists, 17 voluntarily participated in the workshop.	Data was collected through a workshop, representing a focus group, from an appreciative inquiry stance.	The data was analysed by using the creative hermeneutic data analysis method as described by Boomer and McCormack.

An in-depth discussion on the research design and methods used to address the aim of the study is provided in Chapter 3.

## 1.12 ETHICAL CONSIDERATIONS

The ethical approval (with ethics number: 62/2019) to conduct the study was requested and granted by the Faculty of Health Science; University of Pretoria (see Annexure A). Ethics refers to the responsibility that the researcher has towards the research participants and research process.<sup>30</sup> When human beings are involved in a research and used as participants, care should be taken to ensure that their rights are protected during data collection at all times.<sup>30</sup> The following ethical principles were applied to prevent ethical violation.

### **1.12.1 Informed consent and autonomy**

The participants were provided with informed consent forms (see Annexure B) and the study procedure was explained to them. Participants arrived on time for the workshop, this allowed the researcher to introduce the study and brief everyone about the workshop. Participants were not coerced into participating and were informed that they may withdraw their participation at any point during the workshop.

### **1.12.2 Beneficence and non-beneficence**

The researcher had an ethical obligation to ensure that the benefits of this research study were maximised and any form of harm was minimised.<sup>31</sup> This was ensured by involving trained and competent facilitators, (an expert in appreciative inquiry and an expert in vocational rehabilitation) to carry out and facilitate the workshop during data collection. Although some participants were coming from Johannesburg and other parts of Gauteng province, to attend the workshop at University of Pretoria, this may have caused some discomfort and inconveniences. However, all participants voluntarily participated and valued their contribution made in the study.

### **1.12.3 Respect for persons**

The research participants comprised qualified occupational therapists who had the capacity to deliberate about their choices. The participants were treated with respect and permitted to exercise self-determination. No personal information was asked from the participants regarding their health, specific employment details, or clinical records of their clients (see Annexure B and C).

### **1.12.4 Distributive justice**

The ethical principle of justice refers to the right to privacy and the right to fair treatment during data collection.<sup>30</sup> Although the participants were recruited through a purposive sampling methods, their expressions and voices were recorded in an anonymous approach. Participants were free to express their thoughts and views on the work intervention procedures that they are using in practice and were also free to participate in compilation of the ideal work

intervention procedures that should be implemented. Therefore, all the participants' views were treated fairly by recording and transcribing all their voices.

### 1.13 LAYOUT OF CHAPTERS

This study consists of five chapters, the title and description of each chapter is briefly described in Table 1.2.

**Table 1.2 Outline of the chapters**

Chapter	Chapter title	Chapter description
Chapter 1	Orientation to the study	This chapter orientates the reader to the entire study. It provides a brief description of the problem, aims and objectives of the study and ethical considerations adhere to during the study.
Chapter 2	Literature review	Chapter 2 presents an in-depth literature review that was used by the researcher to develop the theoretical underpinning for the study.
Chapter 3	Research design and methods	Chapter 3 discusses the research methodology and design used, including the population, data collection and analysis, rigour and trustworthiness principles adhered to during the study.
Chapter 4	Research findings and discussion	Chapter 4 discusses the research findings, analysed data and discusses the findings with reference to the literature reviewed that supports discussions.
Chapter 5	Conclusions, implications for practice, recommendations and limitations	Chapter 5 concludes the study, by presenting implications for practice, recommendations to management, education and future research are

Chapter	Chapter title	Chapter description
		discussed in addition to limitations that were encountered during the study.

#### 1.14 SUMMARY

In Chapter 1 an overview of the study was provided, focusing on the background to the problem, problem statement, research question, aim and objectives, defining the core concepts, paradigm and related assumptions, summary of the research design and methodology used as well as the ethical considerations. Chapter 2 provides an in-depth discussion on current literature related to the topic of the study.

## CHAPTER 2

### LITERATURE REVIEW

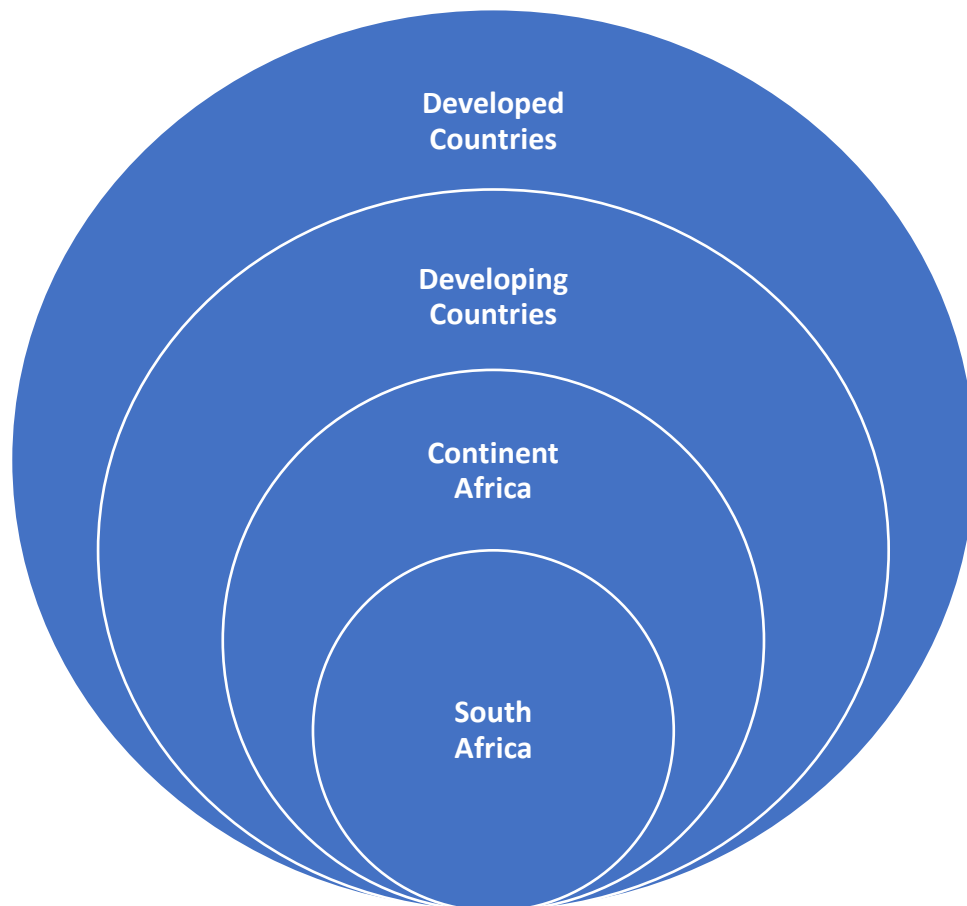
#### 2.1 INTRODUCTION

Chapter 1 focused on providing an orientation to the study, including describing the core problem, rationale and significance as well as indicating the research methodology used to address the research question. This chapter explores and deliberates on the literature that was reviewed for the study.

#### 2.2 RATIONALE FOR LITERATURE REVIEW

According to Burns and Groove,<sup>32</sup> a literature review refers to an organised, written presentation of what has been published on a topic.<sup>31</sup> The purpose of the literature review is to communicate to the reader what is currently known about the topic of interest, to report on knowledge and ideas that have been established on a particular topic, including its strengths and weaknesses.<sup>33</sup> It demonstrates the researcher's knowledge of the subject area and positions the research project within the body of literature and thereby provides perspective for the reader.<sup>34</sup>

In light of the above, the researcher embarked on a literature review process with an intent to understand the relationship between various contributions that have been made concerning the topic under study, determine gaps and unanswered questions and ensure that there was an adequate theoretical and historical base in the body of knowledge. Additionally, the researcher also wished to determine how he can fill a gap in the scholarly literature and contribute meaningfully to the body of knowledge.



**Figure 2.1: Sequential approach undertaken to review literature**

The researcher undertook a sequential approach to reviewing the literature, as depicted in Figure 2.1. This was to compare and distinguish between what has been done from what needs to be done on the topic studied, as well as to provide adequate context for the study. In order to understand the structure of the research subject, the literature review covered the work definition and philosophy of occupational therapy, the role of occupational therapy in work intervention, development of work intervention strategies, history of occupational therapy, work intervention procedures, principles, vocational rehabilitation and the legislation in vocational rehabilitation.

Different methods and search engines, such as dissertations, yearbooks and specific publications, bibliographies, PubMed, and Google Scholar, were consulted in reviewing literature. Due to limited scientific journals and/or publications in the researched topic, the researcher also relied on the grey literature for more information regarding the existing base of evidence on vocational rehabilitation and work intervention procedures.

## 2.3 WORK

The South African Constitution<sup>19</sup> and its legislations such as the Labour Relations Act<sup>20</sup> provides and protects the rights of all citizens to equal opportunity to work in the open labour market. When illness, injury or disability affects the ability to work, the National Health Insurance system<sup>21</sup> restores this constitutional right by ensuring that all citizens have access to quality healthcare services. With this in mind, occupational therapists contribute to reinstating the citizens' constitutional right of working following any form of injury or disability, by involving them in work intervention programmes with an attempt to ensure successful return to work and/or entry into the open labour market.

### 2.3.1 Definition

Work can be viewed as a place of employment, where the worker works or performs his/her work duties under a certain contractual agreement that involves specific work-related tasks or set of occupations.<sup>35</sup> *“Work can be viewed as a skill and performance in participating in socially purposeful and productive activities”*.<sup>35</sup> Work is also defined as a productive activity, paid labour and a place of employment where someone can be employed.<sup>2</sup>

Crepeau et al define occupation as *“the day-to-day activities that enable people to sustain themselves, to contribute to the life of their family, and to participate in the broader society”*.<sup>36</sup> Work is one of the occupations that people actively participate in, for the purposes of earning a salary to be able to provide for their families. It is also a means by which people attach a sense of meaning and purpose to their lives.<sup>37</sup>

### 2.3.2 Work Philosophy

In the context of occupational therapy, work is one of the occupations that people engage in, as occupational beings.<sup>38</sup> *“By means of occupations, people could be trained and adjusted to gainful employment [the philosophy of which was] to give that sort [of activity] which will be preliminary to and dovetailed with the real vocational education which is able to go farther along”*.<sup>39</sup> Cromwell asserted that the occupational therapy profession belief was to ensure adequate productivity, to prevent breakdown of skills, habits and attitudes.<sup>40</sup> This is still the core belief and philosophy of the profession to date in various fields of practice, including vocational rehabilitation.

*“Work is at the heart of the philosophy and practice of occupational therapy. In its broadest sense, work as a productive activity, is the concern in almost all therapy”*.<sup>1</sup> A work-related intervention programme in occupational therapy is a key intervention strategy in work occupation, as well as an integral part of the treatment process and outcome following injury, illness and/or disability, and as part of rehabilitation.<sup>41</sup>

## 2.4 VOCATIONAL REHABILITATION

Escorpizo and colleagues defined vocational rehabilitation as *“a multi-professional evidence-based approach that is provided in different settings, services, and activities to working age individuals with health-related impairments, limitations, or restrictions with work functioning, and whose primary aim is to optimize work participation”*.<sup>42</sup> Vocational rehabilitation entails different components and stages that are followed by occupational therapists such as referral, assessment, work visit, planning, intervention, placement, follow-up, and discharge.<sup>37,43</sup>

The World Federation of Occupational Therapists (WFOT), of which South Africa is a member, views vocational as *“the provision of various services that seek to assist people to enter, re-enter, return and/or remain in work”*.<sup>44</sup> It is through the vocational rehabilitation process that people who have been disadvantaged and affected by any form of illness or disability can be empowered to access, maintain or return to employment, or other useful occupation.<sup>45</sup> Activities that are used by occupational therapists in providing vocational services include vocational guidance, and vocational training.<sup>46</sup>

According to the WFOT, work intervention, adjustment and rehabilitation form part of vocational rehabilitation.<sup>44</sup> Buys<sup>3</sup> indicated that various terms are used in the literature when referring to delivery of work-related services to clients. ‘Work preparation’<sup>3-4,47-48</sup> and ‘work rehabilitation’<sup>6-7</sup> were commonly used terminologies during the 1980s in occupational therapy literature. In the 1990s the concept ‘vocational rehabilitation’ emerged. This is the term which is currently used when referring to work-related services delivered by occupational therapists to their clients.<sup>8-9,49</sup> The various terms that were used in different eras emerged from practice and evolved with the growth of the occupational therapy profession.

Therefore, despite the terminologies that were used at different stages of the development of vocational rehabilitation services, the core purpose remained the same, which is to enable ill or injured workers to return to work or enter the open labour market.



## 2.5 OCCUPATIONAL THERAPY

According to the Health Professions Council of South Africa (HPCSA), Occupational Therapy is one of the professions in Health Sciences.<sup>50</sup> In the South African context, occupational therapy forms part of the Occupational Therapy, Medical Orthotics, Prosthetics and Arts Therapy Board, within HPCSA.<sup>51</sup>

### 2.5.1 Definition

Occupational therapy is defined as “a *Client-centered health profession concerned with promoting health and wellbeing through occupation. The primary goal of occupational therapy is to enable people to participate in their activities of everyday life. Occupational therapists attain this outcome by working with people and communities to improve their abilities to engage in the occupations they want to, need to or are expected to perform, or by modifying the occupation or environment to better support their occupational engagement*”.<sup>35</sup>

### 2.5.2 Role

In their position statement on vocational rehabilitation, the World Federation of Occupational Therapists acknowledge occupational therapists as the professionals who have fitting expertise to play a significant role in provision of vocational rehabilitation services to clients presenting with different kinds of illness and disability.<sup>12</sup> Occupational therapists make use of various assessment and treatment modalities to assist their clients to develop, recover, or maintain the daily living and work skills.<sup>38</sup> The clients may be presenting with various physical, mental, or cognitive disorders.<sup>52</sup> Work intervention procedures are among the treatment modalities that are employed by occupational therapists, as part of their role and scope of practice.<sup>23</sup>

## 2.6 WORK INTERVENTION PROCEDURES

Literature reveals that during the World War I era, occupational therapy was linked to vocational rehabilitation through legislation in response to war-generated needs and social change.<sup>35</sup> Soldiers were the first group of individuals to receive and benefit from vocational education and rehabilitation, then the civilians.<sup>35</sup> This was further expanded and explored in World War II, when medical services became more accessible and available.<sup>35</sup> During these

eras, emphasis was placed on the individuals who had potential to be returned to work or their premorbid place of employment as soon as possible.<sup>35</sup>

Amongst the first fields of the occupational therapy profession which were founded in the early decades, around 1910 to 1920, were work-related programmes.<sup>53</sup> It was inspired by the urgent need of disabled Great War soldiers to return to work.<sup>53</sup> In the history of the occupational therapy profession, it is noted that vocational rehabilitation services, including work intervention programmes, emerged, developed and unfolded in sequential stages over the years. The Canadian Military Hospitals Commission established schools specifically for vocational (work) training. In 1920, the Vocational Rehabilitation Act (Smith-Fess Act, Public Law 66-236) was passed.<sup>53</sup> This landmark legislation defined rehabilitation as “*return to remunerative employment*”.<sup>41</sup>

### 2.6.1 History

Work-related activities were essentially utilised in the early 1930s.<sup>41</sup> The work-related activities were mainly aimed at injured industrial workers and soldiers, to ensure that through active engagement in various work intervention programmes, they were adequately returned back to work. Similar trends were noted in New York City, Europe and many parts of Canada,<sup>41</sup> where there was also a need to retrain and re-educate disabled people, through the use of work-related activities and programmes.<sup>41</sup>

In 1938, the occupational therapy workshop of the Canadian Workmen’s Compensation Board was established, with an intention to cut costs of compensation for the injured workmen.<sup>41</sup> In this workshop, as treatment, patients were actively involved in various concentrated programmes that were related to their former or premorbid jobs.<sup>40</sup> Therefore, every patient’s inherent job requirements would be carefully considered, analysed and used to structure activities of the work intervention programme in the workshop. Amongst the activities or tasks that patients were involved in were: “*building of brick walls, painting buildings, laying of railroad ties, and repairing plumbing*”.<sup>40</sup> Therefore, these kinds of activities were considered as part of the procedures of the work intervention programme.

### 2.6.2 Further developments

West asserted that the occupational therapy profession grew exponentially during World War II, due to the urgency and need of work-related programmes and the importance of the occupational therapist's role in work adjustments for the injured soldiers.<sup>53</sup> In 1943, there were amendments, adjustments and the passage of the Vocational Rehabilitation Act of 1943.<sup>37</sup> This Act served as a significant landmark as injured and disabled people or workers were deemed eligible for rehabilitation services.<sup>53</sup> Therefore, injured workers could be actively engaged in structured meaningful work intervention programmes to ensure that they were successfully and adequately returned to their previous work.

Despite the tremendous growth and developments that were shown to have taken place, West stated that the increased need of occupational therapy services, particularly work-related intervention, resulted in heavy case load, poor training of professional personnel and high cost of facilities.<sup>53</sup> Although the work intervention services were in demand, there seemed to be some uncertainties with regard to the components of the work intervention programmes, hence the need for more training of professional personnel. Cromwell further asserted that *“occupational therapists were looking for more scientific approaches and beginning to reject ‘occupation’ alone as the main mode of treatment”*.<sup>40</sup> It was during this period that occupational therapists sided and chose more often to be identified with the medical model rather than with a social or purely vocational model.<sup>40</sup>

A rapid rise in the need of vocational rehabilitation and work intervention programmes in many military and veteran's hospitals was noted after the 1940s.<sup>53</sup> During this period, occupational therapists utilised activities as part of their work programmes and gradually incorporated adaptive tools and devices for patients who were presenting with various orthopaedic and neurologic injuries.<sup>40</sup> It was during this era that insurance companies such as Liberty Mutual began to implement work rehabilitation workshops in Boston and Chicago,<sup>41</sup> with an intent to provide rehabilitation services to disabled workers in order to return them to their jobs as quickly as possible.

### 2.6.3 Components

According to Wegg et al, there was a tremendous increased interest in vocational rehabilitation between 1957 and 1961.<sup>54</sup> Components of the prevocational programming, and aims of the

work-related programmes for physically disabled populations, entailed work habits, work tolerance, and coordination, productivity and speed.<sup>41</sup> In these programmes “*clients were exposed to activities such as clerical and sales tasks, upholstery refinishing, power press operation, industrial leather manufacturing and assembly and packaging tasks*”.<sup>55</sup>

The tasks that were utilised in these programmes were carefully selected, according to the client’s work history and interests. Clients were involved in these vocational rehabilitation programmes for an average of two weeks to six months depending on the level of improvement of each individual client.<sup>55</sup> Cromwell asserted, in her 1962 presentation at the Third International Congress of the World Federation of Occupational Therapists regarding the profession’s commitment, that “*work adjustment is and has always been a function of occupational therapy*”.<sup>56</sup>

## **2.7 DEVELOPED COUNTRIES**

An overview of work intervention procedures in developed countries, focusing on United States of America, Denmark, Australia and Netherlands, is provided in Sections 2.7.1 to 2.7.4.

### **2.7.1 United States of America**

An intensive work-orientated treatment programme was established at the May T Morrison Centre, in San Francisco, by Carlotta Welles and Signe Brunnstrom, with an intent to cater for and serve people with various kinds of physical and psychological illnesses.<sup>40</sup> To ensure effective intervention and adequate return to work, more adjustments and amendments were made on the Vocational Rehabilitation Act during 1954.<sup>41</sup> As a result of the amendments to the Act, there were more prevocational units within rehabilitation facilities that were established to ensure effective provision of work intervention programmes.<sup>41</sup> Occupational therapists actively assumed major roles during the development and formation of principles that were implemented in the work intervention programmes.<sup>41</sup>

It was around this time that the Department of Physical and Rehabilitation Medicine at New York University Medical Centre established the largest prevocational exploration unit at the time.<sup>57</sup> The scope of occupational therapy practice, training and education related to vocational rehabilitation, was reviewed and reassessed by the American Occupational Therapy

Association in 1955.<sup>53</sup> This included reassessment of “*concepts, purposes, methods, values and rationale of prevocational programming as well as prevocational techniques and media*”.<sup>58</sup>

### 2.7.2 Denmark

In Denmark, a developed country, work intervention procedures and programmes are implemented by occupational therapists and they are referred to as the ‘vocational rehabilitation interventions’.<sup>59</sup> According to Sinclair et al,<sup>60</sup> there is a gap, a lack of standardised evidence-based vocational rehabilitation programmes that are tailored for and are targeting various patients with specific health conditions or injuries,<sup>60</sup> for example those that suffered acquired brain injuries.<sup>60</sup> This has inspired further research and urgent need for tailored vocational rehabilitation interventions that can be adjusted to each patient’s condition, in order to enhance effective return to work.<sup>59</sup>

In their research study on a manual-based vocational rehabilitation programme, Hoeffding described three phases in their manual-based vocational intervention. These phases include an initial assessment phase, the vocational rehabilitation programme phase and post-trial evaluation phase.<sup>59</sup> The vocational rehabilitation programme lasted for a period of six to nine months, and consisted of six individually planned modules (three months) followed by a work placement programme (approximately three to six months).<sup>59</sup>

According to Hoeffding, the components of the six modules of the vocational rehabilitation programme are grouped into:

1. *“Individual therapies, which entails:*
  - *Neuropsychological sessions (10 hours);*
  - *Balance between work and everyday life (20 hours); and*
  - *Job Matching (10 hours)*
2. *Grouped-based therapies, which entails:*
  - *Psycho-education (18 hours);*
  - *Mindfulness (15 hours); and*
  - *Physiotherapy training (15 hours)*
3. *Manualised family intervention programme (eight sessions of 90 minutes)*
  - *Individual caregiver coaching;*

- *Supporting the caregiver in assisting the patient using the different strategies and tools learned in the intervention in everyday life, and at the workshop (12 hours)*
- 4. *An individual work placement programme including work practice (3-6 months)*
- 5. *Supported employment where the rehabilitation team is at the work place (30 hours)*
- 6. *The development of a post-rehabilitation plan (4 hours)*.<sup>59</sup>

Hoeffding asserted that the components and contents of the vocational rehabilitation modules are carefully planned, customised and individualised according to each patient's needs and goals.<sup>59</sup> This is of paramount importance because various patients uniquely present with their own capabilities, strengths, experience, educational level and their prognosis differ. These may also be influenced by various internal and external individual factors, such as the motivation of the patient.

### **2.7.3 Australia**

In Australia, a developed country, a vocational rehabilitation programme was also implemented by occupational therapists.<sup>61</sup> A welfare reform agenda was introduced in Australia in 2006, whereby people with any form of injury or disability were referred for a Job Capacity Assessment when they request or apply for income support from the government.<sup>61</sup> This is done in order to identify any hindrance to work and be able to appropriate adequate intervention to enhance work capacity to the people with disability or injured workers.<sup>62</sup>

Matthews et al<sup>61</sup> expanded on the occupational therapists' scope of vocational rehabilitation in Australia, which includes workplace disability case management, workplace interventions and programme management.<sup>63</sup> Vocational rehabilitation services are also implemented in Australia as part of an Employment Pathway Plan for the patients.<sup>61</sup> Their vocational rehabilitation programme entails certain procedures and components such as assessment, case management, job redesign, job matching, placement and ongoing support for the injured worker or people with disability.<sup>61</sup> Furthermore, it is reported that there are a number of additional schemes that are provided by the Australian government to support vocational rehabilitation programmes, such as the Wage Subsidy Scheme "*which provides up to \$1 500 as an incentive to employers to hire a person with a disability in open employment conditions*".<sup>61</sup>

#### 2.7.4 Netherlands

In the Netherlands, a developed country, the social security system was implemented in order to insure against loss of income-generating capacity due to any form of illness or disease,<sup>64</sup> which may affect the worker's capacity to return to their previous employment.<sup>64</sup> Regardless of how the person has become incapacitated for work, whether through accident in their private space, sports, household activities or through industrial and occupational disease or injury on duty, all have equal rights and are generally subject to the same regulations.<sup>64</sup>

Regulations in the Netherlands include the assessment of work incapacity after two years from the day that the worker was injured or stopped working due to illness, disease or injury at work.<sup>64</sup> However, this process follows a two-track policy that ensures adequate reintegration.<sup>64</sup> The first policy is called disability management, which applies whenever the worker or any person employed in a certain company becomes incapacitated for their work duties or injury on duty.<sup>64</sup> The employer takes full responsibility for these kinds of cases and is obliged to ensure adequate reintegration back into the community and work for a period of two years.<sup>64</sup> It is found that this kind of a process and procedure ensure positive motivation and accountability between both the employer and employee in facilitating early recovery of the employee and his/her return to work.<sup>64</sup>

The return to work could be at the same previous place of employment which may require some form of reasonable accommodation and adjustment.<sup>64</sup> In some instances the employer may not have adequate space or a suitable position to accommodate the employee at the same company or place of employment, therefore a new position or employment may be allocated accordingly,<sup>64</sup> with or without temporarily/permanent adaptations, depending on the employer-employee relationship.<sup>64</sup>

However, if the employer-employee relationship does not exist anymore or in people who have never had such a relationship and are now injured or have sustained any form of illness or disease, they are referred to vocational rehabilitation.<sup>64</sup> This includes cases where the employee has lost contact with the employer after a set two years of being incapacitated for work or anyone who may have been injured at an early age or not due to employment.<sup>64</sup>

In the Netherlands, the track policy called disability management *"is understood to be the sum of those activities which are designed to prevent workers from being absent from work (primary*

*prevention), to support their recovery (direct function) and to develop reintegration activities”.*<sup>65</sup> In an attempt to further unpack the disability management approach, it is also viewed “as a *coordinated and coherent strategy aimed at cost-effective prevention and early intervention both removing the cases of work incapacity and supporting workers to resume work as quickly and adequately as possible*”.<sup>64</sup>

The disability management approach aims at returning workers to work as soon as possible.<sup>64</sup> The first step in the procedure is to seek or create a suitable temporary workplace or position where the disabled or injured worker can be placed.<sup>64</sup> This approach to work intervention assumes that the disabled or injured worker should be able to perform some of their premorbid essential job functions during the recovery stage “(between falling ill and – if possible – to 100% recovery)”.<sup>64</sup> As soon as the patient or injured worker is stable enough, they are encouraged to be involved in this early intervention to ensure successful and early return to work.

Within the context of disability management policy-making in the Netherlands, the early intervention approach is referred to as transitional work.<sup>64</sup> To ensure adequate productivity and early return to work, the transitional work programme commences after an estimation of two weeks following an onset of any form of injury or illness.<sup>64</sup> The transitional work programme serves as a programme that ensures that the injured worker’s functional capacity for work is supported and enhanced.<sup>64</sup> This is successfully achieved through adequate provision of relevant training and use of therapeutic activities.<sup>64</sup>

The injured worker would then be actively involved in various adjusted inherent work tasks or activities that can be gradually graded and aid transitioning back to former work duties or activities.<sup>64</sup> Among the first transitional work procedures of disability management, is a thorough work assessment which is conducted in order to determine the worker’s residual functional capacity and potential.<sup>64</sup> Next, the qualities of the job itself are examined and analysed, which includes “*job strain, job content and job requirements*”,<sup>64</sup> in order to realise and ensure adequate and optimum match between work and job (inherent job requirements).<sup>64</sup> Should there be a mismatch between the worker’s capacity and the job during the transitional work, an alternative employment is explored and considered for the injured or disabled worker.<sup>64</sup>



Regular follow-up and monitoring of the worker is done, once he/she has been placed,<sup>64</sup> in order to establish and note any improvements in the health of the worker that have occurred and to also readjust work activities to newly developed conditions and functional level, if necessary. This forms part of the procedures that ensures a gradual return back into the old premorbid employment or previous position.<sup>66</sup> Literature has shown that resuming or returning to work early post injury is considered to be one of the major factors that ensures improvement to health.<sup>64</sup> Therefore, according to Shrey, transitional work approach ensures that the disabled worker is productive and that his/her recovery is speedily and efficiently facilitated.<sup>66</sup>

In order to implement the disability management policy of the Netherlands in an organisation or company, a disability committee must be appointed to focus specifically on early intervention by following and implementing transitional work.<sup>64</sup> The committee is comprised of the employer, the worker and other role players such as the worker's immediate superior, in consultation with the worker's family physician and medical specialists.<sup>64</sup> Once consensus is met regarding the worker's capacity and capabilities, a plan of action is then drawn and submitted to the medical officer to review and approve, considering the worker's sequelae and medical prognosis.<sup>64</sup>

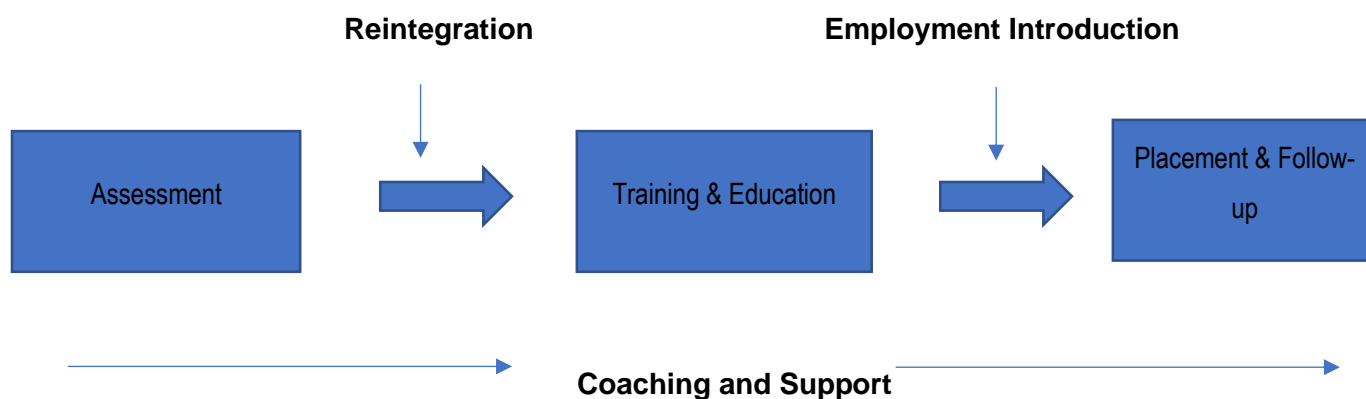
The action plan of the transitional work entails finer details regarding specific procedures that must be carried out and followed by the injured worker or employee.<sup>64</sup> Such a detailed plan or protocol would include things such as working hours and any possible flexibility of the working hours according to the worker's capabilities, and lenient attendance requirements,<sup>64</sup> custom-made positions and specific inherent tasks. The action plan or transitional work programme is then agreed upon and signed by all the involved role players or parties before it can be carried out by the injured worker.<sup>64</sup>

Alongside the disability management policy in the Netherlands, a vocational rehabilitation policy is also implemented, for disabled workers who have not yet developed relations with an employer, have lost contact with the employer or ceased in employer-employee relation.<sup>64</sup> This includes *“youth who, as a result of congenital or acquired disabilities, are faced with a very high threshold to enter the labour market”*.<sup>64</sup> Mostly, they are youth with severe physical or mental handicap, and *“previously employed or self-employed workers who, as a result of disease or disability, have been unable to work for a long time and who have lost their capacity to earn an income which they would have earned in view of training and experience if they did not have their disabilities”*.<sup>64</sup>

The vocational rehabilitation intervention policies in the Netherlands, caters for both categories of disabled or injured workers who would like to have a job again in spite of their disabilities.<sup>64</sup> The vocational rehabilitation process entails a combination of specific procedures and activities that are aimed at the worker.<sup>64</sup> It involves intervention that facilitates a match between a job and individual worker, through the use of training, education and work adaptation.<sup>64</sup>

As part of the vocational rehabilitation procedures, the individual worker is assisted to find positions in the labour market.<sup>64</sup> Depending on the worker's capabilities, protected environment or supported employment is also considered and selected as an alternative goal of intervention, should the injured worker not be suited for the open labour market after participation in the work intervention programme.<sup>64</sup> The activities are structured in a manner that ensures improvement of skills and opportunities to compete in the labour market.<sup>67</sup>

Nijhuis et al<sup>64</sup> asserted that vocational rehabilitation in the Netherlands entails specific step-by-step procedures with detailed components that enhances and ensures successful reintegration.<sup>64</sup> This was further expanded by Van Lierop et al who described a systematic process model of labour integration,<sup>68</sup> as elucidated in Figure 2.2.



**Figure 2.2: Process of labour integration<sup>68</sup>**

According to Nijhuis et al, “the process model of labour integration entails all those activities which are designed to analyse the starting position of disabled workers and to use this analysis as a basis for developing a custom-made plan of reintegration and mediation”.<sup>64</sup> An individual's possibilities are investigated through a thorough assessment, in order to compare the individual's residual functional capacity with the work demands.<sup>64</sup> Careful attention is paid to

the remaining capacity, possibilities and developed potential rather than the actual presenting disabilities a plan is generated in consideration of work-related social and professional skills.<sup>64</sup>

Nijhuis et al further described certain components that comprise Job coaching procedures, which forms part of the labour reintegration process.<sup>64</sup> These include exploring the patient's capabilities, assisting the patient to find a suitable employment position, performing an analysis of the job activities and workplace where the patient would possibly be placed, to ensure an adequate job match by bringing together the job requirements and the patient's capabilities, and intentionally coaching the patient in order to achieve long-term set goals, through skill training and education and on-the-job training and skills acquisition.<sup>64</sup>

### **2.7.5 Synthesis**

Among the developed countries, it is noted that the work intervention procedures services are implemented by occupational therapists, which is in line with the World Federation of Occupational Therapists, as they are recognised as the experts in vocational rehabilitation services. There are different terms that are used when referring to work intervention procedures, however the intent and purpose of the intervention remains central and similar across the developed countries. The work intervention procedures are aimed at rehabilitating injured or disabled persons or workers back to work. The key common components of the intervention process include assessment, job analysis, job design, job matching, placement, follow-up, and case management. Although the programme is pitched differently across the developed countries, it is individualised to each patient. Furthermore, it is noted that there is difference with regard to the funders of the work intervention programme across different developed countries; some are funded by the employer and others are inherently part of the government health system. It is also evident that there are different policies implemented in each developed country which dictate how the work intervention procedures should be implemented.

## **2.8 DEVELOPING COUNTRIES**

An overview of work intervention procedures in developing countries focusing on Brazil and South Africa is provided in Sections 2.9.1 and 2.9.2.

### 2.8.1 Brazil

In Brazil, as with other developing countries in the world, work intervention programmes are also implemented by the occupational therapists.<sup>69</sup> Bio et al<sup>69</sup> conducted a research study with an intention of proving the effectiveness of vocational rehabilitation in improving patient's cognitive and negative symptoms of Schizophrenia.<sup>69</sup> Patients were involved in a structured vocational rehabilitation programmes, which comprised of a six-months internship in a company that partnered with the institute.<sup>69</sup> There were about 42 companies that agreed and signed partnership in this study.<sup>69</sup>

Injured workers or patients were distributed and assigned to the various establishments or companies according to their needs, choices and experiences,<sup>69</sup> in consideration of the core business of company and inherent job requirements and activities.<sup>69</sup> A working contract was formally signed by the patients who showed interest and these received a loan as part of the work intervention programme, in order to cater for their basic needs such as transportation and food during the working hours.<sup>69</sup> According to Bio et al, the partner-companies were free from any expectations, costs or retaining the patients after they had completed their six months internship programme.<sup>69</sup>

Bio et al<sup>69</sup> found that “*vocational rehabilitation significantly improved patients’ performance in cognitive measures that assess executive functions (concept formation, shifting ability, flexibility, inhibitory control and judgment and critics abilities)*”.<sup>69</sup> McGurk et al<sup>70</sup> asserted that patients who were involved in full time work of more than 30 hours per week, were found to have better cognitive performance compared to the unemployed patients.<sup>70</sup> These indicate a need of intensive work intervention programme that includes actual placement to the work situation as part of the procedures. Patients would be exposed to the actual job tasks and get to actively apply themselves and be constructively engaged.

McGurk et al indicated that “*the patients who worked full time also showed superior performance in working memory, vigilance and executive functioning measures than patients who worked half-time, less than 30 hours a week*”.<sup>70</sup> Therefore, engaging patients in a structured daily work intervention programme that entails procedures such as following instructions, taking instructions, thought processing, planning, organisation, responsibility, creativity, socialise and other higher order skills, leads to improved cognitive performance as they are inherently expected to utilise and apply their cognitive abilities at work.

Chronister et al<sup>71</sup> asserted that there has been a shift with regard to evidence-based practices, which shaped the focus of research in rehabilitation and had professionals carefully answer to certain frequently asked questions such as “what processes or techniques make a specific rehabilitation intervention work? For whom is the intervention most effective? Are certain interventions or programmes better for certain persons? Who should receive a specific intervention or programme? When? And for how long? Specifically, the ‘how’ and ‘why’ can be established by studying mediator variables, whereas the ‘when’ or ‘for whom’ can be examined by studying treatment moderators”.<sup>72</sup>

## 2.9 SOUTH AFRICA

Occupational therapy as a health profession was introduced into South Africa in 1942, by professor Raymond Dart of the University of the Witwatersrand at the time.<sup>73</sup> This was followed by a launch of a diploma course in the Medical School.<sup>73</sup> An occupational therapy clinical department was considered and opened at the Johannesburg General Hospital, which also offered vocational rehabilitation services.<sup>73</sup> It was through this dispensation that a great awareness of vocational rehabilitation services was created and clear landmarks were made with certain legislation and procedures related to vocational rehabilitation. The vocational rehabilitation services began to swiftly spread across various countries and higher education institutions benchmarked on the services that were carried out in various hospitals.

In South Africa, a developing country, the rules and regulations that govern the land and its citizens stem from its first democratic Constitution. The Constitution of South Africa<sup>19</sup> and Labour Relations Act,<sup>20</sup> preserves and enforces the rights of all the citizens to equal opportunity to their basic human rights, such as a right to equal healthcare services and work. When illness, injury or disability affects someone’s ability to work, the National Health Insurance system<sup>21</sup> advocate for and reinstates this constitutional right by ensuring that all citizens have access to quality healthcare services that are delivered equitably based on social solidarity, and progressive universalism as a public good and a social investment.

As compared to South Africa, most of the developed countries have a vocational rehabilitation and disability management system with set policies and structures on how to manage incapacitated workers and engage them in various work intervention programmes. These laws and policies are enforced through the government authorities and committees at various levels of care. In South Africa, the Department of Public Service and Administration (DPSA) is

regarded as the custodianship of the incapacity or incapacitated government employees or workers.<sup>74</sup> This is enforced through the guidelines from the Policy and Procedures on Incapacity Leave and Ill-health Retirement (PILIR) booklet and manual.<sup>75</sup>

The PILIR policies and regulations apply to all employees appointed in terms of the South African Public Service Act, 1994, as amended.<sup>75</sup> The objectives of PILIR are to set up structures and processes, which will ensure that intervention and management of incapacity leave in the workplace to accommodate temporary or permanent incapacitated employees; and that rehabilitation, re-skilling, re-alignment and retirement, where applicable, of temporary or permanently incapacity employees are facilitated, where appropriate.<sup>75</sup>

According to the DPSA, a health risk manager is appointed by each government department in partnership with healthcare professionals or experts in enforcing its policies. Occupational therapists are recognized and form part of the appointed PILIR committee members at various government institutions, particularly the public healthcare sector hospitals. An occupational therapist is involved in the secondary assessment phase of the PILIR process, where all the specialists are consulted for further investigations and expert opinions regarding the employee's illness or claims.<sup>75</sup> Therefore, the purpose of the secondary assessment is to determine the validity of the application for temporary incapacity leave, determine the need for ongoing temporary incapacity leave, determine the appropriate duration of the leave, provide preliminary advice on the management of the condition, and advice on a full health assessment, if applicable.<sup>75</sup>

Furthermore, occupational therapists are required to engage the injured workers in work intervention programmes and ensure their return to previous employment, as stipulated in the PILIR policy booklet. However, due to the reality that over 84% of the South African population access public healthcare sector for medical intervention,<sup>14</sup> which includes rehabilitation from various professions, of which occupational therapy is one. Ill or injured workers or persons who fall within 84% of the population access occupational therapy services through public healthcare sector facilities.<sup>76</sup> Among the services that occupational therapists offer to these kinds of clients in Gauteng public healthcare sector includes, vocational rehabilitation where the main focus is on the human occupation of work.<sup>76</sup>

Buys<sup>3</sup> stated in 2015, that the occupational therapy vocational rehabilitation services development in South Africa is not well published. However, according to van Biljon et al<sup>76</sup>

vocational rehabilitation comprise of the six interlinked phases, which are concurrent with the existing phases that are practised within the Gauteng public healthcare sector. The phases are: 1) Prevention of injury at work, through educative services, 2) Screening, 3) Assessment, 4) Intervention, 5) Placement, and 6) Follow-up.

## 2.10 SYNTHESIS

It is noted that there is little literature among the developing countries and Africa continent with regards to work intervention procedures. However, among the developing countries that had some published data, it was discovered that there are common denominators compared to developed countries such as differences in terminologies, and they have the same intent and purpose for the intervention. The developing countries do not have set policies and structure that engage people with disability or injured worker such as the disability management and rehabilitation policies with set procedures, as do some developed countries. The developing countries tend to focus more on the underlying body functions and structures in preparation for the return to work. It is evident that there may be lack of sharing of best practices among the developing countries. There are certain gaps that were identified as there were no set components that should be followed. However, it is generally common that the work intervention procedures are not a linear process, it is fluid and has to be individualized to each patient across all the countries.

The fluidity of the work intervention components and gaps pertaining to work intervention procedures were identified by Muthard.<sup>77</sup> Moed and colleagues asserted that similar concerns and uncertainties on work intervention programmes that existed in the 1960s are the same as the ones that are experienced today,<sup>77</sup> including the questions that are commonly asked by occupational therapists, such as:

1. *“What progress has been made in more sharply defining the term pre-vocational?”*
2. *Can we obtain agreement on working definitions for the following terms?*
  - a) *Work adjustment*
  - b) *Work conditioning*
  - c) *Prevocational unit*
  - d) *Job sampling*
3. *What are the characteristics of a good vocational evaluation system?*
4. *What is the scope of pre-vocational activities?<sup>77</sup>*

West noted that despite the developments that have already been made in vocational rehabilitation programmes, great awareness that has been created and interest in work-related programming, the literature was extremely limited in terms of our total professional picture.<sup>53</sup>

Therefore, the literature that was reviewed show that the gap that is speciously experienced by occupational therapists in Gauteng public healthcare sector of South Africa, regarding the procedures of the work intervention programmes in providing vocational rehabilitation services to clients, has always been there and prominent across various generations and countries.

## **2.11 SUMMARY**

Based on the perused and reviewed literature, it is apparent that the provision of the vocational rehabilitation services such as work intervention procedures across various countries, is shaped and affected by the introduction and development of the occupational therapy profession in the respective countries and their legislations, which also stems from the World War I and II eras. However, there have been some new emerging ways of practice along the years and amendments to the legislations, which have also influenced the terminologies, contents of the work intervention procedures, methods and techniques of practice.

What has been carefully observed through all the vocational rehabilitation programmes and procedures, is that there is a common denominator and outcome of practice, which is centred around returning an injured worker or any person with illness, disability or disease back to their previous work and/or assisting them to enter the open labour market. Although there is less publication and sharing of good work intervention procedures and practices in South Africa Gauteng province, the ultimate goal is similar among occupational therapists which is to successfully rehabilitate clients' work occupation and ensure early return to work.



## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 INTRODUCTION

In Chapter 2, a literature review was conducted, introducing current literature relating to the topic under study. Chapter 3 is dedicated to the research methodology, in terms of the design and methods used in the study. The design is presented in terms of qualitative, explorative and descriptive research and the methods described include the research population, sampling, data collection, and data analysis. In addition, the trustworthiness is discussed and the chapter concludes with a brief summary.

#### 3.2 RESEARCH METHODOLOGY

A research methodology refers to a systematic process of solving a specific problem. Research methodology is comprised of the design and methods that are used during a research study.<sup>78</sup> The research design is concerned about the end-product of the study or a kind of study that will embarked on, whilst the research methods involve the research process, tools and procedures that are used in carrying out the study. The research methodology that was used in conducting this study is spelled out and discussed below.

##### 3.2.1 Research design

A research design refers to the overall strategy that the researcher selects and employs with an intent to uncover and identify solutions to the inquiry, by integrating different components of the study in a coherent and logical way, thereby ensuring that the research problem is addressed effectively.<sup>78</sup> Research design serves as the blueprint for collecting, measuring and analysing data, through a structured set of rational guidelines, to assist in generating reliable findings.<sup>74,79</sup> The function of a research design is to ensure that the evidence obtained enables the researcher to answer the initial question as unambiguously as possible.<sup>79</sup>

In this study, the researcher carefully designed a complete plan on how to conduct the study to the point of analysing the data. The researcher took into account the aims and objectives of the study. A qualitative, explorative and descriptive research design<sup>80</sup> was selected for the study, since it involved extensive inquiry about realities, practical experiences and viewpoints of occupational therapists working in the vocational rehabilitation field in the Gauteng province and using work intervention procedures in practice.

### **3.2.1.1 Qualitative design**

A qualitative research design was used to answer questions about the complex nature of phenomena in order to describe and understand the phenomena from the point of view of the participants.<sup>81</sup> It is a means to explore and comprehend the meanings individuals attribute to social problems, behaviour, actions and interactions.<sup>81</sup> Qualitative research is intended to reveal the meaning of the action or results typically measured by quantitative research and the researcher draws data from the participants in data collection.

Qualitative research often begins with a general research question rather than with specific hypotheses.<sup>81</sup> The researcher collects a large amount of verbal data from a small number of participants, then organises the data in a way that gives it consistency and uses verbal descriptions to describe the situation under study.<sup>81</sup> Throughout the qualitative research process, the researcher continues to focus on learning about the meaning of the problem or issue that the participants have, not the meaning that the researcher brings to the research.<sup>81</sup>

Qualitative researchers tend to collect field data at the site where participants experience the problem or problem being studied.<sup>81</sup> In this study the researcher aimed to explore the work intervention procedures for the public healthcare sector in the Gauteng province.

A qualitative research design was used to guide the research process. Qualitative research design has specific inherent characteristics that must be applied to yield credible results,<sup>82</sup> as summarised in Table 3.1.

**Table 3.1: Summary of characteristics of qualitative design and application to the study**

Qualities	Application in study
Natural setting	Data was collected in the OT department, 5/20 room, through a workshop, participants were in close interaction with the researcher.
Researcher as key instrument in data collection process	The researcher collected data together with a workshop facilitator and co-facilitator, through interview and discussion.
Participants' meaning and perspectives	The researcher focused on learning the meaning of the work intervention procedures from the participants.
Complex reasoning	Complex reasoning skills were used throughout the process of the study and the data was organised into themes, categories and sub-categories.
Reflexivity	The researcher provided participants with his experiences and the benefits of the study.
Holistic account	The researcher, together with the participants, developed a complex picture of the issue being studied.

Adapted from: Nursing research: An introduction, by Moule, Aveyard, & Goodman; 2016<sup>82</sup>

Each of the qualitative research design component qualities identified in Table 3.1 are discussed below.

### 3.2.1.2 Exploratory nature

An exploratory design is conducted on a research problem when there are few or no earlier studies to refer to or rely on to predict an outcome.<sup>82-83</sup> The focus is on gaining new insights into an issue that has not been clearly explored and defined, providing an opportunity to define new terms and clarify existing concepts.<sup>83</sup> Exploratory designs are often used to gather an understanding of how best to proceed with the study of a problem or what methodology would effectively be used to gather information about the problem. Exploratory research organises and provides a well-founded picture of the situation being developed, which can lead to the generation of new ideas, hypotheses and knowledge of a study field.<sup>83</sup>

The researcher undertook an exploratory study to explore and discover new insights pertaining to the work intervention procedures that should be used by occupational therapists in Gauteng public healthcare sector.

### 3.2.1.3 Descriptive nature

Descriptive research designs help provide answers to the questions of who, what, when, where, and how, related to a specific research problem; a descriptive study cannot conclusively determine why.<sup>84</sup> Descriptive research is used to obtain information about the current status of the phenomenon and to describe what exists regarding variables or conditions in a situation. Descriptive studies can produce rich data leading to important practical recommendations.<sup>84-85</sup> For detailed analysis, this approach collects a large amount of data in order to allow the researcher to gain more information concerning the characteristics in a particular field of study.<sup>84</sup>

In this study the researcher asked the participants to reflect on their best practices of work intervention procedures that they implemented in their departments, appreciatively write about the current procedures that they are using, as well as ideal work intervention procedures, wishes and visions for work intervention.

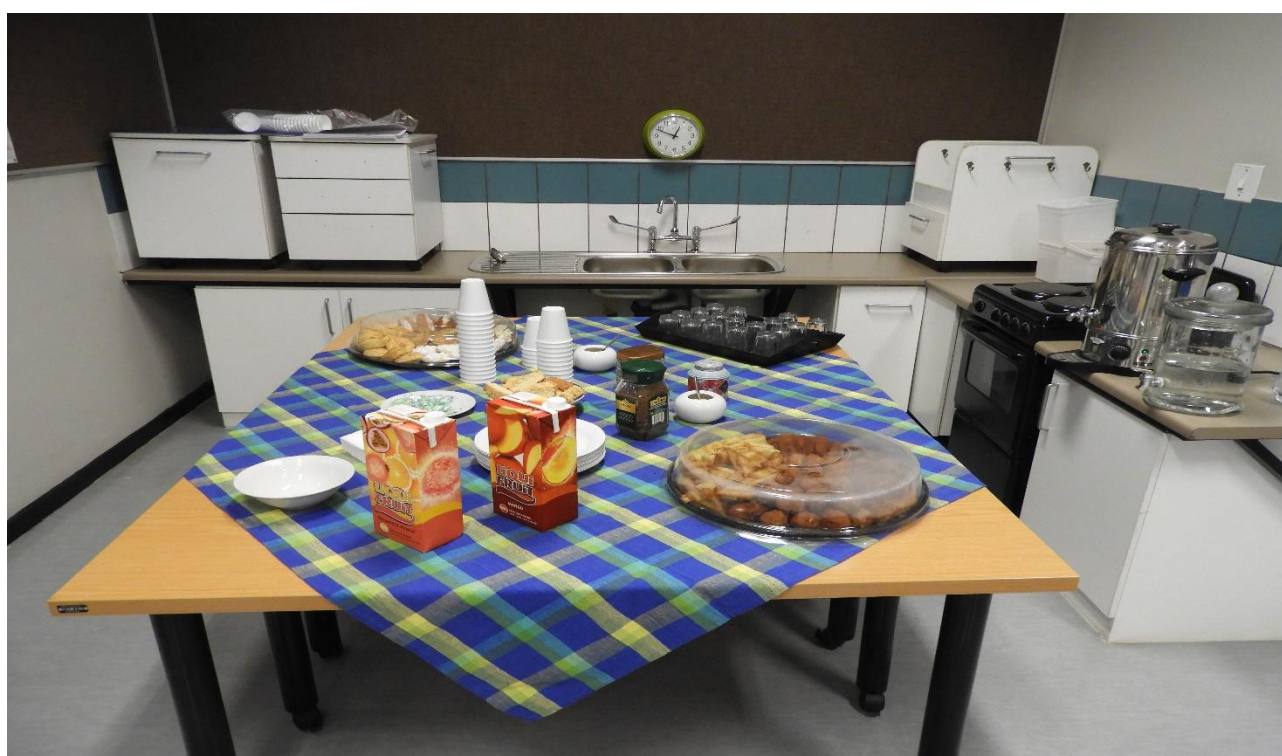
#### 3.2.1.3.1 Natural setting

Qualitative researchers often collect data in the field at the site where participants experience the issues or problems under study.<sup>82</sup> Information can be gathered through actually talking to people, directly seeing them behaving and actually acting within their natural context. Researchers then have a face-to-face interaction over time with the participants in their natural setting. The setting in this study was the Gauteng Occupational Therapy Vocational Rehabilitation practice clinicians and academic occupational therapists were invited to a workshop to be part of data collection as participants, and were then in close interaction with the facilitators and researcher.

The research data was collected at the University of Pretoria, Faculty of Health Sciences, Occupational Therapy Department, as consensus was reached that the venue was a common, convenient and central place geographically and was accessible to all the participants. This acted as a neutral setting and created an unbiased environment to ensure adequate participation as every participant was taken out of their familiar work environment. Figures 1 and 2 depict the physical venue, where the data was collected.



**Figure 3.1: Example of one of the tables used for collaborative work during workshop**



**Figure 3.2: Refreshments provided during the workshop**

### 3.2.1.3.2 Researcher as key instrument

By examining documents, observing behaviour, and interviewing participants, qualitative researchers collect data themselves.<sup>82</sup> The researcher played a significant role as a key instrument through compilation of a research proposal, a dissertation, and the data analysis process. During data collection, the researcher was observing, recording and taking field notes. The facilitator (an expert in facilitating workshops) and co-facilitator (an expert in

vocational rehabilitation) used open-ended questions and probing to facilitate the data collection session.<sup>82</sup>

### **3.2.1.3.3 Participants' meaning and perspectives**

Throughout the qualitative research process the researcher continued to focus on understanding the meaning that the participants held about the problem identified in the study and did not focus on the meaning that he brought either from the literature regarding the research or different writers. The themes developed in this study, which were collaboratively identified, reflect the multiple perspectives of the participants.

### **3.2.1.3.4 Complex reasoning**

Qualitative researchers build their bottom-up patterns, categories, and themes by inductively organising the data into increasingly abstract information units.<sup>82</sup> Data was organised into overarching theme, themes, sub-themes, categories and sub-categories and analysed inductively through interaction with and among participants during the workshop. This inductive process involved working back and forth between the topics and the database until a comprehensive set of topics was established.

### **3.2.1.3.5 Reflexivity**

Researchers position themselves in a qualitative design that is being conducted, which means that researchers convey their own background, such as work experiences, cultural experiences, history, context and prior understanding, which cannot be separated from the interpretation of the information in a study, and what they have to gain from the study.<sup>86</sup> During data collection, the researcher was passive, observing, and audio-recording the participants' voices. Therefore, the researcher did not participate in the interactions with the participants. The facilitator and co-facilitator facilitated the workshop and ensured that meaningful data was produced.

### **3.2.1.3.6 Holistic account**

Qualitative researchers are attempting to develop a complex picture of the issue or issues being studied.<sup>82</sup> This involves reporting multiple perspectives, identifying the numerous factor

s involved in a situation, and generally sketching the larger picture emerging.<sup>82</sup>To accomplish this, the researcher undertook and embarked on a qualitative study. The researcher ensured that participants' views and practices on work intervention procedures were captured by allowing the facilitator and co-facilitator to facilitate the workshop, by engaging with clinicians in public and private sectors, and with academics involved in occupational therapy in a workshop. Through interactive appreciative narrative interviews and discussions, the participants described their practice experiences of the work intervention procedures.

### 3.2.2 Research methods

Literature on research methods view and define research as “*an activity involving finding things that the researcher did not know in a more or less systematic way*”.<sup>87</sup> A method can be defined as “*the philosophical framework within which the research is carried out or the basis on which the research is based*”.<sup>88</sup> Therefore, research methods refer to “*specific procedures or techniques for identifying, selecting, processing and analysing the topic information*”.<sup>87</sup>

Research methods involves the exact plans or recipe of how the study will be conducted, and includes various components such as the research population, data collection, and data analysis techniques.

#### 3.2.2.1 Population

A research population refers to the totality of persons, events, organisation units, case records or other sampling units with which the research problem is concerned.<sup>81</sup> A population is described as the entire group of people or a large collection of individuals or objects that are the main focus of a scientific query,<sup>81</sup> for research purposes. Also described as a well-defined collection of people or objects known to have similar characteristics, is a research population.<sup>81</sup> Usually all individuals or objects within a given population have a common, binding feature or trait.

In this study, the population consisted of occupational therapists who were clinicians employed or working in the public healthcare sector, those who have worked in the public healthcare sector but may have relocated to work in the private healthcare sector, or working in academic institutions in Gauteng province. Participants were selected based on their years of experience, in order to allow them to reflect on their experiences with regard to providing

various work intervention services in their practices and the procedures that were followed in ensuring effective and successful return to work for their clients.

The qualitative research paradigm in its broadest sense refers to research that elicits participant accounts of meaning, experience or perceptions. It also produces descriptive data in the participant's own written or spoken words. This was ensured and facilitated through the selection of an appropriate population.

In order for the participants to be included in this study, they had to:

- be working in the public sector in vocational rehabilitation;
- have worked in the public sector in vocational rehabilitation, with at least one-year experience in vocational rehabilitation; or
- be an academic and have had experience in work intervention procedures.

### **3.2.2.2 Sampling**

Sampling is seen as an effective vehicle for critical study of the population and is generally considered to be a portion of the total objects, events or people from which it was selected.<sup>81</sup> Purposive sampling is considered and applied in qualitative research in order to purposefully select the study participants because they are regarded as the people who are subjected to or experiencing the problem under study and they fully comprehend the phenomenon that is studied. In purposive sampling, the researcher selects the participants based on his personal judgement, considering the participants who will be the most informative and contribute meaningfully in yielding desirable outcomes.

The inherent characteristics of purposive sampling enable a researcher to conduct the study with people from the population so that the results of their study can be used to draw conclusions that apply to the entire population, whereby a sample comprises elements that contain the most characteristics representative of the population.<sup>89</sup> Taylor asserted and described purposive sampling as the one that is mainly based on the selection of participants who have had the first-hand experience and inherently experienced the phenomenon under investigation.<sup>90</sup> Therefore, the researcher selected the occupational therapists who have practised vocational rehabilitation and implemented work intervention procedures in the Gauteng public healthcare sector.



### 3.2.2.3 Sampling size

In qualitative research, the researcher usually focuses on a small sample size that is representative of the whole population.<sup>91</sup> This is applied to ensure adequate profundity and richness of data, rather than accumulating too many responses from a large group of people or population.<sup>91</sup> According to Moule et al, there are no specific rules with regard to the actual size of the sample, however there has to be an adequate representativeness of the population being studied.<sup>82</sup> The size of the research sample “*is also determined by the research question because the researcher must ensure that sufficient information is gathered in order to yield adequate data saturation*”.<sup>82</sup>

Accordingly, the qualitative purposive sampling principles were followed in selecting the population as the researcher was part of the Gauteng Vocational Rehabilitation Task Team and he had access to occupational therapists who were practising vocational rehabilitation at various hospitals in Gauteng and in academia. The occupational therapists were invited to the workshop by means of email with the research information sheet attached. Invitations were also made through the VRTT platform and occupational therapy Gauteng Executive meetings in order to ensure that at least 60% of the population from various public healthcare sector hospitals formed part of the representative sample.

Out of the 50 invited occupational therapists, 17 voluntarily participated in the workshop. Refer to Chapter 4, section 4.2 for more details on the participants’ demographic information.

### 3.2.2.4 Data collection

Data collection refers to a detailed, organised process whereby the researcher collects and gathers information from all relevant sources in order to find answers to the research problem under study.<sup>81</sup> Therefore, participants become the core of the co-inquiry methods and this may take the form of direct interaction with individuals in a group setting.<sup>82</sup> In this study, the researcher collected data in the form of a workshop, representing a focus group, from an appreciative inquiry stance. Among the advantages of the qualitative approach is that the information is rich and provides a deeper insight into the phenomenon being studied.<sup>82</sup>

The researcher used a workshop data collection method to gather data from the participants. It was entitled ‘work intervention workshop based on appreciative inquiry principles. The

workshop inherently involved group principles to ensure active engagement and impartation of information, which can be defined as “*a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment*”.<sup>92</sup> Morgan described the group principles that were used in the workshop as research technique that gathers data on a specific topic that is determined by the researcher through group interaction.<sup>86</sup>

Among the purposes of collecting data from a group of participants in the form of a workshop, is the inherent power and ability to promote participants' self – disclosure, which allows the researcher to deeply access and vividly capture what the participants think and feel concerning the phenomenon under study.<sup>81</sup> Accordingly, the researcher used Appreciative Inquiry as a systematic approach that enabled participants [occupational therapists] to reflect on their day-to-day work intervention practice and encounters in order to elicit positive change.<sup>93</sup> The power of Appreciative Inquiry “*is the way in which participants become engaged and inspired to focus on their own positive experiences*”.<sup>94</sup> Hammond<sup>95</sup> stated that “*what is good within a specific programme or organisation must be carried forward*”.

The use of group principles in a data collection workshop is useful when a specific topic requires multiple viewpoints and responses from the participants.<sup>81</sup> The participants' viewpoints on the good that was happening within the occupational therapy vocational rehabilitation work intervention procedures were appreciated, harnessed and facilitated to be carried forward.

#### **3.2.2.4.1 Role of facilitators**

Facilitation of group principles in a data collection workshop relies on and is guided by the principles of group process, whereby there is constant communication between the facilitator and the participants, as well as among the participants themselves.<sup>81</sup> The workshop was facilitated by two facilitators. One facilitator was a lecturer and expert in Appreciative Inquiry, who also had experience in facilitating workshops and collaborative data analysis. The second facilitator was a lecturer, an expert in vocational rehabilitation. The researcher's responsibility was to record the voices of the participants and taking photographs during data collection, in the workshop.

#### **3.2.2.4.2 Role of the researcher**

The role of the researcher was to ensure that the data collection process was facilitated accordingly through a sustained and intensive experience with the facilitators and the participants. Other roles of the researcher were to welcome the participants, provide an overview of the study, facilitate the signing of the informed consent forms. During the workshop, the researcher was mainly responsible for audiotaping the conversations, as well as the flow of the workshop, and concluded by thanking the participants.

#### **3.2.2.4.3 Preparation for the workshop**

By following the group process and using group principles in a workshop, the researcher created a tolerant and conducive environment that encouraged the participants to share their perceptions, perspectives, experiences, wishes and concerns without putting pressure on participants to vote or reach consensus.<sup>96</sup> The workshop was held at the University of Pretoria, Prinshof Campus, Occupational Therapy Department, Level 5. The physical structuring and preparation for the workshop was done prior to the workshop (view Figures 3.1 and 3.2).

The researcher created an invitation that was sent out through emails, word of mouth at congresses and through Occupational Therapy Association of South Africa to invite the participants to the work intervention workshop.

During the workshop, data was collected (Section 3.2.2.4.4) and analysed (Section 3.2.2.4.5) by the participants.

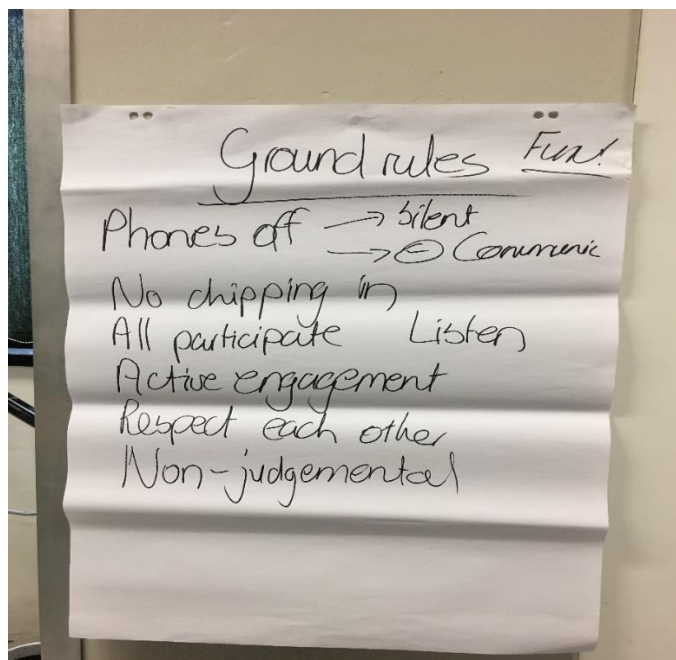
#### **3.2.2.4.4 Data collection process**

The workshop was held on the 18<sup>th</sup> of April 2019, from 13:00 to 16:30 and it was held in room 5-20 HWS-S level 5, in the Occupational Therapy Department, School of Health Sciences, University of Pretoria. A total number of seventeen participants attended the workshop (view Chapter 4, Section 4.2). The participants arrived at different time intervals before 13:00 on the day of the workshop. They were offered tea and coffee as they walked into the room. An attendance register was placed next to the door for the participants to sign upon arrival.

Sixteen participants arrived on time before 13:00, with one participant who came at 13:15. The researcher welcomed the participants, introduced himself as July Masango, an occupational therapy masters student at the University of Pretoria. The researcher introduced the facilitators to the participants and mentioned that they would be facilitating the workshop. A brief overview of the research study was provided by the researcher, including the aims and objectives. This was followed by signing of the informed consent forms (view Annexure B) and the facilitators assisted with collecting the signed forms from the participants' tables.

Name tags were issued to the participants who were asked to write their names for identification purposes among themselves in the workshop. This was followed by a warm-up activity called 'musical chairs', whereby the participants were asked to bring their chairs to an open space in the room, to sit in a circle facing each other. The researcher stood in the middle of the circle to explain the game and start playing. The participants were to mention one quality or anything that describes them and if anyone sitting in the chairs could identify with the same quality, they were to stand up and sit on a different chair. The person who did not have a chair was asked to stand in the middle and say something about themselves, and the game was continued until all participants had a chance to be in the middle, and said something about themselves. This game acted as an ice-breaker, energised the group and facilitated a sense of cohesiveness among the participants.

After the warm-up activity, the researcher split the participants into groups of four, by asking the participants to number themselves from 1 to 4, around the circle, the number ones were grouped together, then number twos, threes and fours. The participants went to sit in their small groups of four per table. The facilitator then took over the workshop and commenced by requesting the participants to draw up a list of norms, as shown in Figure 3.3.



**Figure 3.3: Ground rules or norms of the workshop**

The facilitator asked the participants to write down their views regarding the work intervention procedures that are currently implemented by occupational therapists in practice, and also the work intervention procedures that should ideally be implemented by occupational therapists in practice (view Annexure D). The participants were then required to share their views in pairs or with the person sitting next to them within the small group. The workshop unfolded with the facilitator asking the participants to draw an image in their small groups, that represented their views of the work intervention procedures in practice and within their settings. The facilitator asked the participants to present their images to the big group and the images were then pasted on the wall around the room. (view Figures 3.4 to 3.7).



**Figure 3.4: Image depicted by Group 1**



Figure 3.5: Image depicted by Group 2

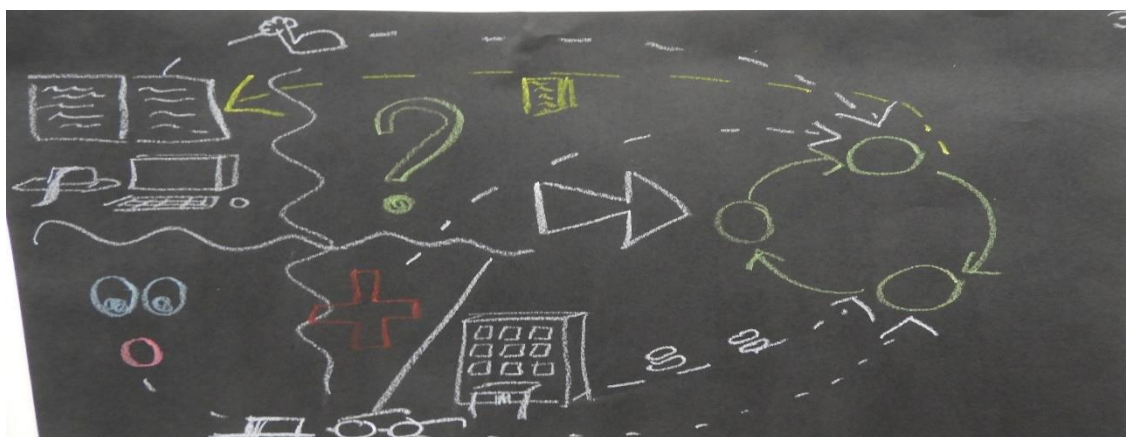


Figure 3.6: Image depicted by Group 3

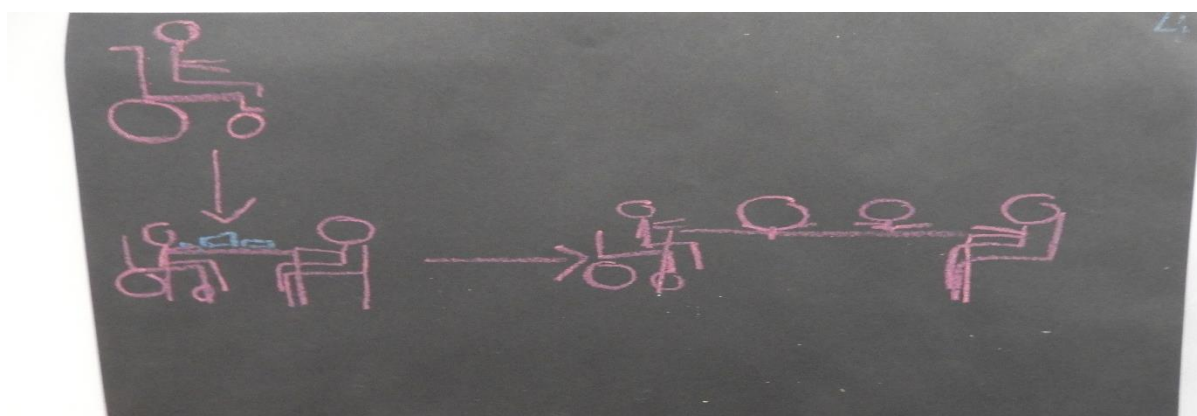
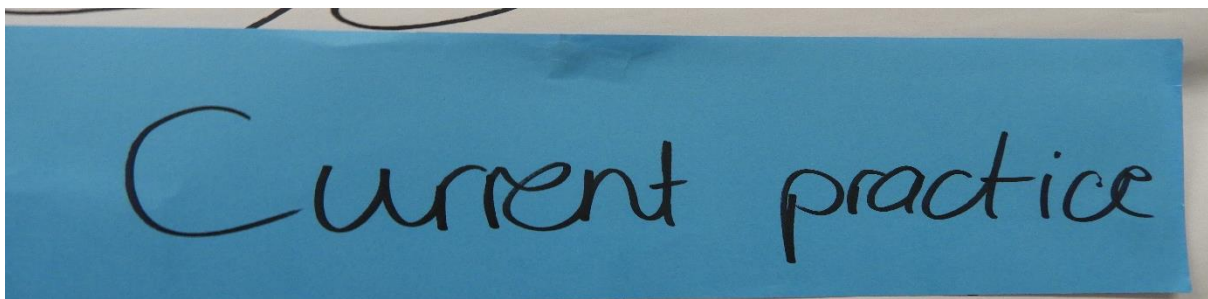


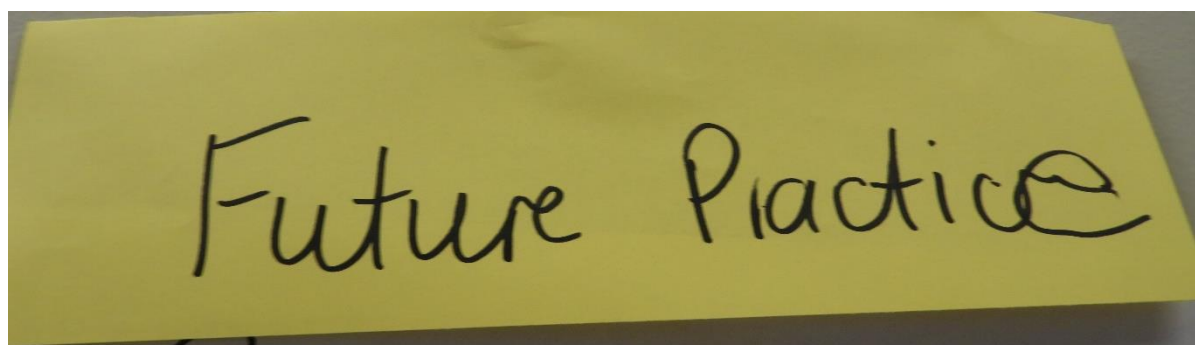
Figure 3.7: Image depicted by Group 4

The participants were given a 10-minute water break after they had presented their images. The workshop was then resumed and the participants were issued with a set of papers (blue – representing the current work intervention procedures that are implemented (view Figure 3.8).



**Figure 3.8: Example of current work intervention procedures implemented**

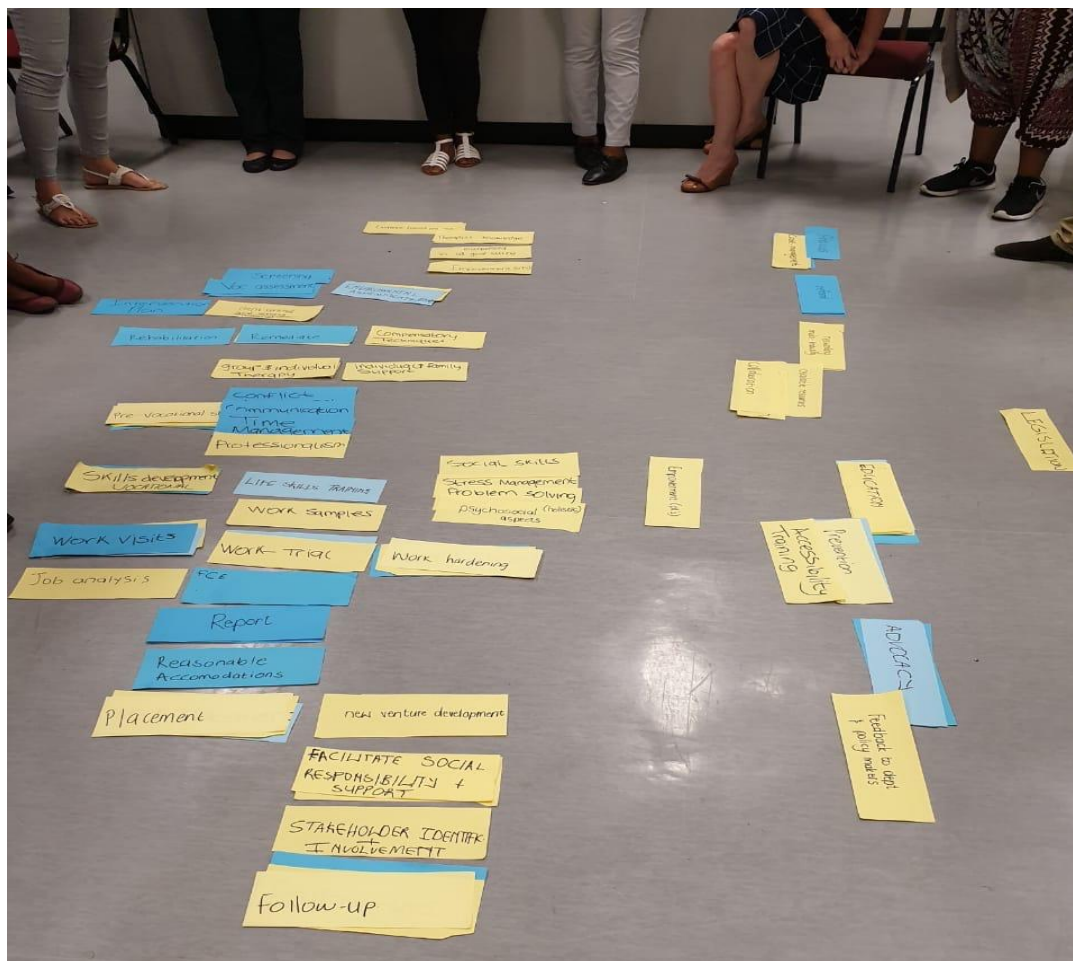
Yellow papers were used to indicate the ideal work intervention that they would like to implement (view Figure 3.9). Participants were to work within their small groups based on what they had portrayed on their images and presented.



**Figure 3.9: Example of future work intervention procedures to be implemented**

The participants were invited to come together in the middle of the room, standing in a circle, in order to collate the work intervention procedures. They were asked to bring their blue and yellow pieces of paper and place them on the floor to build and create a compilation of the work intervention procedures. In this process, the facilitator was constantly ensuring that a consensus was reached on each component that was placed on the floor by participants. This was not an easy exercise as the work intervention procedures are not a linear or step-by-step process, however through tough, heated and constructive discussions and debates, participants eventually reached agreements and produced guidelines that would be used by occupational therapists as work intervention procedures (view Figure 3.10).

A significant and defining phenomenon was evident as the participants were going through the process of reaching and answering the research aim and objectives. It was noted that participants experienced difficulty separating between the current work intervention procedures that are implemented and the ideal (future) work intervention procedures that should be implemented (view Figure 3.10 – merged blue and yellow papers). Participants noted that some components of the work intervention procedures were taking place in some places and not in others such as case management. Therefore, participants collaboratively harnessed and merged the current and ideal (future) work intervention procedures. A consensus was reached to form and collate one merged compilation of work intervention procedures that should be implemented by occupational therapists in Gauteng public healthcare sector, which was inclusive of the current and ideal (future) practice (view Figure 3.10).



**Figure 3.10: Showcasing the work intervention procedures as suggested by participants**



The key data in the focus group and workshop includes what the group participants say during the discussions, therefore the discussions were facilitated by using the creative hermeneutic data collection method as described by Boomer and McCormack.<sup>97</sup> Furthermore, this method enabled the researcher, the facilitators, together with the participants, to begin data analysis during the workshop itself (view Tables 3.4 and 3.5).

The work intervention workshop was approximately three hours, thirty minutes long. The data collection session ended when there was no new emerging information at the end of the workshop and when all the themes regarding the work intervention procedure were identified and arranged accordingly,<sup>98</sup> with preliminary data analysis completed. Data saturation and thick description was ensured in the workshop, as the data was collected and analysed through a workshop protocol as summarised in Tables 3.2 and 3.2.

**Table 3.2: Summary of the steps used during the workshop related to the data collection process**

Introduction and informed consent			
Steps	Activity	Outcome	Responsible
1	Introduction	- Participants understood the aim of the study as well as what was expected of them	Researcher
2	Sign informed consent (view Annexure B)	- Participants were provided an opportunity to ask about the study - Participants signed informed consent to indicate voluntary participation (view Annexure B)	Researcher
3	Complete demographic information leaflet (view Annexure C)	- Participants completed their demographic information form (view Annexure C)	Researcher
4	Ice-breaker	- Participants were asked to introduce themselves to each other through an ice-breaker	Facilitators
Data collection			
5	Reflect on current practice (view Annexure D)	- Individual participants had an opportunity to write down their own views on the current and ideal practice relating to work intervention procedures implemented by occupational therapists on separate pieces of papers.  <u>Note:</u> The reflections written by each participant were collected and used as data sets	Facilitators

Steps	Activity	Outcome	Responsible
6	Pair and share	<ul style="list-style-type: none"> <li>- Participants were grouped into pairs to share their views (Step 5)</li> <li>- Each participant told the co-participant their views of current practice relating to work intervention procedures</li> <li>- The co-participant listened attentively and created an image of the main ideas, providing an opportunity to raise awareness about current practice</li> </ul>	Facilitators
7	Small group discussion and consensus (four to six participants)	<ul style="list-style-type: none"> <li>- Using the creative images as centre pieces, the participants were asked to:               <ul style="list-style-type: none"> <li>o Share their views</li> <li>o Co-construct an image to represent the views of all the participants in the small group.</li> <li>o Share the image and views with all the participants at the workshop</li> </ul> </li> </ul> <p><u>Note:</u> The images and discussion (audiotaped with permission from the participants) were captured and used as data sets</p>	Facilitators

Following the data collection phase during the workshop, the participants were actively involved in the data analysis process.

#### 3.2.2.4.5 Data analysis process

Qualitative data is made up of words, remarks, themes and symbols. Qualitative Data Analysis refers to those processes and procedures that are used by the researcher for data analysis and provide some level of structure, meaningful order, understanding, and interpretation of the data that was collected for the study.<sup>81</sup> Typically, qualitative data analysis takes place at the same time as data collection.<sup>81</sup> Accordingly, data collection and analysis took place concurrently, as illustrated in Tables 3.2 and 3.3. The research data was collected during the workshop (view Section 3.2.2.4.4) and analysed by using the creative hermeneutic data analysis method as described by Boomer and McCormack<sup>97</sup>.

The collaborative data analysis was used to analyse the data that was collected during the workshop. This is vital when data is collected from an appreciative inquiry stance, through a collaborative effort. Analysing the data collaboratively provided the participants with a sense of ownership and involvement in generating and producing the work intervention procedures

that they would use and implement in their respective practices. The facilitator managed the collaborative data analysis, enabling the participants to organise into themes, sub-themes, categories and sub-categories the components of the work intervention procedures that they had written (view Chapter 4). This provided structure and meaning to the raw data that was generated by the participants during the workshop.

**Table 3.3: Summary of the steps used during the workshop related to the data analysis process**

Data analysis			
Steps	Activity	Outcome	Responsible
8	Small group discussion	Participants were asked to return to small groups and then: <ul style="list-style-type: none"> <li>- Reach consensus about the major themes that emerged during the discussion with all the small groups</li> <li>- Write down shared themes – each on a piece of paper</li> </ul>	Facilitators
9	Group discussion and consensus	<ul style="list-style-type: none"> <li>- Each small group presented their themes to other small groups, discussed and agreed on a final set of themes/categories across all small groups.</li> <li>- Participants had to have whole group agreement on these and the final agreed set of themes/categories which then represented all the participants' views</li> </ul>	Facilitators
10	Closure	<ul style="list-style-type: none"> <li>- Participants were given an opportunity to reflect on their experience and key learning during the workshop.</li> <li>- The researcher thanked the participants for their time and input at the end of the workshop.</li> </ul>	Researcher

In addition, throughout the data collection process, the participants' discussions were audio-recorded with their permission and field notes were taken, as suggested by De Vos et al.<sup>4</sup> The discussions were audio-recorded and transcribed verbatim in order to ensure that all the data collected was captured to enhance the trustworthiness of the data. Transcripts, tapes, and notes generated by the end of the workshop were considered as support for the themes identified during the data collection and analysis process.

### 3.3 TRUSTWORTHINESS

Trustworthiness is "*the degree of trust qualitative researchers have in their data, using credibility, reliability, confirmability and transferability strategies*".<sup>30</sup> By using these strategies, the researcher has an opportunity to show how the data collected, its interpretations, together with the drawn conclusion, reflect the participants' views and experience.<sup>82</sup>

In order to ensure the trustworthiness of the study, the researcher employed credibility, dependability, transferability, confirmability and authenticity principles.<sup>82</sup>

#### 3.3.1 Credibility

Credibility refers to the manner in which the research has been conducted and whether it has established adequate confidence in the truth of the results.<sup>99</sup> The research study has credible findings if it is a true reflection of the participants' views and experience.<sup>82</sup>

To ensure validation of data, the researcher verified the same information that was gathered from the participants by using triangulation to increase credibility.<sup>30</sup> The researcher perused and consulted published literature on vocational rehabilitation and work intervention procedures in order to verify data that was collected. Furthermore, verification was done through the researcher's supervisor and co-supervisor.

During the workshop, the data was gathered and preliminary data analysed by the facilitators and participants. This was facilitated by the facilitators who are experts in appreciative inquiry and vocational rehabilitation, and also supervisors of the researcher. This ensured member checking and increased the credibility of the study.<sup>30</sup> Coding of themes took place during data collection. The facilitators facilitated the process of categorising various components or themes of the work intervention procedures. The participants were actively part of this process to ensure that no data was lost.

After data collection, the researcher engaged in various sessions with peers who are experts both in the vocational rehabilitation field and appreciative inquiry, including the supervisors, in order to review the analysed data and further analyse the themes that emerged during the workshop.

### 3.3.2 Dependability

Elo et al<sup>100</sup> stated that the dependability of a research inquiry is evident when the research could be repeated and the findings found to be consistent. Dependability was ensured by adhering to the researched and drafted research design and methods, using credible data analysis methods and styles, and involvement of experienced facilitators to facilitate the workshop.

Dependability of this study was further achieved through thick description of data. The raw data was gathered together with the participants and they actively participated in data analysis. All the themes that emerged in the workshop, notes, audiotape and documents were kept in a safe and secure place and were only accessible to the researcher.

### 3.3.3 Transferability

Transferability refers to the extent to which the research findings or a specific inquiry can be applied to other contexts with other respondents.<sup>101</sup> The transferability of the study findings is shown when there is a probability that the same findings can have meaning and be applicable to others who may be in the same situation.<sup>30</sup>

Although this inquiry is focused on occupational therapists in Gauteng public healthcare sector, it sought to explore work intervention procedures that concerned all occupational therapists in the whole profession, regardless of their geographical location. The researcher provided background to the study, research methods that were used, and information regarding the participants, therefore other researchers will be able to use the findings and information of this study for future research and studies.

### 3.3.4 Confirmability

Confirmability refers to “*the extent whereby the results of a particular research study are a true reflection and are the product of the inquiry in question*”.<sup>102</sup> It is also “*the objectivity and neutrality of the data that was collected and its interpretation*”.<sup>30</sup> The researcher together with

the workshop facilitators remained objective throughout the workshop and study in order to ensure confirmability. The data collected was kept by the researcher, for future reference.

### **3.3.5 Authenticity**

Authenticity ensures that the research is a true reflection of participants' values, opinions and experiences.<sup>99</sup> The authenticity of this study was ensured by thick description of the participants, as they were experienced in work intervention procedures. The researcher followed all the planned processes throughout the study. Data collection and analysis took place during the workshop together with the participants. All the data and evidence was kept safe after the workshop.

### **3.4 SUMMARY**

This chapter discussed the research methodology used to inform the study, which included the research design and research methods. Chapter 4 is dedicated to the research findings and discussion thereof in terms of related literature.

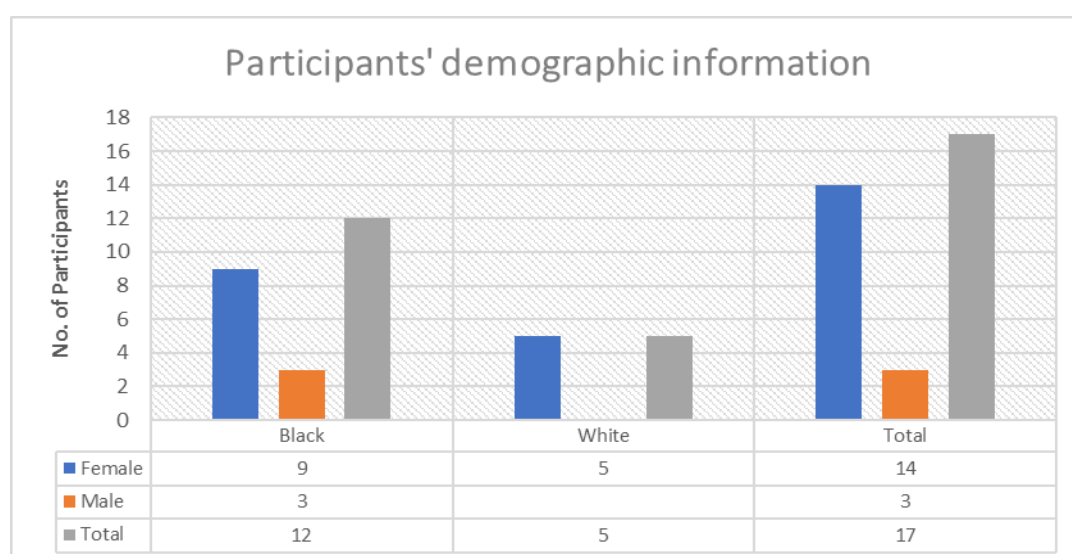
## CHAPTER 4 RESEARCH FINDINGS AND DISCUSSION

### 4.1 INTRODUCTION

Chapter 3 entailed an in-depth discussion and description of the research design and methods used in the study. This chapter (4) contains the demographic profile of the participants who participated in the workshop and then discusses the research findings with reference to the literature reviewed.

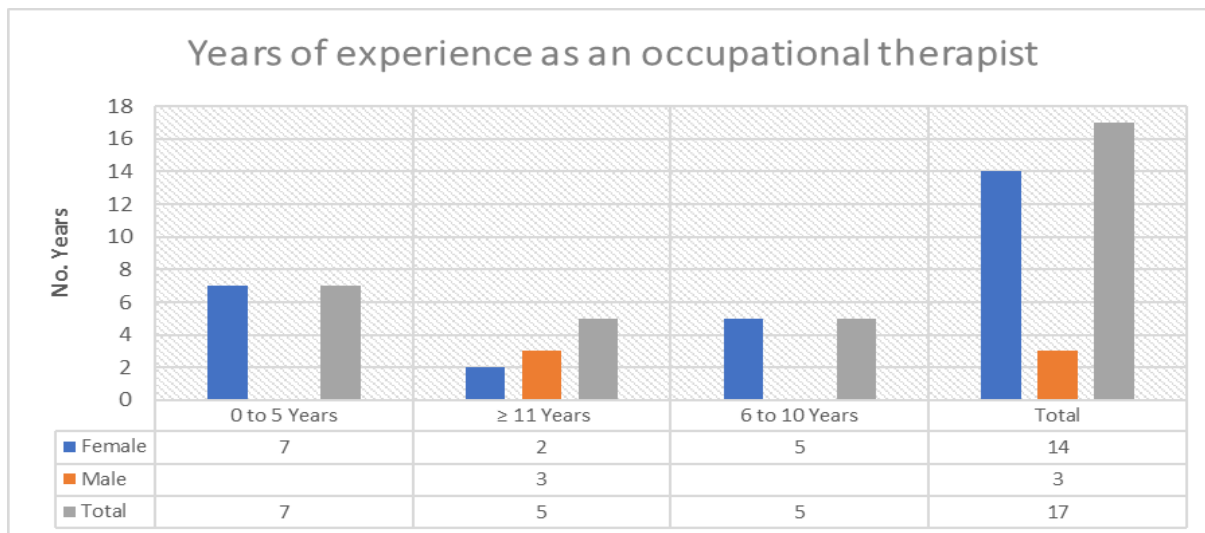
### 4.2 OVERVIEW OF THE DEMOGRAPHIC INFORMATION

A workshop was held on the 18<sup>th</sup> April 2019 from 13:00 to 17:00 at the University of Pretoria, Occupational Therapy Department. Twenty-five participants were invited to the workshop of which 68% attended (see Figure 4.1). Fourteen females of which nine were black attended (see Figure 4.1). Out of the 17 participants, two participants were from the Gauteng province central office, three participants were lecturers at universities in the Gauteng province, two of the participants were self-employed in the private sector, having previously worked in the Gauteng public healthcare sector and involved with work intervention procedures and 10 participants were currently working in the public sector.



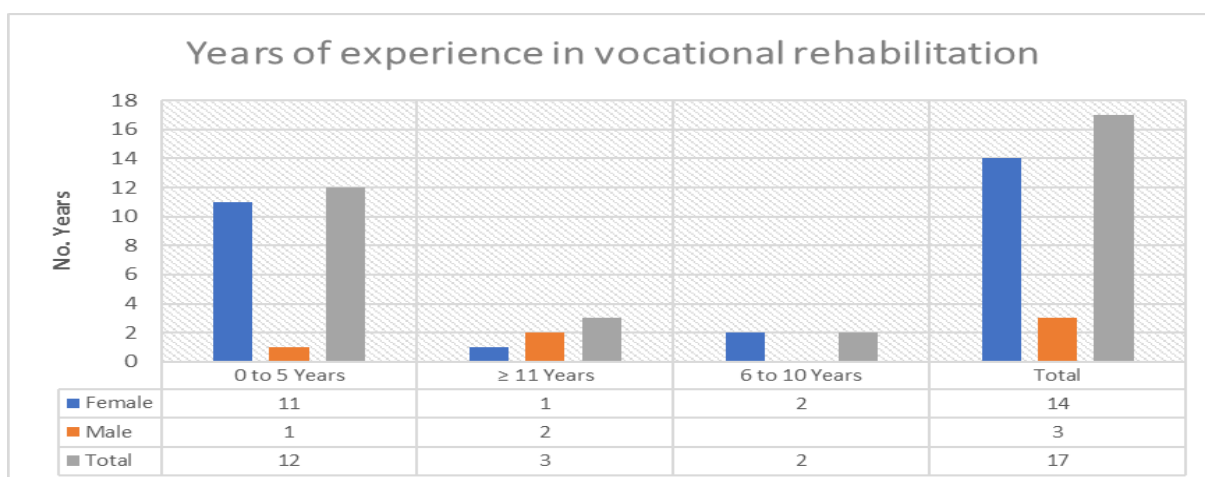
**Figure 4.1: Graph indicating the race of the participants**

The participants had an average of five to ten years of experience as occupational therapist (see Figure 4.2) and an average of five years of experience in the field of vocational rehabilitation (see Figure 4.3).



**Figure 4.2: Graph indicating the years of experience of participants as occupational therapist**

Figure 4.3 shows the years of experience of participants, as occupational therapists, working in the field of vocational rehabilitation. There were three male participants who had more than five year experience in vocational rehabilitation and eight females who had an average of five year experience in vocational rehabilitation, with six females with less than five years' experience in vocational rehabilitation.



**Figure 4.3: Graph indicating the years of experience of participants in vocational rehabilitation**



### 4.3 OVERVIEW OF RESEARCH FINDINGS

The data were analysed using the hermeneutic data analysis method<sup>97</sup> (see Chapter 3, Section 3.2.2.4.4 and 3.2.2.4.5) during the workshop held on the 18<sup>th</sup> April 2019. The researcher was present during the data collection and analysis to observe and take field notes, but no active participation. Only the expert in appreciative inquiry and collaborative data analysis facilitated the data analysis session from an appreciative inquiry stance. All 17 participants participated in the data analysis session. Themes, sub-themes, categories and sub-categories related to work intervention procedures that are implemented and should be used by occupational therapists in the Gauteng public healthcare sector were identified.

From the data that was analysed by the participants, one overarching theme, namely a client-centred approach, was identified. It was decided by all participants that client-centredness lies at the heart of the occupational therapy philosophy, including vocational rehabilitation, and that it should encapsulate the rest of the sub-themes, and therefore should be considered and regarded as the overarching theme. Eleven sub-themes were identified together with their respective categories and subcategories. The eleven sub-themes that were identified were:

- Sub-theme 1: Legislation
- Sub-theme 2: Empowerment
- Sub-theme 3: Assessment
- Sub-theme 4: Intervention planning
- Sub-theme 5: Intervention pathway
- Sub-theme 6: Prevocational skills
- Sub-theme 7: Vocational skills
- Sub-theme 8: Work visit
- Sub-theme 9: Job analysis
- Sub-theme 10: Placement
- Sub-theme 11: Follow-up

A summary of the overarching themes, sub-themes, categories and sub-categories is contained in Table 4.1.

**Table 4.1 Summary of the overarching theme, sub-themes, categories and sub-categories**

Theme	Sub - theme	Categories	Sub-categories
<b>Overarching theme</b>  <b>Client-centred approach</b> (see Section 4.3.1)	<b>Legislation</b> (see Section 4.3.2)	Employment Equity Act (see Section 4.3.2.1)	-
		Labour Relations Act (see Section 4.3.2.2)	-
	<b>Empowerment</b> (see Section 4.3.3)	Occupational therapists (see Section 4.3.3.1)	-
		Patients (see Section 4.3.3.2)	-
		Employer (see Section 4.3.3.3)	-
	<b>Assessment</b> (see Section 4.3.4)	Vocational screening (see Section 4.3.4.1)	-
		Vocational assessment (see Section 4.3.4.2)	-
		Environment (see Section 4.3.4.3)	-
	<b>Intervention planning</b> (see Section 4.3.5)	Goal setting (see Section 4.3.5.1)	-
	<b>Intervention pathway</b> (see Section 4.3.6)	Remediation (see Section 4.3.6.1)	-
		Rehabilitation (see Section 4.3.6.2)	-
		Compensatory (see Section 4.3.6.3)	Assistive device

Theme	Sub - theme	Categories	Sub-categories
	<b>Prevocational Skills</b> (see Section 4.3.7)	Group session or individual sessions (see Section 4.3.6.4)	-
		Conflict management (See Section 4.3.7.1)	-
		Communication (See Section 4.3.7.2)	-
		Time management (See Section 4.3.7.3)	-
		Professionalism (see Section 4.3.7.4)	-
	<b>Vocational Skills</b> (See Section 4.3.8)	Life skills training (see Section 4.3.8.1)	Social skills
		Work samples (see Section 4.3.8.2)	Stress management
			Problem solving
	Psychosocial skills		
	<b>Work visit</b> (see Section 4.3.9)	Work trial (see Section 4.3.9.1)	Work hardening
<b>Job analysis</b> (see Section 4.3.10)	Functional capacity evaluation (see Section 4.3.10.1)	-	
	Report (See Section 4.3.10.2)	-	
	Reasonable Accommodation (see Section 4.3.10.3)	Facilitate social responsibility	
Stakeholder identification and involvement			

Theme	Sub - theme	Categories	Sub-categories
	<b>Placement</b> (see Section 4.3.11)	New adventure	-
	<b>Follow-up</b> (see Section 4.3.12)	-	-

The overarching theme of a client-centred approach will be discussed in detail in Section 4.3.1, thereafter the sub-themes, categories and their related sub-categories are discussed in depth in Sections 4.3.2 to 4.3.12.

#### 4.3.1 Overarching theme: Client-centred approach

The Client-centred approach was identified as the overarching theme currently used by occupational therapists throughout the work intervention procedures as well as the vocational rehabilitation process. Participants stated that the client-centred approach should be at the heart of the goal-setting stage for the work intervention procedures with the client, in order to ensure that the work intervention process is customised to meet the client's needs. It was evident that the work intervention procedures cannot be applied in a linear format to all the clients as a result of client-centredness. Therefore, the client-centred approach dictates the work intervention procedures for each individual client in order to meet their needs and involve them in making critical decisions.

The Client-centred approach as an overarching theme was supported by the following comments made by the participants during the workshop:

- ... *Client-centred should be everywhere ...* (workshop).
- ... *Client-centred goal setting is such a nice word ...* (workshop).
- ... *The client-centred is throughout ...* (workshop) ... *So the client-centred approach will happen throughout the whole process ...* (workshop).

**Discussion:** Client-centredness is at the core of practice when practitioners render healthcare services within the healthcare system.<sup>103</sup> According to the World Health Organization (WHO), client-centredness requires thorough consideration of people's needs, families and communities, not diseases, by empowering them to take charge and ownership of their own health, rather than being a passive recipient of healthcare services.<sup>103</sup> Law et al asserted that *“client-centredness can be viewed as an approach to healthcare which embraces a philosophy of regard for individuals receiving services and a partnership with them”*.<sup>104</sup> Participants' findings of the importance of client-centredness in practice was found to be congruent with both the philosophy of occupational therapy and occupational science<sup>105</sup> together with the World Federation of Occupational Therapists position statement on vocational rehabilitation.<sup>106</sup>

A client-centred approach in practice ensures that the practitioner carefully considers and actively involves the client as a primary decision-maker throughout the treatment process and not just a passive recipient of treatment.<sup>107</sup> Among the early occupational therapy philosophers, Law et al<sup>104</sup> advocated for a client-centred approach and defined it as *“an approach to providing occupational therapy which embraces a philosophy of respect for and partnership with people receiving services. Client-centred practice recognises the autonomy of individuals, the need for client choice in making decisions about occupational needs, the strengths clients bring to a therapy encounter, the benefits of client-therapist partnership and the need to ensure that services are accessible and fit the context in which a client lives”*.<sup>104</sup>

Work is viewed as one of the personal occupations, because it is through work that clients can earn a living and contribute meaningfully in their families and society at large.<sup>108</sup> Therefore, involving clients in decision-making processes, makes them feel valued and respected as human beings.<sup>107</sup> *“Acknowledging clients' experience, knowledge and context facilitates a collaborative process that will inherently induce compliance to treatment and ensure adequate improvement in therapy, rather than doing things for the clients in a passive manner”*.<sup>109</sup>

Law et al asserted that a client-centredness approach in practice comprises various key concepts including *“autonomy/choice, partnership, responsibility, enablement, contextual, congruence, accessibility and respect for diversity”*.<sup>104</sup> The literature supports the findings of the participants and belief that a client-centred approach is at the core of the occupational therapy practice and should be carefully considered throughout the work intervention procedures. Client-centredness is however not possible if there is no legislation in place that

will advocate for and provide protocols and procedures on how to implement effective client-centred interventions in practice. This brings us to the first sub-theme, namely legislation.

#### 4.3.2 Sub-theme 1: Legislation

Participants identified legislation as the first sub-theme that is of paramount importance when actively engaging a client in work intervention procedures. Participants identified legislation to be applicable at different stages of the work intervention procedures. Firstly, the occupational therapy practice and the occupational therapists must be informed and guided by specific legislation in rendering the work intervention procedures to their clients. Secondly, legislation is the beginning of the work intervention procedure processes, and the following steps and their respective components should be implemented within the framework of the legislation. Furthermore, the participants asserted that the clients must also be made aware of and be empowered with necessary legislation to ensure that they are able to participate in the open labour market and engage with their employers.

The sub-theme of legislation is summarised in Table 4.2, followed by some of the quotes from the participants:

**Table 4.2: Legislation**

Sub-theme	Category	Sub-category
Legislation (see Section 4.3.2)	Employment Equity Act (see Section 4.3.2.1)	-
	Labour Relations Act (see Section 4.3.2.1)	-

The following participant quotes support the study findings related to legislation:

- ... *Procedures, protocols and legislation. All that ...* (workshop).
- ... *legislation and programmes like skills development and social responsibility ...* (workshop).
- ... *your code of conduct and all of those things should be considered ...* (workshop).
- ... *all of this should happen within the framework of legislation ...* (workshop).
- ... *all of this is central within legislation ...* (workshop).
- ... *legislation is the start of these processes and leads to that ...* (workshop).

**Discussion:** Work intervention forms part of the vocational rehabilitation field of occupational therapy practice.<sup>38</sup> The aim of intervention in vocational rehabilitation is the client's work occupational performance area.<sup>52</sup> Work is regarded as a sensitive area of the client's life, as it serves as a place where the client generates income to feed and support their family. It involves labour laws and legislation that govern the relations and ensure adequate and safe work space for people to work.<sup>51</sup> It is on this ground that occupational therapists should consider legislation that inherently applies throughout the work intervention process until the client has successfully been returned to or entered the open labour market. Occupational therapists are required to be registered with the Health Professions Council of South Africa (HPCSA), which dictates that all the registered healthcare practitioners should be trained not only in ethics but equally in human rights and medical laws.<sup>110</sup>

The South African Constitution<sup>19</sup> and subsequent legislation<sup>20</sup> protects the rights of people regarding equal opportunity to work. When illness, injury or disability affects the peoples' ability to work, the National Health Insurance system<sup>21</sup> reinstates this constitutional right by ensuring that everyone has equal and adequate access to quality healthcare services that are provided by qualified and registered healthcare practitioners. Van der Reyden noted that healthcare practitioners are obliged to abide by and be familiar with the relevant legislations in South Africa.<sup>110</sup> Furthermore, healthcare practitioners have to act according to personal virtues rooted in their training together with ethical principles embedded in different legislations.<sup>110</sup> Each Act identified by the participants will be discussed in Sections 4.3.2.1 to 4.3.2.2.

#### 4.3.2.1 Employment Equity Act

The aim of the Employment Equity Act, No 55 of 1998, “*is to obtain equity in the workplace by encouraging equal opportunities and fair treatment by eliminating unfair discrimination and by applying affirmative measures to remedy the disadvantages experienced by assigned organisations in order to guarantee fair representation in all working categories and levels in the workforce*”.<sup>51</sup> Therefore, this Act advocates for equal work opportunities among all South African citizens regardless of their colour, gender and disability status.<sup>111-112</sup> Participants noted the importance of empowering their clients with the relevant Acts in order to ensure that they are not discriminated against in the open labour market, regardless of their disability status.

#### 4.3.2.2 Labour Relations Act

The Labour Relations Act “*is aimed at promoting workplace economic development, social justice, labour peace, and democracy*”.<sup>51</sup> The right to fair labour practice which is accommodated in the Labour Relations Act, is important to the occupational therapy profession.<sup>110</sup> This includes discrimination of people with disability, implementation of fair labour practices and workplace adaptations.<sup>110,51</sup> Van der Reyden noted that despite the importance of such legislation, occupational therapists are not adequately informed about the applicable legislation that affects practice.<sup>110</sup> This situation is exacerbated by difficult legal language used in the legislation, publication in the inaccessible Government Gazette formats, and difficulty interpreting and applying the relevant laws in practice.<sup>110</sup>

Effective implementation and adherence to the legislation will not be possible if there is lack of knowledge about the applicable legislations. Therefore, this brings us to the next sub-theme, namely that of empowerment of the occupational therapists, patients and employers.

#### 4.3.3 Sub-theme 2: Empowerment

The second sub-theme identified by participants during the data collection and analysis process was that of empowerment. The empowerment of occupational therapists, patients and employers, were identified as the main categories. Data collected with regard to the empowerment sub-theme is summarised in Table 4.3.



**Table 4.3 Empowerment**

Sub-theme	Category	Subcategory
Empowerment (see Section 4.3.3)	Occupational therapists (see Section 4.3.3.1)	-
	Patients (see Section 4.3.3.2)	-
	Employer (see Section 4.3.3.3)	-

#### 4.3.3.1 Empowerment of occupational therapists

The first category that was identified by the participants under empowerment was the empowerment of occupational therapists, or the clinicians who implement the work intervention procedures. It was found that although occupational therapists undergo formal training for qualification, there are some discrepancies regarding the knowledge and skills required to carry out the work intervention procedures, due to different years of experience, and inadequate sharing of best practices, which can be mitigated through training and more education. Participants found that educating and training occupational therapists, will lead to competence and give them more confidence at all levels of healthcare, i.e. community clinics, district hospitals and tertiary hospitals, so that they can subscribe to the work intervention process, to decrease the patient work-load on the tertiary institutions or hospitals. This will ensure that all occupational therapists in the Gauteng public healthcare sector are equipped with the necessary resources and skills to execute the work intervention procedures.

The following comments and notes from the workshop support the study findings related to empowerment of occupational therapists:

- ... *empower OTs [occupational therapists] by more training ...* (workshop).
- ... *for OTs [occupational therapists] and patients ...*(workshop).
- ... *Education [of occupational therapists] is also part of empowerment ...* (workshop).
- ... *We need to educate and give confidence to [occupational] therapists at all levels of care [hospitals] so that they can buy into the [work intervention] process ...* (workshop).

**Discussion:** In South Africa, newly qualified clinicians are required to be registered with the Health Professions Council of South Africa,<sup>50</sup> which grants them licence to practice as healthcare practitioners.<sup>50</sup> Occupational therapists can consolidate and learn work intervention procedures during their community service period. As outlined by the HPCSA, every newly qualified clinician has to undergo community service and/or internship for a certain number of years, in order to ensure adequate empowerment and skills acquisition.<sup>113</sup> Senior occupational therapists are also required to familiarise and equip themselves with new research,<sup>50</sup> including work intervention procedures. This is noted in the HPCSA policies that every registered clinician has to constantly empower and continue to update themselves in terms of knowledge and skills as part of a continuous professional development programme, and also to ensure continued competence.<sup>50</sup> Buys supports the empowerment of occupational therapists and asserted that occupational therapists need to possess certain professional competency skills in order to be able to carry out vocational rehabilitation services.<sup>3</sup>

Professional competency is achieved through learning and is key to quality service. As noted by Christensen, there is a never-ending need to constantly keep on empowering and educating the clinicians or staff members.<sup>114</sup> However, he further argued that despite the importance and rising need to educate the staff members, this process is considered as one of the most challenging situations in various professions.<sup>114</sup> Innes and Straker reported after tireless research that the occupational therapists' skills, knowledge and experience are of paramount importance in ensuring credibility with regard to the advice and recommendations given to the employer and the client/employee.<sup>115</sup> This puts empowerment of occupational therapists at the core of any form of intervention and interaction with clients.<sup>116</sup>

The nature and magnitude of occupational therapists' responsibility in work evaluation and work intervention procedures dictates that they must constantly be updated with the new treatment modalities and strategies, to ensure adequate clinical reasoning.<sup>117</sup> This is supported by the WFOT, which views occupational therapists as significant role players and key instruments in carrying-out and implementing the vocational rehabilitation services, including work intervention programs.<sup>12</sup> When occupational therapists are empowered, they will be able to empower their patients/clients.

#### 4.3.3.2 Empowerment of patients

The second category identified by participants under the empowerment sub-theme was the empowerment of patients. It was identified that empowerment of patients involves telling them [the patients] about the legislation. As a result of empowerment, patients will be equipped and enabled to stand up for themselves in the work place. It was found that empowerment of patients entails teaching them a skill to do something, giving them information and knowledge to ensure and inspire confidence in order to advocate for themselves, which will ultimately lead to independence.

The following comments and notes from the workshop support the study findings related to empowerment of patients:

- *... educating the patient on their rights, especially regarding disabilities and what their rights are to go back to work ... (workshop).*
- *... after you empower this person [patient], then that person [patient] will be knowledgeable and skilled ... (workshop).*
- *... regarding disabilities and what their [patients] rights are to go back to work ... (workshop).*
- *... empowering the patient is in terms of telling them about legislation. ... So, you are empowering them [patients] to stand up for themselves in a work place ... (workshop).*
- *... Our focus is on the patient, not on the employer ... (workshop).*

**Discussion:** Patient empowerment is regarded as a top priority at all levels of care within the healthcare systems in many countries,<sup>118</sup> including South Africa. Geoffrey et al<sup>119</sup> found that patients tend to be more satisfied with the treatment when they have enough information and guidance from their treating clinicians.<sup>119-121</sup> Bartlett et al added that “*when patients have adequate information concerning their illness or disability, they tend to remember important facts about their conditions which facilitates compliance to intervention*”.<sup>122</sup> Similar research found that the quality of the clinician-patient relationship has a positive impact on the patients’ perception related to their illness,<sup>123</sup> where patient empowerment is concerned. This leads to active participation of the patients in making key decisions regarding their health, and also ensures a sense of ownership in the intervention programme.<sup>119</sup>

Ende argued that a patient’s expressed desire for information about their condition may not automatically be taken as a desire to make decisions.<sup>124-125</sup> Quill and Brody found that among

other things, patients want to be empowered concerning the treatment options available to them, what treatment the clinician recommends and why.<sup>126</sup> A similar study revealed that as part of empowerment, patients value sufficient time with clinicians in consultation and receiving good information about their health, which instils hope and ensures adherence to intervention procedures.<sup>126</sup>

Alongside patient empowerment, Easterling echoed the importance of the bond and rapport that is built between the patient, family and clinician which is based on the ethos of respect for patient and family members individually; respecting and accepting the patient's rights to choose, considering health beliefs; values, ethnic and cultural backgrounds.<sup>127</sup> Such an ethos was found to have a positive impact on the patient's compliance to the intervention programme, which promotes empowerment and ensures adequate patient well-being.<sup>127</sup>

Knowles asserted that adult learning principles are among the key principles that clinicians should consider when developing any form of educational programmes or tools for empowering their patients.<sup>127-128</sup> Knowles stresses that "*adult learning principles and approach to empowerment ensure that adult patients get to assume responsibility for what is imparted and learnt, when the material is personalised and directly related to their illnesses*".<sup>128</sup> A similar study conducted by Lawler has identified six different adult learning principles that clinicians should consider and apply when empowering their patients, which are building on experience of the participant, ensuring reflective thinking, problem posing and problem solving, learning for action, empowering the participant and self-directed learning.<sup>128-129</sup>

#### **4.3.3.3 Empowerment of employers**

The third category that was identified by participants under empowerment, was the empowerment of the employer. According to the participants, this involves educating the patient's new employer, and their colleagues on the disability of the patient and how they can help them [reasonable accommodation]. This will create understanding, and lead to decreased discrimination, furthermore educating the employer on preventing injuries or any further complications. Participants found that there is a need for collaboration of all stakeholders, which includes the medical team, the patient and the employer, in consideration of the legislation to facilitate the work intervention process and ensure return to work of the patient.

Participants further found that employers need to be educated about what occupational therapy is and how occupational therapists can do vocational rehabilitation, to perform work intervention. In most cases, it seems the employer tends to send the patients to their doctors and the doctors do not really know how to go about returning the patient back to work. This includes facilitation of interaction between the employer and the employee. Participants highlighted that occupational therapists engage with the employer when they do the FCE and start the process of work placement. Then the occupational therapists communicate with the employer regularly.

The following comments and notes from the workshop support the study findings related to empowerment of the employer:

- ... *Educating their new employer (workshop) ...then colleagues on the disability ... (workshop).*
- ... *To create understanding, and try to decrease discrimination ... (workshop).*
- ... *educating on preventing injuries or any further complications ... (workshop).*
- ... *employers need to be educated also about what occupational therapy is ... (workshop).*
- ... *education could also be employer education ... (workshop).*

**Discussion:** The empowerment of employers with regard to a patient's or employee's health and disability upon return to work, has been found to be effective in ensuring compliance to intervention or any form of prescribed treatment, and ensuring that the patient or employee remains gainfully employed.<sup>130</sup> An Australian study showed that employers adopted approaches that were proven to be an effective additional healthcare benefit that empowers their employees to manage their chronic illnesses and disabilities.<sup>130</sup> Employers implemented various programmes such as the employee's benefit programme model.<sup>131</sup> The programme ensured active participation, compliance and accountability, where employees had to schedule and attend appointments, achieve goals and implement lifestyle modifications, among other things.<sup>131</sup> Prior to any form of empowerment, there should be an assessment of the client as part of the work intervention procedures, which brings us to the third sub-theme of assessment.

#### 4.3.4 Sub-theme 3: Assessment

The third sub-theme identified by the participants was assessment. Assessment forms part of the initial contact with the patient. While looking at remediating and rehabilitating the patients' daily activities, with the end focus of work, work assessment is done in order to determine how the occupational therapists can remediate the patient to the point where they can go back to work. The data relating to this sub-theme is summarised in Table 4.4.

**Table 4.4: Assessment**

Sub – theme	Category	Sub-category
Assessment (see Section 4.3.4)	Vocational screening (see Section 4.3.4.1)	-
	Vocational assessment (see Section 4.3.4.2)	Body function
	Environment (see Section 4.3.4.3)	-

The following notes from the workshop support the study findings related to the assessment sub-theme:

- ... We have got screening, vocational assessment, specifically the environment ... (workshop).
- ... we do work assessments ... (workshop).
- ... find out the motivation to work ... (workshop).
- ... environmental has a huge influence ... (workshop).
- ... MODAPTS that can be used to screen at all levels of care ... (workshop).
- ... Screening part of assessment (workshop) ... Screening first step of assessment ... (workshop).
- ... screening, vocational assessment, and specifically look at the environment ... (workshop).

**Discussion:** Assessment refers to “an act of assessing someone or something, which inherently forms part of the process of gathering data or information about someone or something”.<sup>132</sup> Data that is gathered can assist in painting a complete vivid picture of someone being evaluated.<sup>132</sup> This provides invaluable information concerning the person’s occupational

performance, which can be further evaluated to aid in decision making about the subsequent steps to be taken thereafter.<sup>132</sup> Participants identified different components under assessment which are described in sections 4.3.4.1 to 4.3.4.3.

#### 4.3.4.1 Vocational screening

The first category of assessment identified by the participants was vocational screening. It was noted that in the Gauteng public healthcare sector, vocational rehabilitation occurs at various levels of care according to the availability of resources and skilling of the occupational therapists at those levels. Screening was identified as the first step of assessment and forms part of the assessment process.

The following notes from the workshop support the study findings related to the vocational screening category:

- ... *Screening [is] part of assessment ...* (workshop).
- ... *Screening [is the] first step of assessment ...* (workshop).
- ... *Then she [occupational therapist] must screen and assess. When she [occupational therapist] does that she must be client-centred, rehabilitate, remediate, compensatory, and decide whether its group or individual [intervention]. From that we go to prevocational skills, skills development, vocational skills, life skills, work samples, work trials ...* (workshop).

**Discussion:** Participants agreed that they practise and implement vocational screening as the first step of assessment in Gauteng public healthcare sector, which was found to be consistent with the opinions of occupational therapists on the positioning of vocational rehabilitation services in Gauteng public healthcare sector.<sup>76</sup> Vocational screening was defined by van Biljon and her colleagues as “*a general and/or specific screening of work-related skills of a client*”.<sup>133</sup> Vocational screening refers to “*a short prescriptive process that is used by occupational therapists to filter and effectively refer patients to more specialized therapists and/or facilities for more in-depth work assessments and support*”.<sup>134</sup> Van Biljon and colleagues compiled protocols which include vocational screening of the client’s ability to work in the open labour market and screening the client’s ability to drive.<sup>133</sup> According to the participants, the vocational screening is followed by vocational assessment.

#### 4.3.4.2 Vocational assessment

The second category of assessment identified by the participants was vocational assessment, which is followed by the traditional vocational rehabilitation process that is implemented by occupational therapists.<sup>76</sup> Provision of vocational assessment services in Gauteng province is influenced and shaped by the availability of resources, staff skilling and levels of cares at various hospitals.<sup>76</sup> Participants agreed that following screening, is vocational assessment, whereby an occupational therapist would commence by conducting a general assessment together with specific vocational assessment.

The vocational assessment entails a detailed analysis and evaluation of the client's everyday tasks or their inherent work duties, in order to determine their residual vocational capacity in relation to what they have been doing at work. Participants identified that vocational assessment involves the process of determining the client's skills and what they can do, prior to the commencement of intervention or treatment and training of the client and/or improvement of the identified problem areas.

The following notes from the workshop support the study findings related to the vocational assessment category:

- ...you [occupational therapists] *start assessing, ... you do a general assessment together with vocational assessment which includes you will find out what this client is doing on day to day basis. Then when you do FCEs, you are now specific into finding the functional capacity of the client. Now it will be after the process and then now you want to place ...* (workshop).
- ...you [occupational therapist] *will first do the [vocational] assessment to see what their skills are and what they can do and start that training and intervention before you maybe do a work trial ...* (workshop).
- ...we [participants/occupational therapists] *feel like most of the people currently are just doing assessments and then referring to the relevant places ...* (workshop).

**Discussion:** van Biljon and her colleagues asserted that “assessment in the context of occupational therapy entails the assessment of the person's ability and/or their capabilities after any form of injury and/or illness, in order to determine their ability to work and/or ascertain their residual functional capacity”.<sup>76,135-136</sup> Assessment forms part of the on-going process and is usually carried out by occupational therapists before and/or simultaneously with vocational



rehabilitation. Occupational therapists play a major role in the vocational rehabilitation process through assessment and rehabilitation to ensure adequate return to work of their clients.<sup>136</sup> Similar studies found that the process of rehabilitating the person or worker's work occupation involves an assessment of the match between the inherent demands of the worker's job, workplace and the residual functional capacity of the worker.<sup>137</sup>

Occupational therapists carefully consider and use the results of the assessments to decide and guide work intervention, with an intent to address any mismatch with regard to the client's work capacity.<sup>137</sup> Occupational therapists utilise assessments that are functionally orientated to assess and determine the client's work capacity.<sup>138</sup> Among the assessment methods and techniques that are commonly used by occupational therapists in practice to assess their clients is FCE.<sup>136</sup>

Among the contributing researchers in South Africa, Buys and van Biljon found that assessment includes the assessment of the client's physical and psychological performance components, which are thoroughly assessed prior to the work evaluation.<sup>43</sup> The assessment of different body structures and body functions is conducted through the use of different standardised and non-standardised assessment methods and tools, observations in various structured and unstructured settings and self-reporting questionnaires. These body structures and body functions include muscle strength, range of motion, balance, concentration, attention, and memory.<sup>139</sup>

Assessment ensures that the worker's functional work capacity equals and meets the physical demands of their inherent work tasks and the work environment at which the tasks are performed.<sup>140</sup> Activities are carefully selected and traditionally used by occupational therapists as part of assessment, including work capacity assessment.<sup>141</sup> Research also found that purposeful use of activities and activity analysis are regarded as the cornerstone of occupational therapy in assessment and intervention, in order to ensure achievement of therapeutic goals.<sup>142</sup> Following the client's work capacity assessment, is the assessment of the work environment.

#### 4.3.4.3 Environment

The third category of assessment that was identified by the participants was the assessment of the environment. The participants asserted that environment is one of the vital areas that should be assessed by an occupational therapist before they [occupational therapists] can actively engage a client in any form of work intervention. Assessment of the environment provides insight to the occupational therapist and enables him/her to put the client in the right environment, structure the intervention or treatment in line with the client's realistic and future home and work environment. The community environment was reported to be among one of the factors that could act as a barrier or facilitator to hindering or enabling the client's ability to participate in the work intervention process and/or to return to work. Therefore, it was agreed that intervention should also consider the client's home and work environment.

The following notes from the workshop support the study findings related to the environment category:

- ... *in our [occupational therapy] experience, environment has a huge influence ...* (workshop).
- ... *And then there's the physical barriers, sometimes people with wheelchairs can't get over because some sewage is going past their front door and things like that ...* (workshop)
- ... *intervention in the environment to take those barriers is very much International Classification Function. You know, those facilities and barriers that goes beyond what we [Occupational Therapists] think of work, and the person's capacity to work and matching him with the work place ...* (workshop).
- ... *altering his [the client's] environment to adapt his work ...* (workshop).
- ... *The assessment that we [occupational therapists] are focusing on here is on body functions and home environment ...* (workshop).

**Discussion:** Work assessment services includes the assessment of the context and environment at which the occupations will be carried out, according to the Occupational Therapy Practice Framework 3<sup>rd</sup> edition.<sup>38</sup> The active participation and engagement of clients in their daily occupation, including work, takes place within the social and physical environment which is therefore contained within their different contexts.<sup>38</sup> The Occupational Therapy Practice Framework indicates that the physical environment which is regarded as the geographical and natural environment, comprises physical structures and surroundings where

occupations are carried out.<sup>52</sup> The physical environment may present some hindrances that may potentially act as a barrier, or may provide a conducive environment that can support and enable the person to actively engage in their occupations such as work.<sup>38</sup> A similar study shows that there is a direct relationship between a person, environment and occupation, as indicated in the Person-Environment-Occupation Model.<sup>143</sup> This model emphasises the dynamic interaction of the person, his/her environment, and occupations that are performed over time, which is congruent with the Canadian Model of Occupational Therapy, and also holds similar values and belief with regard to the impact of the environment on human occupation.<sup>144</sup> It is in support and consistent with the notion that “*human occupational performance is directly shaped and influenced by the dynamic interdependence of the person, environment and occupation*”.<sup>144-145</sup>

According to the Occupational Therapy Practice Framework, the environment is closely linked to the context, which entails social context, cultural context, temporal context and virtual context.<sup>38</sup> These were found to have a direct impact on the client’s ability to execute his/her occupations, including work, which is in line with the World Health Organisation statement that health can directly be influenced by different factors such as occupational deprivation due to environmental barriers.<sup>146</sup> This shows that context and environment play a significant determining role with regard to access and participation in occupations.<sup>147</sup> Therefore, any change that can be made to the environment and context may positively or negatively influence the client’s quality of occupational performance,<sup>38</sup> which includes work occupation. Participants noted that once the client, his/her work capacity and environment have been assessed, with identified areas of deficit to be treated and addressed, a plan of action must be carried out, which brings us to the fourth sub-theme of intervention planning.

#### **4.3.5 Sub-theme 4: Intervention planning**

The fourth sub-theme that was identified by the participants at the workshop, during the data collection and data analysis session, was intervention or treatment planning. It was noted that intervention planning should take place after completion of the assessment, which involves the setting of client-centred goals with the client and family. Participants asserted that intervention planning provides guidance with regard to the pathway of treatment that should be taken and the different intervention procedures and components that should be implemented for each individual client. The data relating to this sub-theme is summarised in Table 4.5.

**Table 4.5: Intervention planning**

Sub-theme	Category	Sub-category
Planning (see Section 4.3.5)	Goal setting (see Section 4.3.5.1)	-

The following notes from the workshop support the study findings related to the intervention planning sub-theme:

- ... *the different intervention procedures that we [occupational therapists] can do ... (workshop).*
- ... *planning treatment ... (workshop).*
- ... *implementing treatment and reassessment ... (workshop).*
- ... *the intervention planning phase. So, following assessment, you [occupational therapist] have got the planning phase. And then, we [occupational therapists] come to pre-occupational and then it's going to be components, it's not the same for everybody [clients] ... (workshop).*

**Discussion:** Planning for intervention with a client is at the heart of the intervention process in the philosophy of occupational therapy.<sup>52</sup> The Occupational Therapy Practice Framework describes the intervention process as an undertaking by occupational therapists, done with an intent to facilitate active engagement in client's occupations related to health, well-being and participation.<sup>147</sup> This is done in collaboration with the client.<sup>148</sup> The intervention process consists of intervention plan, intervention implementation and intervention review, as per the Occupational Therapy Practice Framework.<sup>38</sup>

The participants' findings on intervention planning were found to be consistent with the Occupational Therapy Practice Framework, which is described as "*the process which directs the actions of occupational therapy practitioners; it facilitates and guides the selection process of occupational therapy approaches and determines the types of interventions that should be used in reaching the client's identified outcomes*".<sup>38</sup> A similar study found that "*an intervention plan should be collaboratively developed with the client to ensure a sense of ownership, involvement and compliance*".<sup>149</sup>

According to the Occupational Therapy Practice Framework, the components of intervention planning include client-centred goal setting, which is consistent with the research findings, as identified by the participants.<sup>52</sup> However, it was noted that the participants did not mention some of the components that are entailed in the intervention planning, as detailed in the Occupational Therapy Practice Framework. Other components that guide the intervention process include “*the client values, belief, occupational needs, client’s performance skills, performance patterns, context and environment, client factors and performance skills, activity demands and approaches that will be followed*”.<sup>38</sup> Therefore, these are some of the components that seem to be central in intervention planning, in carrying out the work intervention procedures.

#### 4.3.5.1 Category: Goal setting

The category that was identified by the participants under [intervention] planning was goal setting. Participants found that goal setting should form part of [intervention] planning, as this is the point at which the direction for the entire intervention process is determined. It was also noted that the goals should be set together with the client in order to ensure client-centredness. Among the goals identified by the participants for this category, are those that are work related and would have an end outcome of returning the client back to work after they have undergone the work intervention procedures and process. Furthermore, the participants asserted that as part of intervention planning, goal setting determines the pathway that will be used by the occupational therapist, such as remediating, rehabilitating and/or compensating.

The following notes from the workshop support the study findings related to the goal setting sub-theme:

- ... *there is client-centred goal setting ... (workshop).*
- ... *the focus is on goal setting but it must be client-centred ... (workshop).*
- ... *goal setting is one part of the intervention ... (workshop).*
- ... *all goal setting needs to take part in work and return to work ... (workshop).*
- ... *it goes back to client-centred goal setting because that will determine everything, whether you are remediating, rehabilitating or compensating ... (workshop).*

**Discussion:** Participants noted that there are different words that are used when referring to goal setting, although the meaning and implication is similar. The Occupational Therapy

Practice Framework 3<sup>rd</sup> edition, regards goals as outcomes, which are described as the desired end result of the occupational therapy intervention process, which is what can be foreseen, aimed at and/or expected at the end of the intervention program.<sup>38</sup> Goals are related to and are set in accordance with the selected intervention that has been implemented, in conjunction with different factors such as performance skills, client factors, performance patterns, context and environment, and occupations, including the work occupation. A similar study shows that goals of intervention can be subjective and are related to the client's subjective impression on goal attainment.<sup>38</sup>

Goals setting for intervention ensures and proves the effectiveness of therapy and facilitates recovery in therapy. Goals setting can be set in different ways according to the aims of the intervention itself. Among other things, goals can be broken down into long-term goals, short-term goals, intermediate goals, SMART objectives, and sessional goals for a particular treatment session, which would globally lead to an attainment of the overall intervention goals.<sup>38</sup> This is applicable in the work intervention procedures, as the process ensures adequate improvement, where both the occupational therapist and client are able to trace, measure and monitor progress throughout the work intervention process. Similar studies reveal that it is of paramount importance for an occupational therapist and client, during the intervention implementation and reevaluation, to modify or adjust the intervention goals in order to accommodate and meet the changing needs, contexts and performance abilities.<sup>52</sup>

Following intervention planning, participants identified intervention pathway as the next sub-theme that should be part of the work intervention procedures.

#### **4.3.6 Sub-theme 5: Intervention pathway**

Participants identified that an intervention pathway leads to a course of purposeful actions that serve as a way to an achievement of a specific result in the work intervention process. Participants noted that the intervention pathway is generally called different names in occupational therapy literature. Among other things that participants reported were treatment modalities/pathways where the focus is more on the actual treatment, rather than assessment. This includes modalities/pathways such as remediating a client to a point where they can go back to work, rehabilitating or compensating for certain components which guide the path that would be taken for the work intervention procedures and process. Furthermore, participants identified that once the treatment strategy has been selected, the occupational therapist can

then decide whether he/she will follow group or individual therapy sessions to implement the work intervention procedure with the client. The data relating to the pathway sub-theme is summarised in Table 4.6.

**Table 4.6: Intervention pathway**

Sub-theme	Category	Sub-category
Intervention pathway (see Section 4.3.6)	Remediation (see Section 4.3.6.2)	
	Rehabilitation (see Section 4.3.6.1)	
	Compensatory (see Section 4.3.6.3)	Assistive device
	Group session or individual sessions (see Section 4.3.6.4)	

- ... *treatment modality* ... (workshop).
- ... *focus is more on treatment than assessment* ... (workshop).
- ... *we [occupational therapists] can remediate that person [the client] to the point where they can go back to work* ... (workshop).
- ... *the rehabilitation* ... (workshop).
- ... *working on group and individual sessions* ... (workshop).
- ... *support group setting* ... (workshop).
- ... *remediate and rehabilitate and compensate* (workshop) ... *It's three different strategies* (workshop) ... *it takes you on a different path* ... (workshop) ... *three core decisions* (workshop) ... *Because you choose between those things which then guides the rest* ... (workshop).
- ... *from there you either do group or individual therapy* ... (workshop).
- ... *now I must decide where am I going, rehab, remediate, compensatory. And whether I am going to do it in a group or not, individual* ... (workshop).

**Discussion:** Participants identified the intervention pathway as one of the sub-themes and components of work intervention procedures, that should be done by occupational therapists in Gauteng public healthcare sector. Literature shows that intervention pathways sub-theme,

and its respective indicated categories and sub-categories, form part of intervention planning,<sup>38</sup> which is described in 4.3.5. The intervention pathway relates to the occupational therapy intervention approaches and strategies which are selected to guide and direct the evaluation and intervention planning, selection and implementation.<sup>52</sup> Similar research “shows that treatment approaches, which determine the intervention pathway, inform the selection of practice model, treatment theories and frame of reference”.<sup>38</sup> The Occupational Therapy Practice Framework 2<sup>nd</sup> edition, highlights the different treatment approaches that determine the pathway to be followed for work intervention procedures, which includes health promotion, restoration, maintenance, modification or compensation and prevention.<sup>52</sup>

#### 4.3.6.1 Remediation

The first category that was identified by the participants under the pathway sub-theme was that of remediation. Remediation involves restoration of function after any form of injury; as highlighted by the participants, occupational therapists seek to remediate a client to the point where they can go back to work. Remediation as a pathway of an intervention approach determines the unfolding and implementation of the preceding work intervention procedures.

The following transcribed and analysed data from the workshop support the study findings related to the remediation category:

- ... we [occupational therapists] can remediate that person [the client] to the point where they can go back to work ... (workshop).
- ... remediate and rehabilitate and compensate (workshop) ... *It's three different strategies* (workshop) ... *it takes you on a different path* ... (workshop) ... *three core decisions* ... (workshop).

**Discussion:** According to the Occupational Therapy Practice Framework 3<sup>rd</sup> edition, a remediation intervention approach refers to a design that seeks to address the client variables in order to facilitate skill acquisition, improve a skill that has not yet developed and/or to restore any client factors or skills that have been impaired after any form of injury or illness.<sup>38</sup> A remediation intervention pathway is a therapeutic way that may lead to an improvement and restoration of function.<sup>52</sup> There is still hope that the client may recover most of their premorbid function and live independently with good quality.<sup>150</sup> This is usually based on the underlying client factors that are affecting the client's function such as remediating muscle strength, balance, pain management, range of motion, memory, concentration and others, in order to



ensure full participation in work-related activities and other areas of occupation.<sup>73,151</sup> Following remediation intervention strategy is rehabilitation pathway.

#### 4.3.6.2 Rehabilitation

The second category that was identified by the participants under the pathway sub-theme was that of rehabilitation. Participants noted that rehabilitation follows after remediation or can be carried out concurrently. Furthermore, participants highlighted that a rehabilitation approach is carried out and acts as a gap between remediation and compensation.

The following transcribed and analysed data from the workshop support the study findings related to the rehabilitation category:

- ... *the rehabilitation* ... (workshop).
- ... *remediate and rehabilitate and compensate* ... (workshop).

**Discussion:** Wade asserted that the aim of the rehabilitation approach or pathway is to “*maximize the patient's role fulfilment and his independence in his environment, all within the limitations imposed by the underlying pathology and impairments and by the availability of resources; help the person to make the best adaptation possible to any difference between roles achieved and roles desired*”.<sup>152</sup> Literature shows that where rehabilitation is concerned, there are different factors that should be taken into consideration and rehabilitated, not only the client or the person injured.<sup>153</sup> Environmental factors and personal factors are among the factors that should be considered when doing rehabilitation in the occupational therapy context,<sup>153</sup> which is consistent with the World Health Organisation.<sup>146</sup>

Among the environmental factors that occupational therapists should closely consider when involving a client in any form of intervention, including the work intervention, entails the physical, social, and attitudinal environments of the client.<sup>154</sup> Similar research shows that these factors are viewed as external to the client and they can have a positive or negative influence on the client's performance in society, on performance of tasks and activities, or on body function and structures.<sup>155</sup> Participants noted that following the rehabilitation pathway is the compensatory pathway.

#### 4.3.6.3 Compensation

The third category that was identified by the participants under the intervention pathway sub-theme was that of compensation. It was noted by the participants that the compensation intervention approach follows after remediation and rehabilitation, which is a point at which no improvement can be expected in any client factors or variables. Furthermore, participants highlighted that compensation for the lost skills of ability has to be implemented at this stage.

The following transcribed and analysed data from the workshop support the study findings related to the compensatory category:

- *... remediate and rehabilitate and compensate (workshop) ... It's three different strategies ... (workshop).*

**Discussion:** According to the Occupational Therapy Practice Framework, 3<sup>rd</sup> edition, a compensatory intervention approach refers to exploring different ways to revise the client's current context and activity demands in order to support the client's occupational performance in their natural physical environment and context.<sup>38</sup> This includes modification of certain execution methods, tools and equipment to ensure that despite the permanence of the client's physical disability or injury, he/she should be able to actively participate in activities of daily living, including, going to work, accessibility and being able to be gainfully employed.<sup>38</sup>

The compensatory approach involves adaptation and customising the client's environment to make it more conducive and accessible to them to be able to carry out their activities with ease; such as simplifying tasks sequences to assist the client who may have impairments in certain cognitive areas.<sup>38</sup> Participants noted that once an intervention strategy has been selected, an occupational therapist may decide on a mode of treatment whether it will be a group or individual treatment session, which bring us to the fourth category.

#### 4.3.6.4 Group session and/or individual sessions

The fourth category that was identified by the participants under the intervention pathway, was that of group and/or individual sessions. It was noted that after the selection of a treatment approach or strategy, the occupational therapist should then determine whether the identified work qualities or components will be addressed through a group or an individual session, as part of the work intervention procedures.

The following transcribed and analysed data from the workshop support the study findings related to the group session and individual session:

- ... *from there you either do group or individual therapy ...* (workshop).
- ... *working on group and individual sessions ...* (workshop).
- ... *support group setting ...* (workshop).

**Discussion:** Davies and colleagues found that the use of individual treatment sessions and group therapy sessions as methods of intervention, both yield significant improvement in the client factors and performance skills, which ensure the achievement of treatment aims.<sup>156</sup> Group therapy is considered as one of the occupational therapy modes of intervention.<sup>157</sup> As noted by Sowmya,<sup>158</sup> group therapy is regarded as one form of psychosocial treatment where a small group of patients meet regularly to talk, interact and discuss problems with each other, with an intent to reach a common goal, through the facilitation of a group leader.<sup>158</sup> According to the Occupational Therapy Practice Framework, 3<sup>rd</sup> edition, there are various types of group therapy that are provided by occupational therapists in any form of intervention which includes functional groups, activity-based groups, task-based groups, social groups, life skills groups, psycho-education groups, social-emotional groups and support groups.<sup>38</sup>

Creek and Laughter identified some of the reasons for occupational therapy group intervention which include the development of new or adapted roles in society and provision of a conducive and supportive environment for the clients to actively participate while therapeutically learning new skills.<sup>157</sup> Crouch asserted that group therapy facilitates social interaction which induces healing through the support system, sense of belonging, acceptance and the invaluable feedback that clients receive from each other within the group itself.<sup>159</sup> Group therapy is regarded as a cost effective mode of intervention, as many clients can be actively engaged in the same intervention and space with the same aim and achieve the same results.<sup>160</sup> Personal growth through empowerment and sharing of ideas, were among the qualities noted by Crouch, which were improved and promoted through a group therapy intervention mode.<sup>159</sup>

Alongside the group therapy intervention mode, occupational therapists also engage their clients in client-directed daily life activities that match, inherently support and facilitate improvement in certain identified participation goals.<sup>38</sup> Individual intervention sessions entail the careful selection and use of occupations and activities that are analysed and strategically structured to address the underlying client factors and need of the client's mind, body and

soul, in order to ensure the achievement of the therapeutic goals.<sup>52</sup> Therefore, occupational therapists use both individual and group modes of intervention to treat their client's occupations, including work occupation. Depending on the client factors or skills that occupational therapists want to address, this brings us to the sixth sub-theme of pre-vocational skills which is among the skills that can be addressed in an individual session or through a group session.

#### 4.3.7 Sub-theme 6: Prevocational skills

Among the components of work intervention procedures that were identified by the participants is prevocational skills training, which is the sixth sub-theme. Participants identified that prevocational skills training should precede the vocational skills training in the work intervention procedures as they usually commence with these kinds of skills prior to the work specific skills that the client should learn before returning to work. It was noted that client-centredness should be at the heart of planning and execution of the prevocational skills work intervention procedures. The data relating to this sub-theme is summarised in Table 4.7.

**Table 4.7: Prevocational skills**

Sub-theme	Category	Sub-category
Prevocational skills (see Section 4.3.7)	Conflict management (see Section 4.3.7.1)	-
	Communication (see Section 4.3.7.2)	-
	Time management (see Section 4.3.7.3)	-
	Professionalism (see Section 4.3.7.4)	-

The following transcribed and analysed data from the workshop support the study findings related to prevocational skills:

- ... by the prevocational on the way to vocational skills ... (workshop).
- ... prevocational skills will be using the client-centred approach ... (workshop).
- ... following assessment, you have got the planning phase. And then, we come to prevocational and then it's going to be components, it's not the same for everybody ... (workshop).

- ... You are going to screen and assess, you are going to start with your prevocational skills, skills development, your work visits, and that's it ... (workshop).

**Discussion:** Prevocational skills training refers to the various skills that are needed and should be acquired by the client prior to entering or returning to the workforce and/or the open labour market.<sup>161</sup> Mitchel and her colleagues researched the team approach to prevocational services in vocational rehabilitation.<sup>162</sup> They described a Career Training Workshop as the vocational training programme for the purposes of employment in the workforce that was developed for students with disability and unemployed.<sup>162</sup> Prevocational skills training entails specific inherent skills that a person should have before he/she can be employed in the open labour market. It comprises specific qualities such as being able to abide by specific rules and regulations of the company including punctuality,<sup>163</sup> following of instructions,<sup>164</sup> preparation of tasks assigned, executing and completion of tasks, social interaction<sup>165</sup> and being productive.<sup>166</sup>

The prevocational skill model follows the 'Train-then-place' process.<sup>166</sup> This model is based on the assumption that the client or an individual has to undergo an intensive rehabilitation programme of skill acquisition to acquire the general prerequisite skills prior to the employment, and demonstrate their work readiness before they can be considered to be suited for the workforce or to compete in the open labour market.<sup>167</sup> The types of services that are offered as part of the prevocational skills training may include work adjustment, personal adjustment and specific skills training provided outside the normal competitive employment environment or work place.<sup>168-169</sup> A similar study showed a prevocational skills programme developed in work intervention to ensure competence and improvement of certain skills such as standing tolerance, fostering work habits, development of consistency, work motivation and others.<sup>162</sup>

Among the approaches inherently used throughout the prevocational skills process to ensure behaviour modification and skills acquisition, is verbal praise and acknowledgment of good practice in relation to completion of work.<sup>162,170</sup> Prevocational skills training through specific structured activities such as the horticulture programme, in the vocational rehabilitation process, ensures improvement and increased sense of self-worth, increased self-mastery, physical involvement, interaction with peers, interaction with public and development of work habits.<sup>171</sup> Zafar and colleagues argued that supported employment is more effective than the prevocational skills training approach to ensuring entry to the workforce.<sup>166</sup>

According to the Rehabilitation Act of 1973 7(35), supported employment is defined as “*competitive work in integrated work settings, or employment in integrated work settings in which individuals are working toward competitive work, consistent with the strengths, resources, priorities, concerns, abilities, capabilities, interests, and informed choice of the individuals*”.<sup>166,172</sup> In comparison with the prevocational skills training, supported employment is viewed as a ‘place-then-train’ approach. However, other research indicates that prevocational skills follows supported employment and they complement each other in vocational rehabilitation, although there may be some overlaps in the procedures.<sup>172-173</sup> The different components of prevocational skills identified by the participants are described in sections 4.3.7.1 to 4.3.7.4.

#### **4.3.7.1 Conflict management**

Among the categories of prevocational skills that were identified by the participants was conflict management. It was identified that this is one of the life skills that should be considered as a prevocational skill that a client should be trained in before placement in the open labour market.

The following transcribed and analysed data from the workshop support the study findings related to conflict management:

- ... *communication skills, time management and conflict management is prevocational skills ... (workshop).*
- ... *prevocational. skills, skills development, life skills. Life skills includes conflict, social stress, professional and psychological holistic aspects ... (workshop).*

**Discussion:** Conflict refers to a process whereby a party that is engaged in a conflict situation may perceive that his/her needs and interest are being negatively affected and opposed by another party.<sup>174</sup> Conflict is “*a process or situation that can involve one or two parties, even more parties who may strongly hold different points of view on a matter at hand, depending on the severity and the extent of the conflict itself*”.<sup>175</sup> It was noted by the research participants that conflict management is one quality that is of paramount importance for the client to possess prior to returning to work. It is an undeniable reality that upon return to work, the client’s opinion and points of view will be opposed and challenged by the co-workers or superiors.<sup>176</sup> Similar research identified that interferences with someone’s goods, aims, and

values are regarded as among the sources of conflict,<sup>177-178</sup> in any situation including the workplace.

Other causes of conflict include individual characteristics.<sup>174</sup> Literature shows that individual differences such as personality and attitude,<sup>179</sup> have a negative impact on the negotiations in the workplace, particularly with subordinates and co-workers.<sup>89,180</sup> Interpersonal factors whereby two parties are involved in any form of a relationship, is at times deemed to be a well-spring of conflict,<sup>174</sup> such as an employer-employee relationship. Distortions and misunderstandings through communication,<sup>181</sup> are regarded as the common phenomena that are rampant in cross-cultural communication, which may result in conflict.<sup>182</sup> Interestingly, communication is the second category that was identified by the participants as one of the components of prevocational skills that a client should have prior to returning to or entering the open labour market.

#### 4.3.7.2 Communication

Communication is the second category that was identified by the participants as being among the important prevocational skills that the client should possess before entering the open labour market. Participants identified that developing communication skills is an area of general life skills that the client should be trained in before returning to and/or entering the open labour market. This entails communication with co-workers and employers, as indicated in section 4.3.7.1 above, in the literature discussion, regarding the conflict management category.

The following transcribed and analysed data from the workshop support the study findings related to communication:

- *... communication skills, time management and conflict management are pre-voc. [vocational] ... (workshop).*

**Discussion:** The work intervention process inherently entails the process of exchanging key information between the client and the occupational therapist; the client and the stakeholders may be directly involved throughout the intervention process until the client is successfully placed or returned to work. The information that is shared or exchanged between the occupational therapist and the client is central and determines the quality of the healthcare and compliance of the client to the intervention process, including the work intervention.<sup>183-187</sup>

Communication refers to a process of imparting and exchanging information with someone or a group of people.<sup>188</sup> Literature reveals that there are various types and modes of communication, which may take the form of verbal and/or written communication.<sup>188</sup>

Throughout the work intervention procedures, information will be exchanged with the client, whereby he/she would be expected to communicate their needs and contribute meaningfully in the workplace, be it connecting, networking and/or responding effectively to the instructions.<sup>189</sup> Communication may encompass different strategies and methods, which are dependent on the purpose of the communication itself.<sup>190</sup> Formal and informal communication are among the other ways to impart important information<sup>190</sup> between the client, occupational therapist and any other stakeholder, which includes the client's employer and family.

#### 4.3.7.3 Time management

Participants identified time management as the third category that clients should have as part of the prevocational skills, prior to entry into the open labour market. Among other prevocational skills, participants identified that time management is one of the general prerequisites for employment. The client's ability to sustain his/her day to day tasks during the employment is assessed and improved through the work intervention procedures that develops prevocational skills.

Therefore, the following transcribed and analysed data from the workshop support the study findings related to time management:

- ... *communication skills, time management and conflict management are pre-voc. [vocational] ... (workshop).*
- ... *But vocational skills are like time management, can you [client] sustain your [client] whole days' work, so it's more general, it's not specific to a specific job ... (workshop).*

**Discussion:** Literature on time management shows that the process of management of one's time in the work place, is of paramount importance.<sup>191</sup> Lakein described the importance of differentiating and establishing the needs and the wants in the daily tasks that one has to perform at work, in order to ensure adequate prioritisation.<sup>192</sup> Goal setting for each day at work enables one to be able to carefully prioritise the work that they should perform and maximise the time allocated.<sup>192-193</sup> This is important in the work place as the employee has to consider



the allocated time, resources available to plan the work, scheduling of tasks and drawing up a list of key tasks that should be done in order to ensure productivity.<sup>194</sup>

As identified by the research participants, the client who is engaged in the work intervention procedures should be prepared and trained to acquire the necessary time management skills, in order to ensure that he/she is gainfully employed, can sustain the whole day's work by making the most of his/her time on duty. This would be ensured by the organisation of the work place, setting of objectives within the set goals, and setting appointments accordingly, which would facilitate a sense of mastery over one's allocated time.<sup>191,195</sup> Similar research shows that this process gives an individual a perception that they have adequate time to complete what is assigned to them.<sup>195</sup>

#### 4.3.7.4 Professionalism

Participants suggested that professionalism is among the categories of prevocational skills that a client should possess prior to entry into or return to the open labour market. This was identified under the work-related prerequisite skills.

The following transcribed and analysed data from the workshop support the study findings related to professionalism:

- ... *social stress, professionalism and psychological aspects ... (workshop).*

**Discussion:** With regard to this study, professionalism as described by the participants aligns with Helsby's research which views professionalism as 'being professional'.<sup>196</sup> Being professional in the work place relates to the quality of the output, or the results of the work that is carried out by the employee.<sup>196-197</sup> The findings of the current study correlated with the findings of Englund, which indicated that professionalism is closely tied to the individual's conduct, demeanour and certain parameters or standards that dictate and guide a way of being professional in whatever work the individual is doing.<sup>198</sup> As noted by the participants, the prevocational skills serve as foundational skills that should be consolidated prior to acquisition of the vocational skills for the work place.

#### 4.3.8 Sub-theme 7: Vocational skills

The seventh sub-theme that participants identified during the data analysis process was that of vocational skills. Vocational skills follow after the prevocational skills. This is when the client

has been equipped with general prerequisite skills that are needed in order to be employed or return to the open labour market. Vocational skills are work specific and focus on specific inherent work skills and activities that the employee will be required to do on duty. Skills development was noted to be part of vocational skills training whereby physical type of skills can be taught to the clients if they will be engaged in a job that will require physical elements or clerical skills if the client will be engaged in sedentary type of work. Participants identified various components and ways of implementing vocational skills as part of the work intervention procedures. Table 4.8 summarises some of the data collected pertaining to vocational skills.

**Table 4.8: Vocational skills**

Sub-theme	Category	Sub-category
Vocational skills (see Section 4.3.8)	Life Skills training (See Section 4.3.8.1)	Social skills
		Stress management skills
		Problem solving skills
		Psychosocial skills
Work samples (see Section 4.3.8.2)		

The following notes from the workshop support the study findings related to the sub-theme of vocational skills:

- ... So, you [occupational therapist] might be training the vocational skills in a work that this person is already doing or you might be training this person skills in order for them to develop a vocational activity ... (workshop).
- ... the vocational skills are actually what you are already doing. The competency of work ... (workshop).
- ... One of the vocational skills development stuff, is just education leading to empowerment ... (workshop).
- ... Occupational therapy the role of skills training to these clients where we can teach them to do wood work, leather work, or baking and then they open their own business based on our economy ... (workshop).

**Discussion:** Participants identified vocation and described it in line with the current literature that it refers to a person's employment, and/or work as an occupation.<sup>199</sup> Vocational skills refer *“to the types of skills that an individual or employee needs to gain or acquire as part of the process of becoming knowledgeable and skilled in a particular job, profession or career”*.<sup>199-200</sup> Felstead identified specific types of employment which would require vocational skills training or acquisition in order to be competent and adequately compete in the open labour market. These include construction, wholesale & retail, restaurant, public administration, among others.<sup>201</sup> Therefore, vocational skills relate to job specific skills that a client should learn in order to be better equipped for employment.

It is noted that whilst occupational therapists are regarded as the key role players in addressing the occupation of their client's work,<sup>12,202</sup> including vocational skills,<sup>12</sup> there are some specialised job specific skills that can only be learned on-the-job after the client has been hired, placed or returned to work.<sup>203</sup> MacDonald argued that the emphasis should be placed more on the execution process during vocational skills training or engagement in the activity,<sup>204</sup> rather than focusing more on the end product.<sup>205</sup>

Monareng et al identified various vocational and self-employment skills that can be considered by occupational therapists when engaging their clients in work intervention, which include: Retail: Spaza shops, second hand clothing, artwork, blankets, vendor; Services and Skills: freelancing, repairing, hair salon, sewing, car wash, laundry services, driver, recycling; and Manufacturing: toy making, woodwork, craft activities, baking, carpentry and selling a variety of products, among others.<sup>206</sup>

Similar research found that nowadays the skills sets of various jobs tend to change and advance very quickly.<sup>203</sup> This creates a gap and a need to bridge the college qualification or training with the practical vocational skills.<sup>203,207</sup> Employers are more prone to consider trainable recruits and less trained recruits.<sup>207</sup> Some of the vocational skills identified by participants are described in sections 4.3.8.1 to 4.3.8.2.

#### **4.3.8.1 Life skills training**

The first category that the participants identified under vocational skills was that of life skills training. It was noted that in order for the client to be empowered and prepared for returning to and/or entering the open labour market there are certain fundamental life skills that should

be consolidated, as part of vocational skills. The life skills that were identified by the participants include: social skills, stress management, problem solving, and psychosocial skills.

The following notes from the workshop support the study findings related to the life skills training category:

- ... *Life skills includes conflict, social stress, professional and psychological holistic aspects ...* (workshop).
- ... *After the life skills training, then the client will be empowered ...* (workshop).

**Discussion:** Life skills refers to an individual's capacity and ability to effectively use all the necessary skills to approach and deal effectively with life challenges, and being able to actively engage in their daily occupations or activities of daily living.<sup>208</sup> Literature shows that, "*generally, life skills training is behavioural in its orientation and is carried out in a structured intervention environment to ensure skills acquisition and adequate behaviour modification*".<sup>209-</sup>  
<sup>210</sup> Similar research defines life skills "*as those mental, emotional and social attributes, characteristics and qualities that people develop or refine through active participation in life activities such as sport and work, and they have the potential to transfer these skills for use in other occupational performance*".<sup>211</sup>

Gould et al identified some of the important life skills that can be built through active engagement in life situations. These include the ability to set and achieve goals, leadership skills, confidence, discipline, emotional control, moral reasoning and teamwork, among others.<sup>211</sup> Although there are many such life skills, the research participants also added some of the life skills that are needed for the purposes of returning to work or entering the open labour market, which are described in Sections 4.3.8.1.1 to 4.3.8.1.4.

#### 4.3.8.1.1 Social skills

Participants identified social skills as one of the components that should be implemented under the life skills training category, in vocational skills, as part of the work intervention procedures. The following notes from the workshop support the study findings related to the sub-category of social skills:

- ... *Before we [occupational therapists] get to all of those [life skills training components], we [occupational therapists] need social skills ...* (workshop).

**Discussion:** As identified by the participants, Hayes indicated on interpersonal skills at work, that social skills refer to someone's ability to interact and communicate effectively with other people around them, such as friends, colleagues, family, acquaintances and others.<sup>212</sup> Gurtman argued and added that social skills involve someone's ability to read social norms and cues in verbal and non-verbal engagements when actively participating in different relations.<sup>213</sup> Similar research by Goleman reveals that social skills in the work place is tied to emotional intelligence.<sup>214</sup> Goleman argues that emotional intelligence must be accompanied by personal competence and social competence. He defined both phenomena as the ability to manage oneself and also being able to manage social relations, which play a vital role in social skills in the work place.<sup>214</sup>

Similar research asserted that *"a person's ability to perceive, identify, and manage emotion provides the basis for the kinds of social and emotional competencies that are important for success in almost any job in the open labour market"*.<sup>214-215</sup> This ability becomes increasingly important as the work environment is dynamic and progresses with time.<sup>216</sup> The work environment is also seasonal, where there may be peak seasons, dry seasons and others, which means that there may be some adaptations that must be made by the worker cognitively, emotionally and physically in terms of their acquired skills and abilities to ensure that they optimally offer a good service, remain gainfully employed and productive at work.<sup>215</sup> Productivity in the workplace inherently entails good management of work pressure and stress, which brings us to the second sub-category of stress management skills.

#### 4.3.8.1.2 Stress management skills

The second sub-category that was identified by the participants under life skills training in preparing the clients for the open labour market is that of stress management. This was found to be among the components as it relates to the management of stress in the work place and also in a personal capacity that may affect the client's work. The following notes from the workshop support the sub-category of stress management as identified by the participants:

- ... *Life skills includes conflict, social stress [management], professional and psychological holistic aspects ...* (workshop).

**Discussion:** For the purposes of this study stress, as described by the participants, refers to a human bodily change or reaction to any kind of change that one may experience which requires a response and/or adjustment.<sup>217</sup> Research shows that the bodily reactions may

manifest in many forms which includes physical, emotional and emotional responses.<sup>218</sup> Similar research reveals that stress can be normal and/or abnormal. This means that there are negative and positive situations that may cause or lead to stress, such as work promotion which may come with high work demands and expectations.<sup>219</sup> Therefore, stress management relates to the different therapeutic and effective techniques that are mainly aimed at managing and regulating someone's level of stress.<sup>220</sup> These techniques can be used to improve someone's ability to cope and function adequately in their daily occupations, including work occupation.<sup>221</sup> Therefore, it is on this ground that stress management was identified to be among the life skills training in work intervention procedures that should be considered and taught to clients when rendering the work intervention services by occupational therapists.

#### **4.3.8.1.3 Problem solving skills**

The third sub-category identified by the participants under the life skills training category in preparing the clients for the open labour market is that of problem-solving skills. This was identified during the data analysis session and identification of the categories with the participants.

**Discussion:** For the purposes of this study, participants viewed problem solving as a process that involves goal-directed thinking, as it requires the client to go behind the obvious and want to discover the unknown, considering the information that is available at hand. According to Weiten, problem solving can be defined as an active process whereby *“an active effort is taken in order to intentionally discover what must be done to achieve a desired goal that is not readily attainable”*.<sup>222</sup>

Similar research on problem solving among engineering and other professionals found that generally people are hired, retained and rewarded solely for the purposes of solving problems in the work place or open labour market.<sup>223</sup> It is therefore important that occupational therapists should stimulate their client's thinking and capacity to be able to withstand and solve arising problems in the work place. Jonassen reported that most of the workplace problems that need to be solved are ill-structured, and tend to be more complex,<sup>224</sup> compared to the everyday life problems that people encounter. This is because most of the complex work place problems may involve conflicting goals, multiple solution methods, and unanticipated problems, among other things.<sup>223-225</sup> Problem solving inherently involves different mental functions that form part

of the client's psychosocial components, which will be described as the fourth sub-category of life skills.

#### 4.3.8.1.4 Psychosocial skills

Participants identified psychosocial skills as the fourth sub-category that should be considered and addressed under life skills training, in vocational skills, when carrying out the work intervention services with the client. In the context of occupational therapy, psychosocial skills relate to a combination of the cognitive client factors and the performance skills that enable the client to actively participate in their daily occupations.<sup>52</sup>

**Discussion:** According to the Occupational Therapy Practice Framework, the client factors and performance skills comprise body functions and mental functions.<sup>226</sup> Performance skills entail the client's cognitive performance skills and emotional regulations skills.<sup>226</sup> The World Health Organisation defines the body functions as the physiological functions of the human body systems, which also includes the psychological functions of the human mind.<sup>227</sup>

The International Classification of Functioning, Disability, and Health,<sup>227</sup> together with the World Health Organisation,<sup>146</sup> describe mental functions as a combination of "*the higher order cognitive (judgment, concept formation, insight, attention and awareness), attention (sustained, selective and divided attention), memory (short-term, long term and working memory), perception (discrimination of sensations such as auditory, visual, olfactory, gustatory, spatial and temporal relationships),<sup>228</sup> thoughts (recognition, thought content, coherent thoughts), mental functions of sequencing complex movement (execution of learner movement patterns), and emotional (coping and behavioural regulations)*".<sup>227,229</sup> Therefore, according to the research participants, these are some of the psychosocial skills that should be considered and addressed as part of the vocational skills that may be demanded by the client's inherent work duties, as part of the work intervention procedures. The psychosocial components can be treated, trained and/or harnessed through the use of different work samples, which brings us to the second category of vocational skills.

#### 4.3.8.2 Work samples

Participants identified work samples as the second category under vocational skills that should be considered and implemented with the client, as part of the work intervention procedures.

Work samples were identified as various standardised and non-standardised methods of testing and rehabilitating a client's work occupation. This entails focusing on the inherent work requirements and considering the essential job functions, together with client's residual functional capacity (client factors and performance skills – body structures and body functions), in order to simulate the client's premorbid or future work place and environment, in order to ensure adequate work skills acquisition and/or rehabilitation of the lost work-related skills.

The following notes from the workshop support the study findings related to the work samples category:

- ... *But before we get there, to work place, we need to do work samples so that we can see if this person has the capacity to get to the work places ...* (workshop).
- ... *when you have rehabilitated, then you get ready and have done the work sample ...* (workshop).
- ... *From that we go to pre-voc. skills, skills development, vocational, life skills, work samples, work trials ...* (workshop).

Furthermore, research participants asserted that as part of the use of the work samples under vocational skills, there are different ways to remediate and rehabilitate the client's work. Among the work intervention procedural methods that were mentioned by participants during the workshop, were those of work conditioning and work hardening, through the use of work samples and other therapeutic activities.

The following notes from the workshop support the category of work samples with regard to the purposes of work conditioning and work hardening work intervention procedural methods:

- ... *So now the second circle, all those different colours represent the different intervention procedures that we can do. And then this then includes the work hardening, work conditioning, skills development, work placement and all the different interventions that are possible with vocational rehabilitation ...* (workshop).
- ... *But also, at the same time, working on group and individual sessions of work hardening and work conditioning as well as a lot of education and advocacy, techniques where the patient can advocate for themselves along the way ...* (workshop).
- ... *I think that's what most of us [occupational therapists] are doing because we [occupational therapists] may not have the facilities to do so, to implement what we*



[occupational therapists] *feature or plan to do in the future with work hardening and placing and reasonable accommodation ...* (workshop).

- ... *I think the workshop of work hardening also represents part of group therapy as well ...* (workshop). ... *You say, this client will be taught how to find work, job hunting skills and stuff like that, how to go on, compile a CV and how to go to job interviews ...* (workshop).

**Discussion:** There are multiple work samples that are used by occupational therapists to assess the client's work capacity. Participants agreed that the same work samples that are used for assessment can also be used as part of work intervention, to remediate or rehabilitate their client's work occupation. Work samples "*refer to a segment of an actual job, an inherent work task or its basic unit in a form of simulation that can be utilised for the purposes of testing or evaluating an individual's ability and capacity to carry out the work-related task*".<sup>230</sup> Wright described a work sample as "*a work activity involving task, material and tools that are similar to those in an actual job (or occupation). It is used to appraise an individual's physical and mental abilities, interest and other characteristics*".<sup>230-231</sup> Similar research found that work samples are regarded as a good technique that can be used to quantify and determine the proportion of time taken by a worker to carry out a particular defined work segment, by following certain studied methods in order to measure the level of output and work speed.<sup>232</sup>

Valpar Component Work Samples are regarded as among the prominent work samples that are utilised by occupational therapists in the South African context.<sup>233</sup> The Valpar Component Work Samples were introduced to South Africa in 1992, and have been used by occupational therapists in vocational rehabilitation ever since then.<sup>233</sup> The Valpar Component Work Samples are considered as the standardised work samples that adequately measure the universal worker characteristics.<sup>43,234</sup> Similar research argued that work samples are generally designed to simulate not a specific job, but focus on work factors that are demanded by a variety of jobs. In the Gauteng province, there has been a transformation that has taken place with regard to vocational rehabilitation services; most of the hospitals are considering work samples as part of their assessments and intervention methods.<sup>15</sup> Like many standardised work samples, the Valpar Component Work Sample provides a multidimensional view of the client's behaviour and performance within the context of the work sample's task, as they inherently involve physical, emotional and mental elements of the client.<sup>235</sup>

The research participants identified that work rehabilitation includes work conditioning and work hardening, whereby an occupational therapist may also make use of the work samples for these purposes. This is consistent with literature that work samples can be used in work conditioning and hardening situations.<sup>236</sup> They can be utilised both as aid in vocational adjustment training, enhancing strength and endurance, and also as a tool to measure the client's progress throughout the work intervention process.<sup>237</sup> Work conditioning is defined as the process of improving the client's affected body functions in a therapy environment by using a variety of therapeutic activities.<sup>238</sup> Whilst work hardening is defined as a work-orientated activity process that may actively involve a client with any form of injury in an actual work task or a simulated work sample.<sup>138</sup> In work hardening, the tasks are intentionally analysed, structured and adequately graded to facilitate an increase and improvement in the client's emotional tolerance, psychological and physical endurance, and general productivity.<sup>138,239-240</sup>

Therefore, the work samples and different therapeutic activities can be used as part of the work conditioning and work hardening programmes, as part of the work intervention procedures in vocational rehabilitation of occupational therapy. Further, research shows that work samples such as the Valpar Component Work Samples, can be used as a standardised measure to quantify and ascertain the client's work skills and abilities during and after the work intervention process, and to further give the occupational therapist some feedback with regard to the client's work speed and quality of performance in relation to the open labour market standards.<sup>241-242</sup> Despite the supported use of standardised work samples, participants who were based particularly in the community clinics in the Gauteng province, asserted that as part of their work samples, work conditioning and work hardening comprises work tasks such as compiling a Curriculum Vitae, typing skills, job seeker's groups, and such interventions.

#### **4.3.9 Sub-theme 8: Work visit**

The eighth sub-theme that was identified by the participants during the data collection and analysis session was that of a work visit. Participants indicated that a work visit is done by occupational therapists in Gauteng province as part of the work intervention procedures. One reason would be to determine whether the client would be able to go back to their previous work, by doing a job analysis upon the work visit. A work visit is also done to build relations with the employer and to facilitate interaction between the employer and employee [client]. The data relating to this sub-theme is summarised in Table 4.9.

**Table 4.9: Work visit**

Sub-theme	Category	Sub-category
Work visit (see Section 4.3.9)	Work trial (see Section 4.3.9.1)	Work hardening

The following notes from the workshop support the study findings with regard to the work visit sub-theme:

- ... If the person (client) is already employed, you (occupational therapist) will first do a work visit to see if they (client) maybe can go back into that same job before doing some of the other processes ... (workshop).
- ... But then breaking up the chain a little bit and working multifactorially, so doing a job site visit, facilitating an interaction between the employer and the employee ... (workshop).

**Discussion:** Work visit refers to the process whereby an occupational therapist physically visits the client's place of employment.<sup>37</sup> Ross asserted that a work site visit is conducted at the work visit, whereby an occupational therapist is enabled to gather crucial information relating to the actual job itself. The occupational therapists would consider the inherent work requirements, assess and gather information about the work environment, and also understand the employer's views and perception with regard to the client's returning to work.<sup>37</sup> A workplace assessment is also carried out at the work place during the work visit through a job analysis process.<sup>243</sup> Similar research found that conducting a work visit enable the occupational therapist to have first-hand experience and also confirm the client's version of the work information and job description, as this will guide the entire intervention process.<sup>244</sup>

Work visits can also be carried out for ergonomic and risk assessments,<sup>245</sup> to conduct an on-site rehabilitation or on-the-job evaluation,<sup>37</sup> however these kinds of intervention are viewed to be costly and time consuming as the client would have to be seen at the place of employment. Furthermore, work visit can be a valuable tool to identify opportunities for reasonable accommodation, should the client need to be returned to work with some residual deficits that the employer may have to accommodate.<sup>246</sup> Work visit can also be beneficial for

implementation of a work trial at the client's place of employment. This brings us to the following sub-category, namely work trial.

#### 4.3.9.1 Work trial

The category that was identified by the participants under the work visit sub-theme, during the data collection and analysis session was that of a work trial. The work visit was found to be accompanied by a work trial for the clients who are ready to be placed or returned to work. Work trial was identified as one of the components that would follow after the client had been involved in vocational skills, work samples including work conditioning and work hardening work intervention procedures.

Work trial is regarded as the stage where the client is prepared to be returned to the actual work or entry into the open labour market. It involves some work simulation, whereby a segment of the actual work cycle can be selected and a client be engaged in it, while at the work place, in order to determine whether the client would be able to manage and sustain the working hours and tolerate the demands of the work environment. Furthermore, participants noted that with work trial, the client would be required to use the natural work tools and material such as using a spade, if he/she was a construction worker, to also address their work endurance and work habits.

The following notes from the workshop support the study findings related to the work trial category:

- ... you also need to do a work trial afterwards ... (workshop).
- ... work trial is for a specific occupation. Remember after you, when you have rehabilitated, then you get ready and have done the work sample. Then if you want to test if you are or have the capacity to actually go back into the actual environment, you will do a work trial ... (workshop).
- ... To see if you can actually manage to do it. And when you are doing the work trial, it's in a supported safe environment. Its simulated. Before we actually take you out into the actual site and get you to do the work ... (workshop).
- ... work trial is for a specific occupation ... (workshop) ... it's the same as work simulation ... (workshop).
- ... a trial period to see if they are coping ... (workshop).
- ... to see if they are able to do the work ... (workshop).

- ... *a man with a spade* ... (workshop).
- ... *improved on with their endurance* ... (workshop).

**Discussion:** For the purposes of this study, work trial, as it was identified by the participants, refers to the process of testing and/or evaluating the client or employee's general performance, inherent work qualities, and to determine whether the client or employee would be best suited for the work that is tried.<sup>247</sup> Similar research indicates that work trial involves a process of actively engaging and trying out the potential employee in a natural work place for a set period of time.<sup>248</sup> It allows both the occupational therapist and employer to examine and determine the client's capabilities and how they would execute and manage their work responsibilities.

Work trial inherently involves a real-life work environment and the client would be expected to use the normal and natural work tools and equipment that they will be using when returned to work.<sup>249</sup> Similar research found that early return to work or early contact with the worker at the work place induces reduction in work disability.<sup>249-251</sup> Work trial can be considered and performed as early as within the first three months following the onset of the injury or illness,<sup>252-253</sup> however some research shows that it may even be done earlier within the first week, depending on the severity and extent of the injury.<sup>253-254</sup> Participants noted that at the core of work trial, or any form of work intervention, lies job analysis.

#### **4.3.10 Sub-theme 9: Job analysis**

The ninth sub-theme that was identified by the participants during the data collection and analysis session was that of job analysis. Participants indicated that job analysis is linked to all the work intervention procedures and components such as work visit. A job analysis can be conducted upon arrival at the client's work and this can also be done during the functional capacity evaluation process, whereby the occupational therapist would be carefully analysing the client's inherent work duties to determine a job match in line with the client's residual functional capacity. The data related to the job analysis sub-theme is summarised on Table 4.10.

**Table 4.10: Job analysis**

Sub-theme	Category	Sub-category
Job analysis (see Section 4.3.10)	Functional capacity evaluation (see Section 4.3.10.1)	-
	Report (see Section 4.3.10.2)	-
	Reasonable accommodation (see Section 4.3.10.3)	Facilitate social responsibility
		Stakeholder identification and involvement

The following notes and data set that was gathered during the workshop support the job analysis sub-theme:

- ... You [occupational therapist] *can't finish the FCEs* [functional capacity evaluation] *without job analysis* ... (workshop).
- ... *the person's capacity to work and matching him with the work place* ... (workshop)

**Discussion:** In the occupational therapy context, a job analysis is defined as a systematic approach that is used to identify and clearly describe the specific demands that a job places on a worker.<sup>116</sup> Rice et al added that a job analysis process is regarded as a systematic evaluation of the job itself, by carefully identifying the job's physical, cognitive, social and psychological requirements.<sup>255</sup> The purposes of conducting a job analysis include the ability to identify the demands of the job that the worker or the client would be expected to perform. This will inform and guide the functional capacity evaluation process as the occupational therapist would have gained insight and get to know which tests or work samples to use with the client in light of the analysed inherent requirements of the job.<sup>255-256</sup>

Job analysis enables the occupational therapist to identify and determine the reasonable accommodations that may be required to be implemented when the client returns to work. It is a way of identifying the gaps and the mismatch between the job and the client's residual functional capacity.<sup>257</sup> Among the benefits of conducting a job analysis is being able to identify alternative jobs and redesign the kind of work that the client may be able to perform as part of the recommendations that would be detailed in the report for the employer. Risk factors are also identified and ruled out through the job analysis process.<sup>258</sup>

The information that is gathered and the things that are assessed during the job analysis include the physical demands of the work (sitting, standing, tools, equipment used, etc.), cognitive demands of the work (decision making, memory, concentration, and others), social demands of the work (level of responsibility, supervisory duties, and others), environmental demands and conditions under which the work is performed (temperature, noise, lighting, and others).<sup>116,255</sup> According to the participants, following, and/or contained within, a thorough analysis of the job, is the functional capacity evolution.

#### 4.3.10.1 Functional capacity evaluation

Participants identified the functional capacity evaluation as the first category under the job analysis sub-theme. It is worth noting that it was difficult for the participants to decide where this component should be placed in the work intervention procedures. However, for the purpose of creating and producing work intervention procedures, it could be placed on the same line as job analysis. Job analysis focuses on the job itself and specific job properties, whilst the functional capacity evaluation focuses on the worker or client, and the match can be deduced in consideration of findings from the two components. Participants further noted that one begins to assess, a general assessment together with vocational assessment which includes finding out about what the client is doing on a day to day basis. Then when the functional capacity evaluation is done, the occupational therapist would now be looking specifically into finding the functional capacity of the client.

The following notes and data set, gathered in the workshop during data analysis, support the functional capacity evaluation category:

- ... FCEs [Functional Capacity Evaluation] *are done in our group and all the recommendations that are paired with that ...* (workshop).
- ... I [Participant] *don't think we [occupational therapists] do FCE [Functional Capacity Evaluation] assessment while we are still assessing the patient or the client initially. Then it comes at a very late stage. The assessment that we are focussing on here is on body functions and home environment ...* (workshop).
- ... *when we do the FCE [Functional Capacity Evaluation], and we need to start the process of placement. Then we communicate with the employer regularly* (workshop).
- ... I [Participant] *also think that as you start assessing, that you do a general assessment together with vocational assessment which includes you will find out what this client is doing on day to day basis ...* (workshop).

**Discussion:** In the context of occupational therapy, the functional capacity evaluation process is defined as an interdisciplinary evaluation that is used to comprehensively assess the client's physical, functional, vocational and psychosocial status, after any form of injury or illness.<sup>259</sup> Similar research adds that functional capacity evaluation refers to an objective process of assessing an individual's ability to perform work-related activity.<sup>260</sup> Functional capacity evaluation is concerned about the person who will be carrying out the job, by determining the capacity that has remained or that he/she still has after the injury or illness has occurred.<sup>261</sup> It assists an occupational therapist to determine the client residual functional capacity in relation to their work occupation.<sup>262</sup> Therefore, functional capacity evaluation can be used to frame the functional capacity of the client in reference to a specific job or accepted occupational category, as noted by Jones and colleague.<sup>263,260</sup>

As noted by the participants, it was difficult to decide where the functional capacity evaluation should be placed in the work intervention procedures process, because of the dynamic and complex occupational therapy process. This is the reason for referral that may determine the stage at which the functional capacity evolution should be done.<sup>264</sup> Some research suggests that functional capacity evaluation can be conducted before employment as part of pre-employment testing.<sup>264</sup> Some argue that functional capacity evaluation should be done as a determination for the client's return to work capacity, during the rehabilitation, and/or throughout the work interventions such as the work conditioning and work hardening process<sup>115</sup>. According to Buys and van Biljon, "*the functional capacity evaluation entails different components including referral of the client, reviewing the documents, interviewing the client, conducting a job analysis, work assessment, gathering of the collateral information from the employer and family, putting it together or hypothesis testing, and report writing with the necessary conclusions and recommendations*".<sup>43</sup>

#### **4.3.10.2 Report writing**

The second category that was identified by the participants is that of report writing. It was noted by the participants that once an occupational therapist has seen the client and conducted the assessment, all the data must be analysed and put together in the form of a formal report, that will then communicate the findings and recommendations to the referring party. Participants further asserted that there is a report template and protocol that has been put together through the Gauteng Vocational Rehabilitation Task Team, which is accessible to all occupational therapists practising vocational rehabilitation in the public healthcare sector.



The following notes and data set, gathered in the workshop during data analysis, support the report writing category that was identified by the participants:

- ... *these little circles here, one represents assessment, the second report and then the third is referrals, because then that's all we [occupational therapists] do at the moment. We do assessments, reports with recommendations and then we refer ... (workshop).*
- ... *so, we said that from the departments view, there are protocols in place, there are report writing templates in place, they do provide training ... (workshop).*

**Discussion:** A report refers to a structured document that is carefully written in order to communicate a specific message or express certain findings to a particular person or audience, and for a specific purpose. Report writing is central to the vocational rehabilitation practice and serves as a basis for decision making.<sup>265</sup> The occupational therapy reports are important and hold authority as they convey an important message and findings pertaining to specific future interventions, outcomes of the treatment that was rendered to the client, and the recommendations.<sup>265-266</sup>

In her research, Buys investigated the professional competencies that occupational therapists should possess in order to practise in vocational rehabilitation.<sup>3</sup> Among other things, she identified report writing and the occupational therapists' competence in the English language of communication.<sup>3</sup> Similar research found that a well-constructed and written report should comprise the client's work profile, highlight the client's problematic areas, training and skilling that the client possesses and comment on the client's residual work capacity with emphasis on his/her abilities or what they can do in the work place.<sup>6,267</sup>

This is supported by other literature on report writing, that a report should entail the client's background history, work history, details regarding the client's functional capacity, transferable work skills of the client, work-related strengths and weaknesses, together with specific recommendations pertaining to the client's capabilities to be employed in the open labour market.<sup>268</sup> Van Biljon and her colleagues embarked on an action research with an attempt to develop a vocational rehabilitation report writing protocol for occupational therapists in Gauteng public healthcare sector.<sup>269</sup> Their efforts yielded a working report writing template that is currently utilised by occupational therapists in vocational rehabilitation in Gauteng public healthcare sector.

#### 4.3.10.3 Reasonable accommodation

The third category that was identified by the participants during data analysis was that of reasonable accommodation. Participants noted that once the assessment has been done, intervention implemented and the job carefully analysed to identify the mismatches or gap, reasonable accommodation may have to be considered and applied. This is to ensure that the client is placed in the right work environment and ensure that they are gainfully employed, taking into account the risk and safety factors. Reasonable accommodation also ensures that the client is best placed in a suitable position based on his/her capabilities.

The following notes and data set from the workshop, during the data analysis, support the reasonable accommodation category that was identified by the participants:

- ... it includes all the reasonable accommodations and putting someone in the right environment, whether they need more support or a protected work environment and then also looking at the ergonomics and all of those ... (workshop).
- ... I [Participant] think that's what most of us are doing because we may not have the facilities to do so, to implement what we feature or plan to do in the future with work hardening and placing and reasonable accommodation ... (workshop).
- ...to see the patient is able to do the basic requirements of the job, and if not, what are the alternatives ... (workshop).
- ... to adapt their work completely ... (workshop).
- ... basic requirements of the job ... (workshop).

**Discussion:** According to the Technical Assistance Guideline on the Employment of Persons with Disability, *“all designated employers under the Act and Code, should reasonably accommodate the needs of Persons with Disabilities”*.<sup>270</sup> This act protects persons with any form of disability in the open labour market and seeks to eliminate unfair discrimination.<sup>110</sup> Reasonable accommodation is regarded as an affirmative action measure that must be implemented by an employer to remove any form of barrier to entry and participation of injured or disabled employee, in the open labour market.<sup>110</sup>

Reasonable accommodation may include physical modifications or change to the manner in which certain inherent tasks of the job are performed under a normal work situation, in order to make the job suitable to a person with a disability or any form of injury.<sup>246</sup> The client's injury and/or disability determines the type and amount of reasonable accommodation required,

together with the inherent essential job functions and the client's work station.<sup>246</sup> Among the examples of reasonable accommodation, is adjustment of work stations such as desks, tables and/or equipment; changes to the work schedule and working hours; reallocation of tasks that are not as essential to ensure productivity and that the person with a disability or injury remains gainfully employed in the company.<sup>246</sup>

#### 4.3.11 Sub-theme 10: Placement

The tenth sub-theme that was identified by the participants at the workshop, during the data analysis, is that of placement. Participants asserted that once the client has been fully rehabilitated and undergone various work intervention procedures, he/she must be placed in a suitable place of employment. This may be returning to their premorbid place of employment or entering a new place of employment and exploring new adventures. The data related to the placement sub-theme is summarised in Table 4.11.

**Table 4.11: Placement**

Sub-theme	Category	Sub-category
Placement (see Section 4.3.11)	New adventure	-

The following notes and data set, gathered from the workshop during the data analysis, support the category of placement that was identified by the participants:

- ... Then so we have these different workshops that represent the different sectors like the trees here represent the agricultural sectors, we could have voc. placements for especially the clients in the community, maybe for physical impairments or even mental impairments as well ... (workshop).
- ... People selling coke on the street, have an income rather than having an actual job placement ... (workshop).
- ... this is the placement ... (workshop).
- ... see how beautifully ergonomic it should be ... (workshop).
- ... it includes all the reasonable accommodations and putting someone in the right environment ... (workshop).
- ... place your clients then in a sector ... (workshop).

- ... *work with companies where we can place clients* ... (workshop).
- ... *brick laying, wood work, we have factories where they mend clothes* ... (workshop).
- ... *return to work* ... (workshop).
- ... *New adventure* (workshop), *means to help clients to be self-employed as an option of work* ... (workshop).

**Discussion:** Work placement, as identified by the participants, is a process whereby the client is returned to work and placed at the place of employment, after the work intervention or rehabilitation.<sup>271</sup> Placement takes place after all the work assessments have been done, job analysis conducted through a work visit and after identifying suitable reasonable accommodation that the client would benefit from.<sup>272</sup> Placement may inherently entail some modification of certain aspects of the job itself in order to accommodate the client, based on certain prescribed ergonomic principles.<sup>273</sup>

The literature reviewed regarding placement is consistent with the research findings, that the process requires all the relevant and affiliated stakeholders. Similar beliefs are expressed in research: the entire process of placing an employee or client back to work involves different stakeholders such as the occupational health and safety doctor, occupational health nurse, the employer, union, line manager or supervisor and any other important person who may be directly linked such as human resources personnel.<sup>274</sup> Communication is vital in the placement process to ensure that the process is smooth and effective.<sup>274-275</sup>

#### **4.3.12 Sub-theme 11: Follow-up**

The participants identified follow-up as the eleventh sub-theme that should be considered when engaging a client in the work intervention procedures. Participants reported that after the client has been placed in the workplace or returned to their place of employment, a continuous follow-up should be done by an occupational therapist or a case manager to ensure that the client receives all the services that are needed. In some instances, the client may have to be reassessed to re-ascertain their level of improvement should they struggle with the work demands upon placement.

**Table 4.12: Follow-up**

Sub-theme	Category	Sub-category
Follow-up (see Section 4.3.12)	-	-

The following notes and data set, gathered from the workshop during the data analysis, support the category of follow-up that was identified by the participants:

- ... And then following-up and seeing if those people have been rehabilitated, or a bit of work hardening or sent for psychology and stuff. And then you follow-up until ... (workshop).
- ... finally place, follow-up, reassess if there is a need, check if that person is suitable and working well with all the arrangements and again working with a lot of people will help to make sure that it's implemented ... (workshop).
- ... when the patient comes back to us on follow up appointments, from whatever therapy or approach or strategy we are working on, we also get those feedbacks from our patients ... (workshop).
- ... You don't know if they are coping at work, you don't know if their boss is giving them problems, so it's important to also have follow-up sessions ... (workshop).
- ... follow up, reassess if there is a need ... (workshop).
- ... check if that person is suitable and working well ... (workshop).

**Discussion:** Occupational therapists are also involved with follow-up services for the client who has been successfully placed and/or returned to work.<sup>276</sup> Follow-up occurs with some of the clients who may not go back to work, but may be undergoing a particular lifestyle change or a transitional process. An occupational therapist would conduct home visits to ensure that the client is adequately functional and adhering to the home programmes.<sup>276</sup> Similar research found that follow-up after placement is important, as it ensures that the client is continuing with the recommended intervention, has not regressed, and whether he/she is still functioning or performing their tasks with good quality.<sup>277</sup>

#### 4.4 SUMMARY

Chapter 4 presented an in-depth description of the identified components of the work intervention procedures that should be implemented by occupational therapists in the Gauteng public healthcare sector. These are: legislation; empowerment; assessment; intervention planning; intervention pathway; prevocational skills; vocational skills; work visit; job analysis; placement, and follow-up. Participants maintained that most of the identified components of the work intervention procedures have categories and sub-categories, which have also been identified and expanded in this chapter.

A thorough integration and conclusion of the study is presented in Chapter 5, together with the recommendations and the implications which this study's findings may have on the occupational therapy practice.

## **CHAPTER 5**

### **CONCLUSION, IMPLICATIONS FOR PRACTICE RECOMMENDATIONS AND LIMITATIONS**

#### **5.1 INTRODUCTION**

In Chapter 4, the research findings were analysed, discussed, and interpreted with reference to the reviewed literature. The research findings were built on the collaborative data analysis conducted by the participants and the researcher from the data obtained during the workshop.

Chapter 5 briefly presents the conclusions, implications for practice, and recommendations related to the study, and will end with limitations of the study as well as a personal reflection from the researcher.

#### **5.2 RESEARCH AIM AND OBJECTIVES**

The aim of the study was to explore the occupational therapy work intervention procedures that should be implemented by occupational therapists in the Gauteng public healthcare sector. In order to address the research aim, the following objectives were formulated:

- To explore the current work intervention procedures implemented by occupational therapists; and
- To explore the ideal work intervention procedures that should be implemented by occupational therapists.

#### **5.3 CONCLUSION**

The research findings and conclusion are summarised in Figure 5.1. The participants collaboratively harnessed and merged the current and ideal (future) work intervention procedures and, after agreeing, reached consensus and collated one merged compilation of work intervention procedures that should be implemented by occupational therapists in the Gauteng public healthcare sector (see Figure 5.1).

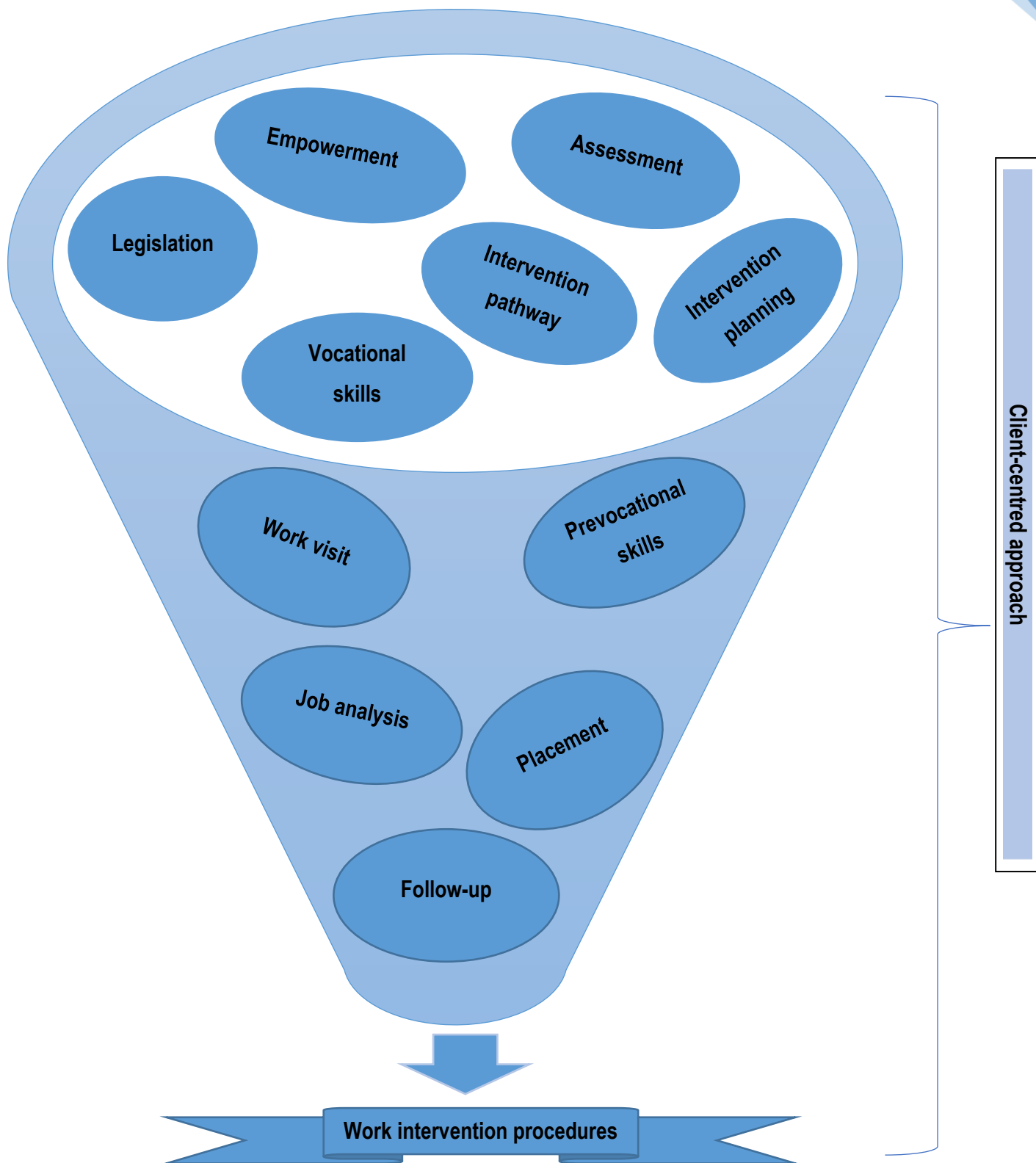


Figure 5.1: Summary of work intervention procedures



The work intervention procedures that should be implemented by occupational therapists in Gauteng public healthcare sector are concluded as follows.

### **5.3.1 Overarching theme: Client-centred approach**

The participants indicated that occupational therapists work from a client-centred approach throughout the work intervention procedures. The client-centred approach serves as a vehicle to compliance, and facilitates a sense of involvement and ownership to intervention.

#### **5.3.1.1 Implications for practice**

The clients are regarded as active participants throughout the work intervention procedures. Occupational therapists should respond to their clients' needs in a humane and holistic way, by implementing client-centred work intervention procedures.

The following implications relating to the client-centred approach apply to practice:

- Although occupational therapists are trained on a client-centred approach in their undergraduate studies, this could be emphasised throughout their practice, to ensure that it is always at the heart of work intervention procedures.

### **5.3.2 Sub-theme 1: Legislation**

The respective components of the work intervention procedures should be implemented within the framework of legislation. Two categories were identified under the sub-theme of legislation, namely the Employment Equity Act and Labour Relations Act (see Chapter 4, Sections 4.3.2, 4.3.2.1 and 4.3.2.2). It was indicated that these acts are among many pieces of legislation that apply in the implementation by occupational therapists as part of work intervention procedures.

#### **5.3.2.1 Implications for practice**

The following implications relating to the sub-theme of legislation apply to the occupational therapy practice:

- Occupational therapists should be fully orientated to the relevant legislation that applies in work intervention procedures, to guide practice and inform their decision-making processes when rendering services.

### 5.3.3 Sub-theme 2: Empowerment

The participants indicated that empowerment should take place at three levels, namely, empowerment of occupational therapists, clients and employers (see Chapter 4, Sections 4.3.3.1 to 4.3.3.3).

The participants indicated that empowerment of occupational therapists will increase their clinical reasoning, which will enable them to make critical decisions concerning their clients' work intervention procedures. The participants sustained that a good quality of work intervention output can only be achieved through a collaborative approach and empowerment of the client and his/her employer. The empowerment of the client is equally crucial and intertwined with empowerment of the employer. It ensures a rapid return to work after injury. The employer will have increased knowledge and insight into the client's capabilities which will facilitate adequate placement, reasonable accommodation implementation and job modification upon return to work. The on-the-job evaluation and intervention can also be done in close partnership with the employer, employee and the occupational therapist.

#### 5.3.3.1 Implications for practice

The following implications relating to the sub-theme of empowerment apply to the occupational therapy practice:

- Lack of empowerment leads to grey areas and unclear boundaries particularly where one party or role player has an impression that they have to apply more effort to comply with the legislation or go an extra mile. For an example, an occupational therapist recommends a reasonable accommodation to the employer, and the employer may dismiss the client, claiming that the recommended reasonable accommodation may not be feasible in the company.
- Therefore, empowerment of all stakeholders, (that is employer, insurance company, union), and role clarification should ideally be done as early as possible by occupational therapists when implementing the work intervention procedures.
- The clients should be educated about their role and responsibility in the work intervention procedures. They need to inform the employer of their whereabouts, sick leave and progress of their rehabilitation while recuperating, in order to ensure that the employer is kept informed regarding the client's progress. This will eliminate unnecessary problems upon initiation of placement and return to work.

- Occupational therapists should also liaise with the employer as soon as the work intervention procedures are implemented.

### **5.3.4 Sub-theme 3: Assessment**

The participants indicated that assessment comprises vocational screening, vocational assessment and environment (see Chapter 4, Sections 4.3.4.1 to 4.3.4.3). The participants asserted that vocational screening should be continued as it serves as an initial phase of work assessment in the Gauteng public healthcare sector. Following screening, is vocational assessment, aimed at identifying the client's greatest areas of deficit to be addressed through the work intervention procedures. The participants further indicated that assessment of the client's work environment gives insight and enables the occupational therapist to appropriately locate the client in the right environment, structure the work intervention procedures and treatment modalities in line with the client's realistic and future home and work environment.

#### **5.3.4.1 Implications for practice**

The following implications relating to the sub-theme of assessment apply to the occupational therapy practice:

- Lack of knowledge or skills in carrying out the work assessments may have a negative impact on the work intervention procedures that should be selected and implemented by an occupational therapist in rehabilitating the client's work occupation;
- Therefore, occupational therapists should undergo frequent refresher workshops (once a year) that focus on the assessment methods and procedures in practice. This will enable the occupational therapists to adequately plan for the work intervention procedures.
- Occupational therapists may be involved in annual workshops where the focus would be on work assessment and use of various standardised and non-standardised assessment tests and work samples.

### 5.3.5 Sub-theme 4: Intervention planning

The participants indicated that intervention planning follows assessment, which entails setting of client-centred goals with the client. Goal setting was noted as the only category under intervention planning (see Chapter 4, Section 4.3.5.1). Intervention planning provides guidance to the pathway of intervention (see Section 5.3.6, Sub-theme 5). It serves as a compass and point of departure where the implementation of work intervention procedures is concerned.

#### 5.3.5.1 Implications for practice

The following implications relating to the sub-theme of intervention planning apply to the occupational therapy practice:

- During intervention planning, occupational therapists are required to have a sound understating of their clients' residual functional capacity in order to appropriate and address the relevant components and client factors, which will ensure effective and smooth work intervention procedures. This means that occupational therapists performing the work intervention procedures should have consolidated sound knowledge and be equipped with practice experience and sequelae of different conditions.
- A certain level of competence is required when setting goals with a client in vocational rehabilitation, which could be acquired by working in different fields of occupational therapy, that is neurology, orthopaedic, hands therapy, psychiatry and others. This will ensure adequate understanding of different medical conditions, experience of different sequelae of injuries, rehabilitation progress and prognosis.
- Goal setting is closely related to the intervention course and/or pathway that is taken and also determines which intervention strategy to use, such as remediation, rehabilitation or compensatory strategies. Therefore, occupational therapists should have a good understanding of what can be improved and/or what has reached a ceiling and considered to be a permanent disability.

### **5.3.6 Sub-theme 5: Intervention pathway**

The participants indicated intervention pathway as a fifth sub-theme, which includes remediation, rehabilitation and compensation (see Chapter 4, Sections 4.3.6.1 to 4.3.6.3). The participants maintained that intervention pathway is also referred to as a strategy. Following a selection of an intervention pathway, an occupational therapist should then determine whether the client will be treated individually and/or in a group therapy session as part of the work intervention procedures.

#### **5.3.6.1 Implications for practice**

The following implications relating to the sub-theme of intervention pathway apply to the occupational therapy practice:

- The vocational rehabilitation process is a multidisciplinary team process, therefore there may be some body functions that could be deferred to other specialists for further remediation, such as gait. This can be referred to a physiotherapist, while the occupational therapist focuses on specific work intervention procedures.
- A collaborative approach is recommended when implementing the work intervention procedures with the client, in order to avoid wasting time and ensure adequate achievement of specific intervention goals.

### **5.3.7 Sub-theme 6: Prevocational skills**

The participants indicated that prevocational skills training provides the prerequisite skills that the client should possess prior to entering the open labour market. These are unlike the vocational skills which are specific to a particular type of work identified for the client and related to their premorbid employment. Among the components of prevocational skills identified by participants are conflict management, communication, time management, and professionalism (see Chapter 4, Sections 4.3.7.1 to 4.3.7.4)

#### **5.3.7.1 Implications for practice**

The following implications relating to the sub-theme of prevocational skills apply to the occupational therapy practice:

- Occupational therapists should have a resource file with all the different pre-vocational skills that can be taught to their clients, so that it will be easier to apply them in practice as the need arises.
- The prevocational skills should be selected and carefully applied in practice as per the individual client's needs.

### **5.3.8 Sub-theme 7: Vocational skills**

The participants indicated that the vocational skills follow after the prevocational skills. They entail work-specific skills, which focus on inherent skills and activities that the employee will be required to perform on duty. The participants indicated two categories under vocational skills, namely life skills training and work samples (see Chapter 4, Sections 4.3.8.1 to 4.3.8.2). Four sub-categories were identified under life skills training category (see Chapter 4, Sections 4.3.8.1.1 to 4.3.8.1.4), which were social skills, stress management, problem solving, and psychosocial skills.

Participants indicated that work samples involve the use of different standardised and non-standardised tests, analysed and carefully selected work-specific activities, to rehabilitate the client's body functions and structures. These can be done in individual and/or group therapy sessions when engaging clients in work samples for the purposes of work conditioning and work hardening. The participants maintained that work samples are also considered as crucial ingredients and tools for work conditioning and work hardening interventions. They uplift the client's motivation, because the client would be engaged in their natural premorbid work environment, which provides measurable and graded outcomes, where they may be able to monitor and trace their level of improvement and readiness to return to work.

#### **5.3.8.1 Implications for practice**

The following implications relating to the sub-theme of vocational skills apply to the occupational therapy practice:

- Vocational skills training should be customised and be in line with the intervention goals that are set for each client throughout the work intervention procedures.
- Occupational therapists should be taught most of the life skills that can be taught to clients as part of vocational skills training.

- A tick-box list with different important life skills can be compiled for occupational therapists, in order to enlighten and enable them to holistically evaluate and identify the most suitable life skills that should be taught to their clients.
- The clients may be referred to a learnership programme, college or skills training centre, to be equipped with specific life skills. Therefore, occupational therapists should liaise with local empowerment centres, church or religious groups, in different areas, particularly the occupational therapists who are based in the clinics and work within the communities.
- Work samples can be used for both assessment and treatment of the client's work components and skills. Therefore, occupational therapists should be orientated on the different standardised and non-standardised tests that they may use for different purposes.

### **5.3.9 Sub-theme 8: Work visit**

The participants indicated that a work visit should be implemented as part of the work intervention procedures. The work visit is conducted for different purposes such as doing a job analysis, building relations with the employer and to facilitate return to work. Furthermore, the participants concurred that a work trial was identified as a category under the work visit sub-theme. A work trial should be implemented as part of the work intervention procedures.

#### **5.3.9.1 Implications for practice**

The following implications relating to the work visit sub-theme apply to the occupational therapy practice:

- Work visits require that an occupational therapist should drive to the work place, which may not always be practical for some occupational therapists in Gauteng public healthcare sector, due to budget constraints and time. Therefore, other methods should be explored to ensure that occupational therapists still get the full picture of the client's work.
- A video clip can be taken of the client's work site, where the client works or their work station. This may be a segment and/or one cycle of the inherent work duties that the client is expected to perform.
- This will enable the occupational therapist to perform a thorough job analysis and have a full view of the client's work, identify possible risks and areas that may be a problem.

- Although a work trial may be the most effective way of returning a client to work quicker, it is evident that this is one of the most expensive work intervention procedures, as it requires the client to drive daily to the work place, together with the treating occupational therapist to observe the client doing the work in the initial phase of the process.
- However, occupational therapists can simulate some aspects of the work in the occupational therapy department with different work samples and work segments that may inherently demand certain actions and movements that the client will be expected to perform when he/she returns to work in future.
- The client may have to work under close supervision and under strict restrictions as the company may not be held liable for any damages or injuries that may be caused by the client during this period.

### **5.3.10 Sub-theme 9: Job analysis**

The participants maintained that job analysis is one of the components that applies and can be linked to all the work intervention procedures and components such as work visit, and functional capacity evaluation. A job analysis is central and is regarded as the main systematic approach that can enable the occupational therapist to relate to the client's job, gain in-depth insight into the finer details of the inherent job requirements, essential job functions and be able to match the client's capacity with the right job tasks. Three categories were indicated by participants which were intertwined with the sub-theme of job analysis, namely functional capacity evaluation, reasonable accommodation and report writing.

#### **5.3.10.1 Implications for practice**

The following implications relating to the job analysis sub-theme, including functional capacity evaluation, report writing and reasonable accommodation, apply to the occupational therapy practice:

- It was difficult for the participants to categorise some of the components of the work intervention procedures, as they are intertwined and interdependent. It is therefore recommended that continuous training through workshops and in-service training should be offered to occupational therapists in Gauteng public healthcare sector in order to ensure that all occupational therapists are 'on the same page' and 'speak the same language'.



- Application of reasonable accommodation in practice may be expensive for the employer. It is important that occupational therapists should be knowledgeable with regard to the viable options for reasonable accommodation that they can recommend to the employer upon placement and return to work of their clients.
- Small adjustments to the work environment may be welcomed and implemented by the employer, however should the recommendation become too expensive and possibly affect the manner in which the business is run, it may not be welcomed by the employer, which puts the injured employee's career and opportunity to be returned to work at risk.

### **5.3.11 Sub-theme 10: Placement**

The participants indicated that after the client has been fully rehabilitated and undergone different work intervention procedures, he/she must be placed and/or returned to work.

#### **5.3.11.1 Implications for practice**

The following implications relating to the placement sub-theme apply to the occupational therapy practice:

- Occupational therapists should be familiar with different sequelae of medical conditions and injuries in order to be able to determine when is the right time to facilitate placement of the client at work.
- Occupational therapists should be engaged in workshops to share best practice and explore different options on work placement and different partnering stakeholders that can be considered.

### **5.3.12 Sub-theme 11: Follow-up**

The participants indicated that continuous follow-up should be done by an occupational therapist and/or a case manager after the client has been successfully placed at work.

#### **5.3.12.1 Implications for practice**

The following implications relating to the follow-up sub-theme apply to the occupational therapy practice:

- Follow-up should be done to ensure that the client is taken through all the stages of work intervention procedures. However, this is dependent on each institution in public healthcare sector. In some instances where the client is working under a government department, the occupational health and safety division would make the follow-up as they are regarded as the case manager of the respective employee.
- In the case of a private healthcare client, who may be employed by a private company, occupational therapists may have to directly follow-up with these kinds of clients to ensure that they are successfully returned to work.
- The client's level of productivity can be monitored through this process and re-assessment may be considered should there be a need.

The participants further indicated certain components which are inherently part of the work intervention procedures. However, the participants indicated that these components cannot fall within a particular phase, therefore they should be considered throughout the work intervention process and be incorporated continuously as the need arises. These are: education, prevention, accessibility, collaboration, referral, and protocol, case management and networking.

#### **5.4 LIMITATIONS**

This study was limited to the occupational therapists working in, and/or who have worked in, Gauteng public healthcare sector, and have implemented the work intervention procedures. This study cannot be generalised to the work intervention procedures that are implemented by occupational therapists in the other eight provinces of South Africa, as they may have different experiences and views on work intervention procedures.

#### **5.5 RECOMMENDATIONS**

Based on the findings of this study, the researcher makes the following recommendations for practice and future research.

### **5.5.1 Clinical practice**

The study recommendations for clinical practice cover occupational therapists, supervisors and heads of occupational therapy departments, and Department of Health, hospital management and/or policy makers.

#### **5.5.1.1 Occupational therapists**

Occupational therapists should:

- work in long-term rehabilitation hospitals, to be exposed to the medical and functional prognosis of different clients with different injuries and conditions. This will give insight and ensure clinical reasoning, in selecting the right work intervention procedures.
- have a resource file in their vocational rehabilitation units where they can store useful information related to the work intervention procedures, aims, group/individual sessions and different activities that they can use with different clients.
- be engaged in workshops as part of their continuing developmental programme, that will focus on applicable legislation in practice. This will ensure that legislation lies at the heart of practice.
- attend and be engaged in workshops that are aimed at group therapy in vocational rehabilitation, or those that can be used as part of work intervention procedures.
- be realistic when setting goals and reporting to the stakeholder (that is employer, union, insurance company, and others), due to the sensitivity of the vocational rehabilitation, as misinformation may raise expectations.

#### **5.5.1.2 Supervisors and heads of occupational therapy departments**

The supervisors and heads of occupational therapy departments should:

- assess the manner in which clients receive and/or experience client-centredness, and their perception thereof, as this will assist the occupational therapists to know how to appropriately engage with their clients in practice.
- conduct more research on affordable tests that could be of low cost and accessible to as many occupational therapists as possible, due to the reality that most of the standardised tests that are used as work samples are expensive and not every hospital will be able to afford them.

- consider standardisation of certain tests in the occupational therapy practice, which would add more value and yield evidence-based practice and treatment modalities, thereby providing more options for the practice.
- engage occupational therapists in workshops in order to revise some basic skills on how to identify important information on the client's greatest areas of deficits.
- send the occupational therapists to attend the report writing workshops that are held annually by the Gauteng Vocational Rehabilitation Task Team, to ensure that all occupational therapists in practice have similar knowledge and 'speak the same language'.

#### **5.5.1.3 Department of Health, hospital management and/or policy makers.**

The Department of Health, hospital management and policy makers should:

- incorporate and emphasise legislation throughout the occupational therapy undergraduate programme. This will prepare the occupational therapy graduates, and ensure that as they qualify, they are more acquainted with the applicable acts that apply in work intervention procedures.
- provide compulsory training and workshops, due to the reality that occupational therapists qualify from different universities with different training and background on vocational rehabilitation and work intervention procedures. This has resulted in discrepancies with regard to knowledge and confidence in practice.
- provide adequate budget for the occupational therapy departments in different hospitals, in order to be able to procure the standardised tests that can be used as part of work intervention procedures.
- introduce the implementation of work intervention procedures as part of the occupational therapists' performance appraisals, in order to ensure that they implement the work intervention procedures.

#### **5.5.2 Future research**

Future research should explore the following topics:

- Practical implementation of the work intervention procedures in one of the hospitals in Gauteng province.
- Generating work intervention protocols from the work intervention procedures that have been researched in this study.

- Exploring the work intervention procedures that are used by occupational therapists in the other eight provinces of South Africa.
- Clients' perceptions of their role in work intervention procedures and their awareness of relevant legislation.
- Work intervention procedures applied to clients presenting with cardiovascular injuries.
- Work intervention procedures applied to clients presenting with spinal cord injuries.
- Work intervention procedures applied to clients presenting with psychiatric illnesses.

## 5.6 PERSONAL REFLECTION

As the researcher and occupational therapist in Gauteng province, I have had the privilege of being part of the Gauteng Vocational Rehabilitation Task Team. This allowed me to have first-hand experience and exposure to different levels of healthcare and being able to identify areas that need to be researched in the field of vocational rehabilitation. Through the research journey, I have become increasingly aware of the possibilities and potential that I personally possess with regard to research, the thrill of unearthing and collaboratively producing a working system that can be used by occupational therapists in practice. I have come to appreciate the power of 'oneness' and working together in a cohesive manner, through the research methods of this study.

The researcher noted an intense constructive battle and debate among the research participants in the workshop, during the data collection and data analysis session. The active engagement showed that occupational therapists are deeply passionate about their work and services that they render to their clients in the public healthcare sector. The participation revealed the reality that there are many things that occupational therapists are actively doing 'on the ground' where work intervention procedures are concerned. Due to lack of sharing of knowledge and best practices, however each occupational therapist had their own views with regard to the components, and their unique way of doing things which they firmly believed was the best approach as it had been used, tried many times, and worked in their setting.

One other complication that was noted was the reality that the vocational rehabilitation services in Gauteng public healthcare sector are offered at different levels of care. This means that hospitals or clinics at different levels have certain access to some tools and equipment, which then dictates what can be done at each particular institution and how it should be carried out with regard to the work intervention procedures. Of importance to note is the gap that was

identified as a cry regarding lack of standardisation of the work intervention procedures in Gauteng public healthcare sector. It is worth noting that the occupational therapists graduated from different universities, came from different backgrounds and had different principles on how to carry out the work intervention procedures. Therefore, being in one room with different professionals, attempting to work out and draw up common procedures that can adequately cater for and be used by everyone, was not an easy undertaking. However, despite the differences, success was achieved.

Furthermore, it is worth noting that these are not to be rigidly applied and we are not claiming to have exhausted the work intervention procedures. They may be adapted and changed according to different settings and population that is served. As noted during data analysis, the work intervention procedure is a process and it can never be linear. The following notes from the participants support the study findings related to the work intervention procedures:

- ... *once they (clients) are discharged, we start the cycle again ... (workshop) ... so, it's a cycle ... (workshop)*
- ... *very complex and very wide ... (workshop)*
- ... *the whole process is a busy process ... (workshop)*
- ... *it's a very fluid and dynamic process. I think we are just trying to put some order into it ... (workshop)*
- ... *we cannot see this as linear. We can never see it. It will also be cyclic, going around and round ... (workshop)*
- ... *it can never be in a structure ... (workshop)*
- ... *that thing is all components that is almost cyclic and continuing throughout and can come in at any point ... (workshop)*
- ... *the whole OT process is about re-evaluating and re-assessing ... (workshop)*
- ... *it shouldn't have a top and a bottom. It should be fluid ... (workshop).*

It is noted that the research study did not produce new concepts, however through a collaborative effort, participants ensured that the work intervention components were explored and organised into 'easy to follow' and step-by-step procedures that can be used by occupational therapists in practice. This will positively contribute to the occupational therapy profession and add to the body of knowledge.

## 5.7 CONCLUSION

This chapter concluded the research study, by providing a synopsis of the findings. It presented and described the limitations and personal reflection of the researcher, together with the implications for practice and relevant recommendations for further research. The findings of this study should benefit the occupational therapists who will be implementing the work intervention procedures, the clients who will be receiving the services, as well as the supervisors and the Department of Health in improving the work intervention procedures in the public healthcare sector in the province of Gauteng.

## REFERENCES

1. Jacobs K. Occupational therapy : Work-related programs and assessments. 2nd ed. Boston: Little, Brown; 1991.
2. Pratt J, Jacobs K. Work practice : International perspectives. Oxford: Butterworth Heinemann; 1997.
3. Buys T. Professional competencies in vocational rehabilitation: Results of a Delphi study. S Afr J Occup Ther. 2015 Dec; 45(3):48-54.
4. Shipham E. The functioning of a medical fitness for work unit. Rehabilitation South Africa. 1984:8-14.
5. Pretorius C. Activity and work programmes. The role of the occupational therapist in the treatment of persons with epilepsy. S Afr J Occup Ther. 1981; 11(1):6-8.
6. Beukes S. Werkrehabilitasie-benutting van gemeenskapsbronne. S Afr J Occup Ther. 1983; 13:24-6.
7. Sutherland A. Work placement of schizophrenic patients: A pilot study of opportunities and attitudes. S Afr J Occup Ther. 1984; 14(2):26-9.
8. Joubert R. The 17th Vona du Toit memorial lecture : Where from? What now? Where to? S Afr J Occup Ther. 1997; 27(1):5-15.
9. Shipham E. Bolts and nuts: The competitive edge. S Afr J Occup Ther. 1995; 25(2):4-12.
10. Buys T, Wessels E. The need for support groups after vocational rehabilitation. S Afr J Occup Ther. 1991; 21(2):34-7.



11. Waddell G, Burton AK, Kendall N. Vocational rehabilitation : What works, for whom, and when? [London]: TSO; 2010.
12. Position statement vocational rehabilitation. WFOT, editor. Taiwan March, 2012.
13. Van Biljon HM, Casteljiën D, du Toit SH, Soulsby L. Opinions of occupational therapists on the positioning of vocational rehabilitation services in gauteng public healthcare. S Afr J Occup Ther. 2016; 46(1):45-52.
14. Ataguba JE, McIntyre D. Paying for and receiving benefits from health services in south africa: Is the health system equitable? Health Policy Plan. 2012; 27(suppl 1):i35-i45. doi:10.1093/heapol/czs005.
15. Van Biljon HM. Transforming the vocational rehabilitation services of occupational therapists in gauteng public healthcare through action learning action research; 2017.
16. <https://tradingeconomics.com/south-africa/unemployment-rate>.
17. SABPP S. A. Board for People Practices [Internet]. SABPP fact sheets: People with disabilities. @SABPP1; 2017 [cited 2019 Feb 10]. Available from: <https://sabpp.co.za/sabpp-fact-sheets/>.
18. Schell BA, Gillen G, Scaffa M, Cohn ES. Willard and Spackman's Occupational Therapy: Lippincott Williams & Wilkins; 2013.
19. The Constitution of the Republic of South Africa, Act 108 of 1996, (1996).
20. Labour Relations Act (no 66 of 1995), (1995).
21. Republic of South Africa. National health insurance (nhi) white paper. In: Department of Health, editor. Pretoria: Government Printers; 2017.
22. <http://www.statssa.gov.za/?p=5943>.

23. Statement on occupational therapy. World Federation of Occupational Therapy; editor, 2011.
24. Sturesson M, Edlund C, Fjellman-Wiklund A, Falkdal AH, Bernspång B. Work ability as obscure, complex and unique: Views of swedish occupational therapists and physicians. *Work* (Reading, Mass.). 2013; 45(1):117-28. doi:10.3233/WOR-2012-1416.
25. Buys TL, Van Biljon H. Occupational therapy in occupational health and safety : Dealing with disability in the workplace. *Occupational health Southern Africa*. 1998; 4(5):30-3.
26. Hammond SA. *The thin book of appreciative inquiry*. 2nd ed. Plano, Tex: Thin Book Pub. Co; 1998.
27. Reed J. *Appreciative inquiry : Research for change*. Thousand Oaks: Sage Publications; 2007.
28. Trajkovski S, Schmied V, Vickers M, Jackson D. Using appreciative inquiry to transform health care. *Contemporary Nurse: A Journal for the Australian Nursing Profession*. 2013; 45(1).
29. Van Wyk S, Heyns T, Coetzee I. The value of the pre-hospital learning environment as part of the emergency nursing programme. *health sa gesondheid*. 2015; 20(1):91-9.
30. Polit DF, Beck CT. *Nursing research: Generating and assessing evidence for nursing practice*. 9th ed. Philadelphia: Lippincott Williams & Wilkins 2012.
31. Burns N, Groves K. *Practice of nursing research: WB Saunders company Philadelphia, PA*; 1997.
32. Burns N, Grove SK. *The practice of nursing research: Conduct. Critique*. 2005.
33. Webster J, Watson RT. Analyzing the past to prepare for the future: Writing a literature review. *MIS quarterly*. 2002:xiii-xxiii.
34. Hart C. *Doing a literature review: Releasing the research imagination*: Sage; 2018.

35. Willard HS, and Barbara A.B. Schell. Willard & Spackman's Occupational Therapy: Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2014.
36. Crepeau EB, Cohn ES, Schell BAB. Willard & Spackman's Occupational Therapy; 2003.
37. Ross J. Occupational therapy and vocational rehabilitation: Wiley Online Library; 2007.
38. Amini DA, Kannenberg K, Bodison S, Chang P, Colaianni D, Goodrich B, et al. Occupational therapy practice framework: Domain & process 3rd edition. Am J Occup Ther. 2014; 68:S1-S48.
39. Hopkins HL, Hopkins HLH. Willard and Spackman's Occupational Therapy. 8 ed. Philadelphia: Lippincott; 1993.
40. Cromwell F. The world of industry: Arena for OT skills. Presented at the national occupational therapy association conference, philadelphia May 1983.
41. Jacobs K. Occupational therapy : Work-related programs and assessments. Boston: Little, Brown; 1991.
42. Escorpizo R, Reneman MF, Ekholm J, Fritz J, Krupa T, Marnetoft S-U, et al. A conceptual definition of vocational rehabilitation based on the icf: Building a shared global model. Journal of occupational rehabilitation. 2011; 21(2):126-33.
43. Buys T, van Biljon H. Functional capacity evaluation: An essential component of south african occupational therapy work practice services. Work. 2007; 29(1):31-6.
44. Waddell G, Burton AK, Kendall N. Vocational rehabilitation : What works, for whom, and when? London: TSO. 2008.
45. Ward AB, Gutenbrunner C, Giustini A, Delarque A, Fialka-Moser V, Kiekens C, Bertheau M, Christodoulou N. A position paper on physical & rehabilitation medicine programmes in post-acute settings union of European Medical Specialists Section of Physical & Rehabilitation Medicine (in conjunction with the European Society of Physical & Rehabilitation Medicine). Journal of rehabilitation medicine. 2012 Apr 5;44(4):289-98.

46. Office IL. Basic principles of vocational rehabilitation of the disabled: International Labour Office; 1970.
47. Shipham E. The functioning of a medical fitness for work unit. Rehabil South Afr. 1984:8-14.
48. Pretorius C. Activity and work programmes. The role of the occupational therapist in the treatment of persons with epilepsy. S Afr J Occup Ther. 1981; 11(1):6-8
49. Buys T, Wessels E. The need for support groups after vocational rehabilitation S Afr J Occup Ther. 1991; 21(2):34-7.
50. Bola S, Trollip E, Parkinson F. The state of south african internships: A national survey against hpcsa guidelines. SAMJ: South African Medical Journal. 2015; 105(7):535-9.
51. <http://www.labour.gov.za/DOL/legislation/acts/labour-relations/labour-relations-act>.
52. Roley SS, Barrows CJ, Susan Brownrigg OTR L, Sava DI, Vibeke Talley OTR L, Kristi Voelkerding B, et al. Occupational therapy practice framework: Domain & process 2nd edition. Am J Occup Ther. 2008; 62(6):625.
53. West WL. The role of occupational therapy in work adjustment: Work adjustment as a function of occupational therapy. In proceedings of the third international congress of the world federation of occupational therapists Dubuque, Iowa: Wm. C. Brown, 1964; 5:1.
54. Wegg L. The essentials of work evaluation. Am J Occup Ther. 1960; 14(65).
55. Rosenberg B, Wellerson T. A structured prevocational program. Am J Occup Ther. 1960; 14(57).
56. Cromwell FS. Looking ahead in work evaluation: Work adjustment as function of occupational therapy. In procesedings of the third international congress of the world federation of occupational therapists Dubuque, Iowa: Wm. C. Brown,. 1964; 5(16).

57. Department of Physical Medicine and Rehabilitation. Pre-vocational therapy demonstration in the general hospital and a rehabilitation centre (sp-234). Report to the national advisory council on vocational rehabilitation, U.S. Department of Health, Education and Welfare, New York: New York University Medical Centre; editor, 1960.
58. Granofsky JA. Manual for occupational therapists on prevocational exploration. Dubuque, Iowa: Wm. C. Brown. 1959.
59. Louise K, Hoeffding. A manual-based vocational rehabilitation program for patients with an acquired brain injury: Study protocol of a pragmatic randomized controlled trial (rct). 2012; 18(371).
60. Sinclair E, Radford K, Grant M, Terry J. Developing stroke-specific vocational rehabilitation: A soft systems analysis of current service provision. *Disabil Rehabil.* 2014; 36:409 - 17.
61. Buys N, Matthews L, Randall C. Contemporary vocational rehabilitation in Australia. *Disabil Rehabil.* 2015; 37(9):820-24. doi:10.3109/09638288.2014.942001.
62. Commonwealth of Australia. Welfare to work budget measures. In: Canberra ACT, editor; 2005.
63. Matthews L. Evolution of vocational rehabilitation competencies in Australia. *Int J Rehabil Res.* 2010; 33(2):124-33.
64. Nijhuis F, van Lierop B, Wichers F, Gobelet C, Franchignoni F. Vocational rehabilitation in the Netherlands. 2006. p. 367-77.
65. Akabas S, Gates L, Galvin D. Disability management. A complete system to reduce costs, increase productivity, meet employees needs and ensure legal compliance, New York: Amocom. 1992.
66. Shrey D. Worksite disability management and industrial rehabilitation: An overview. In shrey D.E & Iacerte M (ed), principles and practices of disability management in industry. Boca Raton: CRC press, p 3-53. 1997.

67. Van Lierop B. Reinetratie na scholing. Elsevier bedrijfsinformatie bv, den haag; 2001.
68. Van Lierop B, Nijhuis F. Assessment, education and placement: An integrated approach to vocational rehabilitation. *Int J Rehabil Res.* 2000; 23:261 - 9.
69. Bio D, Gattaz W. Vocational rehabilitation improves cognition and negative symptoms in schizophrenia. *Schizophr. Res.* 2010; doi:doi:10.1016/j.schre.2010.08.003.
70. McGurk S, Meltzer H. The role of recognition in vocational functioning in schizophrenia. *Schizophr. Res.* 2000; 27; 45(3):175 - 84.
71. Chronister J, Chou C-C, da Silva Cardoso E, Sasson J, Chan F, Tan SY. Vocational services as intervention for substance abuse rehabilitation: Implications for addiction studies education. *Journal of Teaching in the Addictions.* 2008; 7(1):31-56. doi:10.1080/15332700802072274.
72. Frazier PA, Tix AP, Barron KE. Testing moderator and mediator effects in counseling psychology. *J Couns Psychol.* 2004; 51:115 - 34.
73. Hopkins HL, Smith HD. Willard and spackman's Occupational Therapy. 6th ed. Philadelphia: Lippincott;1993.
74. Cavana RY, Delahaye BL, Sekaran U. Applied business research: Qualitative and quantitative methods. *Aust N Z J Med.* 2001.
75. Policy and procedure on incapacity leave and ill-health retirement (PILIR) document; April 2009.
76. Van Biljon H, Casteljiën D, Du Toit SH, Soulby L. Opinions of occupational therapists on the positioning of vocational rehabilitation services in gauteng public healthcare. *S Afr J Occup Ther.* 2016; 46(1):45-52.
77. Moed MB. Procedures and practices in prevocational evaluation: A review of current programs. In j.E muthard (ed.), proceedings of the iowa conference on prevocational activities.

Washington, d.C. Office of Vocational Rehabilitation, US Department of Health, Education and Welfare. 1960.

78. De Vaus DA. Research design in social research. London : Sage; 2001.

79. De Vaus DA. Research design in social research. London: SAGE; 2006.

80. Reed J. Appreciative inquiry: Research for change. London: Sage Publications; 2007.

81. De Vos AS, Strydom H, Fouche CB, Delport CSL. Research at grass roots, for the social sciences and human service professions 4th Edition ed. South Africa: Van Schaik Publishers; 2011.

82. Moule P, Aveyard H, Goodman M. Nursing research: An introduction: Sage; 2016.

83. Cuthill M. Exploratory research: Citizen participation, local government, and sustainable development in australia 2002:78-89.

84. Anastas JW. Research design for social work and human services. 2nd ed. New York: Columbia University Press;1999.

85. Neil J, Rasmussen K. Descriptive research methodologies. Thousand Oaks: Sage; 2007.

86. Morgan DL. Focus group as qualitative research. Thousand Oaks, CA: SAGE; 1997.

87. Walliman NS, Walliman N. Research methods: The basics. Taylor and Francis; 2011.

88. Brown RB. Doing your dissertation in business and management: The reality of research and writing: Sage Publications; 2006.

89. Rubin A, Babbie E. Research methods for social work. 5th ed. Australia: Thomson Brooks/Cole; 2005.

90. Taylor R. Essentials of nursing and health care London: Sage; 2014.

91. Holland K, Rees C. Nursing: Evidence-based practice skills. New York: Oxford University Press; 2010.
92. Krueger RA. Focus groups: A practical guide for applied research. Newbury Park: SAGE; 1988.
93. Stringer ET. Action Research California: SAGE; 2014.
94. Coghlan AT, Preskill H, Tzavaras Catsambas T. An overview of appreciative inquiry in evaluation. *New Directions for Evaluation*. 2003; (100):5-22. doi:10.1002/ev.96.
95. Hammond SA. The thin book of appreciative inquiry 2nd ed. Plano, Tex: Thin Book Pub. Co; 1998.
96. Barbour S, Kitzinger J. Developing focus group research: Politics, theory and practice. London: SAGE; 1999.
97. Boomer CA, McCormack B. Creating the conditions for growth: A collaborative practice development programme for clinical nurse leaders. *J Nurs Manag*. 2010; 18(6):633-44. doi:10.1111/j.1365-2834.2010.01143.x.
98. Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. *Field Methods*. 2006; 18:59-82.
99. Lincoln YS, Guba EG. *Naturalistic inquiry* Newbury park, CA: Sage Publications; 1985.
100. Elo S, Kaariainen M, Kanste O, Polkki T, Utriainen K, Kyngas H. Qualitative content analysis. A focus on trustworthiness *SAGE Open*, 2014; 4.
101. Guba EG. Criteria for assessing the trustworthiness of naturalistic inquiries;. *Educational Communication and Technology Journal*. 1981; 29:75-91.
102. Ebersohn L, Eloff I, Ferreira R. *First steps in research*. Pretoria, van Schaik. 2010.
103. <https://www.who.int/>.



104. Law M, Baptiste S, Mills J. Client centred practice: What does it mean and does it make a difference? *Canadian Journal of Occupational Therapy*. 1995; 62:250-7.
105. Driver MF. A philosophic view of the history of Occupational Therapy in Canada. *Can. J. Occup. Ther.* 1968; 35(2):53-60.
106. Whalley H, Karen R. Client-centred occupational therapy: The importance of critical perspectives. *Scand J Occup Ther.* 2015; 22(4):237-43.
107. Corring D, Cook J. Client-centred care means I am a valued human being. *Can. J. Occup. Ther.* 1999; 66(2):71-82.
108. Law M, Steinwender S, Leclair L. Occupation, health and well-being. *Can. J. Occup. Ther.* 1998;65,81-91.
109. Townsend E. Using Canada's 1997 guidelines for enabling occupation. *Aust Occup Ther J.* 1998; 45:1-6.
110. Van Der Reyden D. Legislation for everyday occupational therapy practice. *S Afr J Occup Ther.* 2010; 40(3):27-35.
111. Thomas A. Employment equity in South Africa: Lessons from the global school. *International Journal of Manpower.* 2002; 23(3):237-55.
112. Booyesen L. Barriers to employment equity implementation and retention of blacks in management in South Africa. *S. Afr. J. Labour Relat.* 2007; 31(1):47-71.
113. Cameron D, Blitz J, Durrheim D. Teaching young docs old tricks: Was Aristotle right? An assessment of the skills training needs and transformation of interns and community service doctors working at a district hospital. *S Afr Med J.* 2002; 92:276-8.
114. Christensen GJ. Educating dental staff members for optimum patient service. *J. Am. Dent. Assoc.* 1999; 130(12):1783-5.

115. Innes E, Straker L. Workplace assessments and functional capacity evaluations: Current beliefs of therapists in australia. *Work*. 2003; 20(3):225-36.
116. Joss M. The role of functional capacity evaluations in occupational therapy vocational evaluations. *Br J Occup Ther*. 2011; 74(9):450-2.
117. Durand M-J, Brassard B, Hong QN, Lemaire J, Loisel P. Responsiveness of the physical work performance evaluation, a functional capacity evaluation, in patients with low back pain. *Journal of occupational rehabilitation*. 2008; 18(1):58-67.
118. Wensing M, Elwyn G. Methods for incorporating patients' views in health care. *BMJ*. 2003 Apr; 19(326(7394)):877-9.
119. Geoffrey H, et al. Educating and enlisting patients. *JCOM*. 1998; 5(4).
120. Waitzkin H. Doctor-patient communication: Clinical implications of social scientific research. *JAMA*. 1984 Nov 2; 252(17):2441-6.
121. Ley P. Doctor-patient communication: Some quantitative estimates of the role of cognitive factors in non-compliance. *Journal of hypertension. Supplement. J Hypertens Suppl*. 1985 Apr; 3(1):S51-5.
122. Bartlett EE, Grayson M, Barker R, Levine DM, Golden A, Libber S. The effects of physician communications skills on patient satisfaction; recall, and adherence. *J Chronic Dis*. 1984; 37(9-10):755-64.
123. Booth R. *Facilitating treatment adherence—a practitioner's guidebook*: D. Meichenbaum and d. Turk: Plenum press, new york (1987). 297 pp. \$35.40. *Behav Res Ther*. 1989; 27(6):695-. doi:10.1016/0005-7967(89)90157-5.
124. Ende J, Kazis L, Ash A, Moskowitz MA. Measuring patients' desire for autonomy. *J Gen Intern Med*. 1989; 4(1):23-30.

125. Peters RM. Matching physician practice style to patient informational issues and decision-making preferences. An approach to patient autonomy and medical paternalism issues in clinical practice. *Arch Fam Med*. 1994; 3(9):760-3; discussion 4.
126. Quill TE, Brody H. Physician recommendations and patient autonomy: Finding a balance between physician power and patient choice. *Ann Intern Med*. 1996; 125(9):763-9.
127. Halper J, APN-C M, Holland NJ. *Comprehensive nursing care in multiple sclerosis*: Springer Publishing Company; 2010.
128. Knowles MS. *The modern practice of adult education : From pedagogy to andragogy*. Rev. and updated ed. Englewood Cliffs, NJ: Cambridge Adult Education; 1980.
129. Lawler P. *Workplace education and the principles and practices of adult education*; doctoral dissertation. In: University TC, York N, editors. 1988.
130. Iyer R, Coderre P, McKelvey T, Cooper J, Berger J, Moore E, et al. An employer-based, pharmacist intervention model for patients with type 2 diabetes. *Am J Health Syst Pharm*. 2010; 67(4):312-6.
131. Cranor CW, Christensen DB. *The Asheville Project: short-term outcomes of a community pharmacy diabetes care program*. *J Am Pharm Assoc*. 2003 Mar 1;43(2):149-59.
132. Hanna GS, Dettmer PA. *Assessment for effective teaching: Using context-adaptive planning*. Boston, MA; 2004.
133. Vocational rehabilitation task team. *Occupational therapy vocational ability screening tool*. In: Department of health and social development. Johannesburg: Gauteng Province; 2013.
134. VRTT. *Occupational therapy vocational ability screening tool*. Johannesburg: Gauteng Province; 2013.
135. Buys T, Van Biljon H. *Occupational therapy in occupational health and safety: Dealing with disability in the work place*. *Occupational Health South Africa*. 1998; 4(5):30-3.

136. Gibson L, Strong J. A conceptual framework of functional capacity evaluation for occupational therapy in work rehabilitation. *Aust Occup Ther J.* 2003; 50:64-71.
137. Strong J, Unruh AM, Wright A, Baxter GD. *Pain: A textbook for therapists*: Churchill Livingstone Edinburgh, Scotland; 2002.
138. Holmes D. The role of the occupational therapist–work evaluator. *Am J Occup Ther.* 1985; 39(5):308-13.
139. Deen M, Gibson L, Strong J. A survey of occupational therapy in australian work practice. *Work.* 2002; 19(3):219-30.
140. Hofmann T-M, Kielblock J. The assessment of functional work capacity in the south african mining industry. *Work.* 2007; 29(1):5-11.
141. Brink KS. Applying the use of activity in the assessment of malingering: A case illustration. *Work.* 2007; 29(1):47-53.
142. Steinbeck TM. Purposeful activity and performance. *Am J Occup Ther.* 1986; 40(8):529-34.
143. Strong S, Rigby P, Stewart D, Law M, Letts L, Cooper B. Application of the person-environment-occupation model: A practical tool. *Can. J. Occup. Ther.* 1999; 66(3):122-33.
144. Townsend E, Stanton S, Law M, Polatajko H, Baptiste S, Thompson-Franson T. Canadian association of occupational therapists. *Enabling occupation: An occupational therapy perspective.* Ottawa (Canada): Can. J. Occup. Ther. 2002.
145. Law M, Baptiste S, McColl M, Opzoomer A, Polatajko H, Pollock N. The canadian occupational performance measure: An outcome measure for occupational therapy. *Canadian Journal of Occupational Therapy.* 1990; 57(2):82-7.
146. Rosenbaum P, Stewart D, editors. *The world health organization international classification of functioning, disability, and health: A model to guide clinical thinking, practice and research in the field of cerebral palsy.* Semin Pediatr Neurol; 2004: Elsevier.

147. Wilcock AA. Occupational science: Bridging occupation and health. SAGE Publications Sage CA: Los Angeles, CA; 2005.
148. Wilcock AA. Occupation and health. *Br J Occup Ther.* 1998; 61(8):340-43.
149. Wielandt T, Strong J. Compliance with prescribed adaptive equipment: A literature review. *Br J Occup Ther.* 2000; 63(2):65-75.
150. Crepeau EB, Ellen SC, Barbara A, Schell B. Willard & spackman's occupational therapy. 10th ed. Philadelphia; 2009.
151. Christiansen CH, Townsend EA. Introduction to occupation: The art and science of living Upper Saddle River N, editor: Prentice Hall; 2004.
152. Wade DT. Stroke: Rehabilitation and long-term care. *The Lancet.* 1992; 339(8796):791-3.
153. Wottrich AW, von Koch L, Tham K. The meaning of rehabilitation in the home environment after acute stroke from the perspective of a multiprofessional team. *Phys Ther.* 2007; 87(6):778-88. doi:10.2522/ptj.20060152.
154. Bendz M. The first year of rehabilitation after a stroke—from two perspectives. *Scand J Caring Sci.* 2003; 17(3):215-22.
155. Lewinter M, Mikkelsen S. Therapists and the rehabilitation process after stroke. *Disabil Rehabil.* 1995; 17(5):211-6.
156. Davies PL, Gavin WJ. Comparison of individual and group/consultation treatment methods for preschool children with developmental delays. *Am J Occup Ther.* 1994; 48(2):155-61.
157. Creek J, Lougher L. Occupational therapy and mental health: Elsevier Health Sciences; 2011.

158. Sowmya V. A study to assess the knowledge, current system of practice and the problems faced regarding bio medical waste management among health care personnel working in selected phc's in bangalore; 2013.
159. Crouch RB, Alers V. Occupational therapy in psychiatry and mental health: Wiley Online Library; 2014.
160. Gauthier L, Dalziel S, Gauthier S. The benefits of group occupational therapy for patients with parkinson's disease. *Am J Occup Ther.* 1987; 41(6):360-5.
161. Egan I, Oregon State System of Higher Education MTRD. Associated work skills: A manual; 1984.
162. Mitchell M, Rourk JD, Schwarz J. A team approach to prevocational services. *Am J Occup Ther.* 1989; 43(6):378-83.
163. Ellington C. Teaching prevocational skills to handicapped students. *Career Development for Exceptional Individuals.* 1981; 4(1):35-7.
164. Rouleau S, Saint-Jean M, Stip E, Fortier P. The impact of a pre-vocational program on cognition, symptoms, and work re-integration in schizophrenia. *Occupational Therapy in Mental Health.* 2009; 25(1):26-43.
165. Murray C, Doren B. The effects of working at gaining employment skills on the social and vocational skills of adolescents with disabilities: A school-based intervention. *Rehabilitation Counseling Bulletin.* 2013; 56(2):96-107.
166. Nazarov ZE, Golden TP, Schrader Sv. Prevocational services and supported employment wages. *J. Vocat. Rehabil.* 2012; 37(2):119-29.
167. Almeida R, Behrman J, Robalino D. The right skills for the job? Rethinking training policies for workers: The World Bank; 2012.
168. Corbiere M, Lecomte T. Vocational services offered to people with severe mental illness. *J Ment Health.* 2009; 18(1):38-50.

169. Cochrane JJ, Goering P, Rogers JM. Vocational programs and services in Canada. *Can J Commun Ment Health*. 2009; 10(1):51-62.
170. Mithaug DE. Case studies in the management of inappropriate behaviors during prevocational training. *AAESPH Review*. 1978; 3(3):132-44.
171. Relf D. The use of horticulture in vocational rehabilitation. *J Rehabil*. 1981; 47(3):53-6.
172. Bond GR, Drake RE. Making the case for ips supported employment. *Administration and policy in mental health and mental health services research*. 2014; 41(1):69-73.
173. Dutta A, Gurvey R, Chan F, Chou C-C, Ditchman N. Vocational rehabilitation services and employment outcomes for people with disabilities: A United States study. *Journal of occupational rehabilitation*. 2008; 18(4):326.
174. Wall Jr JA, Callister RR. Conflict and its management. *Journal of management*. 1995; 21(3):515-58.
175. Fink CF. Some conceptual difficulties in the theory of social conflict. *Journal of conflict resolution*. 1968; 12(4):412-60.
176. Thomas KW, Schmidt WH. A survey of managerial interests with respect to conflict. *Acad Manage J*. 1976; 19(2):315-8.
177. Putnam LL, Poole MS. *Conflict and negotiation*; 1987.
178. Krone KJ, Jablin FM, Putnam LL. Communication theory and organizational communication: Multiple perspectives. *Handbook of organizational communication: An interdisciplinary perspective*. 1987; 18(1):40.
179. Baron RA. Reducing organizational conflict: An incompatible response approach. *J Appl Psychol*. 1984; 69(2):272.
180. Thompson JD. *Organizations in action*. New York: McGraw-Hill. Thompson Organizations in Action. 1967.

181. Pondy LR. Organizational conflict: Concepts and models. *Adm Sci Q.* 1967:296-320.
182. Augsburger DW. *Conflict mediation across cultures: Pathways and patterns*: Westminster John Knox Press; 1992.
183. Frederikson LG. Development of an integrative model for medical consultation. *Health Communication.* 1993; 5(3):225-37.
184. Makoul G, Arntson P, Schofield T. Health promotion in primary care: Physician-patient communication and decision making about prescription medications. *Soc Sci Med.* 1995; 41(9):1241-54.
185. Waitzkin H. Information giving in medical care. *J Health Soc Behav.* 1985:81-101.
186. Frederikson LG. Exploring information-exchange in consultation: The patients' view of performance and outcomes. *Patient Educ Couns.* 1995; 25(3):237-46.
187. Ong LM, De Haes JC, Hoos AM, Lammes FB. Doctor-patient communication: A review of the literature. *Soc Sci Med.* 1995; 40(7):903-18.
188. Luhmann N. What is communication? *Communication theory.* 1992; 2(3):251-9.
189. Miller KI. Compassionate communication in the workplace: Exploring processes of noticing, connecting, and responding. *Journal of Applied Communication Research.* 2007; 35(3):223-45.
190. Kripalani S, LeFevre F, Phillips CO, Williams MV, Basaviah P, Baker DW. Deficits in communication and information transfer between hospital-based and primary care physicians: Implications for patient safety and continuity of care. *JAMA.* 2007; 297(8):831-41.
191. Macan TH. Time management: Test of a process model. *J Appl Psychol.* 1994; 79(3):381.
192. Lakein A, Leake P. *How to get control of your time and your life*: New American Library New York; 1973.



193. Britton BK, Tesser A. Effects of time-management practices on college grades. *J Educ Psychol.* 1991; 83(3):405.
194. Macan TH, Shahani C, Dipboye RL, Phillips AP. College students' time management: Correlations with academic performance and stress. *J Educ Psychol.* 1990; 82(4):760.
195. Schuler RS. Managing stress means managing time. *Pers J.* 1979; 58(12):851-4.
196. Helsby G. Teachers' construction of professionalism in England in the 1990s. *Journal of Education for Teaching.* 1995; 21(3):317-32.
197. Hargreaves A. Four ages of professionalism and professional learning. *Teachers and teaching.* 2000; 6(2):151-82.
198. Englund T. Are professional teachers a good thing? In: Goodson I & Hargreaves A (red.), *Teachers' professional lives* (s. 75–87). London/New York: Routledge Falmer; 1996.
199. Weiss RS, Kahn RL. Definitions of work and occupation. *Soc. Probs.* 1960; 8:142.
200. Spring G, Syrmis J. What's in a name? The meaning of 'vocational' in changing times. *Unicorn (Carlton, Vic).* 2002; 28(3):5.
201. Felstead A, Gallie D, Green F. *Work skills in Britain, 1986-2001.* 2002.
202. Adam K, Gibson E, Lyle A, Strong J. Development of roles for occupational therapists and physiotherapists in work related practice: An Australian perspective. *Work.* 2010; 36(3):263-72.
203. Maclean R, Ordonez V. Work, skills development for employability and education for sustainable development. *Educational Research for Policy and Practice.* 2007; 6(2):123-40.
204. Macdonald EM. *Occupational therapy in rehabilitation: A handbook for occupational therapists, students and others interested in this aspect of reablement.* Bailliere Tindall Limited; 1976.

205. Holder V. The use of creative activities within occupational therapy. *Br J Occup Ther.* 2001; 64(2):103-5.
206. Monareng LL, Franzsen D, van Biljon H. A survey of occupational therapists' involvement in facilitating self-employment for people with disabilities. *S Afr J Occup Ther.* 2018; 48(3):52-7.
207. Andrieu M. A better future for work? *The OECD Observer.* 1999; 217:53.
208. Organization WH. Life skills education for children and adolescents in schools. Pt. 3, training workshops for the development and implementation of life skills programmes. Geneva: World Health Organization, 1994.
209. Hayes RL, Halford WK, Varghese FN. Generalization of the effects of activity therapy and social skills training on the social behavior of low functioning schizophrenic patients. *Occupational Therapy in Mental Health.* 1992; 11(4):3-20.
210. Mairs H, Bradshaw T. Life skills training in schizophrenia. *Br J Occup Ther.* 2004; 67(5):217-24.
211. Gould D, Carson S. Life skills development through sport: Current status and future directions. *International review of sport and exercise psychology.* 2008; 1(1):58-78.
212. Hayes J. *Interpersonal skills at work*: Routledge; 2002.
213. Gurtman MB. Social competence: An interpersonal analysis and reformulation. *Eur J Psychol Assess.* 1999; 15(3):233.
214. Cherniss C, Goleman D. *The emotionally intelligence workplace. How to select for measure and improve emotional intelligence in individuals, groups and organizations* san Francisco: Jossey-Bass. 2001.
215. Cherniss C, editor. *Emotional intelligence: What it is and why it matters.* annual meeting of the Society for Industrial and Organizational Psychology, New Orleans, LA; 2000.

216. Zeidner M, Matthews G, Roberts RD. Emotional intelligence in the workplace: A critical review. *Applied Psychology*. 2004; 53(3):371-99.
217. Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. Posttraumatic stress disorder in the national comorbidity survey. *Arch Gen Psychiatry*. 1995; 52(12):1048-60.
218. Barlow DH. *Principles and practice of stress management*: Guilford Press; 2007.
219. Quick JC, Quick JD, Nelson DL, Hurrell Jr JJ. *Preventive stress management in organizations*: American Psychological Association; 1997.
220. Varvogli L, Darviri C. Stress management techniques: Evidence-based procedures that reduce stress and promote health. *Health Sci. J*. 2011; 5(2):74.
221. Granath J, Ingvarsson S, von Thiele U, Lundberg U. Stress management: A randomized study of cognitive behavioural therapy and yoga. *Cogn Behav Ther*. 2006; 35(1):3-10.
222. Weiten W. *Psychology: Themes and variations: Themes and variations*: Cengage Learning; 2007.
223. Jonassen D, Strobel J, Lee CB. Everyday problem solving in engineering: Lessons for engineering educators. *J. Eng. Educ*. 2006; 95(2):139-51.
224. Jonassen DH. Toward a design theory of problem solving. *Educational technology research and development*. 2000; 48(4):63-85.
225. Ulrich W. The design of problem-solving systems. *Management Science*. 1977; 23(10):1099-108.
226. Roley SS, Barrows CJ, Susan Brownrigg OTR L, Sava DI, Vibeke Talley OTR L, Kristi Voelkerding B, et al. *Occupational therapy practice framework: Domain & process*; 2nd edition. *Am J Occup Ther*. 2008; 62(6):625.
227. Organization WH. *International classification of functioning, disability and health*: Icf: Geneva: World Health Organization; 2001.

228. Calvert G, Spence C, Stein BE. The handbook of multisensory processes: MIT press; 2004.
229. Willard HS, Spackman CS, Puglisi A, Crepeau EB, Cohn ES, Schell BAB. Terapia occupazionale: Antonio Delfino; 2008.
230. Callinan M, Robertson IT. Work sample testing. *International Journal of Selection and Assessment*. 2000; 8(4):248-60.
231. Wright GN. Total rehabilitation: Little Brown and Company; 1980.
232. Innes E, Straker L. Validity of work-related assessments. *Work*. 1999; 13(2):125-52.
233. Van Biljon H. The relevance of the valpar in the SA context. *S Afr J Occup Ther*. 1994; 24(2):16-9.
234. Schult M-L, Ingrid S, Jacobs K. Multidimensional aspects of work capability. *Work*. 2000; 15(1):41-53.
235. Häkkinen A, Sokka T, Lietsalmi AM, Kautiainen H, Hannonen P. Effects of dynamic strength training on physical function, valpar 9 work sample test, and working capacity in patients with recent-onset rheumatoid arthritis. *Arthritis Care & Research: J Arthritis Rheum*. 2003; 49(1):71-7.
236. Joss M. Occupational therapy and rehabilitation for work. *Br J Occup Ther*. 2002; 65(3):141-8.
237. Sang LS, Eria LPY. Outcome evaluation of work hardening program for manual workers with work-related back injury. *Work*. 2005; 25(4):297-305.
238. Scott P. The effect of a work-conditioning programme on manual labourers in south african industry. *Int J Ind Ergon*. 1999; 24(3):253-9.
239. Matheson LN, Ogden LD, Violette K, Schultz K. Work hardening: Occupational therapy in industrial rehabilitation. *Am J Occup Ther*. 1985; 39(5):314-21.

240. Marshall EM. Work evaluation as a theme. *Am J Occup Ther.* 1985; 39(5):295-6.
241. Dickson MB. Work sample evaluation of blind clients: Criteria for administration and development; 1976.
242. Caruso LA, Chan DE, Chan A. The management of work-related back pain. *Am J Occup Ther.* 1987; 41(2):112-7.
243. Canelón MF. Job site analysis facilitates work reintegration. *Am J Occup Ther.* 1995; 49(5):461-7.
244. Canelon MF, Ervin EM. An on-site job evaluation performed via activity analysis *Am J Occup Ther.* 1997; 51(2):144-53.
245. Owens T, Hoffman G, Kumar S. An ergonomic perspective on accommodation in accessibility for people with disability. *Disabil Rehabil.* 1996; 18(8):402-7.
246. Karlan PS, Rutherglen G. Disabilities, discrimination, and reasonable accommodation. *Duke LJ.* 1996; 46:1.
247. Franche R-L, Cullen K, Clarke J, Irvin E, Sinclair S, Frank J, et al. Workplace-based return-to-work interventions: A systematic review of the quantitative literature. *Journal of occupational rehabilitation.* 2005; 15(4):607-31.
248. Pomaki G, Franche RL, Murray E, Khushrushashi N, Lampinen TM. Workplace-based work disability prevention interventions for workers with common mental conditions: A review of literature *Journal of Occupational Rehabilitation* 2012; 22(2):182 - 95.
249. Amick BC, Habeck RV, Hunt A, Fossel AH, Chapin A, Keller RB, et al. Measuring the impact of organizational behaviors on work disability prevention and management. *Journal of occupational rehabilitation.* 2000; 10(1):21-38.
250. Arnetz BB, Sjögren B, Rydén B, Meisel R. Early workplace intervention for employees with musculoskeletal-related absenteeism: A prospective controlled intervention study. *J Occup Environ Med.* 2003; 45(5):499-506.

251. Loisel P, Abenhaim L, Durand P, Esdaile JM, Suissa S, Gosselin L, et al. A population-based, randomized clinical trial on back pain management. *Spine (Phila Pa 1976)*. 1997; 22(24):2911-8.
252. Krause N, Dasinger LK, Neuhauser F. Modified work and return to work: A review of the literature. *Journal of occupational rehabilitation*. 1998; 8(2):113-39.
253. Yassi A, Khokhar J, Tate R, Cooper J, Snow C, Vallentype S. The epidemiology of back injuries in nurses at a large canadian tertiary care hospital: Implications for prevention. *Occup Med*. 1995; 45(4):215-20.
254. Cooper J, Tate R, Yassi A. Work hardening in an early return to work program for nurses with back injury. *Work*. 1997; 8(2):149-56.
255. Rice V, Luster S. Restoring competence for the worker role. *Occupational Therapy for Physical Dysfunction*, 5th ed. Baltimore, MD: Lippincott Williams & Wilkins; 2002.
256. Schneider B, Konz AM. Strategic job analysis. *Hum Resour Manage*. 1989; 28(1):51-63.
257. Harvey RJ. Job analysis. *Handbook of industrial and organizational psychology*; 1991.
258. Lysaght R. Job analysis in occupational therapy: Stepping into the complex world of business and industry. *Am J Occup Ther*. 1997; 51(7):569-75.
259. Van Deusen J, Brunt D. Assessment in occupational therapy and physical therapy. *Assessment*. 1997; 96:6052.
260. Ha Denise H, Page JJ, Wietlisbach CM. Work evaluation and work programs. *Pedretti's Occupational Therapy-E-Book: Practice Skills for Physical Dysfunction*. 2013; 337.
261. King PM, Tuckwell N, Barrett TE. A critical review of functional capacity evaluations. *Phys Ther*. 1998; 78(8):852-66.
262. Smith SL, Cunningham S, Weinberg R. The predictive validity of the functional capacities evaluation. *Am J Occup Ther*. 1986; 40(8):564-7.

263. Jones T, Kumar S. Functional capacity evaluation of manual materials handlers: A review. *Disabil Rehabil.* 2003; 25(4-5):179-91.
264. Jones T, Kumar S. Functional capacity evaluation of manual materials handlers: A review. *Disabil Rehabil.* 2003; 25(4-5):179-91.
265. Coole C, Birks E, Watson PJ, Drummond A. Communicating with employers: Experiences of occupational therapists treating people with musculoskeletal conditions. *Journal of occupational rehabilitation.* 2014; 24(3):585-95.
266. Ownby RL. *Psychological reports: A guide to report writing in professional psychology*: John Wiley & Sons Inc; 1997.
267. Beukes S. The accreditation of vocational assessment areas: Proposed standard statement and measurement criteria. *S Afr J Occup Ther.* 2011; 41(3):42-9.
268. Buys TL. Professional competencies required by occupational therapist delivering work practice services to workers with disabilities in the south african open labour market; 2006.
269. Van Biljon H, Casteleijn D, du Toit SH. Developing a vocational rehabilitation report writing protocol-a collaborative action research process. *S Afr J Occup Ther.* 2015; 45(2):15-21.
270. Technical Assistance Guideline on the Employment of persons with Disability (TAG). Department of labour; internal editing, layout and design and distribution. Media Production Unit; Printer: Farmeset, Cape Town.
271. Steenstra IA, Anema JR, Van Tulder MW, Bongers PM, De Vet HC, Van Mechelen W. Economic evaluation of a multi-stage return to work program for workers on sick-leave due to low back pain. *Journal of occupational rehabilitation.* 2006; 16(4):557-78.
272. De Jong AM, Vink P. Participatory ergonomics applied in installation work. *Appl Ergon.* 2002; 33(5):439-48.

273. Anema J, Steenstra I, Urlings I, Bongers P, De Vroome E, Van Mechelen W. Participatory ergonomics as a return-to-work intervention: A future challenge? *Am J Ind Med.* 2003; 44(3):273-81.

274. Loisel P, Gosselin L, Durand P, Lemaire J, Poitras S, Abenhaim L. Implementation of a participatory ergonomics program in the rehabilitation of workers suffering from subacute back pain. *Appl Ergon.* 2001; 32(1):53-60.

275. Anema J, Buijs P, van Putten D. Samenwerking van huisarts en bedrijfsarts: Een leidraad voor de praktijk. *Medisch Contact*, 20, 56, 790-793. 2001.

276. Clark F, Azen SP, Carlson M, Mandel D, LaBree L, Hay J, et al. Embedding health-promoting changes into the daily lives of independent-living older adults: Long-term follow-up of occupational therapy intervention. *J Gerontol B Psychol Sci Soc Sci.* 2001; 56(1):P60-P3.

277. Clark F, Azen SP, Zemke R, Jackson J, Carlson M, Mandel D, et al. Occupational therapy for independent-living older adults: A randomized controlled trial. *JAMA.* 1997; 278(16):1321-6.



**ANNEXURE A****LETTER: APPROVAL  
RESEARCH ETHICS COMMITTEE**



Faculty of Health Sciences

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002587, Approved dd 22 May 2002 and Expires 03/20/2022.
- IRB 0000 2235 ICRG0001762 Approved dd 22/01/2014 and Expires 01/14/2020

28 February 2019

**Approval Certificate  
New Application**

**Ethics Reference No.: 62/2019**

**Title: EXPLORING OCCUPATIONAL THERAPY WORK INTERVENTION PROCEDURES FOR THE PUBLIC HEALTHCARE SECTOR IN GAUTENG PROVINCE**

Dear Mr J Masango

The **New Application** as supported by documents received between 2019-02-19 and 2019-02-27 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on its quorate meeting of 2019-02-27.

Please note the following about your ethics approval:

- Ethics Approval is valid for 1 year and needs to be renewed annually by 2020-02-29.
- Please remember to use your protocol number (62/2019 ) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.

**Ethics approval is subject to the following:**

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

**Dr R Sommers**

MBChB MMed (Int) MPharmMed PhD

Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

*The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health)*

Research Ethics Committee  
Room 4 00, Level 4, Tswelopele Building  
University of Pretoria, Private Bag 3029  
Arcadia 0007, South Africa  
Tel +27 (0)12 356 3004  
Email: [ethics@up.ac.za](mailto:ethics@up.ac.za)  
[www.up.ac.za](http://www.up.ac.za)

Fakulteit Gesondheidswetenskappe  
Lefapha la Disaense tsa Maphelo

**ANNEXURE B****PARTICIPANT'S INFORMATION &  
INFORMED CONSENT  
DOCUMENT**

**PARTICIPANT'S INFORMATION AND INFORMED CONSENT DOCUMENT**

**Occupational therapists**

**Study title:**

Exploring occupational therapy work intervention procedures for the public healthcare sector in Gauteng province

**Principal Investigator:** July Masango

**Supervisor:** Mrs T Buys (Department of Occupational Therapy, UP)

**Co-supervisor:** Prof T Heyns (Department of Nursing Science, UP)

**Institution:** University of Pretoria

**DAYTIME AND AFTER-HOURS TELEPHONE NUMBER(S):** (July Masango)

**Daytime number/s:** July Masango (076 321 7592) and Tania Buys (083 407 8463)

**Afterhours number:** July Masango (076 321 7592) and Tania Buys (083 407 8463)

**Date and time of informed consent discussion:**

19	February	2019
date	month	year

08 :00
Time

**Dear Prospective Participant**

**1) INTRODUCTION**

You are cordially invited to attend a continuous professional development workshop based on appreciative inquiry principles. This information booklet will help you to decide if you would like to participate in this research inquiry. Before you agree to take part, kindly make sure that you fully understand what is involved. If you have any questions, please do not hesitate to contact and ask the researcher Mr July Masango for more information.

**2) THE NATURE AND PURPOSE OF THIS STUDY**

The aim of this study is to explore occupational therapy work intervention procedures for public healthcare sector: with the use of appreciative inquiry.

**3) EXPLANATION OF PROCEDURES AND WHAT WILL BE EXPECTED FROM PARTICIPANTS**

If you agree to participate, you will be asked to participate in a workshop group discussion which will take about three hours. The workshop will comprise of paired interviews as well as discussions and ending with identified emerging themes during feedback. You and the other participants will be asked questions about your opinion regarding work intervention procedures, in occupational therapy practice. We will not ask any questions about your personal experience.

As a participant you will be involved in the analysis of the data during the workshop, however the discussions will to be recorded for storage purposes. If you are not comfortable with this, it will not be possible for you to participate in the study.

**4) RISKS AND DISCOMFORTS INVOLVED**

We do not think that taking part in the study will cause any physical or emotional discomfort or risk.

You do not have to share any knowledge you are not comfortable with.

During the workshop group discussion, if you find that some of the questions are sensitive; for instance, questions about your understanding of work intervention procedures. If these kinds of questions feel too personal or make you uncomfortable, you do not have to answer them.

#### **5) POSSIBLE BENEFITS OF THIS STUDY**

You will not benefit directly by being part of this study. But your participation is important for us to better understand and develop procedures on how to address and implement work intervention in occupational therapy practice, within the public healthcare sector. The information you give may help the researcher contribute in ensuring adequate patient treatment and successful return to work of patients.

#### **6) COMPENSATION**

You will not be paid to take part in the study. There are no costs involved for you to be part of the study, other than your own travelling costs.

#### **7) VOLUNTARY PARTICIPATION**

The decision to take part in the study is yours and yours alone. You do not have to take part if you do not want to. You can also stop at any time during the workshop and interviews without giving a reason. If you refuse to take part in the study, this will not affect you in any way.

#### **8) ETHICAL APPROVAL**

This study was submitted to the Research Ethics Committee of the Faculty of Health Sciences at the University of Pretoria, Medical Campus, Tswelopele Building, Level 4-59, telephone numbers 012 356 3084 / 012 356 3085 and written approval certificate has been given by the committee, with ethics reference no.: 62/2019.

#### **9) INFORMATION ON WHO TO CONTACT**

If you have any questions concerning this study, you should contact: July Masango (Investigator) and Tania Buys (Supervisor). Telephone numbers: July Masango (076 321 7592) and email: [julymasango76@gmail.com](mailto:julymasango76@gmail.com) Or Tania Buys (083 407 8463) and email: [tania.buys@up.ac.za](mailto:tania.buys@up.ac.za)

## 10) PRIVACY AND CONFIDENTIALITY

We will not record your name anywhere and no one will be able to connect you to the answers you give. Your answers will be linked to a fictitious code number or a pseudonym (participant) and we will refer to you in this way in the data, any publication, report or other research output. All records from this study will be regarded as confidential. Results will be published in South African Journal of Occupational Therapy or presented at conferences in such a way that it will not be possible for people to know that you were part of the study.

The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Research Ethics Committee. All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

All hard copy information will be kept in a locked facility in the Occupational Therapy Department at the University of Pretoria, for a minimum of fifteen years and only the research team will have access to this information.

## 11) CONSENT TO PARTICIPATE IN THIS STUDY

- I confirm that the person requesting my consent to take part in this study has told me about the nature and process, any risks or discomforts, and the benefits of the study.
- I have also received, read and understood the above written information about the study.
- I have had adequate time to ask questions and I have no objections to participate in this study.
- I am aware that the information obtained in the study, including personal details, will be anonymously processed and presented in the reporting of results.
- I understand that I will not be penalised in any way should I wish to discontinue with the study and my withdrawal will not affect my treatment and care.
- If photos are taken it may only be used after I have seen it and agreed that it may be used.
- I am participating willingly.
- I have received a signed copy of this informed consent agreement.

---

Participant's name (Please print)

---

Date

---

Participant's signature

---

Date

---

Researcher's name (Please print)

---

Date

---

Researcher's signature

---

Date

**I understand that the workshop discussion will be audio-recorded. I give consent that it may be audio-recorded.**

YES

NO



**ANNEXURE C****DEMOGRAPHIC INFORMATION**

## 1. DEMOGRAPHIC INFORMATION

Please complete the following to provide us with information about your experience as an occupational therapist relating to vocational therapy and work intervention procedures.

Gender	Male	Female
Age in year	_____years	
Highest qualification		
Current place of employment		
Current position		
Years of experience as occupational therapist	_____years	
Years of experience in the public sector specifically relating vocational rehabilitation?	_____years	

Thank you!

**ANNEXURE D**

**WORK INTERVENTION  
PROCEDURES FORM**



## WORK INTERVENTION PROCEDURES FORM

Please write down your views on the following two questions.

Question 1: Based on your view, which vocational intervention procedures are currently implemented by occupational therapists in practice?

Question 2: Based on your view, which vocational intervention procedures should ideally be implemented by occupational therapist in practice?

Thank you!

**ANNEXURE E****TURNITIN REPORT**

## TURNITIN REPORT



### Digital Receipt

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**CHAPTER 1**  
**ORIENTATION TO THE STUDY**

**1.1 INTRODUCTION**

The occupational therapy profession considers human work as a key occupation, as well as an integral part of the treatment process and outcome following rehabilitation. Work is defined as productive activity, paid labour and a place of employment.<sup>1</sup> Occupational therapists use various analysed work-related activities to treat a client's work occupation after any form of injury or illness and facilitate the return to work process.

Buys<sup>2</sup> supports the statement that different terminologies are used in occupational therapy literature when referring to delivery of work-related services to clients. 'Work preparation'<sup>3,4</sup> and 'work rehabilitation'<sup>5,6</sup> were commonly used during the 1980s in occupational therapy literature. In the 1990s the concept vocational rehabilitation emerged, which is the term that is now used when referring to work-related services delivered to clients.<sup>6,11</sup> The World Federation of Occupational Therapists (WFOT), of which South Africa is a member,<sup>7</sup> broadly defines vocational rehabilitation as "the provision of various services to assist people to enter, re-enter, return and/or remain in work."<sup>11</sup> In their position statement on vocational rehabilitation, the WFOT acknowledge the occupational therapists as the professionals who have the appropriate expertise to play a significant role in provision of vocational rehabilitation services to clients.<sup>11</sup>

According to van Bijon et al.,<sup>12</sup> vocational rehabilitation includes six interlinked phases, which are concurrent with the existing phases practised within Gauteng public healthcare settings. The phases are: 1) Prevention of injury at work, through educative services, 2) Screening, 3) Assessment, 4) Intervention, 5) Placement, and 6) Follow-up. The six interlinked vocational rehabilitation phases were applied through the following case scenario of a patient who was treated at one of the hospitals in the Gauteng public healthcare sector. See Figure 1.1.

1

July Masango

**Note:** it is noted that the Turnitin system picked up and recorded most of the words and terminologies that are commonly used in the occupational therapy literature, which increased the percentage, therefore the 3 % shown below contains most of the same words and terminologies.

T 890 OTX 890 891 990 Y1 202... Research report / dissertation - DUE 31-...

Originality GradeMark PeerMark

EXPLORING OCCUPATIONAL THERAPY WORK

turnitin 12% SIMILAR OUT OF 0

BY J (JULY) MASANGO

2019

37 CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

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**ANNEXURE F****CREATIVE HERMENEUTIC DATA ANALYSIS**

## The steps of creative hermeneutic data analysis as described by Boomer McCormack.<sup>97</sup>

Titchen A. (2000) *Professional Craft Knowledge in Patient-Centred Nursing and the Facilitation of its Development*. Ashdale Press, Kidlington.

University of Ulster, Health and Social Care and Royal College of Nursing. (2009) *A Strategic Framework for Enhancing Practice Development Knowledge, Skills and Expertise in Northern Ireland*. University of Ulster, Health and Social Care and The Royal College of Nursing, Belfast, UK.

Van Manen M. (1990) *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. State University of New York Press, London, ON.

Wilson V., Hardy S. & Brown B. (2008) An exploration of practice development evaluation: unearthing PRAXIS. In *International Practice Development in Nursing and Healthcare* (K. Manley, B. McCormack & V. Wilson eds), pp. 126–146. Blackwell Publishing, Oxford.

### Appendix 1: Creative hermeneutic data analysis (Boomer & McCormack 2007) with data extracts from the study

1. Clarify data available and code (if necessary):

*In this study the data available included the already analysed:*

- Observations of practice
- Action learning data
- Staff nurse interviews
- Patient interviews
- Participant interviews
- Manager interviews

2. Read the data and form general impressions, observations, thoughts and feelings. *[Make some notes on these if it helps and will also be useful to check back on later]*

3. Create an image of your impressions (intuitive grasp) of the data → the image captures the essences of the data.

*[This stage is done individually]*



4. 'In pairs, tell the story' of the creative work: *each person tells the story of their creative work, i.e. the meanings of the images produced. The second person in the pairing writes the story verbatim.*

**Community narrative:** There is a definite sense of people on a **journey** through the PD programme. Along this journey many different things have impacted on these journeys, including amongst others reflection, support (nurturing). However this journey is both: complex (cultural and contextual restraints) and one that is individual, demonstrating people being at different points at the end of the PD programme. There is a strong sense of **enlightenment** (e.g. light bulbs and ah ha moments) and some **empowerment**, but that these are both somewhat **fragile and delicate**. Overall there is **growth**, again in varying degrees, with some its only small steps being taken, but it is definitely present. The growth needs **nurturing**, both for it to be sustained and for continuing growth and spread.

5. Using the creative image as the centre piece and the story (written) and other notes made at step 1, theme the image:

- As many themes as possible
- Write 1 theme on each post it and stick on the creative image.

6. With the pairs form a small group – the small group (as a whole) discuss the individual themes and devise 'shared themes' [Categories] → must have whole group agreement on these.

Process outcomes (research question 1)	Outcomes (research question 2)
Becoming reflexive	For patients
Becoming proactive	For nursing staff
Valuing teamwork	For programme participants
Becoming a facilitator	For managers
Nursing processes	For facilitators
	For organizations

7. Match raw data to categories from step 5.
8. If more than one small group working on the data analysis – each small group to present their categories to each other and discuss → agree a final set of categories across all small groups. Must have whole group agreement on these and the final agreed set of categories should represent all of previous small group categories.