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A STUDY TO DETERMINE THE PROFILE OF CASE MANAGEMENT OF LONG-TERM INCAPACITY INSURANCE CLAIMS FOR CLAIMANTS LIVING WITH MENTAL HEALTH CONDITIONS IN SOUTH AFRICA

Masters degree in Occupational Therapy

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i. Declaration

I, Mpakeleng Eugenia (Pinky) Aphane, student number 10084020, hereby declare that this dissertation submitted for the degree in Master of Occupational Therapy at the University of Pretoria, is my original work in execution and style. The work done on this dissertation has incorporated literature from sources that have been cited and / or acknowledged throughout the chapters and have contributed to the outcome of this study. The acknowledgment for the sources has been made by means of references and included in the bibliography. This dissertation was conducted for analyzing the profile of case management of long-term incapacity claimants living with mental health conditions in South Africa and all the results have been attached in the annexures to support this dissertation's write up.

Name and Surname: **Mpakeleng Eugenia Aphane**

Signature: 

Date: **2023/06/15**

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iii. Abstract

Introduction

Sickness absence and long-term incapacity leave contribute substantially to the overall national service delivery challenges in a working environment. Insurance companies have, over time, seen a substantial increase in the number of disability claims resulting from claimants living with mental health conditions. Case management is a collaborative process of assessment, planning, facilitation, and advocacy for options and services to meet an individual's holistic needs through communication and available resources to promote quality, cost-effective outcomes. The Association of Savings and Investments of South Africa (ASISA) guidelines provide an approach that insurance companies can apply to the clinical management of long-term mental health claims. However, these guidelines do not outline specific case management recommendations to assist insurers in managing long-term incapacity for mental health claims. Insurance case management aims to provide additional support to claimants living with mental health conditions through proactive management of the long-term incapacity claimants. Case management has proven to be successful in other industries, so providing case management recommendations for long-term incapacity claimants in an insurance context is needed. Analyzing the profile of the management of mental health claimants to understand the context of effective case management interventions was thus envisaged.

Aims and objectives

This study aimed to analyze the management of long-term incapacity insurance claimants living with mental health conditions in South Africa. Objectives included classification of the biographical data, types of intervention programs, and success of return to work for claimants living with mental health conditions within the insurance sector.

Research design

A quantitative retrospective correlational research design was used for this study.

Methods (setting, population, sampling, data collection, and analysis)

The data was collected from one insurance company through a purposeful sampling technique. The data variables selected comprised age, gender, body system and diagnosis, occupation, industry, the years considered of the study, claim type, cases referred for case management, type of case management intervention received, and return to work outcome. Data analysis used descriptive and inferential statistics to compare using frequency distribution tables. The odd ratios from the results also indicated probabilities and the strengths of the relationships between the variables, respectively.

Significance of the study

The results positively contribute to the occupational therapists in clinical practice and case managers in the insurance industry in facilitating triumphant return to work. This study will also benefit claimants to return to work and participate in economic activities. The insurers, on the other hand, will be able to save on the long-term costs of mental health claims and future research opportunities noted for career advancement.

iv. Table of Contents

v. List of figures and tables

vi. List of abbreviations and acronyms

Abbreviation / Acronym	Full description
ADL's	Activities of Daily Living
AMA	American Medical Association (AMA)
AOTA	American Occupational Therapy Association AOTA
ASISA	Association of Savings & Investments of South Africa
CBT	Cognitive Behavioural Therapy
CM	Case management
CMASA	Case Manager Association of South Africa
CMSA	Case Management Society of America
CRD	Compensation Research Data
DALY's	Daily Adjusted Life Years
ICBT	Internet-based Cognitive Behavioural Therapy
ISCO	International Standard Classification of Occupations
JCPMH	Joint Commissioning Panel for Mental Health
NOS	Non-Otherwise Specified
OTASA	Occupational Therapy Association of South Africa
PEO	Person, Environment, and Occupation
PGAP	Progressive Goal Attainment Program
PHC	Public Health Care
POPIA	Protection of Personal Information Act
PPR	Policy Holder Protection Rules
PTSD	Post-Traumatic Stress Disorder
RGA	Reinsurance Group of America
RTW	Return to work
SASOP	South African Society of Psychiatrists
WHO	World Health Organisation

CHAPTER 1: GENERAL INTRODUCTION

1.1 Introduction

Occupational therapists play a vital role in the insurance industry managing of long-term incapacity insurance claims due to mental health conditions. In South Africa, similar to other countries, mental illness remains one of the medical conditions requiring a multi-disciplinary treatment intervention in all sectors (Willetenburg, Roestenburg, Carbonato and Bila, 2016), the insurance industry included. This study analyzed case management of long-term incapacity insurance claims for claimants living with mental health conditions in South Africa.

The study is based on the insurance policies individual clients (individual policyholders) have taken out and paid premiums for based on the benefits they were insured. Focus was given to policyholders who have submitted long-term incapacity claims (considered claimants in this context) because of mental health conditions. Since occupational therapy has a broad scope of practice, occupational therapists play a valuable role in the insurance industry (Govender, Chantal, and Thanalutchmy, 2018). The role that they play in this industry (usually referred to as claims assessors in insurance) comprises of assessment of claimants in terms of inability to work due to ill health, sickness, or injury as well as case management as described in the key definition of terms. It is relevant to note that managing claimants living with mental health conditions is as critical in a clinical setting as it is within the insurance industry. Occupational therapists working in the insurance industry are also appointed as case managers apart from the claims assessor role to manage the interventions and claim benefits of claimants with long-term incapacity due to ill health resulting from mental health conditions.

There is a specified criterion in place in which claims assessors (some are occupational therapists and other allied health care professionals) refer claims received by claimants with mental health conditions for case management in line with the case management criteria. The case management criteria outline the referral process within the claims team, how claimants referred are identified, as well as the body systems and conditions that will benefit from case management. The insurer puts these referral criteria are put in place as a guide to ensure that long-term incapacity claimants referred for case management support the objectives of case management interventions. This criterion focuses on managing of subjective conditions, including mental health conditions which this study focused on. The mental health conditions covered in this referral criteria include and are not limited to the following conditions:

- Major Depressive Disorders
- Anxiety Disorders
- Bipolar Mood Disorders

- Schizophrenia
- Post-Traumatic Stress Disorder
- Fibromyalgia (also classified under mental health disorders by the insurer)
- Chronic Fatigue Syndrome (also classified under mental health disorders by the insurer)

In addition to the above, it is outlined in the referral criteria which data variables are to be provided/or included as part of the referral for each long-term incapacity claimant with a mental health condition. The variables used in the referral provide case managers with context on the medical background, the nature and extent of their mental health condition and how that has impacted on their overall functioning including the claimant's ability to work. The case managers thus use this information to determine a suitable case management plan, including enrolling them in a specific intervention program suitable to their needs while in the claim. The referral process and criteria are also outlined in Annexure A, which details the case management process and criteria.

This study was conducted over three years from January 2018 to January 2021, in which case managers received the following referrals:

- 2018 – 94 referrals, of which 44% accounted for claimants living with mental health conditions
- 2019 – 147 referrals, of which 35% were for claimants living with mental health conditions
- 2020 – 166 referrals and 40% comprised of claimants living with mental health conditions
- January 2021 (only) – 7 referrals for the month, of which 57% accounted for claimants living with mental health conditions.

Therefore, for the -mentioned above, this study focused on analyzing the profile of the case management of long-term incapacity claims for mental health claimants and evaluating the success of intervention programs to assist claimants in returning to work.

1.2 Background

Globally, it is estimated that roughly 450 million people suffer from mental disorders, with a lifetime prevalence that ranges from 12.2-48.6% and an 8.4-29.1% prevalence in 12 months (Roestenburg et al., 2016). The Unipolar Depressive Disorder has been projected to be the second highest cause of all Daily Adjusted Life Years (DALYs) that will be lost worldwide (Roestenburg et al., 2016). This depressive disorder directly impacts the ability of those affected to engage in productive work-related activities and contribute to the economic functioning from a socio-economic perspective.

Occupational therapists noted a widespread concern concerning the impact of trauma and stress-related conditions as this had indicated a direct impact on claimants' engagement in meaningful work-related occupations that impacted their quality of life. This concern was confirmed in one of the studies as work provided varied benefits, which included economic independence at an individual level,

engaging in meaningful life activities, social participation, and fulfilment, and this was noted to play a significant role in the overall well-being of claimants (Edgelow, 2020). This view was also in alignment with the public health approach that the World Health Organization provided.

The World Health Organization (WHO) provides a general public health approach to mental. (Charlson, van Ommeren, Flaxman, Cornett, Whiteford, and Saxena, 2019). The emphasis is on the promotion, prevention, and intervention strategies in mental health. The World Health Organization (2019) also provides a valuable client-centered approach to managing mental health conditions through multi-disciplinary treatment. This client-centered approach aims to assist individuals with mental health problems to live meaningful lives within their respective community and reach their full pre-morbid / pre-illness potential in line with recognized treatment protocols. Lund, Kleintjes, Cooper, Petersen, Bhana, and Flisher (2011) corroborates that in recent years South Africa has taken some necessary steps forward in strengthening its mental health systems accordingly.

Mental illness is also noted to have developed as a secondary issue in the recovery process of other medical conditions (Brijnath, Mazza, Singh, Kosny, Ruseckaite, and Collie, 2014). Return to work (RTW) following an absence from work due to mental health conditions assisted with the overall recovery and provided claimants with an opportunity to improve their quality of life. In order to improve quality of life, some strategies need to be applied from a rehabilitation and intervention point of view to achieve successful RTW (Akbarzadeh Khorshidi, Hadi Marembo, Mirriam Aickelin, Uwe, 2019). When these intervention strategies are applied, they assist in reducing long-term incapacity and the prevalence of disability for those suffering from mental health conditions.

According to the American Medical Association (AMA) Guides 5th Edition (AMA, 2000) to the Evaluation of Permanent Impairment, disability is defined as an alteration of an individual's capacity to meet personal, social, or occupational demands or statutory or regulatory requirements due to impairment (Schultz, Izabela Z., 2006). The AMA believes that disability has a relational outcome contingent on the environmental conditions in which activities are performed. Therefore, an individual can have a disability in performing a specific work activity but not have a disability in any other social role (Schultz et al., 2006). This impairment guideline is generally used across the insurance industry to determine the severity of the medical condition in line with the defined insurance criteria for long-term incapacity claimants as outlined in the policy benefits.

The World Health Organization estimated that 30.8% of all years lived with disability globally are due to mental health conditions (Jack, Wagner, Petersen, Thom, Newton, Stein, et al., 2014). In South Africa, the burden of mental health conditions had grown over a period of 20 years (1990-2010), and

the rise was expected to continue (Jack et al., 2014). According to the South African Stress and Health Study, the lifetime prevalence of common mental health conditions in South Africa accounted for 30.3% of all conditions (Jack et al., 2014). The costs associated with managing mental health conditions were also worth mentioning. Jack et al. (2014) reported that indirect costs, i.e., costs to families and households, had contributed to the total economic burden of mental health conditions more than direct costs, which arose from actual treatment of mental health conditions. However, Jack et al. (2014) further stated that only one study assessed indirect costs within the South African context. On the other hand, the National Mental Health Policy Framework and Strategic Plan: 2013-2020 reported that the indirect costs of managing mental health- related conditions, outweighed the direct treatment costs.

With the impact of the 2020 COVID-19 pandemic, it was envisaged that this global pandemic would trigger health issues due to the mindset from “living” to “survival” (WHO, 2020). This would lead to mental health symptoms including feelings of despair, hopelessness, social withdrawal, loneliness, increased anxiety, etc which may have arisen from decreased financial security. According to Usher, Durkin, and Bhullar (2020), people tended to feel anxious and unsafe in reaction to any environmental changes, and the impact of the COVID-19 pandemic on job security, inability to return to work and other economic factors may have impacted on claimants already living with mental health conditions.

A recent WHO publication stresses the pandemic’s impact and the toll it has taken on mental health (WHO., 2022). The World Health Organization now estimates a more than 25% rise in the prevalence of anxiety and stress disorders during the first year of the pandemic. Also, it highlights those services related to mental health have been severely hindered. From a socio-economic perspective, about 84 million people worldwide were consequently displaced in the first year of the COVID-19 pandemic. A recent study conducted on sub-Saharan adolescents, estimated that at least 10%-20% of children and adolescents experience mental health problems worldwide (Jörns-Presentati et al., 2021). The outcome of the study, which looked at reviewing the prevalence of mental health problems in sub-Saharan notes that increases over time due to a several factors such as managing conflict, psychosocial adjustments, family support, and community acceptance, etc which are vital factors in human nature and the researcher’s view, can result in long-term effects from a mental health perspective as adults (Jörns-Presentati et al., 2021). Insurance products are thus intended not only to replace income for claimants that have not been able to work due to mental health conditions leading to long-term incapacity. Insurance products/benefits are also there to help supplement additional costs incurred due to incapacity and disability to help alleviate the financial burden.

According to Brijnath, Mazza, Singh, Kosny, Ruseckaite, and Collie (2014) work-related mental stress was the most common cause of workplace compensation claims. This article also noted that mental stress adversely affects physical and psychological health, work productivity, as well as social relationships. Consequently, long-term exposure to mental stress led to mental health conditions such as depression, Post-Traumatic Stress Disorder (PTSD), and anxiety, and physical conditions (Brijnath et al., 2014). Brijnath (2014) further explained that mental health sequelae seemed to develop as a secondary issue in the recovery process of other medical conditions. These are the conditions that have also been seen commonly by the insurer and case managers working in insurance. A study by Brijnath (based in the Australian insurance context) revealed that there was complexity in the management of claimants living with mental health conditions due to diagnostic difficulties related to the invisibility of the injury, conflicting medical opinions, and the stigma associated with it (Brijnath et al., 2014). These factors made managing mental health conditions difficult and delayed clients' timely RTW, hence the need for case management.

Mental health conditions have long-term implications for clients, such as loss of income, role change, reduced possibility for reasonable accommodation, and lack of engagement in productive activities such as work and leisure (Khorshidi et al., 2019). These long-term implications on RTW for these workers can be complicated. The longer the claimants are away from work, the lower the likelihood of a successful RTW (Khorshidi et al., 2019). Factors related to mental health, such as psychological and social factors, influenced the process of RTW. Occupational therapists are well positioned to assess the needs of claimants with long-term incapacity and to prepare them for work in the open labour market, or work re-entry following long-term incapacity (Kreshnee, Chantal, and Thanalutchmy, 2018). Occupational therapists in the South African insurance industry perform similar functions to that of a case manager including vocational rehabilitation to facilitate RTW, including case management. Vocational rehabilitation in occupational therapy entails sequential delivery and coordination of services by rehabilitation providers under a rehabilitation plan to achieve the goal of suitable gainful employment (Hankins and Reid, 2015). The South African Position paper on Vocational Rehabilitation highlights that occupational therapists within vocational rehabilitation play a significant and recognized role specifically in vocational rehabilitation contributing to holistic management in both public and private sectors (Hester van Biljon; Simon Rabothata; P A de Witt, 2020). Case managers are responsible for collaborating and negotiating with the relevant stakeholders to facilitate follow-through with the treatment plan and while ensuring cost-effectiveness (Govender et al., 2018). The role that the case managers play in insurance thus complements partnerships in the private sector, which encourages this collaboration for vocational rehabilitation.

An insurance policy is defined as a group effort to reduce the sufferings of an individual as a result of some inevitable adversity such as death, disability, and injury or sickness (Karve, 2008). Insurance companies, usually share the risk costs associated with each policy taken with other insurance companies known as the reinsurer. Therefore, disability life insurance cover (including mental health conditions) is intended to assist individuals with financial relief in times of inability to earn income as a result of disease, illness, or injury. The insurance products offered to cover mental health-related conditions are included in insurance offerings for unforeseen ill-health circumstances. The literature revealed more than a R10 trillion insurance gap (which is the financial aspect that insurance policies are intended to cover) through life and disability insurance within the South African context (Berndt Göran Svensson, Pellissier, and Kruger, 2011). Research also supported the need to plan for the current and future activities regarding resources, clients, products, services, and costs within the life insurance industry (Berndt Göran Svensson et al., 2011). Recent data from Reinsurance Group of America (RGA) shared an overall increase of mental health claims of about 11%, accounting for individual life claims and approximately 20% in group insurance in 2019 in South Africa (RGA., 2019) based on their available data then.

In the South African insurance industry, which includes private insurance companies and employee benefit schemes, an average of 30% of all disability claims accounted for mental health-related conditions (Van der Walt and Kotze, 2017). Research forecasted that depression rates had reached record levels in the US: 7.1% of adults in the US had at least one major depressive episode in 2015, and an estimated 7 million American adults aged 65 and older experience depression. Anxiety disorders are also on the rise, with a recent review estimating a prevalence of up to 25% for the general population (Taylor, 2020).

Laaksonen and Gould (2015) report a strong association between vocational rehabilitation and RTW and that increasing rehabilitation amongst those with impaired work ability promoted RTW. The association referred to included participation in case management programs for RTW, and a reported rate of about 6.8% from insurer representatives (Peters, Coppieters, Ross, and Johnston, 2017) was reported. Generally, there needs to be more evidence of reported statistics regarding the rate of RTW from an insurance perspective, as most of the literature focuses more on prevalence nationwide and globally with little granular details from an insurance perspective. It is therefore envisaged that this study would provide a more contextual analysis regarding the association of vocational rehabilitation and its impact on RTW from an insurer's perspective with a specific focus on the role of case management for claimants living with mental health conditions in South Africa. Reinsurance Group of America also believes that early access to rehabilitation increases the likelihood of claimants with long-term incapacity getting back to work sooner and helps achieve better mental health outcomes.

The Association of Savings & Investments of South Africa (ASISA) had therefore put together guidelines for management of impairment claims on mental health grounds in place for the South African Insurance Industry (Van der Walt et al., 2017). It is outlined in these guidelines that the extent of the problem would provide some context into the understanding of mental health conditions to ensure a fair and equitable handling of these clients while in claim specifically for mental health-related conditions. However, the guidelines do not substantiate detailed recommendations for rehabilitation from a case management perspective regarding the management of long-term incapacity claimants.

In insurance, case management aims to provide proactive additional support to claimants with long-term incapacity for the management of disability claims (Hankins et al., 2015). The proactive approach included creating awareness and monitoring mental health conditions to prevent short-term disability claims from becoming long-term claims The intervention strategies' focus was duration management and facilitation of early return to work (RTW) where possible. Case management has proven to play a pivotal role in facilitating return to work following a period of absence due to a mental health condition enhancing the claims management process. Therefore, to support this, the rehabilitation aspect needs to be addressed to managemental health conditions with the aim of implementing suitable case management recommendations by means of appropriate vocational rehabilitation programs for RTW.

One critical factor that was considered in the ASISA guideline documentation was that claimants living with mental health conditions should receive the same priority and a reasonable approach in terms of how policy benefits are designed, underwriting standards are applied, protocols were being used for claims management, and many other insurance practices. This guideline included of case management interventions offered by insurers for managing long-term incapacity claimants resulting from mental health-related conditions. Brijnath (2014) supported that there were no gold standards for interventions for RTW in mental health conditions claims. The author further explained by this author that the evidence around the efficacy of RTW interventions seemed to be lacking or insufficient.

However, it is also critically important to understand the barriers that influenced successful RTW by understanding mental health outcomes and reducing claim costs to facilitate RTW timeously. It is evident that there are barriers that influence a successful RTW of claimants living with mental health conditions following a period of absence. Some barriers included a slow or delayed referral to the insurers, poor communication between stakeholders managing the client, red tape, stigma etc (Brijnath et al., 2014). Research shows that the management of mental health claims are highly complex, and this was seemingly brought upon by the difficulty associated with uncertainty around predicting RTW (Brijnath et al., 2014). Consequently, the uncertainty results in conflicting medical

opinions about severity, management, and RTW prognostic factors, impacting on chances for RTW at large.

Mental health rehabilitation services are offered within the clinical environment and by case managers who work for insurance companies offering support services to these clients. The services offered are intended to help clients while claiming for long-term incapacity resulting from mental health-related conditions. This service offering provides mental health claimants with the necessary support to acquire or regain the skills and confidence to live successfully in the community while in claim and undergoing treatment. Support provided to these claimants includes telephonic support, assisting with counseling referrals for psychological support, liaising with treating specialists regarding of progress and compliance and keeping claimants informed regarding the claim management process. This support is therefore provided by case managers in line with evidence-based interventions in the clinical field. Mokoka, Rataemane, and Dos Santos (2012) supported this strategy and believed that occupational therapists were the most appropriate professionals to assist in mental health rehabilitation programs. Research and reviews that have been done over the years indicate reasonable evidence suggesting that inpatient rehabilitation and supported accommodation can reduce inpatient service use for people with more complex and long-term mental health problems (Dalton-Locke, Christian, Marston, Louise McPherson, Peter Killaspy, Helen, 2020).

On the other hand, Birken, Henderson, and Slade (2018), supported the need to use a more proactive approach to reduce the long-term impact of claimants living with mental health conditions for the individual and reduce costs for the National Health Service. The United States (US) government has also emphasized this approach in its five-year forward view for mental health (Birken et al., 2018). Therefore, the need to analyze case management interventions thus becomes prominent in this study in understanding and recognizing the efficiency in managing long-term incapacity claimants resulting from claimants living with mental health conditions.

1.3 Problem statement

The World Health Organization reported that mental health conditions accounted for 30% of the non-fatal disease burden and 10% of the overall disease burden worldwide, including death and disability (WHO, 2022). Mental health issues were on the rise globally, including of psychosocial risk factors and variance in the magnitude of disability (amplified stress, suffering, and disability). These were costly claims and complex to manage from an insurer's perspective, which is noted within the South African context.

Reinsurance Group of America (RGA) confirmed that claimants living with mental health conditions were rising and that case managers face substantial challenges in the initial decision or management of long-term incapacity claimants (2018). This observation highlighted the importance of case management involvement managing long-term incapacity claimants living with mental health conditions respectively.

In long-term insurance, there seem to be limited rehabilitation product offerings available within an insurance context to support case management interventions in managing mental health claims. Most insurance products are generically designed to offer solutions for providing financial security in case of illness, injuries, or disability. Despite the limitation regarding rehabilitation products, there are insurance companies that take this a step further by offering case management interventions to help offer rehabilitation support for claimants. However, the challenge is that there were no specific case management recommendations to help support the management of claimants living with mental health claimants to facilitate RTW in line with suitable vocational rehabilitation approaches. Generally, insurance companies and the industry at large offer lump sum disability cover as and income protection products for claimants with mental health conditions.

The ASISA guidelines provide insurance companies with a framework to manage mental health claims. These guidelines refer to the importance of rehabilitation intervention programs to help achieve their objectives to help manage long-term incapacity claimants living with mental health conditions. Return to work is assumed to be an essential aspect during the recuperation period, especially for claimants living with mental health conditions. The assumption is over and above the clinical management of claimants by their specialists from a pharmacological point of view to manage their mental health conditions and in collaboration with other mental health providers in the clinical field that were managing these claimants in line with the appropriate treatment protocols. Specific case management recommendations for RTW are the knowledge gap noted to complement case management/ insurance guidelines to assist case managers working in the insurance industry in managing long-term incapacity claimants with mental health conditions and to facilitate RTW for claimants while on benefits.

1.4 Research question

The problem statement provided some context around the research problem for this study. The research question was: What is the profile of case management of long-term incapacity insurance claims for claimants living with mental health conditions in South Africa?

1.5 Research Aim and Objectives

1.5.1 Aim of the study

The aims and objectives of this study were established as the matrix in which the outcomes of the study would be measured to address the research question at hand. This research aimed to review case management services and outcomes of long-term incapacity insurance claims for claimants living with mental health conditions in South Africa. The objectives have therefore been outlined below:

1.5.2 Objectives

- To determine the biographical data of long-term incapacity claims for mental health claimants submitted at the company level over three years.
- To identify the types of benefits and conditions referred for case management and the reasons for referrals to case management.
- To determine the case management services and interventions utilized for successful RTW following the long-term incapacity of claimants with mental health conditions.
- To determine whether the claimants with mental health conditions returned to work following case management interventions.

1.6 Theoretical Model

This quantitative study assumed a positivist paradigm as the functional relationships are derived from causal and explanatory factors of the variables used in the study, looking at both independent and dependent variables (Park, Yoon Soo, Konge, Lars, Artino, Anthony R., Jr., 2020). The objective epistemology and critical realist ontology were considered and incorporated through the data variables used in the entire research process, considering the population, data collection process, and the analysis thereof. The objective epistemology and critical realist ontology provided the researcher to rely mainly on the reality of the data that exists independently of human consciousness and experience. In this case, the data variables were the study's primary focus. Furthermore, the positivist paradigm was utilized to examine explanatory relationships between the data variables in favor of experimental designs to ensure that all critical factors of interest are examined in the study (Park, 2020). From an objective point of view, this positivist approach also allowed the researcher to be external to the process and thus assumed a role of an observer rather than a creator or participant. Additionally, it created a platform for the researcher to remove herself from potentially influencing the data and thus allowed for the actual reality of the theory to emerge in its true sense. The study was conducted within an insurance context utilizing the data from the case management role within the claims department where the case management unit functions.

Using a theoretical framework provided a contextual summary of theory regarding a particular research problem that was developed through a review of previously tested knowledge of the variables involved. This framework assisted in the identification for investigation, planning as well as interpretation of the research findings. In this study, the Person, Environment, and Occupation (PEO) model were used as the basis of this research study and used a biopsychosocial approach looking at factors that may influence a person's occupational performance (Bass, Julie Baum, Carolyn Christiansen, Charles, 2015). This framework focused on intrinsic and extrinsic factors that directly impact an individual's occupational performance. The intrinsic factors included psychological, neuro-behavioural, cognitive, psychological, and spiritual.

In contrast the extrinsic factors included social support, culture, values, social and economic systems, the natural environment, the built environment, and technology (Bass et al., 2015). These factors supported the study reviewing case management services and outcomes of claimants of long-term incapacity claims for claimants living with mental health conditions and case intervention programs that had been utilized incorporating both the intrinsic and extrinsic factors that were considered in the facilitation of RTW for these mental health claims. The figure below provided an outline of how the PEO model operated which fitted in with the approaches used for managing long-term incapacity claimants with mental health conditions by the case managers as part of the intervention programs that were facilitated. Please see below Figure 1.1, providing a high-level matrix in which this framework operated for this study:

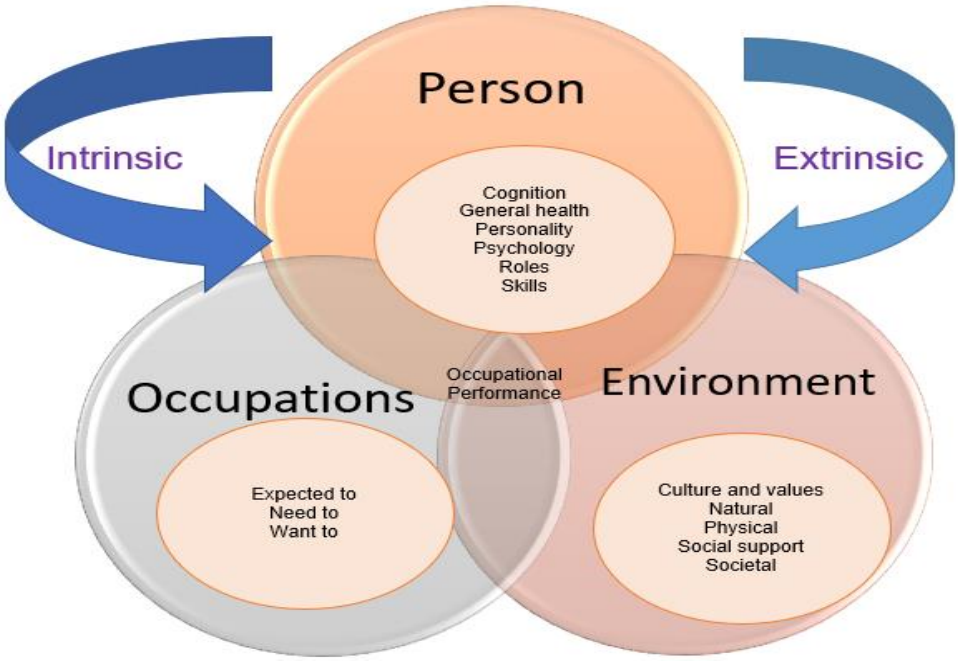


Figure 1.1 PEO model (adapted from Christiansen & Baum)

The PEO theoretical framework (Bass et al., 2015) was applied to describe the profile of the management of mental health claims for claimants living with mental health conditions in the South African insurance context. The application of the framework incorporated the biographical profile (in the form of variables) of claimants living with mental health conditions, the type of case management interventions received, and provided an analysis of the success of the intervention with regards to return to work. The emphasis of this framework was based on evidence from the data analysis that the insurer provided. This framework was also supported by the case management interventions that case managers utilized to manage long-term incapacity claims for claimants living with mental health conditions.

1.7. Significance of the study

This study was conducted to assist insurers with providing a contextual analysis of the status quo, where the researcher utilized historical data over three years, from January 2018 to January 2021. This study was conducted to ascertain the services and outcomes of case management intervention programs utilized for managing long-term incapacity claims. The study also provided an opportunity to explore the challenges faced by looking at the rehabilitation interventions that claimants were enrolled in and explored barriers and enablers in helping claimants with long-term incapacity due to mental health conditions return to work. The benefits of the outcome of this study were intended not only for the insurers but also for the claimants and the insurance industry at large. The study focuses on claimants with mental health conditions as the contextual environment and data used only from individuals who claim for benefits from the insurer specifically for mental health conditions only.

Benefits to the insurer: The study provided insurers with an evidence-based profile that provided information regarding intervention programs that were noted to have been effective for managing long-term incapacity claims, specifically for claimants living with mental health conditions. These were intended to assist with managing of long-term incapacity claimants with mental health conditions to provide support and in turn facilitate RTW in line with suitable recommendations. Furthermore, the insurers would thus be able to save on long-term costs in terms of provisions and reward clients financially in line with policy guidelines through the Shared Value Model (Ta-Kai and Min-Ren, 2020) that supported client rewards. This shared value model complimented the vision of the insurer '*to make people healthier, enhance and protect their lives*' and for the industry at large.

The claimants: The outcome of the study was anticipated to impact positively on the proactive management of long-term incapacity claimants living with mental health conditions and provide appropriate support through early intervention from a case management perspective to help improve the claimants' mental health and reintegrate them in their functional roles including work.

Overall economy: Economically, this study would greatly benefit from a client perspective as they would have been able to return to work and participate in economic activities based on work. This economic benefit will contribute positively to the rate of unemployment as well as the stigma associated with disability supported by labour law regulations should there be reasonable accommodations to be considered.

Occupational Therapy: Provided an opportunity to expand the study further and involve subject matter experts to document of case management guidelines as a recommendation. The study will also assist in increasing knowledge and provide context to occupational therapists working as case managers in insurance on interventions utilized to manage claimants with mental health conditions. Considering the uniqueness of the study, it would be a good publication for learning purposes.

The researcher: Personally, this provides a platform for the researcher for future career opportunities in the academic field.

1.8 Definition of terms

The key concepts defined below are used specifically for this research study within the insurance context.

- *Claimants:* Insured entity who formal requests payment to an insurance company in case of adversities (Sahoo and Das, 2008).
- *Case Management:* A collaborative process that assesses, plans, implements, coordinates, monitors, and evaluates the options and services required to meet an individual's health needs, using communication and available resources to promote quality, cost-effective outcomes (Govender et al., 2018).
- *Case Management interventions:* Facilitation and coordinating care to meet claimant and family health needs through communication and available resources to improve individual and health system outcomes. The effectiveness of case management interventions indicates variable benefits on clinical, social, and organizational outcomes and cost reduction (Hudon, Catherine; Chouinard, Maud-Christine; Lambert, Mireille; Dufour, Isabelle; Krieg, Cynthia, 2016).
- *Case Management recommendations:* providing suitable advice or guidance for case management in management for claimants with mental health conditions (Cambridge Dictionary).
- *Claims Assessors:* Employed by the insurance company to investigate a claim situation (what happened, where, where, when, and how) to determine the validity of the claim and what the

amount due to the claimant in line with the criteria and conditions of the insurance contract (www.insurance chat.co.za).

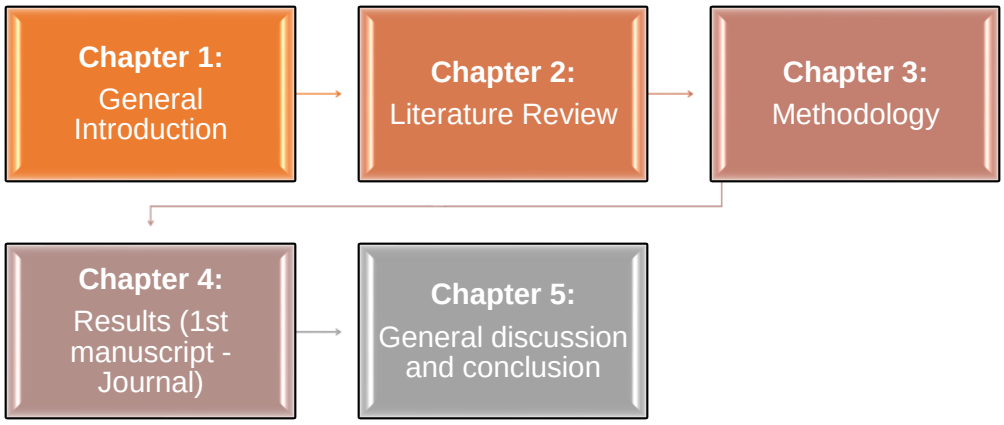
- *Capital Disability Benefits: This benefit* pays a capital amount in the event of an individual meeting medical, occupation, and financial criteria because of an illness, disease, or injury which is assessed under impairment definitions outlined by an insurer (Life, 2020)
- *Disability*: Umbrella term covering impairments, activity limitations, and participation restriction (Staff, 2006). All changes must be permanent despite optimal treatment in line with recognized medical protocols.
- *Income Continuation Benefit (ICB): This benefit* pays an individual a regular income should you experience an illness or injury preventing them from working and a loss of income upon becoming fully or partially unable to follow their nominated occupation (Life, 2020)
- *Insurance*: Protection from financial loss in the event of inevitable adversities such as death, disability or sickness in the form of a contract (Sahoo et al., 2008).
- *Insure*r: The source or group entity that provides insurance (Karve, 2008)
- *Long-term incapacity claims*: an insurance policy that provides income replacement for claimants if they become unable to work due to an illness, or injury so they can continue paying bills and meeting financial goals and obligations on an ongoing/continuous period in a claim (www.policygenius.com).
- *Mental health*: A state of well-being, it includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices (Fanning, 2018)
- *Mental health conditions*: Same as mental health disorders – "generally characterized by a combination of abnormal thoughts, perceptions, emotions, behaviour and relationships with others" (WHO, 2019).
- *Occupation:* refers to the kind of work performed in a job. The concept of occupation is defined as a "set of jobs whose main tasks and duties are characterized by a high degree of similarity". A person may be associated with an occupation through the main job currently held, a second job, a future job, or a previously held job (ISCO, 2012).
- *Reinsurer*: Transfer of insurance business from one insurer to another and sharing a portion of premium contributions (Sahoo et al., 2008).
- *Vocational Rehabilitation:* The sequential delivery and coordination of services by rehabilitation providers under a rehabilitation plan to achieve the goal of suitable gainful employment (Hankins et al., 2015). In a South African context defined as a multi-professional evidence-informed 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 where the primary aim is to optimize work participation at the different phases of an individual's work cycle (Hester et al., 2020).

1.9 Outline of the study

The study reviewed the case management services and outcomes of long-term incapacity insurance claims for claimants living with mental health conditions in South Africa. The first chapter provided a contextual background on the research topic and critical elements around the mental health status quo in conjunction with the insurance industry. Chapter 2 explores the literature in much more structured detail as a base to compare the research results. Chapter Three outlines the research methodology and steps taken while conducting the study, while Chapter Four reveals the actual study results and analysis thereof. In Chapter Five, the study results will be discussed, and conclusions of the study will be made in Chapter Six with recommendations applicable. Please refer to the below outline of this dissertation:

Figure 1.2 Study Outline



CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter focuses on reviewing, synthesizing, and critiquing of available literature pertaining to the research conducted. This chapter aims to provide the reader with more context from a literature perspective concerning the occupational therapists' role in the insurance sector, specifically within case management. The literature will incorporate defining some concepts within insurance, including disability and the role of rehabilitation programs within the insurance sector, the role and challenges that case managers are faced with managing long-term incapacity claimants with mental health conditions, and the impact of mental health claims in insurance. This chapter will also include reviewing mental health statistics globally and in the South African context looking at it from an insurance perspective, the success rate for return to work, and possible strategies being implemented to help manage mental health within the insurance sector through rehabilitation programs. The chapter will be concluded by looking at recommendations for more effective intervention programs for managing long-term incapacity claimants with mental health conditions that could assist with a triumphant return to work.

2.2 Literature search methodology

The strategy used to gather literature for this chapter was based on the key concepts that, in the researcher's view, would provide more context regarding the research topic and how the outcome of this study fits into the overall management of mental health claimants in an insurance context. The sources used to gather information include academic journal articles from WorldCat Discovery (Catalogue) within the university library site for research articles, including internet searches from mental health organizations and societies, research done by reinsurance companies, and articles from WHO. The search methodology used from the WorldCat Discovery on the library site included article name, authors, and years of publication. The keywords that were used for searching and finding articles included;

- Global mental health disease burden
- Mental illness as a disease burden in South Africa
- Mental health experience in the insurance industry
- Mental health claims statistics in insurance
- Scope of Practice for occupational therapists
- Disability experience in insurance
- Rehabilitation and intervention programs suitable for the management of mental health conditions

The literature review process required time and space for the researcher to immerse herself in structuring the literature and use key terms that would help provide information relevant to the study. The timeframe taken to collate the literature articles was approximately 4-6 weeks, and the article years varied from 2011-2022. The oldest articles were the ones published in 2006. They provided context on traditional definition of disability then and the Return to Work (RTW) background that was implemented then to solidify the information on those aspects. The key concepts being outlined and reviewed in the following sections were used as keywords in the compilation of this chapter which are crucial in this literature review chapter considering the research question.

2.3 Mental health burden

The World Health Organization defines health as “a state of complete physical, mental, and social well-being”. Mental health is also an essential element of health and is also considered crucial to the overall well-being of individuals and society. Mental health is thus defined as “the successful performance of a mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity; from early childhood until later life, mental health was, therefore, the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem” (De Wee, Guswin Asmah-Andoh, Kwame, 2021).

There seems to be a fine distinction between mental distress and mental illness which will never be clear cut. This distinction arises from because a mental disorder depends on shifting cultural, political, and economic values and scientific facts about how psychology and biology can go wrong, producing suffering and functional impairment in everyday life (McNally, Richard J., 2022). The view that there will never be a clear-cut distinction between mental illness and mental distress is influenced by overlapping human features humans without necessarily having the same essence in each case (McNally et al., 2022). The features are characterized by different clusters, which are:

- The first cluster includes perceptual, cognitive, and emotional disturbances arising voluntarily from the structural and functional ailments of the brain, including Alzheimer's disease, bipolar disorder, and schizophrenia.
- The second cluster includes problems that arise when patients present extreme psychological dimensions, introversion, and neuroticism. In the second cluster, there are extreme points on psychological dimensions of traits such as introversion and neuroticism. For example, people who appear too shy and may not necessarily mean they have a social phobia.
- The third cluster is a behaviour related to specific patterns with immediate positive consequences. However, the negative consequences are delayed, such as addiction.
- The fourth cluster was associated with one’s experiences (negative/ traumatic), such as post -traumatic disorders.

The WHO estimated that the prevalence of mental health conditions in emergency settings was more than a decade old, and it did not reflect modern methods to gather existing data and derive estimates. Research showed a prevalence of 21% of mental disorders, including conditions such as depression, anxiety, post-traumatic stress disorder, bipolar disorder, and schizophrenia (Charlson et al., 2019).

The disease burden of mental health cannot be taken for granted as it is noted to be one of the biggest challenges faced in every country. It has been noted that mental health problems affect at least one in four people at some time (WHO, 2020). The prevalence of mental health disorders is very high in the European regions accounting for 100 million people out of the 870 million population who were estimated to have suffered from anxiety and depression. Over 21 million were diagnosed with alcohol use disorders; over 7 million from Alzheimer's disease and other dementias; about 4 million from schizophrenia; 4 million from bipolar affective disorder; and 4 million from panic disorders (WHO, 2020). The WHO (2020) also indicated that at some point, one in four people is affected by a mental health condition. The prediction is that by 2030 depression will be the leading cause of disease burden globally.

In South Africa, the burden of mental disorders has grown over more than 20 decades, as noted in many low or middle-income countries (Jack et al., 2014). This disease burden directly impacts on the economic data, which raises the need for policymakers and donors to consider these factors into account, including equity, as one of the priorities. There seems to be some level of disintegration of the mental health system in South Africa historically. Consequently, this results in little attention to the prioritization of mental health in primary care facilities (Jack et al., 2014). Additionally, neuropsychiatric disorders were ranked 3rd in their contribution to the overall burden of disease in South Africa, with significant economic and social costs associated with this disease burden (De Wee et al., 2021).

However, the Department of Health has it taken upon itself over the years to develop and compile a National Mental Health Policy Framework and Strategic Plan (2013-2020). This Mental Health Policy Framework and Strategic Plan 2013-2020 was developed through an extensive consultation process with relevant stakeholders. All nine provinces in South Africa held summits to review the state of mental health and mental health services in their provinces, to identify best practices, and to generate a roadmap for improving mental health. Challenges highlighted in this document include the following in terms of mental health in the South African context:

- Until the development of the National Mental Health Policy Framework and Strategic Plan (2013-2020), there has been no officially endorsed national mental health policy for South Africa.

- Mental health care continues to be under-funded and under-resourced compared to other health priorities in the country, even though neuropsychiatric disorders are ranked third in their contribution to the burden of disease in South Africa, after HIV&AIDS and other infectious diseases.
- There is enormous inequity between provinces in the distribution of mental health services and resources.
- There is a lack of public awareness of mental health and widespread stigma against those who have mental illness.
- There was a lack of accurate routinely collected data regarding mental health service provision.
- Mental health services continue to labour under the legacy of colonial mental health systems, with heavy reliance on psychiatric hospitals; and
- While the integration of mental health into Public Health Care (PHC) was enshrined in the White Paper and the Mental Health Care Act (2016), in practice, mental health care is usually confined to the management of medication for those with severe mental disorders and did not include detection and treatment of other mental disorders, such as depression and anxiety disorders.

The above factors thus led to the development of the national mental health policy in consultation with relevant stakeholders, which were also considered to be subject matter experts to guide in the promotion, prevention, treatment as well rehabilitation of South Africans suffering from mental health disorders (De Wee et al., 2021).

Additionally, to provide a foundation in which the national mental health policy was intended to combat, the South African Society of Psychiatrists (SASOP) developed treatment guidelines for Psychiatric disorders (Emsley et al., 2017). These guidelines were compiled and referred to the current healthcare setting in South Africa. To complement these guidelines, ASISA also used the guidelines as the base frame of reference for the management of impairment claims on mental health grounds for the South African Insurance industry (Van Der Walt et al.,2017).

Therefore, based on the above literature, it shows that from a national perspective, the National Mental Health Policy was put in place to help manage the mental health disease burden. SASOP further took this up to develop guidelines for the private sector, and these were further used as a point of reference to help manage mental health from an insurance perspective. All strategies indicate efforts by the public, private, and insurance sectors to help manage mental health as a disease burden in the South African context.

2.4 Management of mental health in the insurance industry

In Chapter One, the researcher defined ed an insurance policy that aimed at reducing the sufferings of an individual as a result of some inevitable adversity such as death, disability, and injury or sickness (Karve, 2008). Most insurance companies offer policies (individual and group benefits) for various benefits covering a broad spectrum of disorders, including mental health ailments. Insurance products are usually sold as individual products, but others also include insurance sold as part of employee benefits from a corporate perspective. The insurance products are mentioned because of what the claimants purchased as a product in order for them to claim benefits. Those policies are purely intended to provide cover for policyholders in cases of unforeseen medical circumstances that lead to absence from work and, in this study, due to a mental health condition and claimants thus not being able to earn income, fulfill financial roles within society and contributing positively to the South African economy at large.

An article published by Reinsurance Group of America (RGA) in December 2020 reported that lack of access to mental healthcare is associated with adverse health outcomes resulting from increased stress, depression, and anxiety (RGA, 2020). These adverse outcomes are essential to employers as untreated mental health conditions may result in productivity, engagement, and retention losses. Before COVID-19, over 200 million workdays were lost globally due to mental health conditions annually, costing employers $17 to $44 billion. According to the United Nations, mental illness costs the global economy more than $1 trillion every year. Svensson (2011) reported that from the insurance perspective, there is more than a R10 trillion that the insurance gap covers.

Significant demand for mental health services has skyrocketed during the pandemic and spurred major growth – the mental health and wellness space has seen a surge in deal activity and funding for mental health care services, including insurance. Given the pandemic crisis, RGA reported that investors had poured well over $1 billion into mental health and wellness start-ups through the third quarter of 2020.

It is argued that insurance companies that pay for treatment are keen to confine their financial responsibility to confirmed/defined medical conditions. They understandably question whether they should reimburse clinicians for helping people cope with the problems of everyday life. For different reasons, critics of overmedicalization worry about broadening the scope of mental disorders. There is fear that it will have unintended negative consequences ranging from diminishing resilience and autonomy to increasing stigma (McNally et al., 2022).

McNally (2022) also believes that science alone does not determine where to draw the line when making distinctions between mental distress and mental disorders and other factors to be considered

especially when it comes to insurance. However, RGA, on the other hand, shared interesting insights regarding the role of behavioural science and overall mental health (RGA, 2022). Behavioural science plays a vital role in insurance in terms of studying trends and demographics from a health perspective that is thus utilized for product innovations based on evidence-based data, claims, and sales (McKinsey & Co, 2020). Another reinsurance company (HannoverRe, 2020) also shares the notion regarding contextual factors and notes that individuals with mental health conditions may be at risk of not receiving adequate treatment due to factors ranging from access to mental healthcare, limited public and mental health resources and stigma (HannoverRe, 2020). The stigma associated with mental health and well-being often creates a barrier to seek help. These insights will be discussed in much more detail in the section on return to work and the role behavioural science plays in it.

There seems to be a perception regarding how insurance companies handle mental health claims based on the stigma, subjectivity and complexity associated with the management of mental health conditions. HannoverRe (2020) also reported on the stigma around mental health and noted that individuals with mental health conditions might be at risk of not receiving adequate treatment due to factors ranging from access to mental healthcare, limited public and mental health resources, and stigma. HannoverRe (2020) shared the same sentiment that mental health and mental health conditions result from a complex interplay between genetics and biopsychosocial factors. Before COVID-19, over 200 million workdays were lost globally due to mental health conditions annually, costing employers $17 to $44 billion.

There has been a developing trend noted of refusal of insurance companies to pay for treatment of people receiving certain non-otherwise specified (NOS) diagnoses (for example, anxiety disorder NOS) (McNally et al., 2022). This option, too, presents problems because many claimants with a NOS diagnosis suffer considerably functionally on a day-to-day basis even if they fail to meet the full criteria for a standard disorder (for example, panic disorder). Moreover, it provides a strong incentive for clinicians to assign a diagnosis that comes closest to capturing the patient’s problems, and that will ensure reimbursement even if it is not the correct diagnosis. Efforts to reduce healthcare spending by reducing the range of disorders eligible for reimbursable treatment would seriously exacerbate the problem of unmet needs. There is, however, a way to reduce spending and still provide needed services. There is thus an opinion that if insurance companies paid only for the delivery of evidence-based treatments for mental disorders, this would speed patients' recovery, thereby reducing costs. Unfortunately, even today, there is no guarantee that a patient with a specific disorder will receive state-of-the-art treatment (McNally et al., 2022).

Taking the above perceptions into consideration and for more effective management of long-term incapacity claimants with mental health conditions, ASISA guidelines for managing impairment claims on psychiatric grounds were formulated. ASISA reports that an average of 30% of all disability claims are due to mental health conditions within the South African insurance industry (Van Der Walt et al.,2017). This percentage accounts for both private insurance policies and employee benefits schemes. It is important to note that the overall business of insurance carriers is to insure uncertainty for unforeseen circumstances using evidence-based scientific measurement criteria against which validity is evaluated.

Therefore, the literature provides more context regarding the impact of mental health conditions in insurance, factors that affect claim payments, the associated stigma, and overall perceptions regarding how mental health claims are handled from an insurance perspective. This context also provides some information regarding the need for insurance cover and the overall gap that insurance attempts to close from a rand and/or cost perspective and how that helps to contribute to the overall well-being and management of long-term incapacity claimants with mental health conditions.

2.5 Insights on mental health claims in the Workplace

Prescient National, a company providing claims and risk management for workers' compensation in the United States, is of the opinion that mental claims are much more complex to establish due to a harder threshold in proving the link between the workplace and a mental health condition (National, 2022). In their web article regarding mental health claims, Prescient provides standards in which mental health claims would be considered, which include psychiatric diagnosis over a minimum period of six months in accordance with the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) and they also highlight that stress would not be considered as a condition. One of the standards include that at least 51% or more of their employment circumstances should be attributed to the specific psychiatric condition (National, 2022). However, the matrix of what the 51% comprises is not outlined, although they provide examples that would not be considered as part of a claim for mental health conditions, including work ethic and litigation.

In the South African Context, the Department of Labour issued a Gazette that provides a standard for processing claims specifically for Post Traumatic Stress Disorder (PTSD) on Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993 (COIDA) (Government Gazette, 2002).
The circular defines of the condition, how the diagnosis is made (utilizing ICD10 code), provides definitions for impairment and disability (temporary & permanent), and timelines in which medical aids can provide medical history (24 months). Claims processing in this gazette indicates that the criteria of impairment for PTSD at 100%, which shall be equivalent to 65% permanent disablement, and

highlights that an impairment less than 20% will not be considered as permanent disablement from this condition (Government Gazette, 2002). The government gazette provides a guideline for claims processing PTSD. There seems to be a gap regarding the overall claims process of all mental health claims and not sufficient literature providing accurate statistics of the current status quo that could be accessible in the public domain for research purposes. This insufficient literature may need to be researched further and analyzed accordingly, and this could also be industry dependent based on the prevalence of mental health claims experience.

Interestingly, a study conducted in 2013 on the prevalence of PTSD in the South African mining industry and outcomes of liability claims submitted to Rand Mutual Assurance (RMA) revealed that out of an overall 671 claims that were received by RMA for PTSD, 66.9% were from the mining industry (Zungu, 2013). Zungu highlighted in this study that claims handling from workers is a critical aspect impacting the relationship between the employers and mine workers, which would assist to improve mental health and well-being and boost the morale of the mine workers considering the traumatic occupational exposures. The results of this study provide a context of how traumatic occupational exposures could impact individual mental health in general, and the prevalence thereof can vary from industry to industry. Looking at both COIDA and RMA, there seems to be much more focus on PTSD than any other mental health disorders, and while the spectrum of mental health conditions is broad and varies, highlighting the complexity thereof as noted by Prescient.

A cross-cultural comparison of mental health between German and South African Employees revealed that German employees had lower levels of mental health problems and shame and higher levels of self-compassion than South African employees (Kotera et al., 2021). These results could be attributed to the impact of lockdown during the early days of the COVID-19 pandemic with risks for depression in adults with childhood trauma. However, the study revealed a decline in mental health for German and South African employees.

Publication from Employment Law Alert (Hofmeyr, 2022) provides a South African case study also for PTSD where an employee with PTSD was exposed to a traumatic incident at work triggered by her phobia of snakes found in the office, resulting in numerous psychological conditions. She was initially awarded 20% for permanent disablement by the Compensation Commission, which was challenged, and eventually qualified for 75% of benefits following their appeal per with Schedule 2 of the COID Act (Hofmeyr, 2022).

It is thus noted from the literature that there seems to be a lot more focus on PTST from an employment perspective which is also influenced by the employees' traumatic exposures, which differ

from employer to employer and per industry. The case study provides a good example of the long-term effects of PTSD in the workplace and the adverse effects thereof. There seems to be limited literature on prevalence of specific conditions per occupation and industry to provide a context of the impact of employee absence. The prevalence of PTSD could be an interesting topic for further research and mitigating risk factors associated with employee wellness programs offered in the workplace.

2.6 Disability in Insurance

The insurance industry offers a variety of insurance products, and it is imperative to be able to distinguish between disability and impairment, as the insurance products are designed based on the complexity and financial needs of a variety of medical conditions that differ in nature and extent of the condition and its impact on function. The impact of a specific mental health condition may not be as debilitating as other defined conditions that are chronic and disabling in nature.

According to Staff (2006), disability is an umbrella term covering impairments, activity limitations, and participation restrictions. All changes in health and function must be permanent despite optimal treatment in line with recognized medical protocols. According to the International Classification of Functioning Disability (2020), impairment is activity limitation or participation restriction summarized under the disability umbrella term. Impairments are, therefore, problems in body function or structure and their components (WHO, 2021). Therefore, disability is the alteration of the capability to meet personal, social, or occupational demands due to impairment and is assessed by non-medical means. Impairment is thus the alteration of normal functional capacity due to disease and is assessed by medical means after a diagnosis has been established and appropriate and optimal treatment applied (Van Der Walt et al.,2017).

The World Health Organization indicates that disability is part of being human and that almost everyone will temporarily or permanently experience disability at some point in their life. The World Health Organization (WHO, 2021) reports over 1 billion people – about 15% of the global population currently experience disability, and this number is increasing due in part to population aging and an increase in the prevalence of non-communicable diseases. Disability results from the interaction between individuals with a health condition, such as depression, with personal and environmental factors, including negative attitudes, inaccessible transportation and public buildings, and limited social support (WHO, 2021). A person's environment significantly affects the experience and extent of disability. Inaccessible environments create barriers that often hinder the full and effective participation of persons with disabilities in society on an equal basis with others. Progress in improving

social participation can be made by addressing these barriers and facilitating access for persons with disabilities in their day-to-day lives.

Disability insurance has become an essential product line in the South African insurance market, and insurers believe it is vital to monitor the claims experience continually. This disability insurance done to inform pricing and product design. According to HannoverRe (2016), disability lump sum products in South Africa were first introduced in the mid-1900s as products that protect policyholders from loss of income due to a disability. The commonly used definitions of occupational disability are that a policyholder is paid a benefit if they cannot perform their occupation; their occupation, or any occupation to which they are suited through training/skills or any occupation. This criterion is referred to as an occupation-based definition (HannoverRe, 2016). However, new generation products were introduced around the year 2000. The main change from traditional products was to include a set of functional impairment criteria. HannoverRe (2016) clearly defines the list of conditions under which a policyholder would qualify for a payout. These new products have the advantage of being more transparent to the policyholder regarding eligibility to claim and the events they would cover.

Figure 2.1 provides an overview of the evolution of disability products in the South African insurance industry:

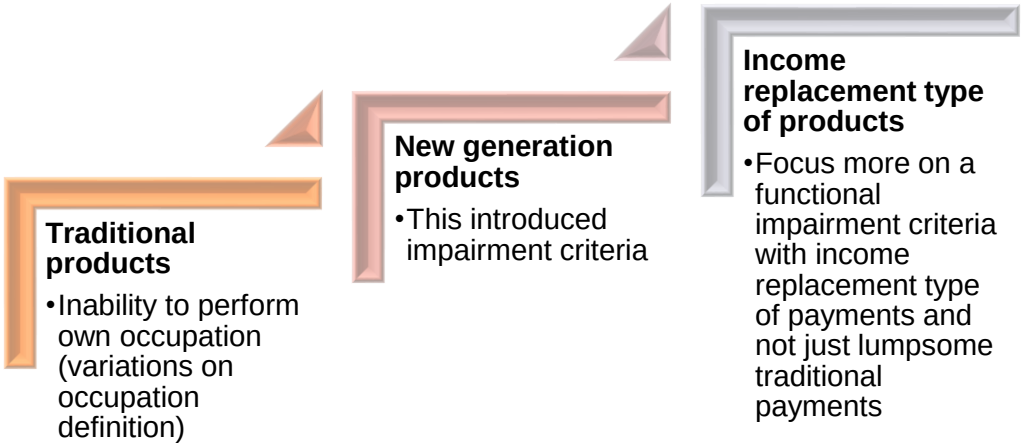


Figure 2.1 Evolution of insurance products HannoverRe (2017) reported that a total of 7% of disability claims accounted for mental health claims with claim causes including conditions such as dementia, depression, post-traumatic stress disorders, etc. Of these mental health claims, 18% were from females, and only 4% accounted for males for disability lumpsum pay-outs made based on statistics shared in the article from HannoverRe (2017).

2.7 Role of occupational therapists and case management in the insurance sector

The Occupational Therapy Association of South Africa (OTASA) defines occupational therapy as a client-centered health profession that promotes health and well-being through occupation (Occupational Therapy Association of South Africa, 2021). On the other hand, the American Occupational Therapy Association (AOTA) defines occupational therapy as the therapeutic use of everyday life occupations with persons, groups, or populations to enhance or enable participation (American Occupational Therapy Association. Commission, 2020). Occupational therapists render various services for rehabilitation, including health promotion as well as providing wellness activities for clients with disabilities and non-disability-related needs, and these include mental health and/or well-being. Generally, occupational therapists understand and focus their therapeutic interventions and services aimed at achieving independence. The services include assisting with providing life skills for adults coping with serious mental illness, which may also address the needs and expectations of both private and public sectors as well as employers respectively (AOTA, 2020). The employers play a vital role in managing absenteeism, reasonable accommodations, and providing support with a graded return to work, working closely with occupational therapists and case managers (Govender et al., 2018). Mental health services are provided directly to clients using a collaborative approach in different settings such as hospitals, clinics, industry, schools, homes, communities, and the insurance sector.

Whilst mental health is recognized as a specialized area of occupational therapy practice (Jörns-Presentati et al., 2021), AOTA emphasizes the importance of building and maintaining efficiencies regarding appropriate skillsets, crucial in providing adequate and quality health care to clients. However, AOTA also argues that occupational therapists may lack consistency or efficiencies in delivering proper mental health care services, which may result in less optimal outcomes. In a South African context, the Occupational Therapy Association of South Africa (OTASA) indicates that occupational therapists play a role in mental health. However, there seems to be no stronghold regarding the role of occupational therapy in mental health being recognized as a specialized area but instead listed as one of the practice fields.

Mokoka (2012) noted that case management crucial for occupational therapists in managing mental health conditions (Mokoka et al., 2012). Case management as a concept is generally defined as a component of managed healthcare. Itis defined as a “collaborative process which assesses, plans, implements, coordinates, monitors, and evaluates the options and services required to meet an individual’s health needs, using communication and available resources to promote quality, cost-effective outcomes (Govender et al., 2018). On the other hand, the Case Management Society of

America (CMSA) defines case management as the term used to refer to the management of acute and rehabilitative health care services (Tahan, Hussein M Treiger, Teresa M., 2016). In the South African context and looking at the evolution of occupational therapy roles, there is considerable interest in being challenged to adopt a case management role (Govender et al., 2018). This adoption emanates from the need to provide better healthcare and the role that occupational therapists have grown to play within the insurance sector as well as the health risk management aspect to help combat the management of incapacity and disability in the workplace (Govender et al., 2018). Various case management societies and/or associations have predominantly focused more on managed care services with little focus on occupational therapists' role play in case management from a rehabilitation perspective. Services are delivered under a medical model, primarily by nurses, although CMSA incorporates rehabilitation in its definition of case management.

While the concept of case management is the same across the board within the health care profession at large and the intent thereof, the CMSA recognizes case managers as skilled professionals that are key role players in coordinating a certain level of care to the team, which provides access to quality healthcare; and also assists in the transition of care to the next level (Tahan et al., 2016). The Case Manager Association of South Africa (CMASA, 2020) also concurs with CMSA regarding the role and activities associated with case management. CMASA indicates that case managers are involved in comprehensive assessments to identify suitable care plans care. These plans are done in collaboration with clients, families, rehabilitation specialists, clinicians and payers (we will refer to payers as insurance companies for the purpose of this study). The case management plans are there to facilitate and maximize an excellent response to health care being provided and the cost-effectiveness thereof (CMASA, 2020).

Case Management Association South Africa further notes that case management is also utilized in coordinating rehabilitation and vocational (RTW) programmes, where an injury on duties, work, and non-work-related injuries and illnesses impact an employee's ability to stay at or return to work (CMASA, 2020). It is notable that while in the past case management was traditionally highly utilized within the managed care services, particularly by nurses, there is clear evolution even in the definition of what case management entails where it does not only focus on managed care services but expands further into rehabilitation as well as vocational rehabilitation programs for effective and successful RTW (CMASA, 2020). Occupational therapists play a vital role in both the clinical field and the insurance industry in managing mental health problems. However, the researcher notes that there is limited literature within the South African context regarding occupational therapists' role in case management within the insurance industry, which is also one of the factors that motivated this study or research topic. Govender (2018) also shared the same sentiments regarding occupational

therapists' role as case managers in the insurance industry. The role and scope need to be acknowledged and defined as their contributions to the field within this scope of practice. Occupational therapists and their role in case management have been associated with their ability to handle complexity due to multiple skills and knowledge in activity analysis, psycho-social interactions, disability management, handling disease progression, and daily life habits and routines (Robinson, Monica, Fisher, Thomas F. Broussard, Kim, 2016).

2.8 Rehabilitation in mental health and Return to Work

Center for Psychiatric Rehabilitation in Boston describes psychiatric rehabilitation as activities concerned with the performance of a specific role in specific environments in psychiatry including functional assessments and teaching of skills in the recovery of mental health problems (Rehabilitation, 2022). Rehabilitation in mental health has also been described as a wide range of services and interventions for a longer-term management of complex mental health problems involving a multi-disciplinary team (Dalton-Locke, 2021).

Therefore, mental health rehabilitation services have been put in place to provide support essential to individuals suffering from complex and long-term mental health problems. These services do not only include inpatient services and community teams providing clinical input to people living in supported accommodation services but also additional support being provided by occupational therapists in case manager roles within the insurance sector (Dalton-Locke, Christian; Dalton-Locke, Christian; McPherson, Peter; Killaspy, Helen, 2020).

The Joint Commissioning Panel for Mental Health (JCPMH) reports that mental health rehabilitation service provides specialist assessment, treatment, interventions, and support to enable the recovery of people whose complex needs cannot be met by general adult mental health services. The emphasis of these rehabilitation services is on achieving as much individual autonomy and independence as possible. These services include ensuring that clients' mental health conditions are managed optimally to a point where they can improve their participation in activities of daily living (ADLs), engage in meaningful work-related activities, and receive the support they need while undergoing rehabilitation programs suitable to their individual needs in line with the specific intervention programs required (JCPMH, 2016).

Rehabilitation is known to be a helpful recovery concept that requires a collaborative effort by the multidisciplinary team working towards individually personalized goals (Dalton-Locke et al., 2020). From a mental health perspective, the JCPMH emphasizes that this recovery period instills hope and urgency, providing opportunities for inclusion and themes that resonate well with the rehabilitation objectives for mental health rehabilitation. Vocational rehabilitation was one of the social inclusion

support services offered within sheltered and supported employment, voluntary work, welfare benefits advice considering the client's level of education, advocacy services, and peer support (JCPMH, 2016).

The World Federation of Occupational Therapy (WFOT, 2012) provides insights into occupational therapists' role in vocational rehabilitation. It is further explained in the position statement that the vocational rehabilitation services offered to assist with enabling individuals and reintegrating them back to work utilizing their expertise (WFOT, 2012). In South Africa, the literature reveals that occupational therapists are the most appropriate professionals to assist in a gradual return to work program (Mokoka et al., 2012). Although resources are limited and local health insurance benefits may be inadequate to cover the costs of ideal management, increased awareness of best practices should result in optimal utilization of the available resources for retaining occupational capital in South Africa (Mokoka et al., 2012). The South African Position Paper on Vocational Rehabilitation outlines the significant role that occupational therapists play in the holistic management of care in both public and private sectors, particularly in vocational rehabilitation (Van Biljon et al., 2020). The article defines vocational rehabilitation as a multi-professional, evidence-informed 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 where the primary aim is to optimize work participation at the different phases of an individual's work cycle (Van Biljon et al., 2020). The services associated with vocational rehabilitation include workplace readiness assessments, functional capacity evaluations, medicolegal assessments, pre-placement screening, and disability determination. These activities are done with intervention services and/or programs to correct, adapt, or compensate for the ability to work deficits to ensure successful RTW in a previous or alternative occupation (Van Biljon et al., 2020).

Absence from work (sick leave) due to mental health problems is known as one of the societal problems considering the costs associated with absence from work from a productivity perspective, as well as the economic impact resulting from absenteeism (Govender et al., 2018). This opinion is supported by McNally, where it is noted that mental health disorders (i.e., depression, bipolar disorder, developmental disorder, personality disorder, anxiety disorder, and adjustment disorder) have adverse effects on workers (McNally et al., 2022). These conditions significantly cause disability in many Western countries and Japan (Yoshitsugu, Kiyoshi; Kuroda, Yuko; Hiroyama, Yuji; Nagano, Nobuhisa, 2013). In the study by Kiyoshi and associates to determine the concise set of files for smooth RTW in employees with mental health disorders, the study revealed that generally, it is not easy for occupational physicians to manage the situation of RTW due to the limited role that they play focusing more on pharmacological treatment. However, it was noted that attendance in occupational

therapy outpatient rehabilitation programs plays a vital role in the recovery from mental health conditions as well as helping clients strengthen their cognitive function, learn life skills and coping mechanisms with stress to be able to corporate with peers in their working environment to ensure triumphant return to work (Kiyoshi et al., 2013). Based on the outcome of the study by Kiyoshi (2013), the researcher questions the actual predictors of RTW from a mental health perspective considering the subjective nature and complexity of the overall management of mental health disorders at large.

Generally, a proportion of RTW is commonly used in the insurance sector in the case of management as a matrix to assess the improvement and success of a rehabilitation program following an absence from work (RGA, 2019). However, it is equally important to have a matrix measuring the sustainability ratio of clients who can stay at work following rehabilitation and those who cannot (Khorshidi et al., 2019). Khorshidi conducted a study in 2019 using Compensation Research Data (CRD) to develop predictive models that will aid in determining the likelihood of RTW and the sustainability thereof once claimants have RTW. The study indicated that the use of specialized psychiatric services was noted to be the most potent predictor for RTW, and that gender was the least powerful one. The difference in sustainability likelihood between psychiatric service users, including rehabilitation and non-users, was much higher than for RTW likelihood. The results showed that workers with mental health disorders were less likely to achieve RTW and have a sustained RTW through original employer services. The study by Khorshidi concluded that workers with mental health disorders were not necessarily working with the least likelihood of RTW. Instead, they were noted to be less likely to return to their previous workplace (Khorshidi et al., 2019). This outcome could have been influenced by the barriers and stigma associated with mental health disorders in the workplace. However, early intervention is vital in managing mental health conditions for a successful and sustainable RTW, even if it may not be RTW to the initial nominated occupation. Vocational rehabilitation, in conjunction with pharmacological and psychological support, seems to be the most potent predictor for RTW based on Khorshidi's study.

An older study conducted by David Pluta et al. (2006) on predictors of RTW for people with psychiatric conditions from a private sector perspective revealed interestingly different results. The study focused on the vocational characteristics of claimants that best predict RTW, which was done within an insurance context. The study’s outcome revealed statistically that factors commonly associated with RTW, such as the use of psychiatric services (most powerful predictor), and gender (least powerful predictor) were not significant predictors of return to work. Contrary to what Khorshidi’s study revealed, in this study, it was noted that claimants with relatively high salaries and an advanced level of education were far different with successful RTW than for the public sector. The results indicated that vocational rehabilitation counseling initiatives done in the private sector for disability insurance

have been minimal. The first recommendation for future researchers was to analyze the demographic and vocational factors by type of policy to determine if it contributes to employment outcomes. The second was identifying variables that hasten RTW for a high-income earning population to reduce costs and prevent the “dumping” of private disability claims onto the public sector (Pluta, David; Accordino, Michael, 2006). In the literature review by Kiyoshi (2013) and David Pluta et al. (2006) on predictors for successful RTW, both old and recent literature show that there is still more research to be done from an insurance perspective concerning investigating triumphant and sustainable return to work utilizing more data variables that could be contributing factors for the anticipated RTW predictors. The views from different associations have also been noted and show that the effort is collaborative, and that occupational therapy and case management play a vital role in managing mental health conditions despite the challenges and some noted restrictions experienced in the insurance sector.

In terms of specific programs being utilized for RTW for claimants with mental health conditions, the researcher explored literature regarding the contribution and effectiveness of Cognitive Behavioural Therapy (CBT) rehabilitation (Mayo Clinic, 2019) and Pain SA (2018) regarding the Progressive Goal Attainment Program (PGAP) in successful RTW for claimants with long-term mental health conditions as an additional intervention program. CBT is a common type of talk therapy (psychotherapy) conducted in a structured way, attending a limited number of sessions. CBT helps individuals become aware of inaccurate or negative thinking so claimants can view challenging situations more clearly and respond to them more effectively. It is a helpful tool either on its own or in combination with other therapies in treating mental health disorders, such as depression, PTSD, or an eating disorder. CBT can be an effective tool to help anyone learn how to manage stressful life situations better (Mayo Clinic, 2019). Pain South Africa (2018) further elaborates that PGAP is currently the most researched risk-targeted treatment program for reducing disability associated with pain, depression, cancer, and other chronic health conditions and effectively facilitates return to work. Pain South Africa (2018) further elaborates that PGAP is currently the most researched risk-targeted treatment programme for reducing disability associated with pain, depression, cancer, and other chronic health conditions and has been shown to be effective in facilitating return to work. Both CBT and PGAP have been reported to be very effective psychological approaches for the management of mental health conditions as well as for management of pain (Rivano Fischer, Marcelo; Schult, Marie-Louise; Löfgren, Monika; Stålnacke, Britt-Marie, 2021). Success factors associated with RTW from a mental health perspective will be investigated in the analysis of the results of this study.

The impact of the COVID-19 pandemic on mental health and insurance solutions has also led to therapies being done differently to ensure that claimants still receive the intervention required using alternative platforms than face-to-face consultations. RGA (2021) reports use of CBT digitally to help

manage mental health conditions and has been proven to be an effective alternative within the insurance industry. In an article by RGA (2022), the authors report that Internet-based Cognitive Behavioural Therapy (ICBT) provides digital access to treating psychiatric disorders utilizing guided therapy and weekly touch points with a therapist through email or online sessions. Furthermore, self-guided programs allow users to access a range of customized modules. It is further reported in this article that in Canada (RGA, 2022), the Ontario government offered free guided digital therapy during the pandemic to residents. It is thus relevant to note that while CBT has been around for quite some time, the digital experience allows access anywhere, anytime, in a stigma-free environment for both young and old. It also promotes better compliance and program adherence due to its flexibility (RGA, 2022).

There seems to be focus on CBT for in rehabilitating mental health conditions based on literature from the Mayo Clinic, Fischer's study and RGA; however, there seems to be a lack of efficacy provided in the literature to corroborate this despite the positive reports on the outcomes thereof. A study exploring the effectiveness of rehabilitation services in the United Kingdom could not confirm specific rehabilitation services from an efficacy perspective. However, this revealed the mental health rehabilitation research field to be heterogenous and lacking in some areas, including the lack of support for longer complex mental health problems outside of the supported accommodation environment (Dalton et al., 2020).

2.9 Summary of the literature review

This literature review explored various aspects of mental health, the prevalence thereof, intervention in both clinical and insurance settings and how those impact on absence from work. This review includes the impact on the economic contribution (globally and locally) due to sickness absence transferring into disability, and lastly, the long-term management of these mental health conditions within the insurance industry (Govender et al., 2018). There have been many debates from a clinical perspective in terms of exploring practical ways of acute management of mental health disorders, the importance of the multi-disciplinary team, and early intervention. Different literature authors and associations such as the AOTA, OTASA, CMCA, Govender (2018), and Mokoka (2012) in the literature further elaborated on the role occupational therapists play within the multi-disciplinary team from a functional perspective and intervention programs that are available in assisting with recuperation and eventually RTW. These authors also elaborated on the importance of case management in the recuperation period and the scope of practice/role occupational therapy plays in the insurance context. Articles from reinsurance companies (HannoverRe and RGA) shared statistical information regarding the prevalence of mental health disability, the importance of insurance coverage

during the absence from work, and the unfortunate eventuality of long-term incapacity and, consequently, disability.

2013 highlights that mental health is essential to one's overall health; however, the disease burden cannot be taken for granted. The prevalence of the disease burden based on mental health is noted. Several articles from Jack et al., De Wee et al., Van Der Walt et al., SASOP and others outlining that and even go a step further in making a distinction between mental health distress and mental illness to be able to provide context in understanding the long-term effects of this disease burden. From a South African perspective, there seems to have been less priority given to the management of mental health conditions at the primary care level until the National Mental Health Policy Framework and Strategic Plan were developed to address critical factors to help combat this disease burden involving key stakeholders, considered to be subject matter experts.

Over time, SASOP also noted the impact of absence from work and amended their policies to help reduce absence from work, noting that work is good for recovery for patients suffering from mental health disorders. The SASOP guidelines have further been adopted and updated within the insurance sector through collaboration with SASOP stakeholders and ASISA to assist with managing these conditions. The importance of early intervention in both acute and chronic settings is evident in the research. However, while the ASISA guidelines stress the importance of rehabilitation and case management during the recuperation period to facilitate RTW, there are no specific intervention programs outlined in these guidelines as a standard to help prevent long-term incapacity due to mental health conditions.

The financial burden (Jörns-Presentati et al., 2021) brought upon long-term incapacity due to illness or disability on a personal and economic level is noted in the literature, highlighting the importance of disability insurance to help close the gap. The evolution of insurance products has been highlighted in articles by a reinsurance company (HannoverRe, 2016) that is indicative of the advancement of the products to help close the financial gaps, particularly income replacement type of products. While the literature provides context regarding the evolution of insurance products, there is still a gap regarding rehabilitation costs being incorporated in pricing models to cater to the need and alignment with the adopted ASISA guidelines complementing the rehabilitation required during the recuperation period as part of case management. Seemingly more work still needs to be done around this subject for product, pricing, and costing models for the insurance industry within the South African context. In addition, general perceptions regarding how insurance companies manage mental health claimants have been noted with different views, which may not reflect the actual intention and supporting interventions offered to claimants.

Jörns-Presentati et al. (2021) highlight occupational therapy as a specialized area in managing mental health conditions from a case management perspective in the Australian context. his management is not only in a clinical setting but also in the insurance industry. It is considered to be equally important. The challenges of case management in both settings can, however, not be ignored, taking into consideration the psycho-social factors during the critical phase of rehabilitation to help clients be able to RTW and motivate them to recover beyond the barriers and stigma associated with RTW and mental health conditions. Return to Work is also a complex factor, primarily due to mental health-related conditions. It uses a matrix against which rehabilitation success is measured. From a rehabilitation program's perspective, vocational rehabilitation has traditionally been used as a generic term to facilitate RTW This literature review shows it appears that CTB and PGAP are some intervention programs with a noted success rate within the South African context. Although PGAP was initially intended to help manage pain, literature shows the importance of the same approach being utilized in combating long-term incapacity as a result of mental health conditions and to help facilitate successful RTW through graded activities incorporated into this program. Advancement in virtual consultations has been noted particularly for claimants undergoing CBT due to the COVID-19 pandemic, and the alternative methods being utilized as ICBT prove to be more accessible and effective in Canada. However, looking at the varied socio-economic classes within the South African context, the same approach might not be as practical. The economic class thus impacts access to the internet and costs associated with ICBT from a resource perspective which might not be accessible for claimants residing in remote areas or those that fall within a much lower socio-economic class. However, this is still a step in the right direction providing alternative platforms to ensure that claimants still receive the rehabilitation required to help them in their recuperation period with the support of case managers and facilitation of RTW, which is a critical matrix for the rehabilitation success.

Insurers can contribute to improving mental health through proactive outreach, partnerships with complementary organizations, and innovative product expansion. By helping meet the need for mental health services and providing support for young people, insurers can proactively help create a better future for our customers, communities, and industry.

2.10 Conclusion of the literature review

The objectives of this study included looking at intervention programs utilized by case managers and the success thereof in managing long-term incapacity claimants with mental health conditions. These will be analyzed in chapter four, and the results will be described concerning what has been noted in the literature. In summary, the literature provides a detailed context regarding mental health as a

disease burden globally and within the South African context. Initiatives made by the Mental Health Policy Framework and SASOP guidelines play a critical role in the overall management of mental health conditions in a South African context, both in the public and private sectors, and subject expert matters play a vital role in driving these initiatives. While we note the costs associated with the management of mental health claimants globally, there seems to be insufficient literature regarding this from a South African context. Disability insurance, on the other still needs to be explored further without prejudice to those suffering from mental health conditions considering evidence-based interventions available for the management thereof. The role occupational therapists and case management play in managing mental health conditions in the insurance sectors have been noted to be unique and specialized, providing room for expansion in the scope of practice and growth opportunities within an insurance context. Little literature seems to provide more evidence regarding the efficacy of the different interventions, although CBT seems to be most recommended for managing mental health conditions.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter focuses on the research methodology used to conduct the study. The research design and all components considered when the study was conducted will be unpacked in more detail in the following sections of this chapter.

3.2 Research Design

A research design is a framework of the research method and techniques which a researcher has chosen to utilize for their specific study (Rosenstein, 2019). A quantitative retrospective correlational research design was applied (Brink, Van der Walt and Van Rensburg, 2018). This research design was based on non-experimental research, and therefore considering the nominal and ordinal data variables used to collect the data, no experiment or any form of testing was conducted prior to the data collection process. To explain the relationships between the variables, a correlation design was applied, looking at both nominal and ordinal variables (Brink et al., 2018). The correlation design was utilized firstly to address the research objectives and the research problem at hand and secondly, to identify specific rehabilitation programs that have been utilized through case management interventions to help claimants with long-term incapacity due to mental health RTW. Considering the research question, this research design was appropriate to address/answer the research question considering the nominal and ordinal data variables that were used (Curry and Nunez-Smith, 2015).

The data variables that were used in the study comprised of nominal and ordinal data. The ordinal data included:

- ***Age*** was used to identify the age range of the claimants. The age will be related to the next age based on the format that the insurer saves the claimants' information on the claims system.
- ***Date claim logged*** to indicate the year in which the claim was received or initiated

**The date of claim logging was only used in order to extract data and identify the years in which the study was focused on and, therefore, not analyzed individually in the actual results of the study.*

The nominal data included:

- ***Gender*** to determine the most affected gender.
- ***Diagnosis*** was to determine the type of mental health conditions the claimants were in a claim for

- ***Occupation*** and industry were included in to understand which occupations were most affected by mental health conditions and identify a correlation between of the impact of specific occupations that result in long-term mental health claims.
- ***Claim type*** provided context and comparison between income continuation benefit claims and capital disability benefits with regards to prevalence thereof in mental health claimants
- ***Type of intervention received*** to identify which interventions were commonly used for long-term management of long-term mental health claimants.
- The study used the ***Return-to-work outcome*** matrix to measure outcome and success factors around return to work following case management interventions.

The data variables used looked at the biographical information of the claimants, the body system in which the condition originated, and the actual diagnosis. The study also considered job titles and industries in which the occupations originated, dates in which conditions were diagnosed, and claims lodged. The study also included types of benefits claimants lodged claims for, including the type of intervention received from case management and whether the return to work was triumphant or not following case management initiatives undertaken to manage long-term incapacity claims resulting from mental health conditions.

The focus was purely on causality and probability, as described by Brink et al. (2018). Analysis of claim trends was done on one specific insurance company over three years (records from January 2018 to January 2021) to understand the outcome of vocational rehabilitation services with case management and RTW for long-term incapacity claimants with mental health conditions. In addition, the process included the identification of proactive approaches that were utilized to help facilitate duration management in the claim period as well as successful RTW.

3.3 Contextual Setting/Study Context

This study was conducted within an insurance context. One specific insurance company focused on claimants that have participated in case management programs, particularly for claimants living with mental health conditions. The study was based on case management interventions facilitated by one of the reinsurance companies. Therefore, the focus was only on claims that had been logged for income continuation benefits (for income replacement during absence from work) and capital disability benefits (for permanent disability on medical grounds or occupational or both) in managing long-term incapacity claims. These claims were managed by case managers who are qualified occupational therapists and physiotherapists working in the insurance company's claims department. These case managers supported the claims assessors within the claims team managing long-term incapacity claimants with mental health conditions.

3.4 Population and Sample

Brink (2018) explains that a population comprises the entire group of persons that is interested in the research. Therefore, the population considered for this study entailed claims data collected from an insurance company in South Africa. Thus, this study's sample of interest (Brink et al., 2018) for this study was extracted from the comprehensive claims data for the three years (January 2018-January 2021) under consideration. However, the study focused on long-term incapacity mental health claims specifically on claimants referred for case management interventions. The population consisted of 716 claims received over this period comprising of claimants living with mental health conditions only, forming part of the study population.

3.5 Sample size

A sample is a group of people, objects, or items taken from a larger population for measurement (Curry et al., 2015). The sample size was extracted from the comprehensive claims data and then tapered down to mental health claims referred for case management over the three years under consideration. A total purposeful sampling technique was utilized based on the nominal and ordinal variables that this study focused on. The specified variables, as outlined in the research design section of this chapter, were selected to ensure the data's validity and transferability by using data collection instruments (Ali, 2021). To ensure the credibility of the sampling, considering that this was a quantitative study, the data was transferred to different statistical tests to explore relationships, and ratios were also explored (Ali, 2021). This goal was to ensure that the findings could be transferred to other settings, contexts, or populations that could be of value for further studies due to their credibility.

Of the 716 mental health claims that were recorded, 414 claims were referred for case management (including all conditions). The sample size comprised at least 40% referrals made during this time frame. The 40% calculated average arose from the number of referrals done during the three years under consideration, specifically for mental health claimants only. Please see below a breakdown of the calculated 40% average that was utilized for this study:

- 2018 – 94 referrals, of which 44% accounted for claimants living with mental health conditions
- 2019 – 147 referrals, of which 35% were for claimants living with mental health conditions
- 2020 – 166 referrals and 40% comprised of claimants living with mental health conditions
- January 2021 (only) – 7 referrals for the month, of which 57% accounted for claimants living with mental health conditions.

Therefore, n=166 out of 414 x 100 = 40% of referrals received for case management over these three years 414 referrals (n=166 inclusive of all mental health conditions referred for case management).

3.6 Inclusion and exclusion criteria

The inclusion criteria comprised of the following:

- Long-term claims logged over the three years – January 2018 to January 2021
- Claims logged because of mental health conditions; other claim conditions were thus excluded.
- Claims referred for case management by the insurer.
- There was not any age restriction on the data variables.

The sample exclusion criteria:

- Claimants that were referred for case management but were not enrolled in a case management intervention program from January 2018-January 2021.
- Claimants that did not comply with the case management intervention and or were considered medically unstable during January 2018-January 2021.
- Claimants referred for any other medical condition and was not of a long-term nature.

3.7 Data collection process and data instrument

Data collection is the process of gathering quantitative information on specific variables to evaluate the study's objectives (Curry et al., 2015). The data source in this correlation research design was specifically from one insurer, and they were thoughtfully aligned to serve a complementary purpose r to answer the research question (Curry et al., 2015).

Considering the retrospective correlational design of the study, clinical and administrative data from the insurer was used.

The following process was followed for data collection:

- The researcher applied for permission and approval from the insurer's compliance team to access the data needed for this study. In this application, the researcher provided the compliance team with a motivation for the study and outlined the nominal and ordinal data required. The motivation also included a consent statement from an ethical perspective to reinforce the study's credibility and ensure the confidentiality of the data variables used to conduct this study. Please refer to Annexure B with all the details that were provided in the application and approval granted by legal compliance from the insurer.
- Concerning data collection, the researcher liaised with a data analyst from the systems department, followed the internal process and included the compliance approval letter as part of the request for the data to be released. The report was extracted into an Excel spreadsheet and used as a data collection instrument for this phase. Client personal information was removed (de-identified) during data cleaning, which was done by a data analyst employed by the insurer responsible for extracting reports.

- De-identification of data was done, and only the selected variables (primarily categorical) on which the study was based (in line with the objectives) and measured against was used. These variables were categorized in line with the specific variables outlined in point 3.2 on the design section.
- The results were to be summarized and critically analyzed with comments on case management outcomes for long-term incapacity for mental health claimants, which was measured, providing a claimant profile on which this study was based.

Please see below an example of the data collection sheet that was used to conduct this study:

Table 3.1 Data collection sheet

Age	Gender	Body System	Diagnosis	Diagnosis Categoy
48	Male	Mental & Behavioural	Depression	F30-F39 Mood (affective) disorders
40	Male	Mental & Behavioural	Panic Attacks, Anxiety Disorder, PTSD	F40-F48 Anxiety, dissociative, stress-related, somatoform and other
54	Male	Mental & Behavioural	Major Depressive Disorder	F 30-F39 Mood (affective) disorders
49	Male	Mental & Behavioural	Anxiety Disorder	F40-F48 Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders
53	Male	Mental & Behavioural	Major Depressive Disorder	F 30-F39 Mood (affective) disorders
51	Male	Mental & Behavioural	MDD	F 30-F39 Mood (affective) disorders
62	Male	Mental & Behavioural	Bipolar mood disorder	F 30-F39 Mood (affective) disorders
57	Female	Mental & Behavioural	MDD, epilepsy	F 30-F39 Mood (affective) disorders
38	Male	Mental & Behavioural	major depression	F 30-F39 Mood (affective) disorders
52	Female	Mental & Behavioural	Major Depressive Disorder	F 30-F39 Mood (affective) disorders
47	Male	Mental & Behavioural	frontal lobe brain damage and bipolar / Post traumatic epilepsy (head injury)	F01-F09 Mental disordres due to known physiological conditions
40	Male	Mental & Behavioural	Major depression since 17/10/2018	F 30-F39 Mood (affective) disorders
55	Female	Mental & Behavioural	Major depression	F 30-F39 Mood (affective) disorders

Table 3. 2 Data collection sheet

Occupation	Industry	Occupation group - ISCO	Date of Condition
Director - admin only, < 20% travel	Business & Administrative	Managers	10/01/2018
Director - admin only < 20% travel	Business & Administrative	Managers	09/05/2018
Director - admin only < 20% travel	Business & Administrative	Managers	08/02/2017
Manager / Manageress - admin only	Human Resources	Managers	29/09/2017
Director - admin only < 20% travel		Managers	01/03/2018
Mechanical Engineer	Industrial	Professional	
Business Owner - <20% manual duties & travel	Agriculture	Skilled Agricultural, Forestry and Fishery Workers	19/09/2017
Business Owner - admin only < 20% travel	Business & Administrative	Technicians and Associate Professionals	14/12/2017
Business Owner - admin only, < 20% travel	Training	Technicians and Associate Professionals	01/04/2010
IT - Systems Developer	Information Technology	Technicians and Associate Professionals	14/08/2017
HR manager	Human Resources	Managers	01/10/2017
Personal Assistant	Business & Administrative	Clerical and Support Workers	05/05/2017
Business Owner - < 20% manual duties	Motor	Technicians and Associate Professionals	06/12/2015
Administrator	Business & Administrative	Clerical and Support Workers	17/10/2018
Admin Manager / Manageress	Minerals	Managers	12/05/2018
Sales Representative	IT and Telecommunications	Services and Sales Workers	17/10/2017

The conditions were grouped according to the ICD10 codes, and the occupations were grouped based on the International Standard Classification of Occupations (ISCO), where the occupations are hierarchically classified based on industry, job classification as well as a skill level of the occupation

which is evidence based on statistical censuses and surveys (ISCO, 2012). See Table 3.1, which provides the demographics of the claimants and categories for the diagnosis and Table 3.2 indicates the occupational categories and industries classified under each occupation group in line with the International Standard Classification of Occupations (ISCO). This category was added as one of the variables to determine if there are specific occupations and/or industries would be more susceptible to mental health conditions than others.

3.8 Data analysis

Data analysis is a systematic process of collecting and evaluating measurable and verifiable data (Ali, 2021). Considering the retrospective data that was used non-experimental, data analysis was done on the variables collected to answer the research question. A professional statistician conducted the data analysis, consisting of descriptive statistics such as mean, median, standard deviations, frequencies, and proportions, to describe the results and frequency distribution tables (Field, 2018).

The descriptive statistics were used to analyze the data in a quantitative form from a spreadsheet providing a visual representation of the results in line with the variables on which the study was focussed and in line with the study's objectives (Ali, 2021).

Descriptive analysis summarizes data in an organized manner by describing the relationship between variables in a sample or population (Field, 2018). A descriptive analysis of the first dataset will be presented in the results section in chapter four. Where applicable, certain Likert scales were assigned to specific categorical variables to simplify the descriptive analysis. The overall data set contained 716 claims received under consideration (January 2018 to January 2021).

Each dataset contained different information; therefore, specific details will appear under the analyzed data set. These results will be analyzed by looking at overall demographics, which entail:

- Claim type
- Conditions/diagnoses
- Next age
- Gender
- Occupations

The following metrics were calculated across all variables (questions) in the data:

- **Mean**: The average rank of each option is given in the first column of the descriptive statistics table.
- **Standard deviation:** Standard deviation measures the data's spread around the mean.
- **Counts:** The count frequencies for each Likert scale response are calculated.
- **Proportions:** The proportions are obtained from the counts of each Likert scale response and are calculated across all variables.

Data sets analyzed

In chapter four, a diagrammatical outline of the data set is provided, indicating analyzed data sets.

The first dataset labeled "1 – Overall mental health claims logged from January 2018 to January 2021", contained all the information regarding claims logged across the entire period comprising 716 claimants. This dataset included demographic information regarding the policy, dates of claims, conditions, and claim status day. Furthermore, information about the policyholders included the claim type, the body system, medical condition, age, gender, claim status, expiry age, and the claimants' occupation. The variables were described in Chapter 3, and this data sheet is linked to the first objective in Figure 4.1.

The second dataset, labeled "2 - Referrals received January 2018 to January 2021", consists of spreadsheet tabs (per year) of Case Management (CM) allocations comprising 269 claimants. These CM allocations contained information regarding claim types, the diagnosis, the reason for referrals and dates of the referrals, claim notification, allocation date, and date of feedback sent. Since the data collection period ranged from 2018 to 2021, there was a separate tab in the spreadsheet for each year. In addition to the CM allocations, there was an additional tab titled "Proactive 2019" for claimants identified proactively, which contained information regarding the benefit of the policies of the claimants, their body systems, condition, flag applied, ability outcome scoring and whether they were referred to the Progressive Goal Attainment Program (PGAP). This data sheet is linked to the second objective in Figure 4.1.

The third dataset, labeled "3 – Case Management Intervention January 2018 to January 2021", contained a complete outlook of the claims process and outcome for the claimants, and a numerical summary of the amounts paid for each claim. This data set provided an excellent overview of the claim descriptions and outcomes. This data sheet is linked to the third and fourth objectives in Figure 4.1, which comprised 100 claimants.

Statistical analysis used

Inferential statistics were included in the analysis to investigate relationships between variables. The tests used to utilize the results included the Chi-squared test, Fisher's Exact Test and, Cramer's V Test which was used to determine the relationships and identify patterns (Field, 2018). The Chi-squared test is a statistical test used to test for independence between two variables with an underlying assumption that each cell has a frequency of at least five. When there was a violation when the test was not most potent in the assumption of the Chi-square test, specifically when the expected frequencies were less than 5, Fisher's Exact test was appropriate (Stats Direct, 2022). Fisher's Exact test provides a p-value corrected for testing for associations between two groups or variables. As a result, Fisher's Exact test was used as the formal test to determine whether the two variables are independent or not.

To investigate, measure and quantify the relationships and impact of the variables in line with the study's objectives, specific statistical testing methods were utilized to perform the analysis. The tests used included:

- *The Cramer's V Test:*
- *The Chi-square Test:*
- *The Fisher's Exact Test:*

The study investigated the following relationships from the second data set:

- Type of Intervention vs. Return to Work (RTW) Outcome
- Diagnosis vs. RTW outcome
- Age vs. RTW outcome
- Gender vs. RTW outcome
- Occupation vs. RTW outcome

The odd ratios were also calculated for the variables tested for significant association. These odd ratios were included as they highlighted relationships worth focussing on in an individual's case management (CM) outcomes and the type of intervention they received. The odd ratio (OR) calculates the relationship between a variable and the likelihood of an event occurring. A common interpretation for odds ratios is identifying risk factors by assessing the relationship between exposure to a risk factor and a medical outcome (Joshi, Rajneesh, Monil, Khera, Anurag, Godbole, Sheela, 2015). The odd ratios were also calculated to explore further the relationships between the variables and the likelihood of events occurring based on the data available for this study.

To provide an accurate measure and analysis of the data and effectiveness of the case management interventions being utilized within an insurance context, the study was limited to only one insurance company. The study analysis was limited to claims lodged for claimants living with mental health conditions that had been referred for case management interventions. The data was only limited to two types of benefits: income continuation and capital disability benefits that the claimants were in a claim for over three years (Jan 2018 to Jan 2021). The income continuation benefit was a policy benefit that protected individuals and paid claimants' monthly income if they could not work due to illness. Capital disability benefits, on the other hand, paid a lump sum to claimants once they were permanently disabled in line with the definitions provided by the insurers on their policies.

The analysis of these results will be discussed in the next chapter accordingly.

3.9 Rigour

Rigour refers to the extent to which the researchers worked to enhance the quality of the studies (Heale and Twycross, 2015). According to (Thomas and Magilvy,2011), rigour is helpful in establishing consistency of the study methods over time and accurately represents population studies. Considering the quantitative nature of this study, the scientific rigour aspect is essential to ensure that

the study can be replicated, which means that it is conducted on a solid baseline, that it is repeatable, and that data utilized can be ensured confidently for further research. The rigour produces unbiased results, increasing the likelihood of accurate results and that the accurate results could be repeated independently (Hofseth, 2018). The measuring instruments for reliability and validity were considered in this study (Sürücü, Lütfi; Maslakci, Ahmet, 2020).

3.9.1 Reliability

The research problem and design were outlined in an objectively to ensure that the researcher's opinion did not influence the study's results. The causality aspect of the research methodology was also considered, and the analysis aspect was used to address the relationship between variables, and inferential statistics were used. A data analyst extracted the data from a report with audit trail indicating when the information was captured systematically (Brink et al., 2018). Furthermore, the study focused on retrospective data, and the information was therefore considered to be reliable, and the variables that were measured were based on accurate client information captured on the insurer's claim system. The researcher also looked at the probability of concepts concluding the data variables, which revealed the study's outcome. The case management data (records over the three years) was managed by an external resource (reinsurer) and was recorded on a central system that was validated accordingly. The inclusion and exclusion criteria have been outlined and very specific to the study to strengthen the scientific rigour and merits in which this study was conducted (Hofseth, 2018). The data collection form used was in a spreadsheet format designed with the statistician's assistance. The form validate the data analyzed using the described statistical tests (Field, 2018). This validation assisted in reducing or eliminating any form of bias that helped review of case management of long-term incapacity claims living with mental health conditions in South Africa in line with the research question.

3.9.2 Validity

Considering the quantitative approach, =rigour was achieved by ensuring the validity and reliability of the data collection tools used to conduct the study (Ali, 2021). Furthermore, the data collection methods were described such that the researcher conducting the study could yield the same results using the same processes in order to reach the same conclusions confirming validity of the research design as outlined in the design section (Brink et al., 2018). Furthermore, the validity was thus solidified by using of construct validity through using different statistical tests and the variables pruning to validate the concept of the different objectives, considering the theoretical framework in which the study was conducted (Heale, 2015). Therefore, the statistical tests (Chi-squared test, Fisher's Exact Test. and Cramer's V Test), which are scientific and standardized, were used to analyze the data,

which was an objective and scientific method of analysis in this quantitative study for purposes of not only validity but accuracy as well (Sürücü et al., 2020).

3.10 Ethical considerations

Ethical conduct while conducting research is critical and provides a baseline or standard of practice in which the researcher obtains and utilizes data variables for research purposes (Fleming, 2018). The researcher understands the importance of protecting the claimant's data and takes accountability for the findings, expecting to promote social as well as ethical values for all South Africans (Brink et al. 2018). Therefore, compliance in this regard is therefore of great importance from an ethical perspective in line with policies and regulatory requirements solidifying the study's merits and credibility. Specific ethical principles were considered in light of the quantitative research methodology (Brink et al., 2018). These principles were applied to ensure the study's credibility, in light of the honesty and integrity while conducting the study and also ensuring truthful reporting of evidence-based results. The following principles were applied to the research study:

1) **Respect for persons**

Respect for persons is vital in the research process considering anonymity, human rights, respect for society with the traditional and religious practices and protection of those with diminished autonomy due to mental and or intellectual challenges (Brink et al. 2018). The researcher ensured a person's confidentiality by protecting client data such as personal and special person information by de-identifying the data and removing all personal information and special person information, only conducting the research with specified data variables. The claimants' data was kept anonymous in line with the request made for compliance. In this request, the researcher completed a standard internal form detailing the type of report required to conduct the study and providing a list of variables to extract the report, which comprised both nominal and ordinal data. This request was also considered internally in line with compliance standards and data protection policies applicable within the insurer's restrictions. It is relevant to note that the data collection sheet was specific and precise for the conduction of this study, and it focused on variables that were specific for research to strengthen this principle (Fleming, 2018). A copy of this request has been attached as Annexure C for perusal.

2) **Principle of beneficence**

The researcher used good judgment to consider the insurer's reputation by not mentioning the insurer concerned from which the data was collected. This principle ensured that there were no reputational risks that the research outcome would bring and that it would not create an extreme bias towards the insurer's approach in conducting this study. From a claimant's perspective, the researcher has

protected their personal information and considered the benefit of the study's outcome in line with the clinical oath and contract taken through compliance office. Benefits to the insurer would be implementing evidence-based case management intervention programs that directly impact the quality of service to claimants and improve overall well-being.

3) Principle of justice

It was also the researcher's responsibility to ensure fairness in the data collection process and formulate of the recommendations based on evidence from the analysis and supported by the literature. The fairness approach applied was based on the data collection process described in the previous section, including the anonymity of the data subjects as well as the de-identification thereof. Therefore, no claim or policy numbers were used that could be traced back to the insurer's claimants as that formed part of special personal information. The researcher accessed the data through the data analyst as agreed upon and authorized by the insurer's compliance team to support this study.
It is also relevant to note that the Protection of Personal Information Act (POPIA) recognizes the right to privacy, which includes *collection, recording, organization, updating and retrieval, consultation, use, dissemination employing transmission, destruction of personal information,* etc. and all this was taken into account in both the data collection and analysis process (De Bruyn, 2014). The Policy Holder Protection Rules (PPR) provide a framework for the conduct of business reforms respectively. The researcher already motivated to the compliance team, considering the research was based on factual policyholder data in line with legislative requirements. Please refer to Annexure B for the approval received, which solidified this ethical principle.

The proposal was thus submitted to the University of Pretoria, Faculty of Health Sciences, and Research Ethics Committee for ethical approval before the data collection process commenced, and approval was obtained accordingly. Approval was granted on the 24th of November 2021 with this reference number: *586/2021*.

In conclusion, ethical considerations are crucial in the entire research process from a scientific point of view and considering the regulations and legislation, which is important at all phases of the research. These ethical considerations, in turn, provides confidence and credibility for the study and helps open opportunities for further research; they provide the baseline in which the study needs to be conducted considering the human and data protection aspects at all angles as described in this section ensuring validity and reliability of the conduction and outcome of the study.

CHAPTER 4: RESULTS AND ANALYSIS

4.1.1 Introduction

In chapter three, the research methodology for this study is discussed, and chapter four focuses on the study's findings.

The results were first analyzed and interpreted utilizing descriptive analysis of the variables. Three data sets were used in the study to determine the relationship between the variables. The second part is the outcome of the statistical testing resulting from the Chi-Squared Test, the Fisher's exact test, as well as the Cramer's V tests used that includes the odd ratios used to measure association and the strength of the outcomes of the results in line with the objectives of the study.

4.1.2 Overall presentation of the results

The overall presentation of the results will be based on the data sets that were used and will then be analyzed based on the study objectives. The results will be presented in by the study objectives in Figure 4.1 below:

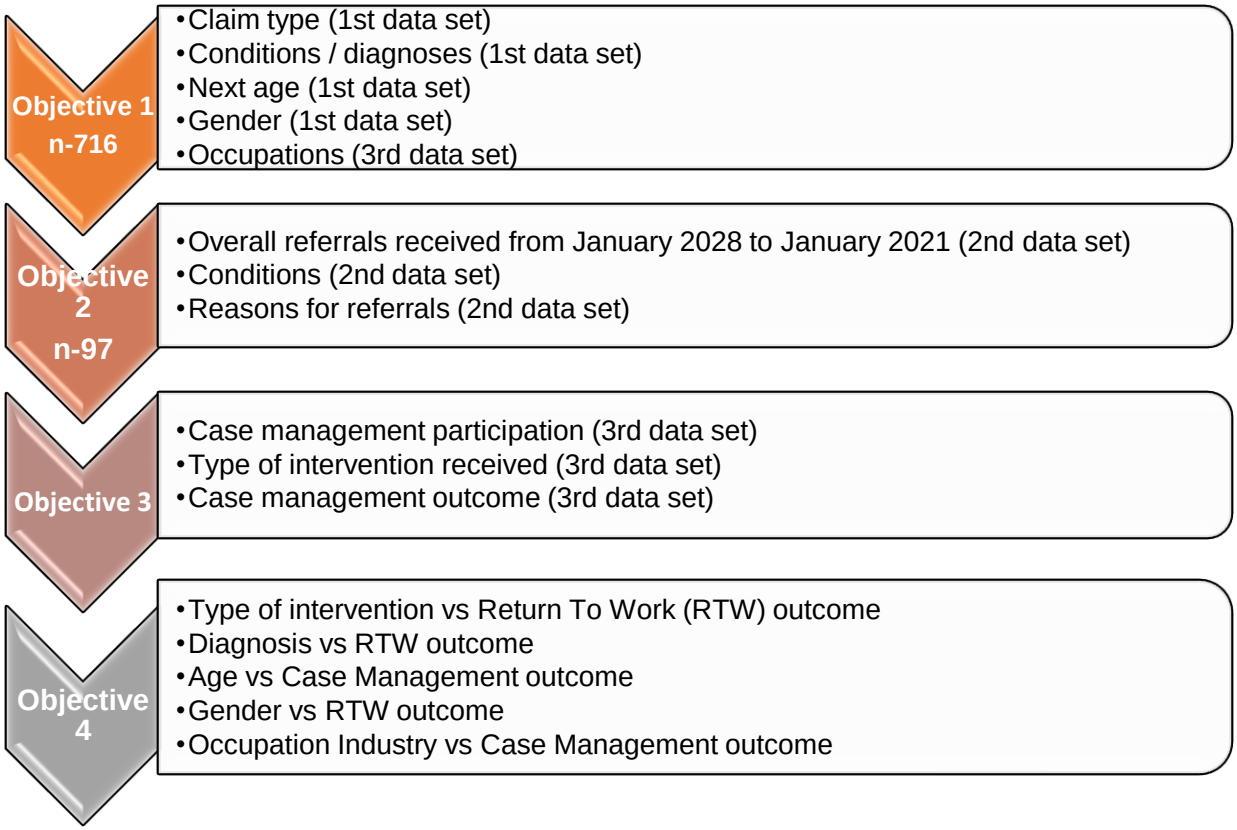


Figure 4.1: Overall presentation of the results according to objectives

4.2. Data sets used

Three datasets were involved in this study, and the aim was to understand how they are related. These datasets were labeled according to categories outlined in Figure 4.2 below:

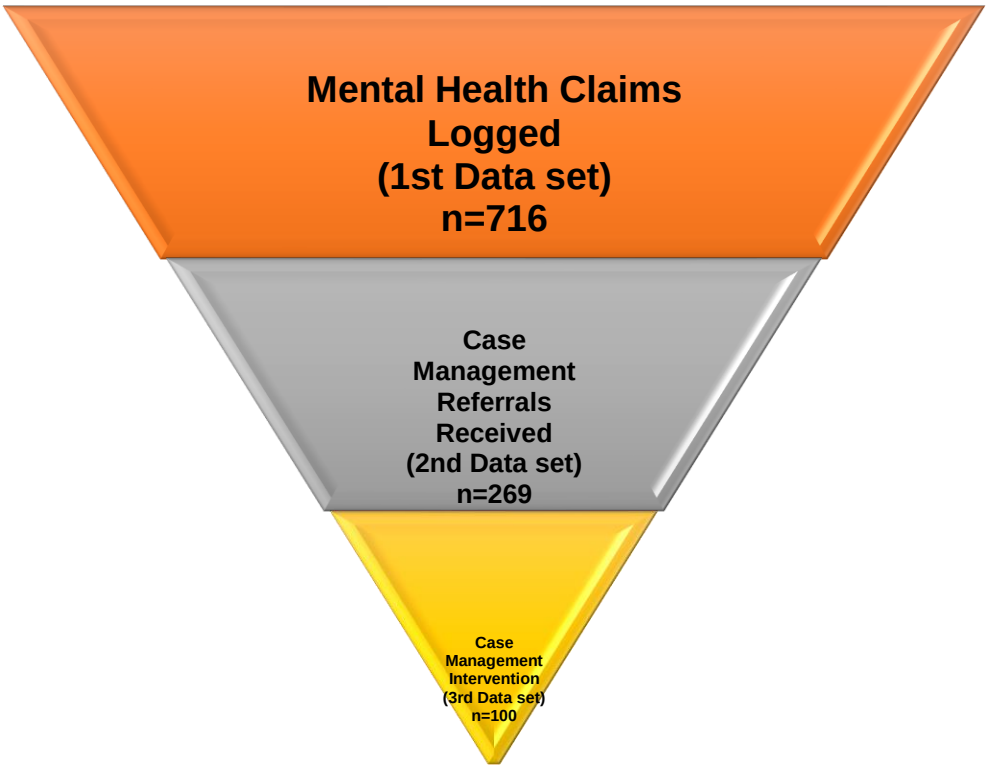


Figure 4.2: Data set categories

4.3 Descriptive analysis

All these variables arise from the three data sets that will be analyzed under each objective accordingly.

4.3.1. Objective 1 (1st data set): To determine the biographical data of long-term incapacity claims for mental health claimants submitted at the company level over three years (January 2018 to January 2021)

4.3.1.1 Demographics

The variables described in the table below refer to the demographic information of the claimants and include diagnoses/conditions for the overall claims logged, the next age of the claimants, their gender split and occupations. Regarding the next age, this is how the insurer usually represents the age of the claimants, as described in chapter three.

Table 4.1 below provides a numerical representation of the demographics for mental health claims received from January 2018 to January 2021:

Table 4.1 Overall claims lodged from January 2018 to January 2021

Diagnosis	Total number of claimants (n)	Age Range (n)	Percentage out of 716	Female	Male
Major Depressive Disorder	456	24-69	64%	258	198
Bipolar Mood Disorder	115	24-66	16%	61	54
Anxiety Disorder	38	29-60	5.30%	19	19
Post-Traumatic Stress Disorder	33	32-61	4.60%	17	16
Chronic Fatigue Syndrome	27	30-55	3.60%	15	12
Mental Stress	25	31-57	3.40%	13	12
Schizophrenia	12	31-51	1.60%	4	8
Psychosis	6	32-57	0.84%	4	2
Nervous breakdown	4	25-45	0.50%	1	3

4.3.1.2 Conditions / Diagnoses:

The mean and standard deviation are calculated for the assigned Likert scale values. The majority of the claimants (n=456) had a condition of Major depressive disorder, as indicated by the proportion of 64 %. The top 5 conditions were noted as follows:

1. Major Depressive Disorder (64%)
2. Bipolar Mood Disorder (16%)
3. Anxiety Disorder (5.3%)
4. Post -Traumatic Stress Disorder (4.60%)
5. Chronic Fatigue Syndrome (3.60%)

4.3.1.3 Age range

The average age range for the overall claims logged during the three years under consideration was 44.

4.3.1.4 Claim Type

This variable refers to the claim type received during the period under consideration. These are the claim type categories:

- Capital Disability
- Income Continuation Benefits

Below is Table 4.1 indicating the type of benefits received over the three years under consideration.

Table 4.2 Overall claim types received from January 2018 to January 2021

Year	Income Continuation Benefits	Capital Disability Benefits	Total Claims received
2018	88 claims	127 claims	215
2019	113 claims	157 claims	270
2020	101 claims	115 claims	216
2021 (January only)	6 claims	9 claims	15
January 2018 – January 2021	**n=308**	**n=408**	**716 mental health claims**

The table summary above indicates the total claims logged from January 2018 to January 2021 (n=716), which comprised 57% Capital Disability Claims (n=408) and 43% Income Continuation Benefit claims (n=308).

Figure 4.3 below provides a diagrammatic representation of the case types received for claims logged from January 2018 to January 2021:

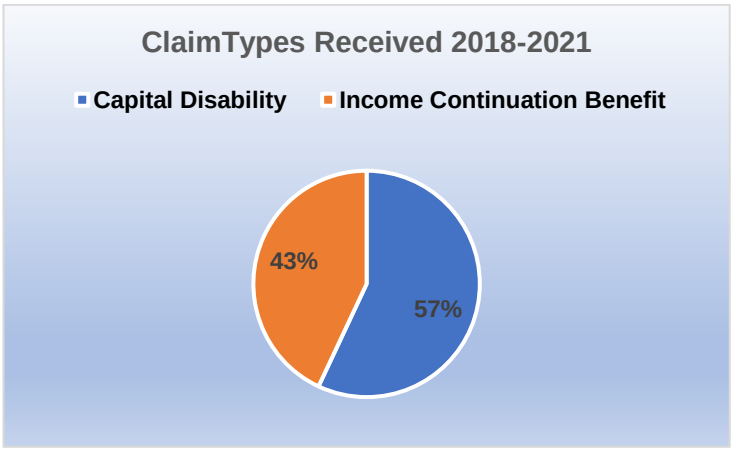


Figure 4.3 Claim types Jan 2018-Jan 2021

4.3.1.5 Occupations:

There were 126 unique occupations found in this variable, further investigation was done, and a summary of occupations analyzed will be provided, Grouped per the International Standard Classification of Occupations (ISCO). Therefore, the results regarding the occupation represent the second data set (referrals received) and not for the overall claims received. These arise from the

referrals received for case management from January 2018 to January 2022The following top 5 were identified from the results and the description by ISCO:

Table 4.3 Top 5 Occupation Classification

Occupation classification: Top 5 occupations in order from no 1-5	**ISCO Description**
Managers (n=28%)	Managers plan, direct, coordinate, and evaluate the overall activities of enterprises, governments, and other organizations, or organizational units within them and formulate and review their policies, laws, and rules (ISCO, 2012).
Professional (n=26%)	Professionals increase the existing stock of knowledge; apply scientific or artistic concepts and theories; teach about forgoing systematically; or engage in any combination of these activities (ISCO, 2012).
Technicians and Associate Professionals (n=14%)	Perform technical and related tasks connected with research and the application of scientific or artistic concepts, and operational methods, and government or business regulations (ISCO, 2012).
Services and Sales Workers (n=13%)	Provide personal and protective services related to travel, housekeeping, catering, personal care, protection against fire and unlawful acts; or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets (ISCO, 2012).
Clerical and Support Workers (n=11%)	They organize, store, compute retrieve information, and perform several clerical duties concerning money-handling operations, travel arrangements, requests for information, and appointments (ISCO, 2012).

4.3.2. Objective 2 (2nd data set): To identify the types of benefits and conditions referred for case management and reasons for referral to case management.

This objective is analyzed based on the following variables:

- Overall referrals received from January 2028 to January 2021 (2nd data set)
- Conditions (2nd data set)

- Reasons for referrals (2nd data set)

4.3.2.1 Overall referrals received from January 2018 to January 2021

The second dataset's descriptive analysis presents Likert scales assigned to specific categorical variables. The Likert scale was to simplify the descriptive analysis, and this second dataset consisted of four tabs in the spreadsheet of allocations done from the referrals received, namely:

- CM Allocations 2018: n=96
- CM Allocations 2019: n=58
- Proactive allocations 2019: n=38
- CM Allocations 2020: n=66
- CM allocations Jan 202: n=11

The total number of cases referred for long-term incapacity claimants with mental health conditions for case management from January 2018 to January 2021 is n=269.

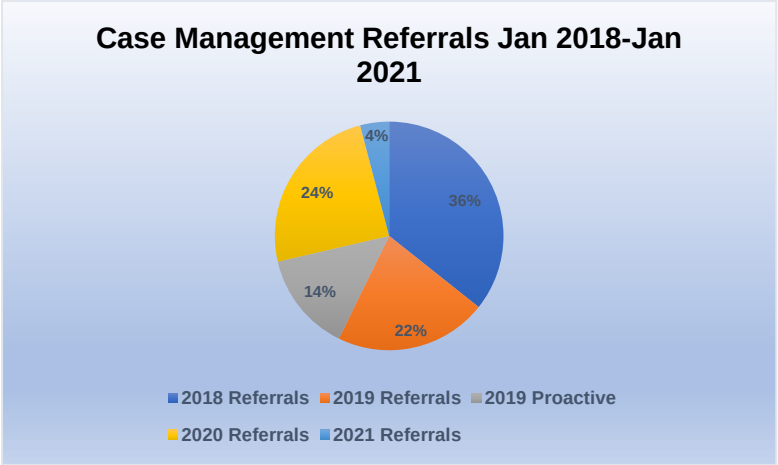


Figure 4.4: Case management referrals received Jan 2018-Jan 2021

4.3.2.2 Types of benefits referred for case management from January 2018 to January 2021

Table 4.4 below highlights that ICB was the highest claim type referred for case management, even for those with other benefits that claimants were claiming based on mental health conditions. Please see Table 4.4 below:

Table 4.4 Top benefit referred for case management Jan 2018-Jan 2021

Year Referred for case management	Claim type – ICB only (%)	Claim type – ICB with other benefits (%)	Combined total (%)
2018	65.98%	12.37%	78.35%*
2019	37.93%	72.4%	110.3%**
2020	33.33%	37.88%	71.21%*
2021	73%	0%	73%

Income Continuation Benefits were the majority of the claim types referred for case management from January 2018 to January 2021.

This variable refers to the diagnoses of the claimants that were referred for case management. Note that there were various diagnoses across the claimants, and the results provide the top four conditions were referred to during this period. The diagnoses were thus grouped and classified according to the ICD10 codes, and the standard classification noted for this study was the below:

Table 4.5 Conditions / Diagnoses of claimants referred for case management

Diagnosis classification	Diagnoses	Overall Percentage
F30-F39 Mood (affective) disorders	Depression Major Depressive Disorder Bipolar Mood Disorder	78%
F01-F09 Mental disorders due to known physiological conditions	Resulting from conditions such as: Musculoskeletal conditions Multiple injuries Fibromyalgia Other combinations of medical conditions	11%
F40-F48 Anxiety, dissociative, stress-related, somatoform, and other nonpsychotic mental disorder	Anxiety disorders Agoraphobia Panic Attacks Post-Traumatic Stress Disorder	8%

Diagnosis classification	Diagnoses	Overall Percentage
F20-F29 Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders	Schizoaffective disorder Conversion disorder	3%

The results indicate that the majority of the conditions were mainly for Mood Affective Disorders.

4.3.2.3 Reasons for Case Management Referrals January 2018 to January 2021

This variable refers to the reasons for referral; the reasons for referral were based on these metrics:

- CM intervention
- CM Opinion
- CM Opinion and intervention
- PGAP
- Proactive

Table 4.6 Overall reasons for referral (Jan 2018 – January 2021)

Reasons for Referral	2018	2019	2020	2021
CM intervention	82%	84%	35%	91%
CM Opinion	12%	-	-	9%
CM intervention & opinion	6%	-	-	-
PGAP	-	-	3%	-
Proactive	-	16%	62%	-

Table 4.6 shows the overall claimants referred for case management were mainly for case management intervention at 73% on overage of 73%. However, it is noted that in 2019 and 2020 there were more claimants identified proactively for case management.

4.3.3. Objective 3 (3rd data set): To determine the case management interventions used for successful RTW following long-term incapacity of claimants with mental health conditions.

A descriptive analysis of the third dataset will be presented. Likert scales were assigned to specific categorical variables to simplify the descriptive analysis. Presentation of these results will only focus on specific variables relevant: case management participation and type of intervention received.

4.3.3.1 Case Management Participation

This variable provides an overview of claimants' participation in case management interventions. The metrics in which this was measured were based on the following:

- Case Management terminated.
- Completed
- Did not participate
- Medically unstable
- Rehabilitation
- Returned to work
- Returned to work & relapsed
- Work Trial

Figure 4.17 below shows that the majority of the case management had an outcome of case management termination, as indicated by the proportion of 39%. An in-depth analysis was not conducted to determine how many of these claimants had returned to work and those that remaining on permanent benefits for the insurer. A small percentage of 01% is noted for a claimant that returned to work but relapsed; this could indicate of successful RTW following rehabilitation considering the 26% that had RTW.

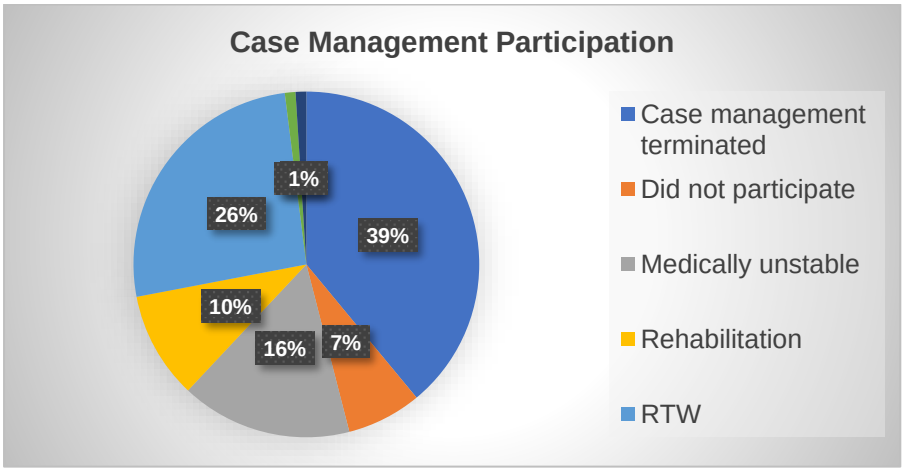


Figure 4.5: Overall participation status in case management

The claimants that did not participate attributed 7%, possibly due to a lack of insight. They could also be merged with those noted to be medically unstable, which could also impact o the overall percentage of the reasons for not participating were considered in the analysis.

4.3.3.2 Type of intervention received

This variable refers to the type of intervention received by the claimants. The type of interventions for this variable is outlined in Table 4.7 below:

Table 4.7 Type of intervention received

Variable name	**Type of intervention received**
Case management monitoring	1 (1,05%)
Cognitive Behavioural Therapy	6 (6,31%)
Dialectical Behavioural Therapy	1 (1,05%)
Neuro-cognitive rehabilitation	1 (1,05%)
PGAP	53 (55,79%)
Rehabilitation	15 (15,79%)
Vocational Rehabilitation	12 (12,63%)

Table 4.7 indicates that the majority of the type of interventions received was for PGAP, which is indicated by the proportion of 55.79 % followed by general rehabilitation (15.79%) and vocational rehabilitation (12.63%) for claimants that participated in these case management intervention programs. The high percentage for PGAP could be attributed to this intervention being utilized in addition to rehabilitation as an additional supportive intervention program to get the claimants to enhance their level of participation. These results will thus be unpacked in the discussion in chapter five.

4.3.3.3 Case management outcome

This variable refers to the outcomes of the case management interventions received for claimants that participated. Table 4.8 below outlines results of the outcomes thereof:

Table 4.8 Case management outcomes

Variable name	Case management outcome
Alternative Occupation	3 (3,3%)
Committed suicide	1 (1,1%)
Did not return to work	29 (31,87%)
Not compliant	1 (1,1%)
Ongoing case management	11 (12,09%)
Passed away - natural causes	1 (1,1%)
Policy contract terminated	2 (2,2%)
Returned to work	40 (43,96%)
Returned to work – with reasonable accommodations	1 (1,1%)
Returned to work - partially	2 (2,2%)

Results outlined in Table 4.8 show that 43.96% of claimants RTW and take note of that returned to work with reasonable accommodations at 1.1% and partially at 2.2%. The 31.87% of those that did not return to work would most probably be due to the conditions being highly incapacitating and would have qualified for permanent disability and remain on claim benefits in line with the insurer's benefit/policy criteria. Notably, the less prevalent result is that of the 1.1% of the claimant that committed suicide could be indicative of the adverse effects of the mental health condition that led to the incident of this unfortunate eventuality. Interestingly only 3.3% had returned to an alternative occupation, most probably due to not meeting the inherent requirements of the nominated occupation for which they were initially insured due to the incapacitating effects of the condition in occupational functioning.

4.3.3.4 Claimants classified under permanent disability

This variable investigated whether claimants had a permanent disability or not. The results indicate that most of the claimants, accounting for 57%, did not meet the permanent disability status. A total of 36% were classified as permanently disabled, and the latter 6% were those where disability status could not be confirmed and could have just started with case management intervention. Figure 4.18 below provides a graphical representation of these results:

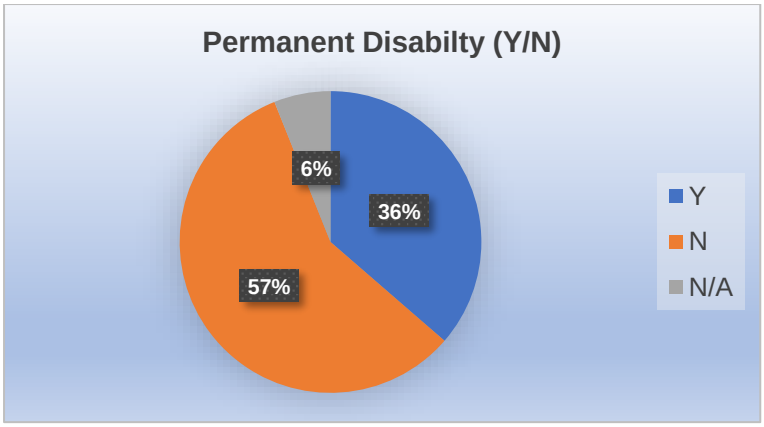


Figure 4.6: Permanent Disability Status

In addition to the above Figure 4.18, results show that of the 36% of claimants that were eventually classified under permanent disability, the majority, 57%, still required ongoing management and remained on benefits.

4.3.4. Objective 4 (3rd data set): To determine whether claimants with mental health conditions returned to work following case management interventions.

The table below provides an overview of the different relationships investigated against each other using two statistical tests. In this section, the focus will be made on the following relationships of the variables that were found to be pertinent to this study in terms of analysis of the management of claimants living with mental health conditions who are most likely to return to work following case management interventions.

Table 4.9 Variable comparison – Cramer's V vs. Chi-square

Variable Comparison	Cramer's V	Chi-square p-value
Type of Intervention Received vs. CM Outcome	0.5027	0.0005*
Age vs. CM Outcome	0.1086	0.9975
Age vs. Type of Intervention Received	0.3235	0.0385*
Gender vs. CM Outcome	0.0975	0.8856
Gender vs. Type of Intervention Received	0.1013	0.9405
Occupation Group vs. CM Outcome	0.1992	0.7631
Occupation Group vs. Type of Intervention Received	0.1552	0.9610

Variable Comparison	Cramer's V	Chi-square p-value
Diagnosis Category vs. CM Outcome	0.2054	0.2804
Diagnosis Category vs. Type of Intervention Received	0.2289	0.3633
Industry vs. CM Outcome	0.3044	0.1829
Industry vs. Type of Intervention Received	0.2454	0.7871

* p-value<0.05 indicated a significant finding

Table 4.9 above shows that the most significant relationships noted were the type of intervention received versus case management outcome with a p-value of 0.0005* and age versus type of intervention received with a p-value of 0.0385*
Odd ratios were only included on the two variables where significant relationships were noted.

4.4.4.1 Type of intervention vs Return to Work (RTW) outcome

Table 4.19 below indicates a correction for the type of intervention received versus the RTW Outcome, indicative of a relatively strong relationship between the two variables in this scenario, with Cramer's V value calculated at 0.5027.

There is a **strong positive relationship** between 'Did not participate' and 'Not applicable' noted, as this would have been a predictable outcome. A strange positive relationship between 'Rehabilitation' and 'Did not return to work' was noted with a less strong relationship with those that returned to work on a smaller scale than those that RTW. The opposite relationship is found between vocational rehabilitation and return to work, albeit with a smaller strength. The results revealed that individuals who received vocational rehabilitation, have a positive relationship with RTW. However, it noted that claimants that received Cognitive Rehabilitation had a a more substantial relationship for RTW than those that received PGAP, albeit the most miniature scale, as noted on the diagram in Figure 4.17 below. However, there seemed to be more participation in overall rehabilitation that the claimants received during the time under consideration.

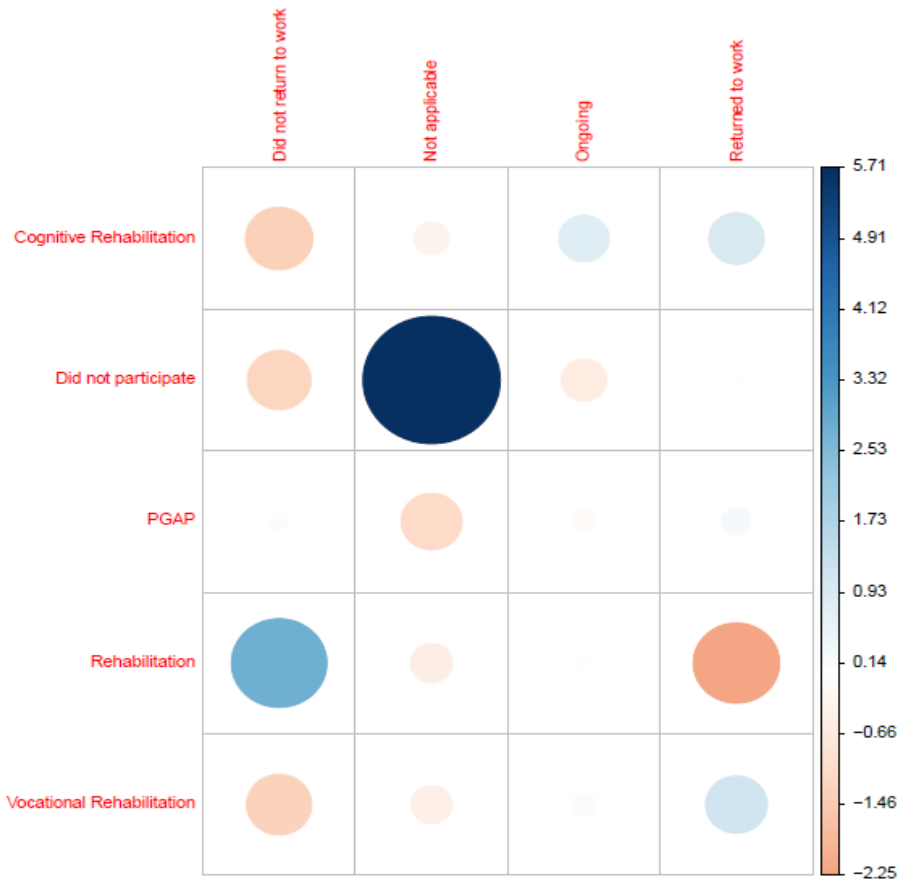


Figure 4.7. Variable comparison: Type of intervention vs. RTW outcome

Odd ratios: Claimants who received cognitive rehabilitation are 6.556 times more likely than their combined counterparts to have an RTW CM outcome and 3.143 times more likely than those who did not receive cognitive rehabilitation from having an ongoing CM outcome. Claimants who did not participate in the intervention are 11.25 times more likely than their combined counterparts to have a not applicable CM outcome and less likely than those who did participate to have returned to work as a CM outcome. Strangely claimants that undergo rehabilitation are 10.2 times more likely than other recipients to not return to work as a CM outcome but are equally as likely to have an ongoing CM outcome as their non-rehabilitation counterparts. This outcome could be attributed to claimants that could have received late intervention for rehabilitation by the time the insurer received their claim and case management involvement at a later stage. Notably, claimants who received vocational rehabilitation are more likely than the other claimants to return to work and equally likely as other interventions to have an ongoing CM outcome. Further, they are 2.333 times more likely to return to work and 7.909 times more likely to return to work partially compared to those who did not receive vocal rehabilitation.

4.4.4.2 Diagnosis vs. Case Management Outcome

In this variable, a comparison of the diagnostic categories and the CM outcome was made. The diagnoses were grouped according to the ICD10 categories:

- F01-F09 Mental disorders due to known physiological conditions
- F30-F39 Mood (affective) disorders
- F40-F48 Anxiety, dissociative, stress-related, somatoform, and other nonpsychotic mental disorders
- F 30-F39 Mood (affective) disorders
- F20-F29 Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders

For this variable and considering that the expected frequencies were less than five, this was not a significant finding. Results from the Cramer's V test revealed a moderate relationship between these two groups rather than a strong one, somewhat fitting with these results.

4.4.4.3 Age vs. RTW Outcome

For this variable comparison, various age groups and the type of intervention received by the claimants were compared. The ages are numeric and are thus not categorical and were therefore categorized in age ranges together and then examined. The age groups range created included:

- 25 - 34
- 35 - 44
- 45 - 54
- 55+

Figure 4.20 below illustrates the correlations between the residuals, **a strong positive relationship** is noted between 20 'Cognitive rehabilitation' and individuals aged 55 and above, with more minor negative relationships noted with the other age ranges. These results might indicate that cognitive rehabilitation may only be helpful for those older than 55, with adverse effects for those younger than 55. The outcome of the age analysis is undoubtedly an exciting discovery. A positive relationship is noted between 'PGAP' and individuals aged between 25 and 34, with an antagonistic relationship noted with individuals older than 55. A negative relationship is found between 'Rehabilitation' and individuals aged between 44 and 54, with a positive relationship between this intervention and individuals more significant than 55 years old. A small positive relationship is noted with those aged between 35 and 44. 'Vocational rehabilitation' has a positive relationship with individuals aged between 35 and 44, with a minor positive relationship with those aged between 45 and 54. Interestingly, a relatively significant negative effect between individuals aged between 25 and 34 and

those aged 55 and above. Perhaps only 'middle-aged' individuals benefit from vocational rehabilitation.

Figure 4.8 Variable comparison: Age vs. RTW Outcome

Odd ratios: Claimants in the age group 25-34 are 1.523 times more likely than any other age group to have a 'Did not return to work' outcome, 1.735 times more likely to have an ongoing outcome, and 1.556 times more likely to return to work than other age groups indicating a divided approach within the group to returning to work. It is noted that claimants in the aged 35-44 are less likely than any other age group to have a 'Did not return to work' outcome and as a; not-applicable, ongoing, and return to work outcome. However, they are 1.8 times more likely to have a 'N/A' outcome. Of note, those claimants in the category aged 54 and above are 1.591 times more likely to not return to work than other age groups, and 2.857 times more likely to have a 'not applicable' outcome. A lesser likelihood supports the former to return to work. They are also less likely to have an ongoing outcome than other age groups.

4.4.4.4 Gender vs. Case Management Outcome

Results from this variable showed a high p-value of 0.8856 for the Chi-square test, indicative that these are independent variables. This variable was not a significant finding revealing a negligible

relationship between the two variables, which could mean that the type of gender the claimants were in did not predict a positive or negative outcome for RTW following case management intervention.

4.4.4.5 Occupation Industry vs. Case Management Outcome

A comparison was made between the occupation industry groups against the case management outcome concerning RTW. The industry group was categorized in line with the ISCO categories below:

- Managers
- Professional
- Skilled Agricultural, Forestry, and Fishery Workers
- Technicians and Associate Professionals
- Clerical and Support Workers
- Services and Sales Workers
- Craft and Related Trades Workers
- Plant and Machine Operators and Assemblers
- Elementary

Results revealed a high p-value at 0.7631, indicative that these variables had an insignificant relationship. This value thus shows that there is no specific industry according to the occupation classes that would have a predictable outcome of RTW following case management interventions.

4.4 Summary of the Results

The chapter presented the study results in detail, looking at the demographics in line with the analysis of management long-term incapacity insurance claims for claimants living with mental health conditions in South Africa. Descriptive and statistical tests were used to analyze the results, which provided granular details of the profile of mental health claimants. Results provide a high-level view of the demographics for claimants with mental health conditions obtained from the first data set. Further results were analyzed in more detail from cases referred for case management and outcomes, looking at the type of interventions utilized and outcome measures from an RTW perspective. The top five conditions and top five occupational industry categories were reported upon accordingly, indicative of more detailed analysis from a case management perspective. From an intervention perspective, PGAP, Cognitive Rehabilitation, and Vocational rehabilitation were the common intervention programs utilized together with case management to facilitate RTW.

Interestingly, the results present a wide age range in outcomes for RTW looking at correlations between the variables. Significant relationships were noted for the type of intervention received versus

RTW and age versus the type of intervention received based on the p-values. These results will be discussed in more detail in the next chapter compared to with the literature review from chapter two.

CHAPTER 5: DISCUSSION

5.1. Introduction

This research aimed to retrospectively analyze case management services and outcomes of long-term incapacity insurance claims for claimants living with mental health conditions in South Africa. This chapter focuses on discussing the study's findings compared to the literature and also to get to the essence of case management of long-term claimants living with mental health conditions in South Africa within the insurance context. The discussion will be segmented against each objective and focus on specific variables presented in Chapter Four according to the data sets that were used and the results of the odd ratios.

Below are the research objectives that were outlined in the study:

1. To determine the biographical data of long-term incapacity claims for mental health claimants submitted at the company level over three years.
2. To identify the types of case management intervention programs utilized by an insurer and the return-to-work outcomes.
3. To determine the case management interventions used for successful RTW following the long-term incapacity of claimants with mental health conditions.
4. To determine which claimants living with mental health conditions are most likely to return to work following case management interventions.

The discussion will therefore be done in detail against each research objective looking at the specific and relevant variable around which the discussion point is centered in line with the overall aim of the study.

Table 4.1 in Chapter Four illustrates the structure in which the results of the study were presented. In this chapter, the results are therefore discussed following the same structure / format in line with the study's objectives.

5.2 Discussion of the Results

5.2.1 Objective 1: To determine the biographical data of long-term incapacity claims for mental health claimants submitted at the company level over three years (January 2018 to January 2021)

5.2.1.1 Claim type

The results indicate that the overall data's claim type comprised capital disability benefits and income continuation benefits. The total population of claims logged from January 2018 to January 2021 accounted for 716 claims, of which 408 accounted for Capital Disability benefits (CapDis = 57%), and the latter 308 claims were for Income Continuation Benefits (ICB = 43%). These results indicate that more CapDis claims were lodged during this time compared than ICB claims for claimants with mental health conditions within the insurance industry. The overall disease burden that mental health has globally and in a South African context for claimants in insurance has been reflected in the results. The World Health Organization (WHO, 2020) indicated mental health condition affects at least one in four people. In a South African context, it was noted that the disease burden has a significant impact economically and that high social costs are associated with the disease (De Wee et al., 2021). Looking at the number of claims received during the period under consideration and considering that the majority of the claims logged were for disability benefits, this is in line with what has been reported on by the literature.

Additionally, the WHO reported that about 15% of the global population currently experiences disability (WHO, 2021). This observation was further recognized within the insurance industry, which created room for more product enhancements to cater for income replacement types of products considering the economic impact of the disease burden (HannoverRe, 2017). HannoverRe (2017) reported that 7% accounted for disability claims for claimants with mental health conditions. The Association of Savings and Investment South Africa (ASISA) reported that an average of 30% of all disability claims are due to mental health conditions within the South African insurance industry (Van Der Walt et al.,2017). In this study, a higher percentage (27% higher) of disability claims for mental health conditions compared to the 30% noted in 2017, indicates the impact of the disease burden in the insurance industry. However, this percentage could be challenged and may change because it is based on a smaller sample of data compared to the entire insurance industry.

5.2.1.2 Conditions

A wide range of mental health conditions was noted, which were grouped according to the ICD10 codes and then categorized as follows:

- F 30-F39 Mood (affective) disorders
- F01-F09 Mental disorders due to known physiological conditions
- F20-F29 Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders
- F40-F48 Anxiety, dissociative, stress-related, somatoform, and other nonpsychotic mental disorders.

Results reveal that most claimants lodged claims for Major Depressive Disorder. Research showed a prevalence of 21% mental disorders which included conditions such as Depression (first one listed), Anxiety, Post-Traumatic Stress Disorder, Bipolar Disorder, and Schizophrenia (Charlson et al., 2019). The World Health Organization (2020) predicted that by 2030 Depression would be the leading cause of disease burden globally. The World Health Organization (2021) further reported that disability results from individuals with a health condition, such as Depression, with personal and environmental factors including negative attitudes, inaccessible transportation, and public buildings, and limited social interactions. It is thus noted that Depression seems to be a significant condition of concern, and Anxiety disorders follow this up, and often those suffering from Depression are more likely also to have some anxiety symptoms associated with the overall condition. The impact of COVID-19 on mental health can also not be taken for granted due to the anxiety symptoms the pandemic triggered. The South Africa Depression and Anxiety Group (SADAG) reported that COVID-19 impacted all aspects of mental health, those living with a mental health issue before the pandemic, as well as many more people across the globe experiencing issues because of the stressors of COVID-19 leading to the experts around the world saying that the mental health impact is now the second pandemic to come out of COVID19. The World Health Organization
(2020) also envisaged that this global pandemic would trigger health issues due to the mindset from “living” to “survival”, which is in line with what SADAG also raised. Arguably, the anticipation of an increased mental health crisis as a result of the impact of COVID-19 is yet to be established from an overall statistical perspective in the South African context (public and private sectors) and globally as well.

The South Africa Depression and Anxiety Group (2022) also reported that the state of mental healthcare in South Africa was in crisis prior to the COVID-19 pandemic and that there was a need to ensure that mental health is prioritized across all sectors, provinces, and ages, to help the growing demand for Mental Health Services says. It is further noted that SAGAG also raised concern on its website that there still needed to be a new draft of the Mental Health Policy and Strategic Framework

which expired in 2020. SADAG's need leads to the question of whether mental health is not being prioritized at national level. There seems to be no clear collaboration between the public and private sectors in combatting this disease burden, and both entities are working in silos that might not reach society at all socio-economic levels in the proactive management of this disease burden. The data noted in the insurance sector could only represent a particular economic class and not an overall picture of the society regarding the different mental health conditions. The state of Mental Health in South Africa has been under the spotlight for many years, highlighting the lack of resources, facilities, human resources, and community mental health. While so much still needs to happen to improve mental healthcare and access in the country, this is noted in the results of this study.

5.2.1.3 Age

The results show an average next age of 44 years old for claims received during the period this study focused. This variable comprised the of age 24 as the youngest, and the maximum age is 69. This age is a rather exciting discovery concerning the youngest age suffering from a mental health condition = in insurance claims. It would be interesting to know if this claimant's condition started off during their teenage years or not for them to have reached a point of claiming for a mental health condition at such a young age still. The literature revealed that in a study conducted on sub-Saharan adolescents, was estimated that at least 10%-20% of children and adolescents experience mental health problems worldwide (Jörns-Presentati et al., 2021). Some of the contributing factors in this study included struggles with conflict management, and psycho-social adjustments for family support, including being accepted in the community.

While it is noted in the study that the youngest claimant was 24 years old of age, the researcher is of the view that adolescence is a critical phase of any child's development, and the struggles of developing one's identity and overcoming the struggles of peer pressure could have adverse effects on an adolescence's mental health. Hence, as any life-changing event can, self-discovery is also one of them. This could then continue to the young adult age of 24 when the condition is picked up and diagnosed. The average age noted is not surprising as this is a peak of adulthood with many life experiences that could easily weigh individuals down, looking at personal challenges, pressures for work, family and financial responsibilities, and so forth. Work-related mental stress was noted to be the most common cause of workplace compensation claims (Brijnath, Bianca, Mazza, Danielle, Singh, Nabita, Kosny, Agnieszka, Ruseckaite, Rasa, Collie, Alex, 2014). Brijnath (2014) further explained that mental health sequelae seemed to develop as a secondary issue in the recovery process of other medical conditions hence the results reveal an average age of 44 years old as this is the age group that is vulnerable to developing not only mental conditions; but may have faced physical conditions that impacted on the overall mental well-being. Interestingly, in a study conducted in a South African

context to determine the burden of common mental disorders in a South African workplace setting, the results revealed a mean age of 34.2 years (20-60 years), with more than 35% reporting two or more common mental health disorders (Van Wijk CH, Martin JH, Meintjes WAJ, 2021). These findings are also in line with the results of this study in terms of the age range, although the average age noted in the results of this study was 44 years old.

5.2.1.4 Gender

The results show that most claimants with mental health conditions comprised more females than males. The females accounted for 54.75% and 45.25%, were males. Statistics from HannoverRe (2017) revealed that 18% of mental health claimants at the time were predominantly female accounting for 18% and only 4% of males for disability lump sum pay-outs. However, it is relevant to note that this is based on available data that the reinsurer based their analysis on and on the current study with what the data that was made available for conducting this study. This representation could change should a more significant sample be used with a broader range of insurance products. The literature review done does not seem to have more sources supporting the outcome concerning to the gender most affected by mental health conditions.

5.2.1.5 Occupation

Results reveal that managerial positions were the top occupations in which mental health conditions were noted. In this study, the managerial occupations included business owners and high-ranking managerial positions in business and corporate environments. These jobs require high executive functioning and working under tremendous deadlines and pressure. These occupations are also claimants who are professionals or have attained a professional qualification, and this justifies the results showing that the professionals were second on the list. The latter three occupations also work under much pressure, and stringent deadlines generally stressful due to the cognitive demands. However, not much literature supports these findings, and this provides an opportunity to conduct more research to determine which occupations or industries are most likely to impact their mental health conditions due to environmental exposures and work demands. Interestingly, the literature reports that work-related mental stress was noted to be the most common cause of workplace compensation claims in general (Brijnath et al., 2014).

5.2.2 Objective 2: To identify the types of benefits and conditions referred for case management and reasons for referral to case management.

5.2.2.1 Overall referrals received from January 2028 to January 2021

Results indicated that that most of the claims received during this period were mainly for Income Continuation Benefits for case management referrals averaging 53%. These benefits are different from the overall claims logged during this period which indicated that more capital disability claims were logged during this period compared to ICBs. However, this could be attributed to ongoing need to meet financial obligations when claimants are not able to work due to mental health conditions, and secondly, that the criteria to determine permanency for these mental health conditions is stringent. Treatment takes time for claimants to eventually be classified under permanency as a defined criterion in insurance. This observation is supported by Hannover Re's (2016) view in terms of the evolution of insurance products whereby a need for more income replacement products was seen that did not only cover own occupation but also alternative occupations to meet claimants' everyday financial needs. The everyday financial needs are evident in the referrals received for case management during the period under consideration, which also helps to monitor claim period and duration management in claims for claimants with mental health conditions.

5.2.2.2 Conditions

Results show that 78% contributed to Mood (affective) Disorders and psychotic disorders being minor conditions referred, contributing to 3% during this period under consideration. This finding is supported by literature in Chapter Two, where Mc Nally (2022) indicated that depression, bipolar disorder, developmental disorder, personality disorder, anxiety disorder, and adjustment disorder) have adverse effects on workers; hence the study results show that most cases referred during this period were more for income replacement benefits more than those for lumpsum disability benefits. In Chapter One in the introduction, it is mentioned that the case management criteria for referrals for mental health conditions included the following conditions:

- Major Depressive Disorders
- Anxiety Disorders
- Bipolar Mood Disorders
- Schizophrenia
- Post-Traumatic Stress Disorder

These conditions do not only align with the overall top 5 conditions for the claims that were logged during the period under consideration. The conditions also align with the outcome of the study, where

it is noted that the majority were for depressive disorders, followed by anxiety disorders and psychotic disorders being the least. The overall claims logged showed the top diagnosis of claims received Major depressive disorder accounting for 64%, and those referred for case management accounted for 78% for Mood (affective) Disorders. The World Health Organization (2022) now estimates a more than 25% rise in the prevalence of both anxiety and stress disorders during the first year of the pandemic, and Brijnath (2014) on the other hand also highlighted that long-term exposure to mental stress led to mental health conditions such as depression, Post-Traumatic Stress Disorder (PTSD) and anxiety, as well as physical conditions. Interestingly, the study shows a higher percentage of claimants with other physical conditions where mental health conditions were secondary to the primary medical conditions. Mental illness is also noted to have developed as a secondary issue in the recovery process of other medical conditions (Brijnath et al., 2014). The referral criteria could influence the results of the study limitation here. However, the outcome is also supported by literature and correlates with the overall claims received by the insurer during this period.

5.2.2.3 Reasons for Referrals

Case management intervention was noted to be the main reason for referral more than of an opinion for the years 2018-2020, contrary to what was noted in 2021. The limitation for the outcome of the reasons for referral in 2021 could be limited or attributed to the fact that the data was available only for one month, and most cases were identified proactively by the case managers. Notably, it could also indicate that the referral process is being utilized effectively and referring cases that require case management intervention to assist with early intervention, ongoing monitoring of long-term incapacity claimants, and facilitation of Return to Work (RTW) as part of duration management. Case management has been noted to provide additional support to claimants with long-term incapacity (Hankins et al., 2015). It has also proven to play a vital role in facilitating RTW. The reasons for referral to case management are also supported by ASISA (Van Der Walt et al.,2017), and RTW reported a rate of about 6.8% from insurer representatives (Peters et al., 2017).

5.2.3 Objective 3: To determine the case management interventions used for successful RTW following long-term incapacity of claimants with mental health conditions.

5.2.3.1 Case management

Occupational Therapists have, over time, played a pivotal role as the treatment and rehabilitation strategy is mainly on the strengths of individuals rather than their problems and contributes to their recuperation period (McKay, 2014). McKay (2014) further highlights that occupational therapists are

taking on more of an influencing role internally within organizations in this study, such as case management, and externally in the current and broader mental health management. Results of the study show that the main reasons for referrals were for case management intervention. The case management intervention referred here involves monitoring long-term claimants with mental conditions. This intervention included liaising with claimants, treating specialists, and rehabilitation practitioners support claimants, monitor compliance and identify specific/suitable programs that claimants could be enrolled in to facilitate RTW. The monitoring and involvement with specific interventions highlight the critical role that case managers play in the insurance industry in managing long-term incapacity claimants with mental health conditions. Literature also highlighted the role occupational therapists appointed as case managers play within the insurance industry as a specialized area (Jörns-Presentati et al., 2021). This critical role is supported by the American Occupational Therapy Association (AOTA, 2020), Case Management Society of America (CMSA, 2016) and a study conducted in 2018 by Govender et al. While in the South African context and looking at the evolution of occupational therapy roles, there is a substantial interest in being challenged to adopt a case management role, it is evident in the literature shared that role occupational therapists play as case managers in the insurance industry and that the role and scope need to be acknowledged and defined as well as their contributions to the field at large within this scope of practice.

While it is noted that the participation rate was indicated by a proportion of 38%, the challenging factors around case management must be addressed considering the complexity of the conditions and subjective nature thereof. Literature noted by Khorshidi (2019) and Brijnath (2014) revealed that outcomes of case management interventions, including RTW, are influenced by barriers and stigma associated with mental health disorders in the workplace. Some of those barriers include slow or delayed referral to the insurers, poor communication between stakeholders managing the client, red tape, stigma, etc. However, this study did not explore these as the research focused on the overall analysis of case management for long-term incapacity claimants with mental health conditions. The analysis could be an area to explore in future studies for the insurance industry and will be included in the recommendations in the next chapter.

5.2.3.2 Intervention Programs Utilized

Results show that most of claimants participated in PGAP, accounting for 49%. Cognitive Behavioural Therapy accounting for 6.31%, Vocational Rehab at 12.63% and General Rehabilitation accounted for 15.79%. The literature revealed that CBT was an effective tool for managing stressful life situations (Mayo Clinic, 2019). Pain SA (2018) defines PGAP as an Evidence-Based Treatment program for reducing disability associated with pain, depression, cancer, and other chronic health conditions.

Therefore, both PGAP and CBT were noted to be very effective psychological approaches to managing of mental health conditions. These intervention programs is noted in the study's results and the outcome thereof in terms of RTW will be discussed further in the next section of this chapter. However, the limitation of this study could be that PGAP was also a pilot study that the insurer embarked on in 2016. Therefore, more referrals were made to this program to measure the success of RTW specifically for claimants with mental health conditions apart from pain which the program was initially designed. The Reinsurance Group of America (RGA, 2022) also shared insights on the value of CBT as an effective alternative and have thus explored the value of Internet-Based CBT (ICBT) for easy access since the pandemic and to allow a stigma-free environment. This trial is being done in Canada but has yet to explore within the South African context.

While the results strongly relate to PGAP as the most utilized program, literature has also revealed the value of rehabilitation and vocational rehabilitation in driving successful RTW. In Chapter One, the South African Position Paper on Vocational Rehabilitation outlines the significant role that occupational therapists play in the holistic management of care in both public and private sectors, particularly in vocational rehabilitation (Van Biljon et al., 2020). Vocational rehabilitation was noted to be one of the social inclusion support services being offered within sheltered and supported employment (JCPMH, 2016).

5.2.4. Objective 4: To determine whether claimants with mental health conditions returned to work following case management interventions.

Relationships and the impact of the variables were investigated in line with this objective and for discussion in this section. The results revealed that Cramer's V test was not the most appropriate test to investigate the relationships. However, the Chi-Squared and Fisher's Exact Tests were the most appropriate, and correlations were noted from the graphical representation and the strength of the relationships on the Fisher's Exact Test.

*5.2.4.1 Type of Intervention vs. Return to Work (RTW) Outcome**

A solid relationship with RTW was noted with PGAP, followed by Vocational Rehabilitation. Although PGAP seemed to be the most robust relationship with RTW, results revealed a strong relationship with not returning to work, followed by general rehabilitation. Contrary to the results of Vocational Rehabilitation, the relationship with RTW was more potent than not returning to work. This relationship could indicate of the value of vocational rehabilitation and its success rate tin general as opposed to PGAP on its own, which has only recently been as a part of the RTW interventions utilized for mental health conditions. Notably, results show that CBT was the least associated with RTW. However, in

the literature review in Chapter Two it was noted to be one of the most effective interventions for managing mental health conditions. It is thus relevant to mention that the notion of RTW for long-term incapacity claimants with mental health conditions is a complex narrative considering some of the barriers experienced not only within the insurance industry but also in the clinical field even before the claimants notify the insurer of their intension to claim under mental health benefits. There could be a lag in late claim notification. As such, when the insurer intervenes and attempts participation in specific RTW programs, it may be too late due to the advancement of the condition, chronicity thereof and claimants at some point having adopted a sick role. Literature has also reported some of the perceptions that could also be noted as barriers to RTW that have been identified within the South African context, which include ruminating about RTW, fear about RTW, and social pressures (Lebohang, Saonatse, Patricia Ann De, Witt, Matty van, Niekerk, 2019). These perceptions would inherently impact the claimants' participation by the time the insurers get involved if not managed earlier in their treatment regime. It is also worth mentioning that RTW is not only impacted by clinical management, but the psycho-social factors also play a significant role in the claimants' ability to RTW considering that at least 10% of South Africans suffer from some form of Depression (Group, 2020). The South African Depression and Anxiety Society report contributing factors linked with workplace stressors such as rising job insecurity, artificial intelligence, and high job demands which are worsened by the known stigma. It was thus interesting to note the strong relationship between PGAP and RTW, which has been noted in the literature to be successful in RTW for claimants with long-term mental health conditions (Pain SA, 2018). Cognitive Behavioural Therapy, on the other hand, was reported to be an effective tool to help anyone to help manage and cope with stressful life circumstances (Clinic, 2019), which is noted in the study.

Regarding Vocational Rehabilitation, results from Khorshidi's study revealed that vocational rehabilitation counselling initiatives within the insurance context to be minimal. However, contrary to this, we note in the results of this study that there was a higher likelihood for claimants to RTW than not at all as opposed to PGAP. These results indicate the importance of early intervention, multi-disciplinary intervention, psycho-social factors, and contextual influencing factors that play a role in determining successful RTW within the insurance industry. Saonatse and associates also support the notion of a multi-disciplinary and client-centered model, which is more central to occupational therapy's philosophy in managing mental health conditions. The Vocational Rehabilitation aspect was a notable significant finding in this study.

5.2.4.2 Diagnosis vs. RTW Outcome

Returning to work in good health and fully functional is detrimental, particularly to claimants with Major Depressive Disorders (Saonatse et al., 2019). However, RTW for claimants with depressive disorders

may be influenced by the claimants' intrinsic motivation, support from family and colleagues, work demands, and workplace policies that support long-term incapacity. RTW for depression and anxiety is a significant disease burden in developed countries (Prang, Khic-Houy, Bohensky, Megan, Smith, Peter, Collie, Alex, 2016). The study conducted by Prang and associates (2016) confirmed that the majority of the mental health claims were for stress related illness (82.5%), followed by PTSD/anxiety (14.5%) and mental disorder (3.0%).

It is noted in the results of this study that claimants presenting with affective mood disorders (F01-F09) were more like to RTW following receiving PGAP intervention. The likelihood of RTW following Vocational Rehabilitation and General Rehabilitation came second with CBT being the least. Interestingly, a mild relationship with RTW following PGAP intervention was noted for claimants with Schizoaffective-disorders (F20-F29) compared to those with anxiety disorders (F30-F39). Literature reveals that the lifetime prevalence of depressive disorders is estimated at 18.3% of the South African population (Saonatse et al., 2019) and this prevalence is also noted in the results of this study. In terms of RTW, an out-patient RTW program was noted to be the most significant (Saonatse et al., 2019), and this is the time the insurance companies usually receive at the time and claimants are enrolled in for suitable RTW programs in line with their individual needs. This opinion is notwithstanding the barriers and perceptions associated with RTW in personal and occupational aspects of their lives. The theoretical framework in chis this study was conducted is that of a Person, Environment, and Occupational (PEO), which thus corroborates with what has been noted in the literature in terms of managing these mental health conditions and RTW outcomes. This theoretical framework also supports the client-centered model noted in Saonatse's study. There seems to be much lesser relationship for those suffering from anxiety disorders which could possibly be associated with the impact of the disorders on the claimants' functional ability. The World Health Organization (WHO, 2022) also estimated a 25% rise in prevalence of anxiety and stress disorders due to the pandemic which undoubtedly increased anxiety levels for many across the globe. The literature revealed that the pandemic's changes impacted job security, the inability to RTW, and other economic factors (Usher, Kim, Durkin, Joanne, Bhullar, Navjot, 2020). It is also relevant to note that mental health issues existed prior to the pandemic increasing the disease burden, particularly for stress, and anxiety (WHO, 2022). An increased risk of burnout, psychological distress, emotional exhaustion, anxiety, and stress was noted because of the Covid-19 pandemic (Gabriele, Giorgi, Luigi Isaia, Lecca, Federico, Alessio, Georgia Libera, Finstad, Giorgia, Bondanini, Lucrezia Ginevra, Lulli, Giulio, Arcangeli, 2020). Based on this literature, the level of anxiety and impact on functional ability and overall ability to function in a work environment would significantly reduce when not managed in time, thus reducing the probability of successful RTW. However, there seems to be no congruency with RTW results for those with schizoaffective disorders which are usually associated with adverse

thought disturbances that generally make it impossible to RTW. Be that as it may, it has been noted in the insurance industry that most of the diagnoses under this category are those with conversion disorders, and the number of those in a claim is far less looking at the raw data, which makes this finding inadmissible.

*5.2.4.2 Age vs. RTW Outcome**

Results revealed a weak and insignificant relationship between the age group and RTW. However, it is noted in these results that those between ages 35-44 years and 45-54 years were the most common ages noted for claimants that RTW. It is also noted that the overall average age of the claimants was 44 years, usually the peak age for career advancement. Claimants in higher executive roles that are stressful require higher psychological and cognitive demands in those occupations. The average working age in South Africa is 26 years old, which coincides with the onset of an individual's working life (Saonatse et al., 2019). In another study by Prang and associates (2016), the average age of claimants was 44 years (IQR: 36–51), and 56.0% were female, which is approximate to what is seen in the current results. These findings were from an Australian context.

5.2.4.3 Gender vs. RTW Outcome

While the results revealed that more female claimants (n-54.75%) were seen in the variables of this study, in terms of the relationships with RTW, no residual analysis was performed as these are independent variables. However, it is noted from Prang's study (2016) that 56.0 % of claimants for compensation were females. Saonatse's study also showed more responses from females than males. However, if this was more of a qualitative study compared to the current study and therefore participation rate could have been influenced by those that were more willing to participate than working with historical data in this study that was readily available.

5.2.4.4 Occupation vs. RTW Outcome

In Chapter Two, the literature revealed the impact of absenteeism and overall economic impact due to of being off work due to mental health conditions (Govender et al., 2018). According to Prang (2016), workers with mental health conditions take much time away from work, reducing productivity and the prevalence of disability. Therefore, the employers' role in the working environment is vital in assisting with suitable RTW programs, management of employees with mental health programs, through suitable employee wellness support programs and overall collaboration with relevant stakeholders. The economic impact in South Africa, considering that most incapacity leave policies only allow at least 75% of monthly salary out of employee benefits and only once employees have

exhausted their 36-day sick leave cycle (Saonatse et al., 2019). The insurance industry helps cover this gap so that claimants with mental health conditions can meet their financial needs during their absence from work, notwithstanding access to primary health care from both the public and private sectors. These sectors play a vital role in vocational rehabilitation, assisting workers with suitable RTW programs and contributing to the holistic management of mental health conditions (Hester van Biljon; Simon Rabothata; P A de Witt, 2020).

Relationships between the types of occupations and RTW, in this study revealed that occupation groups and RTW were independent. Therefore, there was no link regarding specific occupations that were likely to RTW although the services and sales workers showed a better outcome. In Prang's study (2016), their results showed that evaluating RTW outcomes for workers with mental health conditions revealed that certain industries belonging to smaller organizations were associated with a delayed RTW which was attributed to less information on disability management, less access to health care for and lower rates of work reintegration. Of note, those with previous claims for mental health conditions took longer to RTW. This study noted that most claimants were in senior management positions which are commonly exposed to high stress levels. This occupation category which has also been supported by literature and mostly (considering the insurance sector) are likely self-employed. However, the limitation of this study is that the nature of the occupations needed to be measured to determine the percentage of claimants that were in fact, self-employed.

5.3 Discussion Summary

The overall study indicates that long-term claims for mental health conditions received from January 2020 until January 2021 were mainly for Capital Disability claims (57%), and the latter 44% were for Income Continuation Benefits. The gender composition of these claimants was mainly females accounting for 54.75%, with the average age being 44. The age range was in line with the literature regarding of the disease burden and studies conduction globally and within the insurance industry.

Multiple occupations were noted and thus grouped according to the ISCO, and the top five occupation class for long-term claimants with mental conditions were noted to be Managers (n=28%), Professional (n=26%), Professional (n=26%), Technicians and Associates Professionals (n=14%), Services and Sales Workers (n=13%), and Clerical and Support Workers (n=11%). While this was not a significant finding for this study, it provides some context indicative of the type of occupations at risk for mental health conditions particularly those with high-stress levels requiring executive cognitive functioning which is also noted in the literature. These occupation categories provide employers with intervention strategies in place particularly from a recruitment perspective to apprehend support structures, for individuals in such positions. Recommendations will be included in

the next chapter as part of the conclusion and recommendations regarding proactive management of mental health in the workplace.

Regarding to the actual mental conditions, the study revealed that 78% of long-term incapacity claimants presented with depressive disorders and schizoaffective disorders, being the least at 03%, which is also supported by the literature. The rising numbers on anxiety disorders have been reported in the literature, which accounted for 8% in this study. Additionally, 11% (which came 2nd in the top 5 conditions) were those diagnosed with mental health conditions as a secondary condition from a primary medical condition. This study did not explore the primary medical conditions, as the primary focus is on mental health. Referenced literature regarding mental health conditions as a secondary diagnosis has been noted to delay recovery.

Multi-disciplinary involvement in managing mental health condition was noted to play a vital role including the role, including occupational therapy and case management to help facilitate RTW by enrolling claimants I suitable RTW programs. Approximately 49% participation rate was noted for PGAP, which is also reported also to have been a limitation considering the internal pilot study that the insurer conducted to measure the success of PGAP in managing of mental health conditions. However, vocational rehabilitation and CBT are efficient therapeutic interventions with successful RTW outcomes. Vocational rehabilitation interestingly, has fewer changes of claimants not returning to work compared to PGAP.

Statistical testing was conducted to explore relationships between the variables and the significant findings were on the type of intervention received vs RTW and age vs RTW. The findings revealed positive relationship for claimants who received PGAP and vocational rehabilitation with Cramer's V Test = 0.5027 and p-value = 0.0005*. Vocational rehabilitation revealed Cramer's V Test = 0.3235 and p-value = 0.0385*. An overall positive relationship is noted between PGAP, and individuals aged between 25 and 34, with an antagonistic relationship noted with individuals older than 55. A small positive relationship is noted with those aged between 35 and 44. Literature also supported the age factor indicating that the average age of starting work in South Africa is 26 years old and 44, usually the peak of one's career. These findings directly link to the age groups noted for RTW and are confirmed in this study.

Furthermore, significant findings of the odd ratios indicated that the claimants underwent different rehabilitation interventions, with cognitive rehabilitation at 6.556 times and PGAP at 2.1 times. Interestingly, age groups of 45-54 years were less likely to RTW at 1.513 times, which is also noted in the literature. The outcome of the odd ratios could be attributed to the exposure to more stressful life situations, career peaks, more family responsibilities, and possible stigma associated with RTW

due to mental health conditions. Recommendations regarding these predictions will be addressed in the concluding chapter with applicable recommendations.

CHAPTER 6: CONCLUSION

6.1. Introduction

Chapter Six is the concluding chapter of this study, corroborating the research findings in line with the literature. In this Chapter, the conclusion will be done in concerning the main study objectives incorporating the main results of the research. The study limitations will be highlighted, and the significance of this study will be discussed, looking at the various factors the study was aimed at as indicated in the first chapter. To conclude this Chapter the researcher also provides some recommendations in line with the scope of practice, case management relevance in the insurance industry, and suitable and more innovative intervention programs that could be explored.

6.2 Conclusion of the results

This research aimed to conduct a retrospective analysis of case management services and outcomes of long-term incapacity insurance claims for claimants living with mental health conditions in South Africa. The conclusion will thus be done in lieu of the study objectives.

6.2.1 To determine the biographical data of long-term incapacity claims for mental health claimants submitted at the company level over three years.

The overall high-level biographical data for this objective revealed that more disability claims (57%) were received compared to income continuation benefit (43%) type of claims over the three years period under consideration. Literature by the World Health Organisation (2020) also corroborates these results from a disease burden perspective and the impact of disability. These results are also equally supported by De Wee & associates (2021), looking at the overall economic impact; hence this is noted in the results considering the claims received for mental health-related conditions. In terms of the specific conditions, Major Depressive Disorder was first on the list of the top four conditions, which comprised Mood (affective) disorders (F30-F39), Mental Disorders due to unknown physiological conditions (F01-F09), Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorder (F40-F48), and Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders (F20-F29) in line with the ICD10 code classification. Supporting literature by the World Health Organisation (2020), South Africa Depression and Anxiety Group (SADAG, 2022) as well as Charlson & Associates (2019) all report Major Depression being the most prevalent condition followed by an anxiety disorder. The impact of the Covid-19 pandemic was also considered; even though the disease burden was there prior to the pandemic, it is noted to have elicited a lot of anxiety-related symptoms and the eventuality of the diagnosis as noted by SADAG and WHO. This diagnosis was a significant finding considering the availability of supporting literature regarding this disease burden globally and within the South African context collectively. Age is also one of the

variables analyzed in the demographics, and results revealed an average age of 44 years old for overall claims received.

Regarding the literature, Brijnath & associates (2014) reported the same age as that being the peak age looking at personal challenges and career enhancement period, which is usually a stressful phase in adult life. However, contrary to Brijnath's findings, it is noted that in a South African context, a mean age of 34 years was commonly noted with mental health disorders (Van Wijk et al., 2021). The female gender was noted to be higher than that of males by a difference of 9.5%. Although there was not much literature regarding gender analysis, one of the insurance articles by HannoverRe (2017) reported more females than males.

6.2.2 To identify the types of benefits and conditions referred for case management and reasons for referral to case management.

Study results show that most of the benefit type for claimants referred for case management was for Income Continuation Benefits averaging 53% and, overall, 78.35% combined with other benefits. This percentage is noted as a significant finding where the literature indicates most of mental health conditions leading to disability. Referrals for case management provided a slightly different picture than the overall claimants that registered claims for mental health conditions. These results indicate the evolution of insurance products from just only disability also focusing on the economic impact from a recurrent income perspective to meet the claimants' daily financial needs as noted in Hannover Re's statistics (2016). The results also indicate that 78% of the conditions referred were for Mood (affective) n the first place. These results tie in with the analysis of the overall claimants lodged for mental health conditions in the first data set, and the literature also supports this finding, as noted by WHO (2020), Mc Nally (2022), and Brijnath (2014). Finally, the reasons for referral for case management was mainly for intervention so that claimants could be enrolled in specific rehabilitation and or return to work programs suitable for their needs as each claimant is reviewed on their merit depending on the intervention goals, functional level, as well as the type of occupation (including support). Case management has been noted as a resourceful tool for assisting with RTW by providing additional support to claimants with long-term incapacity (Hankins et al., 2015). Peters & associates (2017) share the same opinion, and Van der Walt & associates (2017) reported 6.8% RTW success with case management interventions from an insurance perspective.

6.2.3 To determine the case management interventions used for successful RTW following the long-term incapacity of claimants with mental health conditions.

The most case management interventions used were PGAP at 55.79%, General Rehabilitation at 15.79%, Vocational Rehab at 12.63% and CBT accounting for 7.36%, the lower percentage. While it

is noted that PGAP was being trailed out as a pilot for this specific insurer and hence the higher percentage, the utilization rate was quite significant in this study. Additionally, the results reveal a 3.16% difference between General Rehabilitation and Vocational rehabilitation, and Van Biljon (2020) confirmed that occupational therapists play a significant role in rehabilitation in both public and private sectors through rehabilitation for driving successful RTW. The Mayo Clinic (2019) also confirmed CBT as a valuable tool in managing stressful situations. Lastly, Pain SA (2018) relies on PGAP as an evidence-based intervention in reducing disability associated with mental health conditions is not limited to pain only.

6.2.4 To determine whether claimants with mental health conditions returned to work following case management interventions.

A positive, strong relationship was noted with general and vocational rehabilitation for RTW. While there was a high participation rate in PGAP, the associated relationship for RTW was the lowest. The odd ratios confirmed that claimants who received Cognitive rehabilitation were 6.556 times more likely to receive RTW than those who did not. Claimants who received vocational rehabilitation were noted to be more likely than others to RTW at 2.33 times and 7.909 times to work partially. The likelihood PGAP's impact on RTW is still yet to be investigated further particularly for mental health conditions. A strong positive relationship was noted between 20 'Cognitive rehabilitation' and individuals aged 55 and above, with more minor negative relationships noted with the other age ranges. 'Vocational rehabilitation' has a positive relationship with individuals aged between 35 and 44, with a minor positive relationship with those aged between 45 and 54. Saonatse et al. (2019) reported the age of 26 years in a South African context that coincides with the onset of mental health conditions but no further study regarding success factors for RTW regarding age. Contrary to the findings, Prang & associates (2016) noted an average age of 44 years (as in this study) and mostly females likely to RTW within the Australian context. Odd ratios noted that claimants aged 54 and above were 1.591 times more likely to not return to work than other age groups, as well as 2.857 times more likely to have a 'not applicable' outcome as they may at that point meet criteria for disability based on mental health conditions and thus not RTW.

In conclusion, the study reveals that more claimants with mental health conditions were for disability than income replacement benefits, with more females than males. Mood disorders are the most prevalent conditions for these claimants in more senior managerial occupations. Claimants that received case management interventions are more for income replacement benefits, with PGAP and rehabilitation being most utilized interventions seemingly effective for return to work and 36% of the claimants remaining on permanent disability benefits following case management intervention.

6.3. Study limitations and strengths

Considering that the study methodology was quantitative and only limited to one insurance company, the retrospective analysis could yield a different outlook if conducted across different insurance companies. However, while the data sample was still large and conducted over a reasonable period (three years), the outcome of the analysis is similar to studies conducted not only within the South African industry but are also compatible with studies conducted on the global scale as reported by the World Health Organization and some studies conducted in the Australian market, these have been outlined in the chapters four and five respectively.

Other limitations noted in chapter Five are attributed to the referral criteria and that most of the interventions were part of a project to determine success rate of RTW through PGAP. However, these are still supported in the literature regarding the success rate and data variables noted in the overall analysis.

The study's strength is noted in the similarity of the outcomes in terms of disease burden supported by statistics about the most prevalent diagnosis and the impact of mental health conditions on disability at large. The study results are consistent with the literature outlined throughout this dissertation and therefore provide a platform for making appropriate recommendations that will benefit the insurance industry and manage this disease burden within the South African context at large. Therefore, the recommendations made here will make a significant contribution and be disseminated in appropriate and relevant platforms accordingly.

6.4. Significance of the study

The significance of the study has been noted in different areas and indicated below in the subheadings accordingly.

6.4.1 Occupational Profession and Clinical Practice

The study's theoretical framework was based on the People, Environment, and Occupation (PEO) model (Bass et al., 2015) evident in the intervention programs utilized and the data variables considered in conducting this research.

6.4.2 The industry

The study thus provides a contextual analysis and background of the status quo of management of long-term incapacity claimants with mental health conditions in insurance and how they are managed to facilitate RTW.

6.4.3 The insurer

The benefit to the insurer is that this review provides more context to the industry in terms of the biographical data, which could also be used as a base for new business in terms of risk ratings and early interventions to help prevent short-term claims from becoming long-term complementing return to health by providing adequate support to claimants.

6.4.4 Claimants

For the claimants, it helps motivate them to participate in specified intervention programs that will help them find meaning to life, be able to contribute to personal, social, and societal roles, and contribute to economic growth in their various career perspectives.

6.4.5 Economic Impact

Economically it provides an excellent opportunity for employers as well and business owners to incorporate relevant support systems in line with employment regulations by retaining employment and contributing positively to the economy.

6.4.6 Case Managers in Insurance

In occupational therapy and case management, it provides an opportunity for subject matter experts to work together and possibly compile practical guidelines for the management of long-term incapacity claimants with mental health conditions in insurance to complement the South African Society of Psychiatry (SASOP) guidelines adapted for the Association of Savings & Investments of South Africa (ASISA).

6.4.7 Future research

For the researcher, it certainly provides an opportunity for career enhancements. The study provides future research opportunities in line with this topic, such as more in-depth studies focussing on the most prevalent occupations and diagnoses identified in analyzing the profile of mental health claimants and developing interventions targeting specific claimant profiles. These will be further discussed in the recommendations which follow.

6.5. Recommendations

Many insurers across the globe have taken the current crisis as an opportunity to partner with digital platforms, applications, virtual care companies, and other service providers to help policyholders safely and remotely manage the mental health of service users (RGA, 2021). There may be better alternative approaches that need to be considered opting out of the traditional fee-for-service mental healthcare model and utilizing a more affordable subscription approach for digital options, allowing

for unlimited visits or check-ins with therapists between visits through computer or phone in the future. In essence, the type of vocational rehabilitation intervention programs that occupational therapists who are in case of management roles in South Africa offer should generally emanate from identified vocational needs and aspirations (clinical and insurance), social structures, and contextual factors that claimants can identify with in order to participate and achieve the ultimate goal and objectives of RTW. ASISA, SASOP, CMACA, and JCPMH, as well as reinsurance companies, have also taken initiatives in exploring effective interventions for managing mental health conditions. However, limited intervention programs are noted to be effective in RTW, and so far, the literature supports PGAP and CBT to be the most effective, including ICBT.

The following recommendations are made:

6.5.1. The insurer

Early identification of potential long-term incapacity claimants through proactive initiatives would help embark on suitable rehabilitation programs sooner to increase the likelihood of returning to work and thus reduce the period in a claim. This recommendation can be made through identified case management processes, creation, and ongoing enhancement of referral criteria that insurers can implement for more effective case management engagements. Insurers should also consider self-help mental health applications as a complementary intervention over and above the rehabilitation services offered from a clinical perspective. These self-help applications have a CBT approach and need to have undergone clinical trials and publication from a rigorous perspective. The case manager working for the insurer will assist with early disability claims management and possible exploration of case management tools that could be a much more effective tool from a monitoring perspective. From a product development perspective, insurers need to consider more flexible and innovative mental health products that would incentive participation in rehabilitation programs supported financially by the insurer and also offer some incentive for claimants that can RTW partially or full time or to alternative occupations. The progression and evolution of the products over the years has been noted from disability to income replacement and therefore provides room for rehabilitation support benefits and incentives for RTW benefiting both the insurer and the claimants. Providing this support will thus assist in closing the loss of income gap as a result of absence from work on the basis of mental health-related conditions and have a positive economic impact in that phase to prepare for reintegration and healthy well-being so that claimants are eventually able to also contribute positively to the South African economy.

6.5.2. Reinsurers

Reinsurance companies are at an advantage from a life insurance perspective for the industry as they are exposed to various insurance products from different insurance companies within the South African Context and mainly on a global scale. They are equipped with a wealth of mental health data that could be analyzed critically and determine more effective ways to manage this disease burden through their research resources and from an international benchmarking perspective. They are, therefore, knowledgeable to connect the industry collaboratively and facilitate the collaboration by creating platforms for engagement, such as appointing mental health champions that can work together and share insights on their challenges and how to combat that at industry levels from a disability management perspective. They are a great resource center to support occupational therapists in case management roles managing long-term incapacity claimants with mental health conditions. Careful consideration could also be taken regarding technological support available for monitoring purposes to help improve the quality of data/statistics available for research purposes. Additionally, the forums could also assist with the following: Establishment of a committee from the MHC that will run the administrative side of these sessions, such as:

- Sourcing subject matter experts for training sessions, workshops, and presentations
- Establishing a resource hub for the industry, such as forms/questionnaires
- Collating statistics and reporting at the industry level provides an overview of the management of these cases.
- Formulation of case management recommendations
- Documentation of best practice guides through suitable training platforms
- Explore possible ways to complement the SASOP guidelines from a case management perspective.
- Consider a broader service provider list that is more hands-on and highly skilled in the management of mental health conditions to combat the disease burden at an industry level

6.5.3. Case Management

Occupational Therapists in case management roles play an essential role from an insurer's perspective; therefore, case managers need to collaborate closely with claimants' employers and their respective wellness consultants toward the same goal of assisting claimants during their absence from work. The case management activities include liaising with the multi-disciplinary team and human resource champions involved in incapacity processes and engaging in suitable RTW programs to assist with a more seamless and structured reintegration approach back into work. These claimants will require handholding from all stakeholders until they are fully reintegrated, considering the stigma associated with mental illness and combatting the chances of relapse. Case managers must keep abreast with evolving literature regarding suitable intervention programs including more technology-

enhanced programs like ICBT. Sun Life (2022) conducted a pilot study in the Canadian market regarding digital therapeutics.

6.5.4. The Association for Savings and Investment South Africa (ASISA)

ASISA provides an excellent platform for the South African insurance industry to share data, knowledge, and gaps within the sector. It is thus recommended that ASISA to create more partnerships for the South African insurance industry with the following:

- South African Mental Health Act policy writers to contribute to the Act also in alignment with what has been noted in the insurance industry from a mental health perspective.
- The involvement and contribution of SADAG and SASOP would also create more outstanding collaborative partnerships in combating the disease burden and help alleviate the management of mental health issues within the country and create opportunities for economic growth for both the private and public sectors.
- Product development initiatives to be explored and time invested at industry level regarding the impact of mental health in disability and income replacement benefits that would assist in prompting more creativity about to product development and enhancements of mental health benefits.
- Create research opportunities for health insurance workers with an appetite for conducting ongoing mental health research as a steering committee at that level. The research will provide an opportunity for more ongoing research being done based on evidence-based practices that will help in the compilation of practical guidelines, which will be monitored, reported on, and utilized at the industry level to manage disability claims resulting from mental health conditions and thus explore more proactive approaches that could be initiated to complement this. Working with subject matter experts would be crucial for reliability and validity and ensuring ethical considerations by looking at the entire value chain and stakeholders that play a critical role in managing mental health conditions from a medical, risk, and financial point of view.

6.5.5 Group Life Insurance

While this study was based on individual life insurance data, proactive management and preventative programs would benefit the group life space. This recommendation considers wellness programs offered by employers. It utilizes the data and screening tools to identify mental health problems before a formal diagnosis is made and looks at occupational risk exposures. As a result, this will help with early case management intervention through screening tools and also utilizing self-help web-based platforms available for self-monitoring and enrolling in appropriate modules that will assist with managing emotions, anxiety, and life skills empowerment in general. Long-term results will help prevent a psychiatric diagnosis.

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