

**THE RELATIONSHIP BETWEEN WORK
STRESSORS, WORK WELLNESS AND INTENTION
TO QUIT OF MANAGEMENT IN A LARGE MINING
HOUSE IN SOUTH AFRICA**

by

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"As we express our gratitude, we must never forget that the highest appreciation is not to utter words, but to live by them."

- John F Kennedy -

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DECLARATION

I, Monica Janine Smith, declare that “The Relationship between Work Stressors, Work Wellness and Intention to Quit of Management in a Large Mining House in South Africa”, is my own unaided work both in content and execution. All the resources I used in this study are cited and referred to in the reference list by means of a comprehensive referencing system. Apart from the normal guidance from my study leader/s, I have received no assistance, except as stated in the acknowledgements.

I declare that the content of this thesis has never been used before for any qualification at any tertiary institution.

I, Monica Janine Smith, declare that the language in this thesis was edited by Anne Marie Smith (Interpreter-Translator, (Brussels, Belgium)).

Monica Janine Smith

Date:

Signature

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Abstract

Background and Aim:

“Burnt out”, this term is being used more and more to describe employees in the mining industry. In the last couple of years research has shown that there has been an increase in stress related burnout in management in the mining industry. As a result more and more managers in the industry are leaving their profession within the industry, because of ill-health caused by stress at work which eventually leads to burnout (Mustafa & Selahattin, 2010). Stress in a mining environment is one of the main reasons for their willingness to leave their profession and work in a field that is deemed to be less stressful. Once an individual is diagnosed as being burnt out their symptoms normally show as ill-health, in the form of depression and counterproductive work behaviour (Tennant, 2001; Michie & Williams, 2003; Fox, Spector, & Miles, 2003). This study aims to investigate work stressors, work wellness and intention to quit in management in a large mining house.

Method:

A cross-sectional survey research design was followed with data collected from management ($N=141$) from a large mining house South Africa. The Job Characteristics Scale, Maslach Burnout Inventory-General Survey, Utrecht Work Engagement Scale, General Health Survey, Dispositional Measure of Employability and Employee Retention Scale were administered. Exploratory Factor Analysis, Reliability Analyses, Descriptive Analyses and Regression Analysis were applied.

Results:

Significant relationships exist between the following variables:

- A positive relationship exists between job resources and work engagement.
- A positive relationship between the job demands, burnout and the three dimensions of the burnout.
- A positive relationship between work engagement and dispositional employability.
- A positive relationship between burnout and the intention to quit.
- A negative relationship exists between work engagement and the intention to quit.
- A negative relationship exists between the job resources and the intention to quit.
- A negative relationship between the dispositional employability and the intention to quit.

No significant relationships exist between the following:

- No significant relationship exists between burnout and dispositional employability
- No significant relationship exists between the job demands and the intention to quit.

Mediator between variables:

- From the Multiple Regression analysis conducted on the relationship between job resources and the intention to quit it was determined that dispositional employability was a statistically significant mediator for the relationship between the job resources and the intention to quit.

Moderator between variables:

- According to the Multiple Regression analysis conducted it was determined that dispositional employability was not a statistically significant moderator for the relationship between the job demands and the intention to quit.

Practice Relevance:

As far as could be determined, there have not been many studies conducted on the relationship between work stressors, work wellness and intention to quit in managers in a large mining organisation in South Africa. The study will attempt to identify if there is a significant relationship between the concepts, and makes a contribution to the body of knowledge surrounding the relationship between the three concepts in the South African context. Furthermore, the study of measures of organisational energy which can be applied in the South African context will assist those interested in the relationship between work stressors, work wellness and the intention to quit in the workplace.

Keywords:

Work Stressors, Job Demands, Job Resources, Work Wellness, Work Engagement, Dispositional Employability, Openness To Change, Work Identity, Career Resilience, Career Proactivity, Career Motivation, Burnout, Emotional Exhaustion, Mental Distance, Depersonalisation, Cynicism, Professional Efficiency, Ill-health, Physical Ill-health, Psychological Ill-health, Intention to Quit, Management in Large Mining Organisation.

THE RELATIONSHIP BETWEEN WORK STRESSORS, WORK WELLNESS AND THE INTENTION TO QUIT OF MANAGEMENT IN A LARGE MINING HOUSE IN SOUTH AFRICA

Chapter 1: INTRODUCTION TO THE STUDY

Once you start down the dark path, forever will it dominate your destiny, consume you it will.

– Jedi Master Yoda –

1.1 BACKGROUND

“Burnt out”, this term is being used more and more to describe employees in the mining industry. In the last couple of years research has shown that there has been an increase in stress related burnout in management in the mining industry. As a result more and more managers in the industry are leaving their profession within the industry, because of ill-health caused by stress at work which eventually leads to burnout (Mustafa & Selahattin, 2010). Stress in a mining environment is one of the main reasons for their willingness to leave their profession and work in a field that is deemed to be less stressful. Once an individual is diagnosed as being burnt out their symptoms normally show as ill-health, such as depression and counterproductive work behaviour (Tennant, 2001; Michie & Williams, 2003; Fox, Spector, & Miles, 2003). This study is intended to investigate work stressors, work wellness and the intention to quit in management in a large mining house.

The fact that employees and managers are leaving the field to find less stressful jobs, may eventually have a negative impact on the skills availability in the profession. In a mining industry there are certain skills that are deemed critical to the organisation for them to stay afloat in the current economic environment. When these individuals leave they create a critical shortage of critical skills required to complete the work available for them. As a result the remaining employees are pushed to complete the required work because they are understaffed and these employees eventually end up burnt out and leave the organisation. Not enough people are moving into the critical skills needed to effectively run

all the aspects in the organisation, so others have to pick up the slack. To solve this problem an academic solution will need to be created. By researching the relationship between work stressors, work wellness and intention to quit in managers in a mining house, a greater understanding can be created and the more the relationship is understood, theory can be used to create a solution to the problems they are facing.

When searching for information on the Work Stressors, Work Wellness and the Intention to quit of management in a large mining house in databases, including EBSCOHost, Emerald, Google Scholar, Proquest and ScienceDirect, it was discovered that not much research has been done on this topic. Many studies have been conducted whereby only Work Stressors in the form of Job Demand and Job Resources are investigated (Schaufeli & Bakker, 2004). Other research has been done to investigate Job Burnout as a result of Job Demands and Job Resources (Rothmann & Joubert, 2007). Burnout and Work Engagement has been investigated in managers. Some of these studies have been conducted in South Africa but most of the studies have been done in the American context. This context is not always applicable to the South African context, as in South Africa most managers have different work ethics from their American counterparts. Another reason is that in South Africa there may be different Work Stressors that can cause Burnout, than those found in the American context (Bakker, Demerouti, & Verbeke, 2004; Britt, Dickinson, Greene-Shortidge, & McKibben, 2007; Warr, 2005).

1.2 PROBLEM STATEMENT

Much research has been done on Job Demands (Rothmann & Joubert, 2007; Bakker, Demerouti, & Verbeke, 2004), Work Wellness (Barkhuizen, Rothmann, & Tytherleigh, 2004) and Ill-Health (Jackson, Rothmann & van de Vijver, 2006) as separate ideas and phenomena. Research has also been done on the combination of the three phenomena to determine the relationships between them. These relationships have been tested on caregivers and educators in South Africa (Jackson, Rothmann, & van de Vijver, 2006). After an extensive search of databases it was determined that research on the relationship between Work Stressors (Job Demands and Resources), Work Engagement and the intention to quit in management in a mining organisation is lacking. There has been

research done on the Burnout of managers in a mining organisation (Rothmann & Joubert, 2007) but no research has been done on the combination of the three.

1.3 PURPOSE STATEMENT

The purpose of the study is to examine the relationship between Work Stressors, Work Wellness and the Intention to quit of management in a large South African mining house.

1.4 RESEARCH QUESTIONS

The research question for this study:

- What is the relationship between the Work Stressors, Work Wellness and the Intention to quit of management in a large South African mining house?

1.4.1 RESEARCH OBJECTIVES

The main research objective for this study is:

- To determine the relationship between Work Stressors, Work Wellness and the Intention to quit of management.

The research objectives for this study were to determine whether:

- Job demands have a positive effect on Burnout
- Job Resources have a positive effect on Work Engagement
- Burnout has a negative effect on Dispositional Employability
- Work Engagement has a positive effect on Dispositional Employability
- Burnout has a positive effect on an employee's Intention to Quit
- Work Engagement has a negative effect on an employee's Intention to Quit
- Job Demands have a positive effect on an employee's Intention to Quit.
- Job Resources have a negative effect on an employee's Intention to Quit.

- Dispositional Employability has a negative effect on an employee's Intention to Quit.
- Dispositional Employability mediates the relationship between Job Resources and the Intention to Quit.
- Dispositional Employability moderates the relationship between Job Demands and the Intention to Quit.

1.5 ACADEMIC VALUE AND CONTRIBUTION OF THE PROPOSED STUDY

From a theoretical perspective there has been a lot of research done on Work Stressors, Work Wellness and the Intention to quit. These phenomena are not new to researchers. These phenomena have very often been studied alone as a singular phenomenon or with one another. There have been studies conducted on the burnout of managers in a mining organisation (Rothmann & Joubert, 2007) and work related stress and depressive disorders (Ill-Health) (Tennant, 2001); however, no full study has been conducted on the relationship between Work Stressors, Work Wellness and the Intention to quit of management in a large mining house. By completing this study it is hoped to increase the knowledge about the stresses that management is under and how these stressors affect the management in the organisation. Much research has been done on the stress, Work Wellness and Ill-Health of high stress industries, for example, the health care industry, as well as the airline industry. What not many people realise it that management in a mining organisation is becoming a high stress profession since new regulations are continuously being imposed to protect the environment. This study proposes to highlight the Work Stressors, Work Wellness and the Intention to quit of management that have resulted from the industry becoming a high risk industry.

The methodological validation of this study is to create a new model that will represent the relationship between Work Stressors, Work Wellness and the Intention to quit in management in a mining house. This model will give the reader of the study a visual understanding of the relationship and how they affect each other.

The practical contribution of this study will be to gain insight by identifying the most common Work Stressors in the organisation. Once the most common Work Stressors have

been determined, it can help researchers to predict which Work Stressors can cause Burnout in management. This study can also be used to determine the most common physical and psychological Ill-Health symptoms that can appear in managers who suffer from Burnout. Once the cause of the Burnout in the managers can be predicted, recommendations can be made on how to prevent the Burnout and as a result prevent the physical and psychological Ill-Health of the management in the organisation.

This research proposal has six main parts. The next section will discuss the assumptions on which the study is based and it will also discuss the delimitations that apply to the proposed study. This is then followed by a list of definitions of the key terms used in the study. Next, the literature on Work Stressors, Work Wellness, Intention to quit and the relationship they have with each other and Managers will be reviewed. The proposed research design and methods are then described under the headings of sampling, data collection, data analysis and finally the research ethics involved in this study.

1.6 DELIMITATIONS AND ASSUMPTIONS

The following section will discuss what the delimitations are of this study. Secondly this chapter will discuss what assumptions were made while completing this study.

1.6.1 DELIMITATIONS

The delimitations to this study are the following:

- This study is a cross-sectional study. As this is the case it will only focus at a certain point in time on the relationship between Work Stressors, Work Wellness and the Intention to quit in management in a large South African mining house.
- The results of this study will only be applicable to management in the specific industry as they are the main focus of this study.
- This study uses self-assessment as the method of data collection. This means that these are the perceptions of the participants in the study. If there is an observer in the workplace observing the participants, the results may differ from the self-assessment results.

1.6.2 ASSUMPTIONS

The assumptions to this study are the following:

- All participants in this study have at least completed their Matric or Grade 12. They are either studying to complete a degree or have already completed a basic degree in their required field of expertise.
- The individuals in the study are expected to be working in the large mining house used in the study.
- The participants' job descriptions should range from supervisors to senior or top management in the organisation.
- All participants are expected to be computer literate.
- All participants have access to a computer which is internet enabled as the questionnaires are web-based.

1.7 DEFINITION OF KEY TERMS

This section discusses the key terms involved in the proposed study. They are listed alphabetically and are referenced to where they can be found in the literature review.

Absorption

Absorption is characterised by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching themselves from the work situation (Hakanen, Bakker, & Schaufeli, 2006).

Burnout

Burnout is defined as a "persistent, negative, work-related state of mind in normal individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work" (Rothmann & Joubert, 2007, p. 49).

Career Motivation

By setting goals workers with high motivational control are more motivated at work and often persist through periods of boredom or frustration, and sustain effort in the face of challenges (Kanfer & Heggestad, 1997).

Career Proactivity

Gathering information related to one's career interests can help serve as feedback and can be the key to deciphering efforts which are effectively adaptive. Work and career proactivity is seen to be similar to pro-active coping (Fugate, Kinicki, & Ashford, 2004).

Career Resilience

Career resilience is the ability to recover quickly from change within one's career and see new challenges and opportunities for growth and development. Career resilience is part of an individual's work identity and is reflective of their dispositional employability (Fugate & Kinicki, 2008).

Cynicism

Cynicism is defined as indifference or a distant attitude towards one's job or people around them (Schaufeli, Taris, & van Rhenen, 2008).

Dedication

Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride, and challenge (Hakanen, Bakker, & Schaufeli, 2006).

Depersonalisation

Depersonalisation is defined as indifference or a distant attitude towards the people around them (Schaufeli, Taris, & van Rhenen, 2008).

Dispositional Employability

Dispositional Employability is defined as a "constellation of individual differences that predispose employees to (pro) actively adapt to their work and career environments"

(Fugate, 2006, p. 20). Employability facilitates the identification and realisation of the job and career opportunities both within and between organisations.

Emotional Exhaustion

Emotional Exhaustion is defined as depletion or draining of an individual's mental resources (Schaufeli, Taris, & van Rhenen, 2008).

Intention to Quit

Employees on the whole do not just decide to leave an organisation. There are normally reasons for their decisions. Some employees may decide to leave as they have been offered better work opportunities elsewhere, or they leave as they can no longer cope with their work, or for many other reasons (de Lange, De Witte, & Notelaers, 2008).

Job Demands

Job Demands refer to things that have to be done or activities to be performed, and include the social, physical and organisational aspects of the job that require sustained physical and mental effort (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

Job Resources

Job Resources are defined as the resources an individual needs to achieve their job demands (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

Ill-health

Every person at some point in time suffers from Ill-Health as it is very often a sign that the individual's immune system is not functioning optimally. Ill-Health is never something an individual should be embarrassed about. Some individuals get sick from flu viruses while others get sick from the environment they work in. Individuals can get sick from the dust and materials they have to work with every day, while others simply get sick from the fact that they are overworked and their workload makes them sick.

Management

Management for this study is defined as someone in charge of other employees. These individuals need to have another employee report to them.

Mental Distance

Mental Distance is defined as when an individual suffers from depersonalisation or cynicism. This is defined as indifference or a distant attitude towards one's job or people around them (Schaufeli, Taris, & van Rhenen, 2008).

Openness to Change

For the purposes of this study Openness to Change is seen as a part of Dispositional Employability. Individuals who experience Openness to Change are more likely to exhibit flexibility when confronted with the challenges inherent to uncertain situations (Fugate, 2006).

Physical Ill-health

Physical Ill-Health is normally defined as something that is physically wrong with the human body (Jackson, Rothmann, & van de Vijver, 2006).

Psychological Ill-health

Psychological Ill-Health is different from Physical Ill-Health. Psychological health or mental health is related to an individual's brain, not the actual organ, but the mental well-being of an individual (Jackson, Rothmann, & van de Vijver, 2006).

Reduced Professional Efficiency

Reduced Professional Efficiency or Inefficiency is described as the tendency to evaluate one's work performance negatively, resulting in the feeling of insignificance and poor job-related Self-Esteem (Schaufeli, Taris, & van Rhenen, 2008).

Vigour

Vigour is normally characterised by high levels of energy and mental resilience while working, the willingness to invest effort into their work, and finally to persist in the face of difficulties (Hakanen, Bakker, & Schaufeli, 2006).

Work Engagement

Work Engagement is the harnessing of organisation members' selves to their work roles by which they employ and express themselves physically, cognitively and emotionally

during their role performance. Engagement will occur on a regular, day-to-day basis, and is actively applied by and through the employees' working behaviour (Rothmann & Jordaan, 2006). According to Hakanen, Bakker, and Schaufeli (2006, p.498), work engagement is defined as "a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption."

Work Identity

Work Identity is defined as "one's self-definition in the career context" (Fugate & Kinicki, 2008, p. 520). This means that individuals use the work they do to define themselves in the work environment.

Work Stressors

Work Stressors occur when one's workload or specific job becomes too demanding so that one is unable to cope with the amount of tension the work generates and there are not enough Job Resources to support one in achieving the required Job Demands (Rothmann & Joubert, 2007).

Work Wellness

Work wellness is seen as "a multidimensional state of being describing the existence of positive health in an individual as exemplified by the quality of life and a sense of well-being" (Corbin & Pangrazi, 2001, p. 3).

In Table 1-1 below the meanings are given for abbreviations that are used later in the thesis.

Table 1-1: Abbreviations used in this Document

Abbreviation	Meaning
JCS	Job Characteristics Scale
MBI-GS	Maslach Burnout Inventory – General Survey
MBI – ES	Maslach Burnout Inventory – Educator Survey
UWES	Utrecht Work Engagement Scale
GHS	General Health Survey
DME	Dispositional Measure for Employability
ERS	Employee Retention Scale
KMO	Kaiser-Meyer-Olkin
PAF	Principle Axis Factoring
EFA	Exploratory Factor Analysis

1.8 CHAPTER OUTLINE OF THE STUDY

The following section is going to give a brief outline of the chapters in the study on the relationship between Work Stressors, Work Wellness and the Intention to quit in management in a large mining house in South Africa. The chapters' outlines, highlighting the overview of this research study are as follows:

Chapter 1: Introduction of the study

Chapter 1 introduces the topic of the study on the relationship between work stressors work wellness and ill-health in management in a large mining house in the broader context of the industry. This chapter provides the impetus for the research study by highlighting the problem statement and research objectives to be investigated. Next the importance and benefits of the research study are indicated before the chapter concludes with a list of definitions and abbreviations frequently used in the study.

Chapter 2: Literature Review

Chapter 2 starts with an overview of all the concepts and aspects that are related to the study. The chapter begins by focusing on each concept of the study individually. Under each of the concepts the different aspects that make up the concepts in the study are

discussed. Once the concepts have been discussed they are followed up with a graphical representation of how the concepts relate to each other. Next the chapter discusses the relationship between the different concepts represented in the model and how they relate back to the topic of the study. The final section of this chapter focuses on the research proposition. This section starts with a detailed diagram of the different hypotheses that are to be tested in the study. These hypotheses are broken down into smaller diagrams and the research hypothesis for each of the research objectives is discussed in detail, as well as the rationale for each hypothesis is given. This chapter ends with a summary of what the chapter is all about.

Chapter 3: Research Design and Methodology

Chapter 3 involves a detailed discussion of the research design and methods of the study, which were selected as the framework through which the research questions of the study were answered. This chapter begins with an overview of the research paradigm of the study, and then moves to give a description of the strategy of inquiry and broad research design of the study. A discussion of the sampling strategies and techniques utilised in the study then follows and the data collection methodology is presented. The ethical concerns related to the study are then considered and finally the limitations that affect the research are discussed. The final section of this chapter consists of the development of research hypotheses for study.

Chapter 4: Results

Chapter 4 commenced with a discussion on the biographical information that was collected during the data collection phase of the study. The next phase of the chapter involved discussing the statistical analysis of the different concepts involved in the study. The final section of the chapter (better known as phase 3) discussed the different relationships of the study through the hypotheses developed in chapter 2.

Chapter 5: Discussion of Results

In Chapter 5, the discussion of the empirical results presented in Chapter 4 is undertaken. Each of the eleven hypotheses of the research study is separately presented and they will either be accepted or rejected based on the evidence gathered from the research study.

Chapter 6: Conclusion, Limitations and Recommendations

Chapter 6 starts with an overview of the research findings of the study in relation to the literature reviewed and the statistical analysis undertaken. Next the limitations of the study are addressed and selected recommendations for further study in the field of Work Stressors, Work Wellness and the Intention to quit in the mining industry are made. In conclusion, final comments are made on the study.

1.9 CONCLUSION

This chapter gave an overview of the study that was to be done. It started by giving background to the problem that was to be investigated. It shifted to focus on the questions which were to be investigated in the study as well as the assumptions and delimitations that were to be discussed. The chapter gave an overview of all the main terms used in the study as well as any abbreviations that were used. The chapter closed with a summary of all the chapters in the study.

Chapter 2: LITERATURE REVIEW

2.1 INTRODUCTION

When working in an organisation, there are many things individuals have to be aware of. Often they are required to balance many tasks at the same time and have to meet multiple deadlines; which results in them being under a lot of stress a lot of their working time. This study aims to investigate the relationship between Work Stressors, Work Wellness and the Intention to quit. To better understand the aspects involved in the study, they will each be discussed separately.

Next the literature review will focus on a visual model of the relationship between Work Stressors, Work Wellness and the Intention to quit. From this model the different relationships between all the concepts in the study will be discussed. Additional to this it will also discuss how these concepts interact with each other. After the relationship and interaction of the concepts have been discussed the literature review will focus on the research propositions of the study. Finally the literature review will conclude with a summary of the different aspects discussed and how they are related to each other within the relationship between Work Stressors, Work Wellness and the Intention to quit in management in a large mining house.

2.2 WORK STRESSORS

Work Stressors are very common in one's life. Work Stressors occur when one's workload or specific job becomes too demanding, so that one is unable to cope with the amount of tension the work generates and there are not enough resources to support one in achieving the job demands (Rothmann & Joubert, 2007). With the ever changing economy and continuous globalisation, organisations are being put under pressure to perform better with fewer resources. Organisations are expecting employees to give more of their time, their efforts and their skills, while the organisations no longer guarantee job security, career opportunities and life time employment (Maslach, Schaufeli, & Leiter, 2001). Research has shown that the key differentiator in competitive advantage in the current

economy is the organisation's employees. With organisations putting more pressure on employees to achieve, employees have to cope with an increase in demands from various and diverse roles and organisational stakeholders, often with limited resources (Minervini, Meyer, & Rourke, 2003). For the purpose of this research Work Stressors are divided into the concepts Job Demands and Job Resources.

2.2.1 JOB DEMANDS

Job demands in a work environment normally refer to things that have to be done or activities to be performed, and include the social, physical and organisational aspects of the job that require sustained physical and mental effort (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job demands include situational factors such as role ambiguity, role conflict, stressful events, heavy workload and work pressures, pressure to make critical and immediate decisions, being assigned more responsibility, and having to meet deadlines (Schaufeli & Enzmann, 1998; Rothmann, 2002). These situational factors can be divided into two main categories. These categories are role demand, and task demand.

Role demand is related to the pressure placed on individuals as a function of the particular role the individual plays in the organisation. When individuals experience role conflict, it is very difficult for them to reconcile or satisfy the expectations they created about the certain role and this causes stress. Stress also occurs when an individual suffers from role overload. Role overload often occurs when the organisation expects the individual to do more than time permits them to do. And finally role ambiguity is created in an individual when the role expectations are not clearly understood and the individual is not sure what is supposed to be done (Robbins & Judge, 2007).

Task demands also play a big role in job demands and work stressors of an individual. Task demands are normally factors that are related to an individual's personal job. This normally involves the autonomy of one's job, the task variety of the job, the work conditions and the physical work layout (Robbins & Judge, 2007). Research has shown that individuals, who have to work in overcrowded rooms or in a visible place or location where noise and interruptions are constant, can experience an increase in their stress and anxiety levels (Rothmann & Joubert, 2007). This has a direct effect on an individual's

ability to deal with work stressors and can eventually lead to burnout when there are not enough job resources.

2.2.2 JOB RESOURCES

Job resources are defined as the resources an individual needs to have achieved their job demands. Work stress normally occurs when the valued resources are either lost or threatened, or there is not enough to achieve the required demands. Many people believe that the job demand is the most important aspect in the creation of work stressors. However, many people fail to realise that without the required resources no person can achieve their goals (Rothmann & Joubert, 2007). Take accountants for example; they cannot audit an organisation if they do not have computers to assist them.

Job resources normally refer to all aspects that can reduce job demands, facilitate achievement of work goals, and which can stimulate an individual's growth (Maslach, Schaufeli, & Leiter, 2001; Rothmann, 2002). These aspects are divided into four categories. These categories are physical resources, psychological resources, social resources and organisational resources.

Physical resources are normally classed as the equipment and materials that an organisation supplies to the employees to achieve their required jobs (Rothmann & Joubert, 2007). The equipment resources are desks, chairs, computers, machinery, work stations, raw materials, etc. in short: everything that is physically needed to achieve the requirements of the job.

Psychological resources and social resources are very often classed as the same resource. These kinds of resources are normally defined as the support an individual requires from their supervisors (supervisory support), their subordinates and their co-workers (collegial support). When employees feel that they are receiving support in the work they are doing, they are often more willing to endure the stress, as they know there are others around to help them and motivate them in stressful situations (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Research has found that individuals who do not

receive psychological and social resources are more likely to suffer from burnout than individuals who have support (Maslach, Schaufeli, & Leiter, 2001).

The final resource is the organisational resource. Organisational resources are normally defined as the resources organisations give individuals to help them grow and keep them motivated to keep performing. Some of these resources are job enhancement opportunities in the form of increased control and autonomy, participation in decisions in decision making, reinforcement contingencies (Burke & Richardsen, 1993) and recognition, opportunities for advancement and rewards (Rothmann, 2002). Research has shown that there is a correlation between lack of support from an organisation and the burnout of individuals (Rothmann & Joubert, 2007).

2.3 WORK WELLNESS

Work wellness or even wellness is a very badly defined concept in literature because there is very little agreement on what the definition should contain. Some of these definitions are:

- “A conscious and deliberate approach to an advanced state of physical, psychological, and spiritual health” (Ardell, 1985, p. 38).
- “A multidimensional state of being describing the existence of positive health in an individual as exemplified by the quality of life and a sense of well-being” (Corbin & Pangrazi, 2001, p. 3).

Other researchers have described wellness as a person’s state of well-being that contributes to an improved quality of life (Corbin, Lindsey, Welk, & Corbin, 2002). In addition to these different definitions, the literature uses the terms wellness and well-being interchangeably (Korhonen, et al., 1998; Martin, Kirkcaldy, & Siefen, 2003). With the absence of a universal definition for wellness, it has resulted in great confusion on how to describe wellness and additional to that develop practical guidelines to help employees and organisations develop good wellness in their work environment (Sieberhagen, Pienaar, & Els, 2011).

As there is no real definition for work wellness it has been decided for purposes of this study that work wellness will be defined as the existence of positive health in an individual. This health is exemplified by the quality of life and a sense of well-being in one's work and everyday life (Corbin & Pangrazi, 2001).

From the literature it can be determined that certain concepts play a direct role in an individual's work wellness. Some of these concepts have a positive impact; while others have a negative impact on the individual's overall state of wellness. Some of the positive states are work engagement and dispositional employability, and some of the negative states are burnout and ill-health.

The positive states of work wellness are seen when an employee shows signs of work engagement. Work engagement is seen as the harnessing of organisation members' selves to their work roles: in engagement individuals employ and express themselves physically, cognitively, emotionally and mentally during certain role performances. Positive work wellness is also observed when an employee shows signs of dispositional employability (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Dispositional employability is seen as the constellation of individual differences that predispose employees to (pro) actively adapt to their work and career environments (Fugate & Kinicki, 2008). When employees show these signs it is often seen that employees are happy at work and are performing to the best of their abilities and the organisation in return is seeing the results of their productive outcomes (Fugate, 2006).

However when organisations notice negative states of work wellness they often experience high levels of burnout. Burnout is the "persistent negative, work-related state of mind in normal individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work" (Maslach, Schaufeli, & Leiter, 2001, p. 398). As a result of the burnout organisations also notice a high increase in cases of ill-health. Ill-health is often defined as the situation when individuals are not feeling well and there is something either physically or psychologically wrong with them (Barkhuizen, Rothmann, & Tytherleigh, 2004). These cases are not just employees experiencing the flu in winter. These cases of ill-health are where the organisation

experiences high levels of absenteeism as employees are continuously off sick. When organisations start experiencing high levels of burnout and ill-health it can be said that the organisation does not have work wellness and there is something that is causing it.

The following sections will discuss the positive and negative states of work wellness in more detail. All of these states will then be linked back to the relationship between Work Stressors, Work Wellness and the Intention to quit in management in the large mining house in South Africa.

2.4 WORK ENGAGEMENT

Work engagement is a broad concept that comprises as core features high involvement, affective energy, and self-presence at work (Britt, Dickinson, Greene-Shortidge, & McKibben, 2007). In the study-field related to work engagement there are many different definitions for this particular concept. Roberts and Davenport (2002), defines work engagement as a person's involvement in their job. Employees who are highly engaged in their jobs identify personally with the job and are motivated by the work itself. These individuals tend to work harder and as a result are more productive than others. They are also more likely to produce the results customers and organisations require from these individuals. When investigating engagement employees report that their jobs make good use of their skills and abilities, they are challenging and stimulating, and provide them with a sense of personal accomplishment (Rothmann & Jordaan, 2006).

Kahn (1990, p. 694), on the other hand defined engagement as the "harnessing of organisation members selves to their work-roles by which they employ and express themselves physically, cognitively and emotionally during their role performance." This means that engaged employees become physically involved in their tasks, cognitively alert, and emotionally connected to others when performing their jobs. Engagement will occur on a regular, day-to-day basis, and is actively applied by and through the employees' working behaviour (Rothmann & Jordaan, 2006).

Additionally to Kahn's, (1990, p. 698) definition of engagement he conceptualises engagement as the "harnessing of organisation members selves to their work roles: in

engagement individuals employ and express themselves physically, cognitively, emotionally and mentally during certain role performances.” This means that engaged employees put much more effort into their work because they better identify with the work. Research has shown that there is a dynamic, dialectical relationship that exists between individuals who drive their personal energies (physical, cognitive, emotional and mental) into their work roles on one hand, and the work role that allows these individuals to express themselves on the other hand. Kahn, (1992) differentiates the concept of engagement from psychological presence or the experience of “being fully there”. Stated differently, here engagement as a behaviour (driving energies in one’s work role) is considered to be a manifestation of psychological presence, a particular mental state. From this engagement it is assumed to produce positive outcomes in both in the individual (personal growth and development) and on the organisational level (performance quality) (Bakker, Schaufeli, Leiter, & Taris, 2008).

From the ground work of Kahn (1990, 1992), Rothbard, (2001, p. 656) investigated further and defined engagement as a “two-dimensional motivational construct that includes attention and absorption.” From this it is important to note that for Kahn (1990, 1992), the key reference of engagement is work. However, when engagement is discussed in relation to burnout more emphasis is placed on the employees work activity than on the work itself (Bakker, Schaufeli, Leiter, & Taris, 2008).

Many scholars agree that engagement includes a dimension of energy and an identification dimension. Work engagement is very often characterised by a high level of energy and a strong identification with one’s work. When defining work engagement it is important to define this concept in a consistent fashion with emphasis and focus on employees’ experience of work activity. Over the years scholars have tried to come up with an all-encompassing definition of engagement. All they unfortunately achieved was a broad exploration of constructs with no consensus on a standard definition or meaning for this concept. To solve this problem researchers have tried to create an all-inclusive umbrella term that contains the different types of engagement (i.e. trait engagement, state engagement, and behavioural engagement), each of which entail various conceptualisations e.g. proactive personality (trait engagement), involvement (state engagement), and organisational citizenship behaviour (behavioural engagement). There

is still no real consensus on the correct definition or application of engagement as some still advocate engagement to be used as a specific, well defined, and properly operationalised psychological state that is open to empirical research and practical application (Bakker, Schaufeli, Leiter, & Taris, 2008).

According to Hakanen, Bakker, and Schaufeli (2006, p.498), work engagement is defined as “a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption.” Within this definition vigour is normally characterised by high levels of energy and mental resilience while working, the willingness to invest effort into their work, and finally to persist in the face of difficulties. The next characteristic, dedication, is characterised by a sense of significance, enthusiasm, inspiration, pride, and challenge. The third defining characteristic of engagement is called absorption. This is characterised by being fully concentrated and happily engrossed in one’s work, whereby time passes quickly and one has difficulties with detaching themselves from the work situation. From recent research conducted it has been suggested that vigour and dedication constitute the core dimensions of work engagement (Hakanen, Bakker, & Schaufeli, 2006).

When dealing with work engagement it is important to understand that work engagement differentiates from workaholism. Workaholism is often characterised by working extensively and working compulsively (Sonnentag, Mojza, Binnewies, & Scholl, 2008). Being energetic dedicated and absorbed at work does not mean working extremely long hours or to experiencing an uncontrolled need to work. Empirical research has shown that work engagement and workaholism are distinct constructs and are often seen in opposition to each other (Schaufeli, Taris, & Bakker, 2006).

2.5 DISPOSITIONAL EMPLOYABILITY

In the last decade there has been a significant increase in researchers using dispositional predictors to measure a variety of individual and organisational criteria. The most well-known or common of these dispositions are the big five dimensions of personality and core self-evaluation (Fugate & Kinicki, 2008). Research has shown that the big five personality dimensions are significantly associated with leadership, job performance, and career

satisfaction (Bono & Judge, 2003; Thoresen, Bradley, Bliese, & Thoresen, 2004; Seibert & Kraimer, 2001). The core self-evaluation includes measures such as self-esteem, self-efficiency, locus of control, and neuroticism, and are significantly related to perceptions of the work environment, job satisfaction, life satisfaction, task motivation, and performance (Erez & Judge, 2001).

Fugate (2006, p. 20), defines dispositional employability as a “constellation of individual differences that predispose employees to (pro) actively adapt to their work and career environments”. Employability facilitates the identification and realisation of the job and career opportunities both within and between organisations. Conceived this way, employability is a disposition that captures individual characteristics that foster adaptive behaviours and positive employment outcomes.

Dispositional employability is more and more relevant in the current turbulent work environment. It specifically focuses on the frequency and intensity of change inherent in the workplace. This is symptomatic of the high levels of uncertainty: employers and employees are confronted with ever-changing and often unknown demands. In response to this organisations have modified processes, structures and practices to make them more malleable to the unknown. Researchers have classified such unstable environments as weak situations as they are in constant flux. They have also noted that individual dispositions are more likely to come to the forefront and significantly influence behaviour and performance in weak situations (Fugate & Kinicki, 2008).

To better understand the term dispositional employability one needs to understand the conceptual foundation of the construct. The following section is going to discuss the conceptual foundation of dispositional employability.

2.5.1 CONCEPTUAL FOUNDATION OF DISPOSITIONAL EMPLOYABILITY

Employability is seen as a psychosocial construct that can embody individual characteristics that will foster adaptive cognition, behaviour, and eventually affect, and enhance the individual-work interface (Fugate, Kinicki, & Ashford, 2004). Employability is conceived as psychosocial in that it encompasses individual characteristics that bridge the

individual-environment gap. This means that employability extends beyond the required knowledge, skills and abilities to do a job. It also represents a broad, latent, high-order trait that facilitates proactive adaptability (Fugate & Kinicki, 2008).

Researchers and practitioners alike acknowledge the importance of an employee's abilities to respond to changing workplace demands, in order to fit and survive. This research postulates that a reactive employee will respond after the situational change occurs or is known. Additional to this researchers have acknowledged the importance of employee initiative and pro-activity in understanding employee behaviour (Frese & Fay, 2001; Seibert, Kraimer, & Crant, 2001). Dispositional employability is consistent with this trend as it is seen to encompass both reactive and proactive personal characteristics. This means that in addition to the ability to adapt reactively to known demands, employable individuals also tend to have a perpetual readiness for change (Fugate, 2006). As a result they tend to prepare in advance for specific or known threats or likely changes rather than to wait for the change to occur. From this it can be seen that, dispositional employability extends beyond the traditional notion of adaptability in that it explicitly represents a proactive orientation to adaptability and is specific to the work domain. Accordingly, employable individuals do not just engage in their jobs and larger careers in order to meet the demands of the environment, they also pro-actively create and realise opportunities (Fugate & Kinicki, 2008).

Dispositional employability can also be used to facilitate the identification of opportunities and the personal learning and change necessary to be successful. Beyond active adaption, dispositional employability also facilitates a proactive orientation towards adaptability (Fugate, Kinicki, & Ashford, 2004). Individuals with high levels of dispositional employability tend to pursue the occupational careers in a proactive fashion. Research has shown that pro-activity positively influences job performance and job satisfaction (Fugate & Kinicki, 2008).

2.5.2 DIMENSIONS OF DISPOSITIONAL EMPLOYABILITY

There are many different personal characteristics and many of these can potentially influence the propensity to identify and realise career opportunities. From all the different

characteristics five dimensions were selected as they are deemed to be critical and representative of the active and adaptable nature of dispositional employability. The five dimensions that were chosen are: openness to change at work, work and career resilience, work and pro-activity, career motivation, and work identity (Fugate & Kinicki, 2008). These dimensions will be discussed below.

2.5.2.1 Openness to Changes at Work

This dimension is fundamental to dispositional employability. By being open to change an individual is more adaptable to continuous learning from new experiences and this in turn enables them to identify and realise career opportunities, and as a result they are able to increase their own adaptability. Individuals who experience openness to change are more likely to exhibit flexibility when confronted with the challenges inherent to uncertain situations. With the flexibility they are able to foster favourable individual attitudes towards the change events. With openness people are more likely to perceive change as a challenge rather than a threat and on the whole be more receptive to new technologies and processes (Fugate & Kinicki, 2008). Therefore, people who are open to new experiences and change are more adaptable to dynamic work requirements, making them able to better handle the stress related to uncertain times (Hawkey, 2011).

2.5.2.2 Work and Career Resilience

Studies have shown that cognitive adaption theory contends that resilient individuals have a positive self-assessment and an optimistic view of all aspects related to life. It has been determined that individuals with positive self-evaluation are more likely to attribute career success to personal ability and effort; and if any failure does occur, they are less likely to personalise the reasons for it (Fugate & Kinicki, 2008). Individuals who are seen to be resilient are often seen to be optimistic and present positive expectations about future events and show confidence in their ability to handle any objective and affective challenge put to them (Peterson, 2000). Therefore, it was determined that employees who possess career optimism are more likely to perceive numerous opportunities to learn, and persist in the pursuit of desired outcomes and goals. It is therefore said that career resilience is part of an individual's work identity and is reflective of their dispositional employability (Fugate & Kinicki, 2008).

2.5.2.3 Work and Career Proactivity

Research has shown that employees with high levels of dispositional employability often actively acquire information about the environment around them. For example, they acquire information about their current employer's intention to downsize the organisation. Gathering information related to one's career interests can help serve as feedback and can be the key to deciphering efforts which are effectively adaptive. Work and career proactivity is seen to be similar to pro-active coping (Fugate, Kinicki, & Ashford, 2004). It is important however to note that, pro-active coping normally occurs on a molar level, for specific challenges or stressors which are not necessarily known or expected. Preparation for this is normally done on a rather general level. As a result, employable individuals will seek information of varying specificity which will be relevant to the personal job and career interests. By doing this, work and career pro-activity helps to facilitate identification and realisation of occupational opportunities (Fugate & Kinicki, 2008).

2.5.2.4 Career Motivation

Career motivation in dispositional employability builds onto Kanfer and Heggestad's, (1997) concepts of motivational control. Kanfer and Heggestad, (1997) argue that by setting goals workers with high motivational control are more motivated at work and often persist through periods of boredom or frustration, and sustain effort in the face of challenges. As a result career motivation can be seen as a critical determinant of continuous learning and dispositional employability.

2.5.2.5 Work Identity

The final dimension in dispositional employability is work identity. According to Fugate and Kinicki, (2008, p. 508), "work identity is one's self-definition in the career context. As such, it provides a strong cognitive affective foundation for dispositional employability. People who define themselves as employable enact behaviours consistent with this self-view, which also influences personal goals and aspirations." It is therefore determined that career identities can direct, regulate and sustain behaviours of employees. Additionally, the absence of well prescribed career tracks in today's business environment requires individuals to manage their own boundary-less careers (Fugate & Kinicki, 2008). Career

identities can help to replace institutionalised career structures with individualised psychological structures. As such career identity provides motivation, direction and a purpose to an individual's career-related endeavours and as a result supports employability (Fugate, Kinicki, & Ashford, 2004).

Now that the conceptual basis, multidimensional structure and component dimensions of dispositional employability have been discussed, the focus is going to shift to the broader part of the literature review. The next section is going to discuss the model of all the previously discussed concepts above and finally will discuss the relationship between the different concepts.

2.6 BURNOUT

Burnout is defined as a “persistent, negative, work-related state of mind in normal individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work” (Rothmann & Joubert, 2007, p. 49). Burnout is also often used as a metaphor to describe a state of mental wariness (Schaufeli & Bakker, 2004). Research has shown that burnout is likely to develop in individuals when the valued resources are lost or threatened, or are inadequate to meet the demands of the job. When an individual suffers from burnout they are normally in a state of emotional, mental, and physical exhaustion caused by excessive and prolonged stress. Burnout occurs when an individual feels overwhelmed and unable to meet the constant demands organisations put on them. As the stress continues, the individual begins to lose interest and motivation in the certain role the individual originally took on (Maslach, Schaufeli, & Leiter, 2001). Burnout is characterised by three dimensions. These dimensions are emotional exhaustion, mental distance and reduced professional efficiency (Barkhuizen, 2005; Rothmann & Joubert, 2007; Maslach, Schaufeli, & Leiter, 2001).

2.6.1 THREE DIMENSIONS OF BURNOUT

This following section is going to discuss the three dimensions that make up burnout. The first of these dimensions is emotional exhaustion. The second dimension is mental distancing. This dimension is further broken down into depersonalisation and cynicism and they will be discussed in detail. The final dimension that will be discussed is the reduction in professional efficiency.

2.6.1.1 Emotional Exhaustion

Emotional exhaustion is defined as depletion or draining of an individual's mental resources (Schaufeli, Taris, & van Rhenen, 2008). This dimension is the most common one used to define an individual who is suffering from burn-out and the most obvious manifestation of this complex syndrome. When individuals describe themselves or others as experiencing burn-out, they most often refer to the experience of exhaustion (Maslach, Schaufeli, & Leiter, 2001).

2.6.1.2 Mental Distance

Mental Distance is defined as when an individual suffers from depersonalisation or cynicism. This is defined as indifference or a distant attitude towards one's job or people around them (Schaufeli, Taris, & van Rhenen, 2008). Mental distance is a new addition to burnout as in the past Maslach, Jackson, and Leiter (1996) defined this section as depersonalisation or cynicism. Only in the last few of years has the researcher joined these two elements together under one heading as cynicism and depersonalisation mean two different things entirely. The following section will be divided into two sections. The first section will discuss depersonalisation and the second section will discuss cynicism. The sections will start with a definition of each of the constructs and then a brief explanation will follow of how an individual might act when they suffer from these.

Depersonalisation

Depersonalisation is defined as indifference or a distant attitude towards one's job or people around them (Schaufeli, Taris, & Van Rhenen, 2008). When individuals experience

depersonalisation, the individuals will often start to manage their demands by making them into impersonal objects. To cope with their workload, individuals use cognitive distancing by developing an indifference attitude, when they are exhausted or discouraged (Maslach, Schaufeli, & Leiter, 2001). These individuals also start distancing themselves from the lives around them. They are no longer interested in what is happening to others, as their main focus is just to get their work done by using the least amount of effort possible.

Eventually this depersonalisation starts to flow into all aspects of the individual's life. When it comes to this point individuals are no longer interested in any aspect of life and everything becomes a hassle to do. Individuals can eventually start depersonalising their lives to the point that every aspect of life becomes a task that needs to be done and is draining to do (Hawkey, 2011).

Cynicism

Cynicism is defined as indifference or a distant attitude towards the people around them (Schaufeli, Taris, & Van Rhenen, 2008). With this type of mental distance an individual withdraws from everyone around them. These individuals start showing signs of being anti-social and loners, as they no longer want to deal with people around them. They often try to put distance between themselves and the service recipient by actively ignoring the qualities that make them unique and engaging people.

When individuals are involved in a job where they are required to deal with people every day, cynicism is often miss-diagnosed as that an individual has a bad attitude. These two factors are often confused however, because cynicism is worse than an individual just having a bad attitude at work. Cynicism can become so bad that an individual can eventually even start withdrawing from their families and close friends. In severe cases individuals can eventually feel that their families are of no consequence to them and that they are more of a hassle than anything else (Hawkey, 2011).

2.6.1.3 Reduction in Professional Efficiency

Reduced professional efficiency or inefficiency is described as the tendency to evaluate one's work performance negatively, resulting in the feeling of insignificance and poor job-related self-esteem (Schaufeli, Taris, & Van Rhenen, 2008). When there are chronic overwhelming demands made in the work situation, it can lead to exhaustion or cynicism, or both, and this can erode one's sense of effectiveness. Studies have shown that it is difficult to gain a sense of accomplishment when one is feeling exhausted and one has a sense of indifference towards the people they work with (Maslach, Schaufeli, & Leiter, 2001).

When individuals eventually suffer from this, their work becomes too much. Individuals start trying to do the bare minimum to get their work done. They are no longer working to the best of their abilities and this eventually shows in an individual's productivity. By the time there is a reduction in the professional efficiency it is no longer just the individual suffering. Studies have shown that there is an increase in accidents in the workplace as employees are no longer as careful as they should be and others can get hurt, when they do not function optimally (Schaufeli & Greenglass, 2001).

2.7 ILL-HEALTH

Ill-health is normally used to describe the situation when an individual is not feeling well and there is something either physically or psychologically wrong with them. Every person at some point in time suffers from ill-health, as it is very often a sign that the individual's immune system is not functioning optimally. Ill-health is never something an individual should be embarrassed about. Some individuals get sick from flu viruses while others get sick from the environment they work in. Individuals can get sick from the dust and materials they have to work with every day while others simply get sick from the fact that they are overworked and their workload makes them sick. When discussing ill-health, medical practitioners divide this into two separate categories. These categories are physical ill-health and psychological ill-health.

2.7.1 DIFFERENT TYPES OF ILL-HEALTH

The following section has been divided into two sections as there are two main aspects related to ill-health. The first aspect related to ill-health is physical ill-health. Physical ill-health involves the physical ailments one might suffer from. The second aspect related to ill-health is psychological ill-health. Psychological ill-health involves the mental ailments one might suffer from. Below these two aspects will be discussed in greater detail.

2.7.1.1 Physical Ill-health

Physical ill-health is normally defined as something that is physically wrong with the human body. This means that the body is sick with the flu or the individual may have a problem with an internal organ.

Much research has shown that there is a close relationship between high levels of stress and burnout and the physical ill-health of individuals. Much research has also been done on the effects of stress on the human body. Researchers have mentioned that individuals who suffer from high levels of stress tend to be more susceptible to heart disease, some forms of cancer, allergies, migraines, back problems and an increased frequency of minor ailments such as colds and flu (Barkhuizen, Rothmann, & Tytherleigh, 2004; Ho, 1997).

Many individuals do not take into account what effect long term stress has on their bodies. People in this world believe they are able to do many things without consequences or thought for the future. Human beings fail to remember that they only ever get one body and it has to last them. People work long hours, putting stress on their vital organs without thinking. Short term stress does not do as much damage to a human body and very often it is said that some stress is actually good, but long term stress is dangerous and can do long term damage (Minervini, Meyer, & Rourke, 2003).

2.7.1.2 Psychological Ill-health

Psychological ill-health is different from physical ill-health. Psychological health or mental health is related to an individual's brain, not the actual organ, but the mental well-being of an individual (Jackson, Rothmann, & van de Vijver, 2006). Research has shown that

stress and burnout do not just affect the physical body but can also affect an individual's psychological or mental health. Exhaustion is a psychological side effect of overwork and continuous exposure to high stress situations.

Many people hear the words mental ill-health and they assume that the individual is crazy and needs to be placed in a mental asylum. Mental ill-health is often caused by stress and burnout. Mental ill-health normally results in depression, as well as behavioural and emotional changes in an individual. Only in severe cases are people committed to institutions specialising in Mental Health for their own safety. They have often had a nervous breakdown from the stress and have become a danger to themselves and loved ones. Most research shows that individuals who suffer from burnout normally show signs of depression, depersonalisation and exhaustion and these are classed as psychological ill-health (Burke & Richardsen, 1993).

Researchers have often argued that individuals who are mentally healthy are better able to deal with chronic stressors and as a result are less likely to experience burnout (Maslach, Schaufeli, & Leiter, 2001). To support this argument, research was done and its results showed that individuals who were psychologically healthier in their adolescence and early adulthood were more likely to enter and stay in a job that had high work stressors, and they also showed greater involvement and satisfaction in their working environments (Jenkins & Maslach, 1994).

Ill-health of individuals suffering from burnout often varies from individual to individual. Some individuals only suffer from exhaustion and are able to recover quickly and get back to work once they have overcome the burnout and the causes of the burnout have been solved. Other individuals suffer from more severe ill-health such as ulcers or have a heart attack because of the high stress environment they function in (Ho, 1997).

2.8 INTENTION TO QUIT

Many studies have recently shown that in order to survive in the current dynamic global economy it is critical to retain and motivate employees. Job stressors and lack of job satisfaction are among the main factors that contribute to employees' intention to quit their

jobs (Moore, 2002). It is important to note that there are factors that mediate the relationship between job stressors and intention to quit. Intentions are seen to be the most immediate determinant factor of actual behaviour in employees (Ajzen & Fishbein, 1980; Igbaria & Greenhaus, 1992). Research done on intentions, has suggested that once people have decided to or implement behaviour to quit, there is little likelihood that their minds can be changed. From this it is reasonable to suggest that intentions are an accurate indicator of subsequent behaviours; it is still uncertain what really causes the intention to quit (Firth, Mellor, Moore, & Loquet, 2004).

Many researchers have tried to answer the question of what determines employees' intention to quit by investigating possible antecedents of the employee's intention to quit (Kalliath & Beck, 2001; Kramer, Callister, & Turban, 1995; Saks, 1996). To date no one has been able to pinpoint the exact cause of intentions to quit. However the studies have come up with certain variables that are consistently related to intention to quit. Even though these variables were identified as a possible cause of an employee's intention to quit no definitive effect of stressors on the intention to quit, but rather an indirect effect through the experience of job stress, social support, job satisfaction and the lack of commitment. The most immediate determinants of the intention to quit were lack of job satisfaction and lack of commitment (Firth, Mellor, Moore, & Loquet, 2004).

2.9 MODEL OF THE RELATIONSHIP BETWEEN WORK STRESSORS, WORK WELLNESS AND THE INTENTION TO QUIT

The following section is going to discuss the relationships between the different concepts that have been discussed previously in this chapter. The figure below is the visual representation of how the concepts of this study relate to each other.

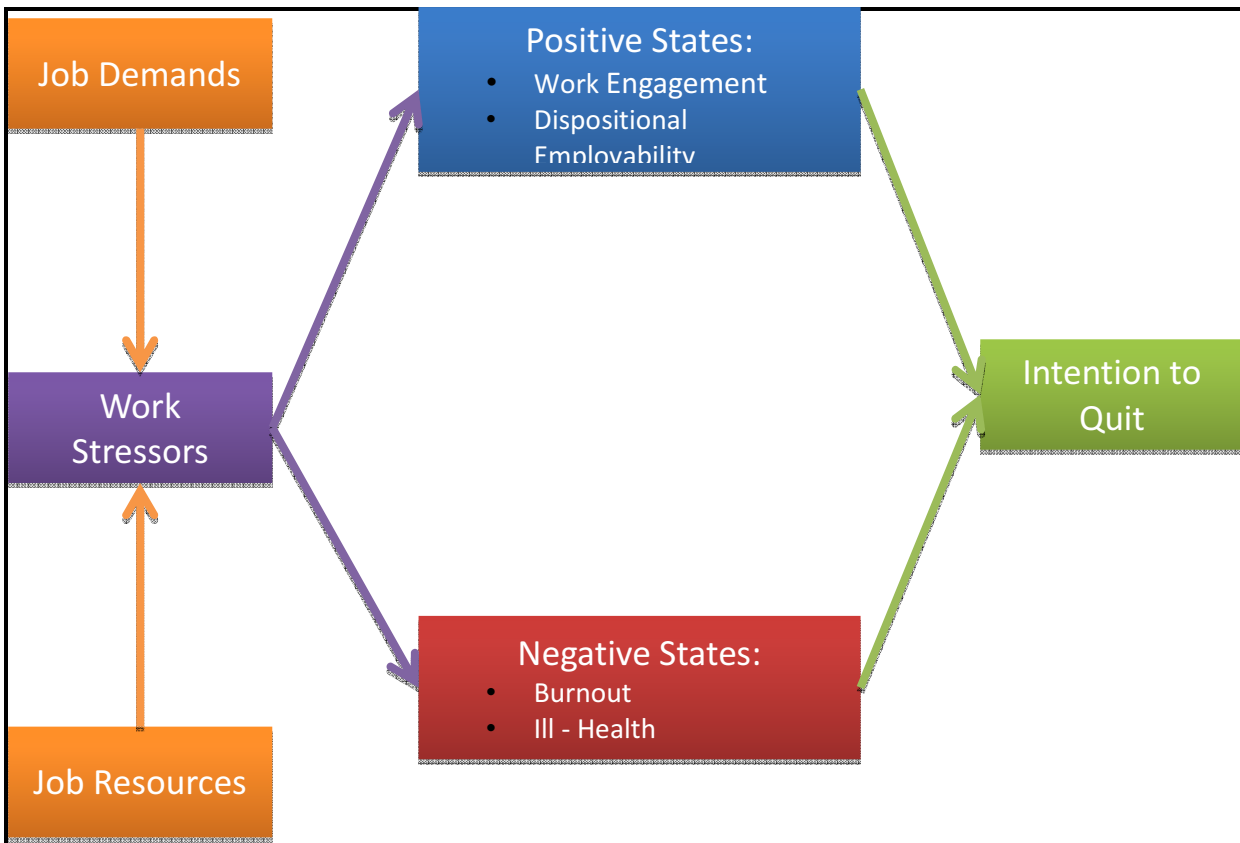


Figure 2-1: The Relationship between Work Stressors, Work Wellness and the Intention to Quit

The model in Figure 2-1 is created as a visual diagram to show the relationship between work stressors, work wellness and the intention to quit. This model in Figure 2-1 starts with work stressors. From the literature above it can be seen that work stressors are a result of job demands and job resources. The lower the job resources, the higher the job demands, the greater the work stressors are. Work stressors as a result have an effect on the work wellness of the employees in the organisation. Work stressors can have an effect on the positive and negative states of work wellness. The positive states of work wellness are work engagement and dispositional employability. The negative states of work wellness are burnout and ill-health which are caused when work stressors are too high. Depending on the work wellness of the employees it will determine an employee's intention to quit their jobs. If employees show signs of the positive states of work wellness they are less likely to want to quit their jobs. However, if they show signs of negative signs of work wellness, there is an increased chance of them wanting to quit their jobs.

Research has shown that these three concepts are related to each other. Research states that work stressors can affect work wellness in individuals and work wellness (burnout)

can cause ill-health in individuals suffering from burnout. Research has also stated that work wellness is a mediator between work stressors and ill-health (Maslach, Schaufeli, & Leiter, 2001). The following section below is going to better discuss the relationships between the different concepts that were mentioned in Figure 2-1.

2.9.1 RELATIONSHIP BETWEEN WORK STRESSORS AND WORK ENGAGEMENT

From the research done on work stressors it has generally been determined that there are two sets of variables that define any specific job: job demands and job resources. Jones and Fletcher (1996, p. 34) define demands as “the degree to which the environment contains stimuli that peremptorily require attention and response. Demands are the things that have to be done.” Job demands are seen as the physical, psychological, social or organisational aspects of the job that require sustained physical or psychological effort (i.e. cognitive or emotional). Research has shown that job demands are not necessarily negative to individuals’. They may turn into job stressors when meeting the demands of the job requires high effort and as a result can result in negative response to the job in terms such as depression, anxiety, or burnout in the long run (Schaufeli & Bakker, 2004; Jones & Fletcher, 1996). Job resources are referred to as the physical, psychological, social or organisational aspects of the job that can reduce the job demands of a job, can help functionally achieve success in the job, and help to stimulate personal growth, learning and development in individuals (Hobfoll, 2002; Schaufeli & Bakker, 2004).

Work engagement has been defined as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption. Engagement is seen as the persistence and pervasive affective cognitive state that is not focused on any one particular object, event, individual or behaviour. This is seen as a positive effect when individuals are happy in their jobs and are most productive (Schaufeli & Bakker, 2004).

Research conducted by Schaufeli and Bakker (2004) showed that there was a relationship between work stressors and work engagement. The study showed that work engagement and job resources of work stressors were more closely related than job demand. It was determined that the more job resources there were to complete the job successfully, the more engaged individuals were in their jobs. The research also showed that job demand

had more of a negative effect on the engagement of the individuals. It was shown that the more job demands there were, the less engaged individuals became in their jobs. According to Maslach (1993), the higher the negative effect of job demands is on the energy levels of individuals and on the attempt to cope with resulting exhaustion, the more the individual withdraws mentally and as a result there is a decrease in work engagement (Schaufeli & Bakker, 2004). A recent study showed that job resources (not job demands) exclusively predict engagement, and that engagement is a mediator of the relationship between job resources and the intention to quit (Bakker & Demerouti, 2008).

2.9.2 RELATIONSHIP BETWEEN WORK ENGAGEMENT AND DISPOSITIONAL EMPLOYABILITY

After reading articles on work engagement and dispositional employability, Sonnentag (2003), it was determined that not much research has been done on the relationship between these two concepts. However the article implied that there is a positive relationship between these two concepts.

As previously stated work engagement is seen as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption (Schaufeli, Taris, & Bakker, 2006). Dispositional employability is seen as an assemblage of individual differences that predispose employees to proactively adapt to their work and career environments. Employability facilitates the identification and realisation of the job and career opportunities both within and between organisations (Fugate & Kinicki, 2008). Dispositional employability or proactive behaviour implies an active approach to one's work and also aims at improving given work methods and procedures, additional to this at developing one's personal prerequisites for meeting future job demands (Frese, Kring, Soose, & Zempel, 1996; Parker, 2000).

A study conducted by Frese, Fay, Hilburger, Leng, and Tag (1997), found that there is a relationship between work engagement and dispositional employability. Their first finding was that the happier an individual is, the more likely they are to spend additional effort on work. Secondly they determine that the more vigorous individuals feel, the more they tend to accomplish their in-task roles with less effort (Hockey, 2000). Thirdly individuals who

engage in proactive behaviour tend to care more about their work and also regard it as worthwhile to spend and invest extra effort into the work they do. When employees are dedicated to their work and enthusiastic about it, they are more likely to engage in proactive actions to keep the work situation as positive as possible and they are continuously trying to further improve it. Finally they found that when individuals are absorbed in their work they are more likely to be proactive and are less likely to detach themselves from their work when it gets too hard (Frese, Fay, Hilburger, Leng, & Tag, 1997).

2.9.3 RELATIONSHIP BETWEEN WORK STRESSORS AND DISPOSITIONAL EMPLOYABILITY

Over time there have been many studies conducted on work stressors and its related concepts of job demands and job resources (Bakker, Demerouti, & Verbeke, 2004; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). In recent years studies have also been conducted that focus on dispositional employability or proactive behaviour (Fugate & Kinicki, 2008; Seibert, Kraimer, & Crant, 2001). However, not many studies have been conducted on the relationship between the two. In some of the articles the authors have implied the relationship between the two concepts, but no definite lines have been drawn between them.

From the studies conducted on these concepts it can be deduced, that individuals are more proactive towards their job when the necessary job resources are in place for them to do their jobs effectively (Sonnentag, 2003). It was determined that high job demands tend to reduce an individual's task motivation, job satisfaction and performance. This causes a decrease in dispositional employability as these concepts play a large role in an individual's dispositional employability (Erez & Judge, 2001).

2.9.4 RELATIONSHIP BETWEEN WORK STRESSORS, WORK ENGAGEMENT AND DISPOSITIONAL EMPLOYABILITY

While investigating the relationship between work stressors, work engagement and dispositional employability, it was seen that there are many articles that investigate the relationship between work stressors and work engagement (Hockey, 2000). However,

there are not many articles that investigate the relationship between these three concepts. After investigating the relationships between work stressors and work engagement, work stressors and dispositional employability, and work engagement and dispositional employability, it was determined that there is a positive relationship between the three concepts. More accurately, job resources have a positive effect on work engagement and dispositional employability (Roberts & Davenport, 2002; Sonnentag, Mojza, Binnewies, & Scholl, 2008; Rothmann & Joubert, 2007). These each in turn have a positive effect on each other (Bakker, Demerouti, & Verbeke, 2004; Britt, Dickinson, Greene-Shortidge, & McKibben, 2007; Fugate, 2006; Erez & Judge, 2001; Fugate, Kinicki, & Ashford, 2004).

2.9.5 RELATIONSHIPS BETWEEN WORK STRESSORS AND BURNOUT

Through research Maslach, Jackson, and Leiter, (1996) proved that burnout is a result of job demands and the lack of job resources. When an individual has high job demands and there are not enough job resources it can lead to burnout in individuals. It is however not definite that if an individual has high job demands and lack of resources that they will suffer from burnout. The reason for this is that individuals all deal with stress in different ways and manners.

Research has shown that some individuals are more capable of dealing with work stressors than others and that they are less likely to burn out (Jenkins & Maslach, 1994). Studies have also shown that if an individual does show symptoms of burnout, it can either be caused by the job demands or the job resources. It does not necessarily mean that both have to exist for an individual to suffer from burnout, just one of the concepts can already cause burnout (Fourie, Rothmann, & van de Vijver, 2008).

Burnout is not solely caused by work stressors as very often outside influences can exacerbate the problems one is experiencing at work. For example, if an individual is having problems in their marriage and they have difficult job demands with not enough job resources, they are more at risk of burning out than an individual who only has high job demands and low job resources, as the individual is pressured from more sides (Hawkey, 2011).

2.9.6 RELATIONSHIP BETWEEN BURNOUT AND ILL-HEALTH

From the research done by Maslach, Jackson, and Leiter, (1996) on the relationship between work stressors and burnout, it was further proved that burnout can cause physical and psychological ill-health in individuals. By the time an individual is suffering from burnout their bodies are so tired that they are more likely to get sick than someone who still has energy and is not tired all the time.

The symptoms of burnout can be divided under the different concepts of ill-health, for example exhaustion can be classed under both physical and psychological ill-health as a person can be both emotionally and physically tired as a result of work stresses (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). With mental distancing it can be classed under psychological ill-health as the individual is depersonalised with the work they do and is cynical with all their friends and family. The reduction in professional efficiency can be classed under both physical ill-health and psychological ill-health. With physical ill-health the individual is so tired that their body does not allow them to be as productive as they want to be, especially if the job involves physical exertion. With the psychological effects the individual can no longer concentrate and it is mentally exhausting to do work as individuals often have to force themselves to concentrate to get the work done (Hawkey, 2011).

2.9.7 RELATIONSHIP BETWEEN WORK STRESSORS AND ILL-HEALTH

The final relationship to be discussed is the relationship between work stressors and ill-health. Research has shown that there is a positive relationship between work stressors and ill-health (Maslach, Jackson, & Leiter, 1996). Research has shown that individuals can become ill of health especially if they push themselves too hard and are often forced to work in situations that are not always conducive to their health.

Individuals can often become sick if they push themselves too hard for a long period of time. By getting ill it does not mean that the individual is burnt out. It can often be a warning or a defence mechanism used by the body to warn the individual to slow down as they are burning themselves out (Zapf, Seifert, Schmutte, Mertini, & Holz, 2001). Research

has shown that very often individuals can become sick from over working and especially from work stressors. By becoming ill of health it can result in individuals becoming burnt out because they are continuously sick (Fourie, Rothmann, & van de Vijver, 2008; Ho, 1997).

2.9.8 RELATIONSHIP BETWEEN WORK STRESSORS, BURNOUT AND ILL-HEALTH

After close examination of the research it can be determined that there is a relationship between the three constructs. According to the research done by Jenkins and Maslach, 1994; Burke and Richardsen, 1993; Bakker, Schaufeli, Leiter, and Taris, 2008; Demerouti, Bakker, Nachreiner, and Schaufeli, 2001; Maslach, Jackson, and Leiter, 1996; and many more researchers, all of these are linked to one another.

In recent years there has been definitive research done by Demerouti, Bakker, Nachreiner, & Schaufeli, (2001), which has proven that there is a definite relationship between job demands-resources and burnout in individuals. This research showed that conceptually speaking, emotional exhaustion closely resembled the traditional stress reactions that were studied in occupational stress research such as fatigue, job related depression, psychosomatics and anxiety. It has also been shown that emotional exhaustion has been related to similar job stressors, such as workload and role problems, and similar attitudinal and behavioural outcomes, such as absenteeism, as a more orthodox stress reaction. This research states that the general job demands are more strongly related to emotional exhaustion than more specific emotional demands (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

An article written by Maslach and Leiter (2005) discussed the firm relationship between burnout and ill-health. It stated that by the time an individual was suffering from the different aspects of burnout, they also very often suffered from some sort of physical or psychological ill-health.

From reading these are articles it can be determined that there is some short of relationship between work stressors, such as job demands and job resources, burnout

(emotional exhaustion, mental distancing and reduction in professional efficiency) and ill-health (psychological and physical).

2.9.9 THE RELATIONSHIP BETWEEN WORK WELLNESS AND THE INTENTION TO QUIT

As previously stated there is not really a standardised definition for work wellness. For purposes of this study work wellness is defined as the existence of positive health in an individual. This health is exemplified by the quality of life and a sense of well-being in one's work and everyday life (Corbin & Pangrazi, 2001). It has been determined that there are positive and negative states related to work wellness. The positive states are work engagement and dispositional employability. The negative states are burnout and ill-health. These are seen as negative states as they have a negative effect on an individual's work wellness. And positive work wellness is observed when individuals show signs of work engagement and dispositional employability (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

From the research done on the relationship between work wellness and the intention to quit it was determined that the positive states of work wellness (work engagement and dispositional employability) have a negative effect on an individual's intention to quit. This means that the more engaged an employee is in their work place the less likely they are to want to quit (Bakker & Demerouti, 2008; Corbin, Lindsey, Welk, & Corbin, 2002). With dispositional employability, the core concept of this aspect is self-evaluation which includes measures such as self-esteem, self-efficiency, locus of control, and neuroticism. These are significantly related to perceptions of the work environment, job satisfaction, life satisfaction, task motivation, and performance (Erez & Judge, 2001). All of these tend to have a negative effect on an individual's intention to quit.

Additional to the research done it was determined that there is positive relationship between work wellness negative states (burnout and ill-health) and an individual's intention to quit. Studies conducted by Firth, Mellor, Moore, and Loquet, (2004) revealed that once a person is suffering from burnout they are more likely to consider quitting their job as they no longer have the mental drive to persevere in the position and quitting seems the easier

way out. The research on the relationship between ill-health and an individual's intention to quit are also positively related as once an individual is suffering from ill-health caused by work, they are more likely to consider quitting their jobs as it is an easy way of getting away from what is causing their ill-health (Chalatharawat, 2007).

2.10 DEVELOPMENT OF RESEARCH HYPOTHESES

From this literature review it has been determined that the following research objectives have been achieved, as stated under the heading 1.4.1. These research objectives are discussed below in detail. The research objectives have been used to develop a visual model of how they are related to each other and this will be used to better explain the research objectives.

The diagram shown below, Figure 2-2, is the expanded version of Figure 2-1. This shows the first research objective, to determine the relationship between Work Stressors, Work Wellness and the Intention to quit of management. Figure 2-2 gives a broader explanation of how the different concepts in the study are linked together and how they affect each other. The diagram also shows the different hypotheses that are going to be tested in the study.

The diagram Figure 2-2 has been divided up into smaller sections below. Each of these smaller sections is going to be discussed separately. The proposition of each of these sections will be to discuss the different hypotheses that were developed and are going to be tested in the study. The first diagram, Figure 2-3, to be discussed will focus on the relationship between work stressors (Job demand, Job resources) and work wellness (Burnout, Work engagement). The next diagram, Figure 2-4, will focus on the relationship between burnout, work wellness and work engagement and the proposed results they will have on dispositional employability and the intention to quit. The third diagram, Figure 2-5, will look at the relationship or effect work stressors, job demand and job resources have on an individual's intention to quit. The final diagram, Figure 2-6, will focus on the direct relationship between dispositional employability and the intention to quit. It will also focus on the indirect relationship between job demands, job resources and dispositional employability.

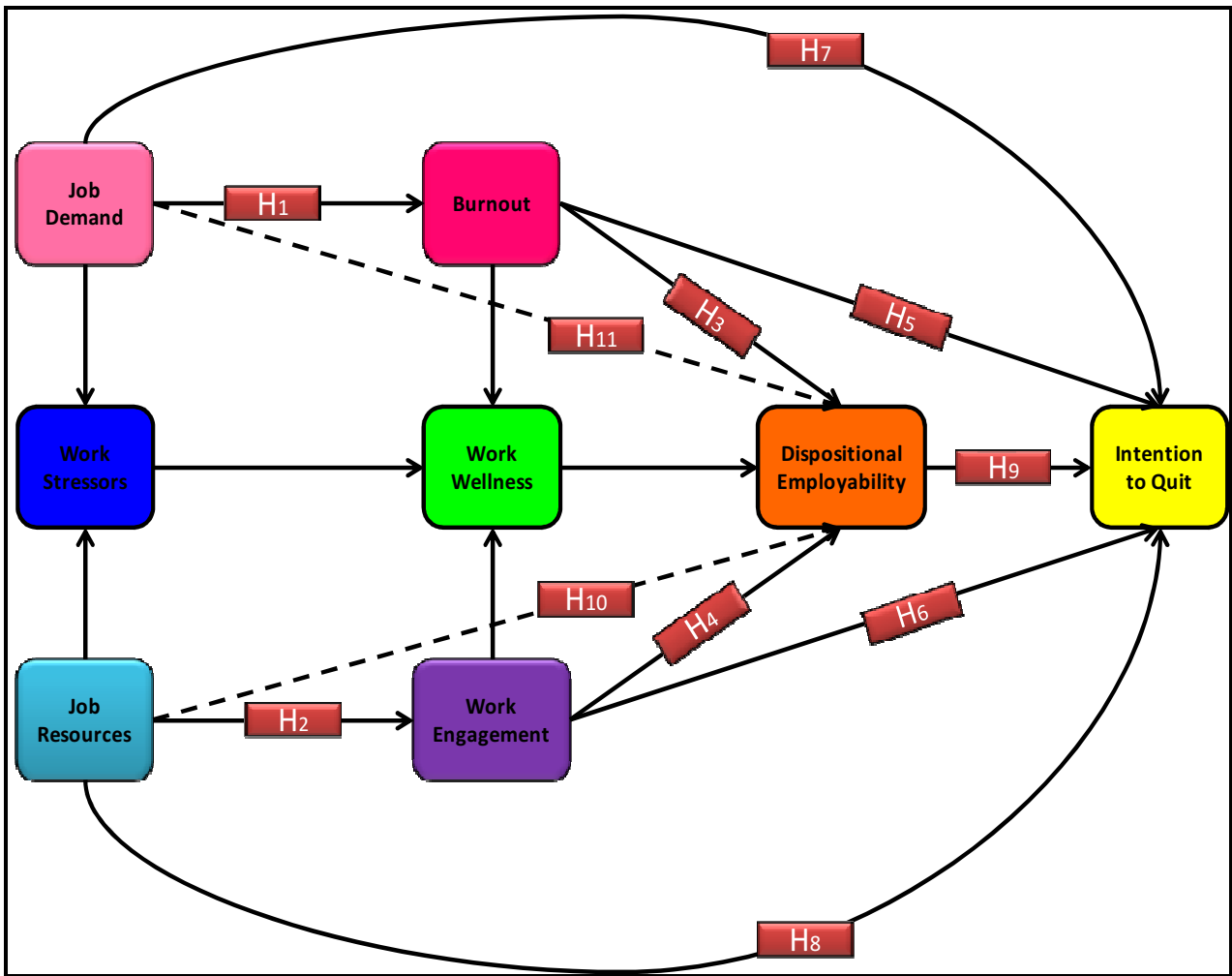


Figure 2-2: Hypothesised Model of the Relationship between the Concepts

Finally this section will discuss the research question stated at the start of the study and it will discuss how these concepts fall into the overall study.

The first research objective was to determine whether there is a positive relationship between work stressors and burnout. This relationship is shown in Figure 2-3. This relationship was proven through the research done by Rothmann and Joubert, (2007) in the Platinum mines in the North West Province of South Africa. This research proved that work stressors such as job demands and job resources were a cause of burnout in workers.

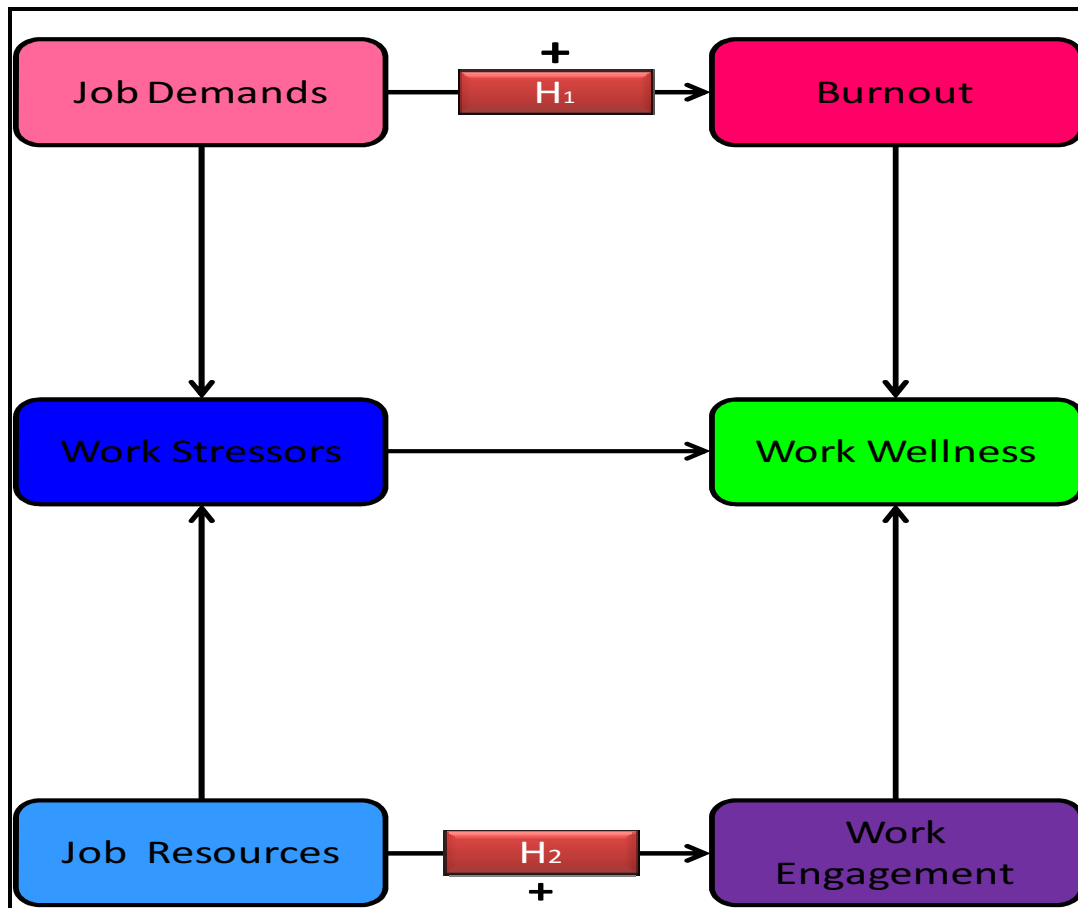


Figure 2-3: The Relationship between Work Stressors and Work Wellness

The second research objective is to determine whether there is a positive relationship between burnout and ill-health. This objective has been proven time and again in many different fields of study in the world. With the development of the Maslach Burnout Inventory it has become easier to prove the relationship between burnout and ill-health (Jenkins & Maslach, 1994).

The third objective was to determine whether there is a positive relationship between work stressors and ill-health. There have been many studies done on this relationship. In a recent study done by Michie and Williams (2003), it was determined that the most common factors associated with psychological ill-health were work demands (long hours, workload, and pressure), lack of control over work, and lack of support. And as a result these were associated with ill-health in employees (Michie & Williams, 2003). From this study it can be determined that there is a relationship between work-stressors and ill-health.

The final research objective was to determine whether burnout mediates the relationship between work stressors and ill-health. From the research stated above in the literature review it can be determined that work wellness does in fact mediate the relationship between work stressors and ill-health. Research has shown that work stressors can affect work wellness (Bakker, Schaufeli, Leiter, & Taris, 2008) and burnout is often a cause of ill-health (Fourie, Rothmann, & van de Vijver, 2008). Therefore it can be determined to be a mediator between the two constructs.

From this Figure 2-3 the following hypotheses were developed to be proven by the study. These hypotheses are:

H₁: Job demands have a positive effect on burnout

H₂: Job resources have a positive effect on work engagement

The next diagram (Figure 2-4) shows the relationships between the concepts of work wellness, dispositional employability and intention to quit.

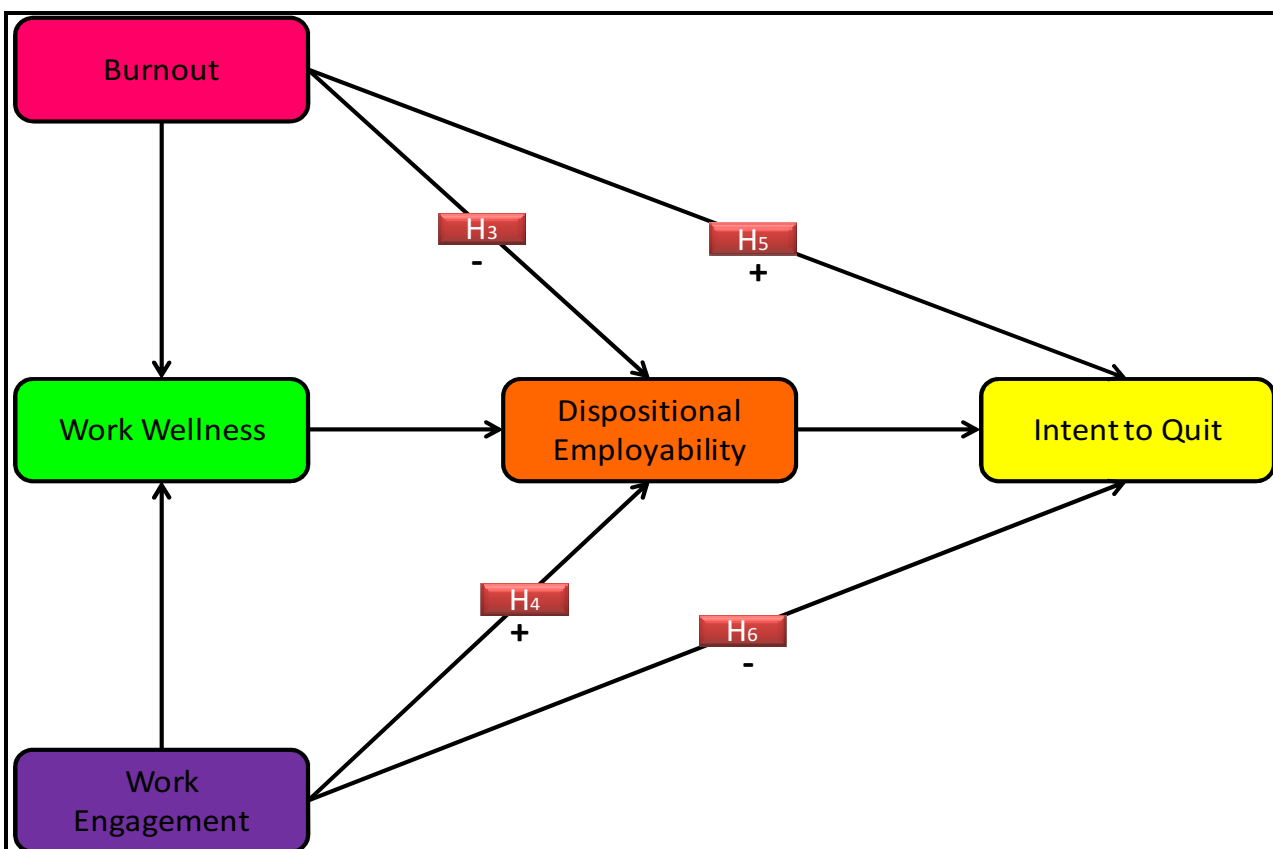


Figure 2-4: The Relationship between Work Wellness, Dispositional Employability and Intention to Quit

Additional to the initial main research objectives as stated under heading 1.4.1 these other relationships were also identified. From the research done it was determined that concepts related to work wellness had an effect on dispositional employability and intention to quit (Figure 2-4). From the study it was determined that burnout had an adverse effect on dispositional employability, while work engagement helps to improve an individual's dispositional employability. This was proven through the research done by Burke and Richardsen (1993); Hakanen, Bakker, and Schaufeli (2006); and Chalatharawat (2007).

The next relationship research found was the relationship between burnout and dispositional employability. Research has shown that there is a negative relationship between these two concepts. Studies have proven that an individual loses interest in their dispositional employability when they suffer from burnout. This was proven by Barkhuizen, (2005); Rothmann and Joubert (2007); Maslach, Schaufeli, and Leiter, (2001) and finally Fugate and Kinicki, (2008).

The research found that work engagement can have a positive effect on dispositional employability. This relationship goes both ways, as dispositional employability also has a positive effect on an employee's work engagement. This relationship was proven by Fugate (2006) and Fugate, Kinicki, and Ashford (2004).

Additional to the effect burnout has on dispositional employability; it also has an effect on an individual's intention to quit. After investigating this relationship it was determined that burnout has a positive relationship on an individual's intention to quit their job. Recent studies done by Maslach, Schaufeli, and Leiter, (2001) and Firth, Mellor, Moore, & Loquet, (2004) showed that once an individual shows symptoms of burnout they withdraw from their work. Eventually to minimise the emotional exhaustion caused by their job, they leave the job as they can no longer cope with it and do not have the energy to solve the problems.

The final relationship shown in this diagram is the relationship between work engagement and an individual's intention to quit. As work engagement tends to have a positive effect on work wellness and dispositional employability, it can be deducted that work engagement will have a negative effect on an individual's intention to quit. Research done by Britt,

Dickinson, Greene-Shortidge, and McKibben, (2007) has suggested the more engaged individuals are in their job, the less likely they are to quit their job. However, research done by Firth, Mellor, Moore, and Loquet, (2004), suggests that there are so many reasons why individuals decide to quit their jobs that there are no exact determinants of the causes for people leaving. It has been implied though, that individuals are less likely to leave their jobs if they are happy and committed to them.

From this model the following hypotheses were developed. They are as follows:

H₃: Burnout has a negative effect on Dispositional Employability

H₄: Work Engagement has a positive effect on Dispositional Employability

H₅: Burnout has a positive effect on an employee's Intention to Quit

H₆: Work Engagement has a negative effect on an employee's Intention to Quit

The diagram below (Figure 2-5), shows the relationship between work stressors concepts (work demands and work resources) and the intention to quit.

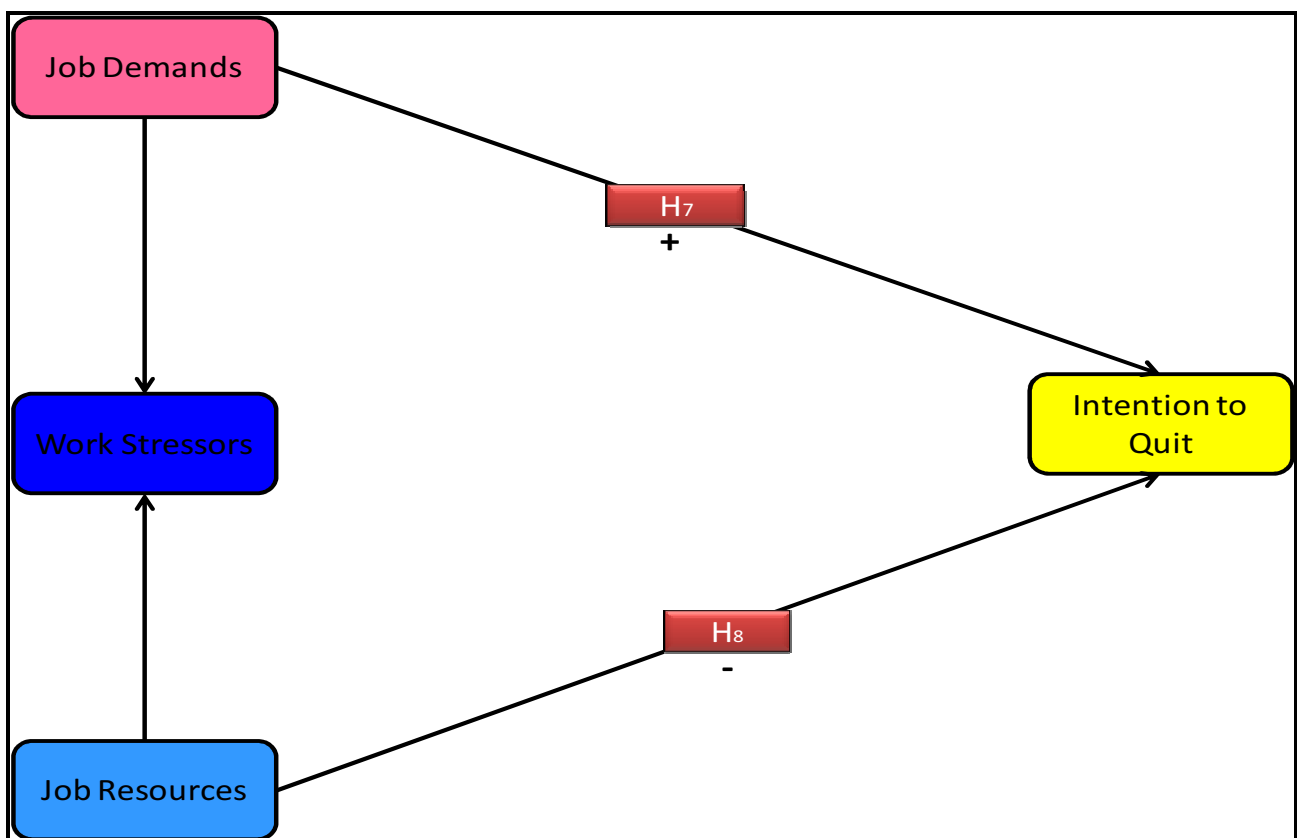


Figure 2-5: The Relationship between Work Stressors and Intention to Quit

Many researchers have tried to answer the question of what determines an employee's intention to quit by investigating possible antecedents of employees' intention to quit (Kalliath & Beck, 2001; Kramer, Callister, & Turban, 1995; Saks, 1996). To date no one has been able to pinpoint the exact cause of intentions to quit. However the studies have come up with certain variables that are consistently related to intention to quit. These variables are (Firth, Mellor, Moore, & Loquet, 2004):

- The experience of job related stress
- The range of factors that lead to job related stress
- Lack of commitment from organisation
- Job dissatisfaction

These variables can be mediated by personal or dispositional factors and by environmental or organisational factors. Some of the personal factors that mediate the relationship between work stressors and the intention to quit are aspects of personal agency, self-esteem and social support (Firth, Mellor, Moore, & Loquet, 2004). Personal agency is defined by concepts such as a sense of powerlessness, locus of control and personal control. Research has shown that the greater the sense of personal agency, the lower is the risk of negative outcomes following a major negative event or role-related stress (Turner & Roszell, 1994).

One of the personal agency variables, locus of control, relates to the extent to which people believe they or external factors such as chance and powerful others are in control of the events that influence their lives. Research done by Rahim and Psenicka (1996), found that internal locus of control mediates the relationship between work stressors and the intention to leave one's job. Additional to this it was found that the locus of control is positively related to job satisfaction (Firth, Mellor, Moore, & Loquet, 2004).

The next variable related to personal agency is self-esteem. This concept refers to the evaluation that individuals make and customarily maintain with regard to themselves. Consistent studies have shown that low self-esteem is related to psychological problems, unemployment and maladaptive behaviour. These studies have suggested that there is a high correlation between self-esteem and job satisfaction (Firth, Mellor, Moore, & Loquet,

2004). In a recent study Moore (2002) suggested self-efficiency (self-esteem) was associated with a reduced intention to quit one's job.

The final personal agency variable is social support. Social support is seen to play an important role in mitigating the intention to quit one's job (Firth, Mellor, Moore, & Loquet, 2004). Research has found that social support from supervisors reduces the level of employees' intention to quit (Moore, 2002).

From this model the following hypotheses were developed. They are as follows:

H₇: Job Demands have a positive effect on an employee's Intention to Quit.

H₈: Job Resources have a negative effect on an employee's Intention to Quit.

The final diagram (Figure 2-6) shows the relationship between dispositional employability and intention to quit. The diagram also shows the indirect relationships between work stressors aspects and dispositional employability.

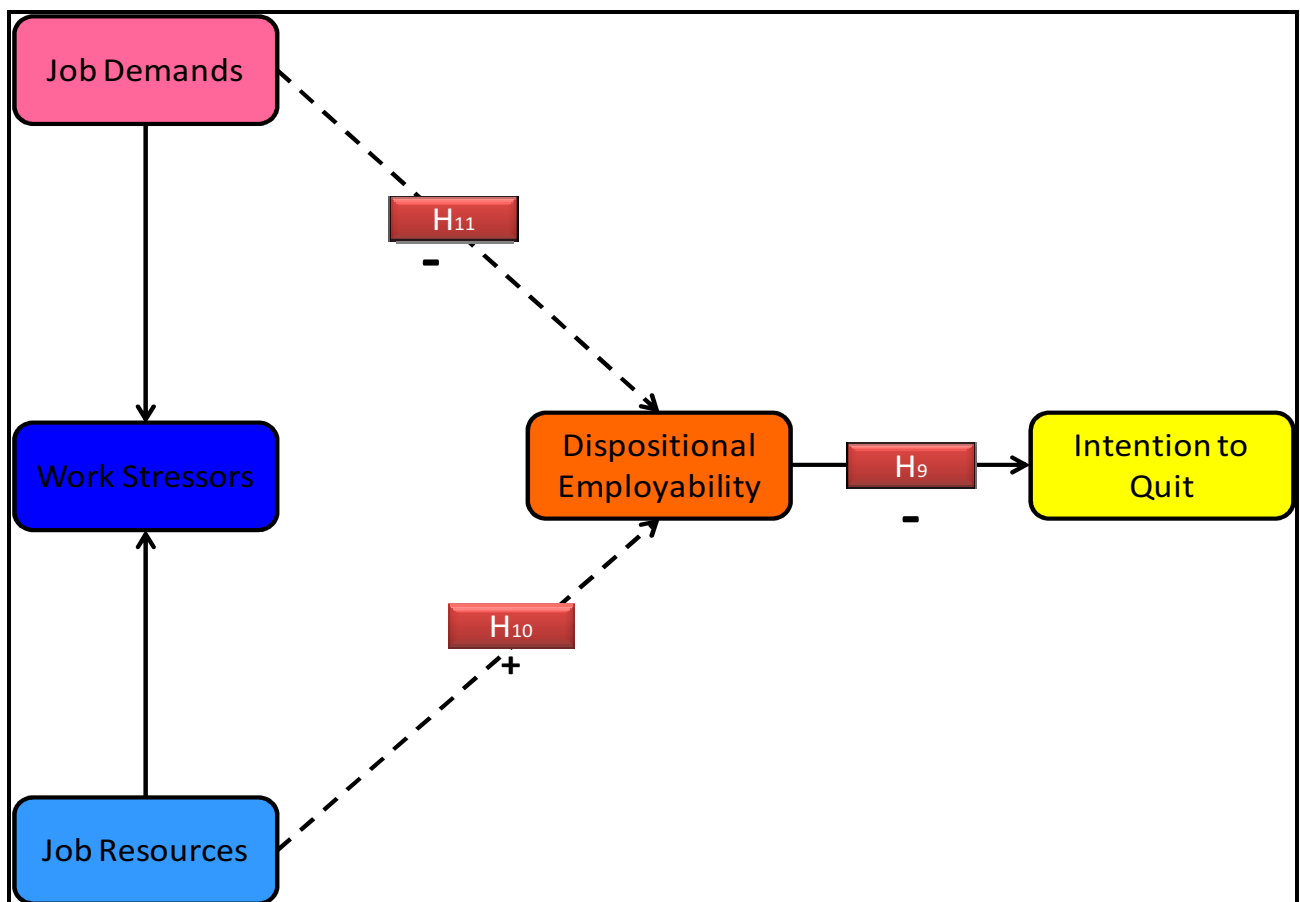


Figure 2-6: The relationship between work stressors, dispositional employability and intention to quit

After much research had been done on dispositional employability and intention to quit, it was deduced that dispositional employability has a negative effect on one's intention to quit. This deduction was made as dispositional employability involves an individual taking interest in their careers, understanding the environment around them and being engaged in their work (Fugate & Kinicki, 2008). Intention to quit on the other hand implies that an individual is no longer interested in their current job and they are actively looking for a new position (Firth, Mellor, Moore, & Loquet, 2004).

The final relationship to be discussed is the indirect relationship between work stressors and dispositional employability. Research conducted on the job resources found that when an individual has the resources they need to conduct their work effectively, they are more likely to have a higher sense of work identity and career motivation. As a result it can be determined that job resources has an indirect positive effect on dispositional employability (Bakker, Demerouti, & Verbeke, 2004).

Job demands on the other hand, tend to have an indirect negative effect on one's dispositional employability. When there are high job demands and low job resources, the result of this effect may have a negative effect on one's openness to change as one is so busy with work, they do not have the ability to also cope with changes in their working environments. When job demands are high individuals are less likely to be career resilient as one is so busy doing their work they are unable to quickly recover from change within one's career and see new challenges and opportunities for growth and development as they are too busy coping with their work (Bakker, Demerouti, and Verbeke, 2004; Erez and Judge, 2001).

From this diagram (Figure 2-6) the following hypotheses were developed. They are as follows:

H₉: Dispositional Employability has a negative effect on an employee's Intention to Quit.

H₁₀: Dispositional Employability mediates the relationship between Job Resources and the Intention to Quit.

H₁₁: Dispositional Employability moderates the relationship between Job Demands and the Intention to Quit.

The only part left of this study to prove is the relationship between Work Stressors, Work Wellness and the Intention to quit in Management in a large South African mining house. There has not been much research done on this topic in the South African context, so this study is going to be one of the first to test the relationship of the three constructs on management in a large South African mining context.

2.11 CONCLUSION

This literature review has only given a broad outline of the related aspects of Work Stressors, Work Wellness and the Intention to quit. A lot of research has been done on the individual aspects. However, not much has been done on all three of these aspects combined. As a result it has been difficult to find the most relevant literature about the interaction between these aspects. Additional to these three aspects concepts were identified that are directly related to the aspects and have an effect on the aspects.

The first aspect that was discussed was work stressors. It was determined that work stressors are created when there is an inconsistency between the job demands and the available resources. This implies that when the job demands are high and job resources are lacking, there is an increase in the stress an individual experiences. These work stressors can eventually cause burnout if they are not solved.

The second aspect was work wellness. It was determined from research that work wellness is effected by four concepts. Some of these concepts have positive effects on work wellness, while others have a negative effect on an individual's work wellness. The concepts that have a positive effect on work wellness are work engagement and dispositional employability. Work engagement involves an individual harnessing themselves to their work rules by which they employ and express themselves physically, cognitively and emotionally during their role performance. Dispositional employability is the second concept that has a positive effect on work wellness. Dispositional employability is seen as a collection of individual differences that predispose employees to proactively adapt to their work and career environments.

The concepts that have a negative effect on work wellness are burnout and ill-health. These concepts are also related to work stressors. Burnout is most often caused by work stressors. However, this is not always the case, as some individuals are mentally healthier than others and they can withstand the work stressors better. Each individual reacts differently to work stressors. When an individual does suffer from burnout, they normally show symptoms of emotional exhaustion, depersonalisation or cynicism, or reduction in performance efficiency. An individual does not necessarily have to have all three symptoms at the same time. They can show a combination of two or three, or just one.

Research has shown that burnout symptoms are very often related to ill-health. Ill-health can be divided into physical ill-health and psychological ill-health. As each individual shows symptoms of burnout differently, they will present different symptoms of ill-health.

Once the main aspects had been investigated, it was determined that these concepts have an effect on an individual's intention to quit their work. It was determined that when an individual has high work stressors and low work wellness they are more likely to leave their jobs and look for other employment.

After all the aspects and concepts had been discussed the literature review started to focus on how these different aspects and concepts relate to each other according to the literature provided on these. On some of the concepts a lot of research has been done, whereas on other concepts much less research has taken place.

Once the relationships had been discussed the focus shifted towards the study that was to be investigated. After the analysis of the literature the following hypotheses were developed and would be accepted or rejected at the end of the study.

Chapter 3: RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

In this chapter the different aspects involved in the research design and the methods that were used to collect the data in the study will be discussed. This section starts by discussing the research paradigm involved with this type of research. The section then discusses the strategy of inquiry used in the study. It then shifts to discuss the sampling method, the data collection and data analysis methods used to complete the study. Finally this section ends by discussing the ethics involved in the study as well as the limitation that appeared in the study.

3.2 RESEARCH PARADIGM

According to Filstead (cited in Creswell, 2009), a paradigm can be defined as a “set of interrelated assumptions about the social world which provides a philosophical and conceptual framework for the organized study of that world”. A research paradigm is used to set the context for a researcher’s study. There are many different types of paradigms that can be used to guide research into all the assumptions made regarding the particular study (Ponterotto, 2005). Creswell (2007) defines the notion of a research paradigm in a more simplistic manner by simply calling them worldviews. This means that they are really defined as a basic set of beliefs that can guide researchers’ actions. A research paradigm includes assumptions regarding ontology (the nature of reality), epistemology (the relationship between the researcher and the research participant), and axiology (the role a researcher’s personal values play in the research process), the rhetorical structure and finally the method to be used (Kotzé, 2011).

The study was conducted from a positivistic paradigm. According to Kotzé (2011), this paradigm can be described as being modelled on the natural science approach. It strives to achieve objective knowledge that can in the end be used to ascertain cause-and-effect relationships. The main ontology, epistemology, axiology, rhetorical structure, the method,

and the role of the researcher that characterise the positivistic approach are summarised in Table 3-1.

Table 3-1: The Main Characteristics of Positivism

Dimension	Description	Positivistic assumption
Ontology	Nature of reality	One true reality that is identifiable, measurable and apprehendable. It is not context or time bound and can be generalised.
Epistemology	The relationship between the researcher and research participant	Independent of each other. The research does not influence the participants and vice versa.
Axiology	The role of values in the research process	Values have no place and must be carefully controlled.
Rhetorical Structure	The language and presentation of the research	Objective, third person who is scientific and detached from the research process.
Method	The process and procedure of the research	Only Quantitative strategies of inquiry.
Role of the researcher	The part played by the researcher in the study	Objective, impartial observer who is passive and value-neutral.

Source: Adapted from Poterotto and Grieger (2010, p. 410)

The positivistic paradigm was appropriate to the study as it attempts to find a relationship between constructs mentioned for this study and also will make use of objective measurement instruments for the data gathering and analysis procedures. The paradigm was also appropriate in light of the fact that the study made use of a questionnaire/survey design and was furthermore aimed at quantifying the attributes related to Work Stressors, Work Wellness and the Intention to quit in management in a large South African mining house. The study furthermore aimed to generalise the results to the sample population as the results have the potential to be valuable to mining houses and add to the limited literature on this topic in South Africa. The function of the researcher in the study was to be objective; impartial and unbiased while hoping to reproduce as far as possible stringent scientific methods and procedures (Ponterotto, 2005). The assumptions on which this study was based fell in line with the paradigm the researcher intended to adopt.

3.3 DESCRIPTION OF INQUIRY STRATEGY AND BROAD RESEARCH DESIGN

The following section will discuss the description of the study's strategy of inquiry and the basic characteristics of quantitative research.

3.3.1 DESCRIPTION OF THE STRATEGY OF INQUIRY

A study of the relationship between Work Stressors, Work Wellness and the Intention to quit can create several research challenges (Bakker, Schaufeli, Leiter, & Taris, 2008). The relationship between these three concepts may vary from person to person as each person experiences these three concepts at different levels at different periods of time (Fourie, Rothmann, & van de Vijver, 2008).

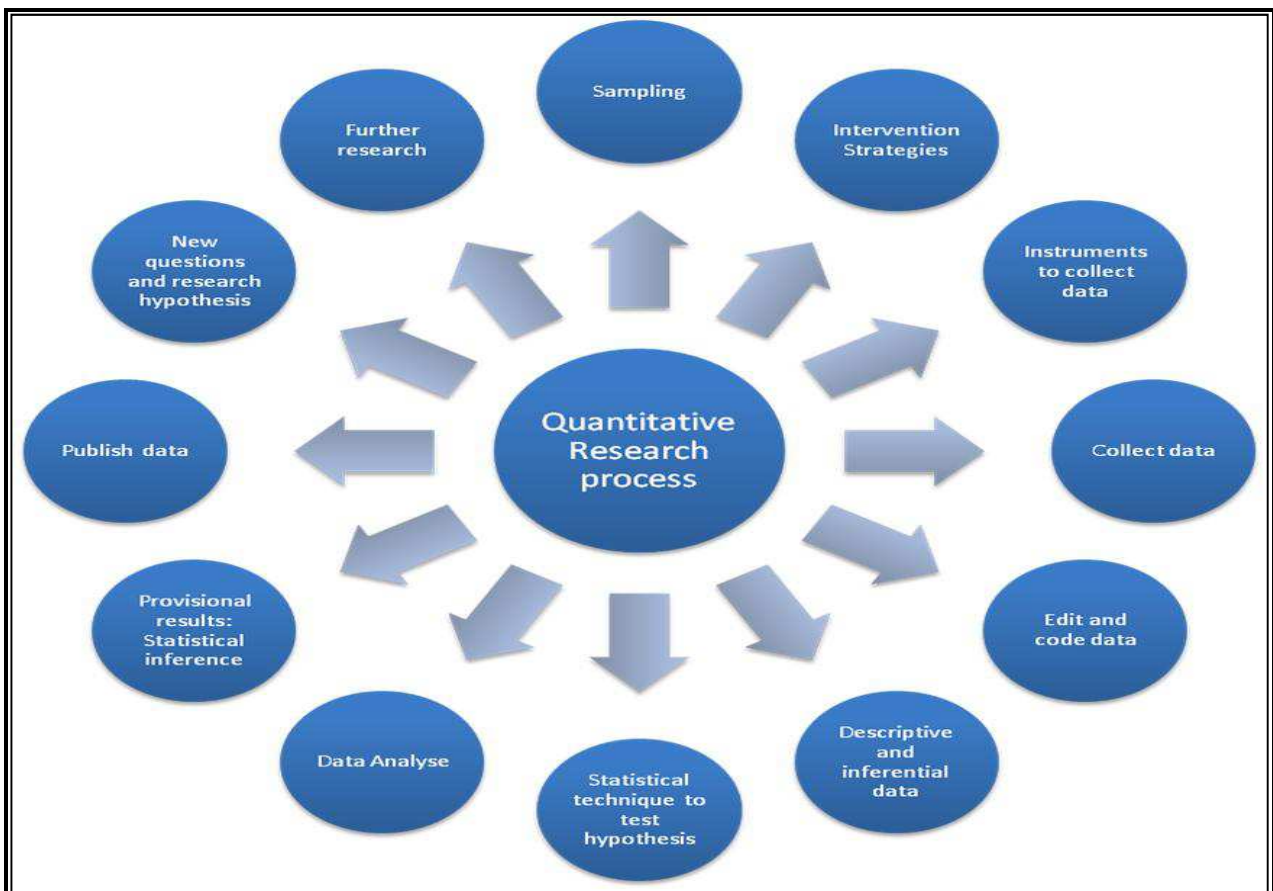
To solve this problem the researcher had decided to use non-experimental research that would provide a numerical (quantitative) description of attitudes, opinions or trends of a population by studying a sample of the population. The study's data was collected through questionnaires while conducting a cross-sectional study (Creswell, 2009).

To answer the research questions stated under heading 1.4, the researcher used a non-experimental design as the strategy of inquiry. This strategy was selected as the researcher was trying to determine the relationship between Work Stressors, Work Wellness and the Intention to quit in management in a large mining house. The non-experimental design was selected as this research cannot be accomplished by using an experimental design. It was impossible to split the managers into two groups and then proceed to apply work stressors to one group and not the control group. This study could not be done in real life as management in a mining industry is a high stress profession and all the managers are under stress. If this test was run in a controlled laboratory and only the test group was influenced by work stressors and not the control group, the results could not be generalised to the greater population of management in the mining industry, as the test does not reflect the real world. Work wellness and ill-health if caused by work stressors, appear differently for each individual as they can manifest differently.

3.3.2 THE BASIC CHARACTERISTICS OF QUANTITATIVE RESEARCH

Quantitative research was used as a means for testing objective theories by the method of statistically analysing relationships amongst variables (Creswell, 2007). Quantitative research was done from a deductive approach which involved the testing of theoretical propositions by the employment of a research strategy that was specifically designed for the purpose of the testing (Saunders, Lewis, & Thornhill, 2009). This in essence meant that no new concepts were developed but only something already proposed to be true in the literature was tested. Survey research is seen as a non-experimental means of conducting quantitative research, by means of collecting questionnaire data and analysing it for the intended purposes of answering the research question.

Maree, (2010) gives an overview of the quantitative research process which is shown in Figure 3-1 below:



Source: Maree (2010, p146)

Figure 3-1: Quantitative Research Process

3.4 A CLASSIFICATION OF THE PROPOSED STUDY'S OVERALL RESEARCH DESIGN

The following are appropriate descriptors that best describe the broader research design of the proposed study:

- **Cross-sectional:** Cross-sectional research involves the study of a particular phenomenon at a point in time. This study is carried out once and only represents a snap shot of one particular point in time (Creswell, 2007). This design was ideally suited to the descriptive and the predictive functions associated with the correlation research. It was used to assess the interrelationship between the variables in the study (Shaunessey & Zechmeister, 1997).
- **Non-experimental:** Non-experimental research provides a numerical (quantitative) description of attitudes, opinions or trends of a population by studying a sample of the population. Data can be collected through questionnaires or structured interviews while conducting a cross-sectional or longitudinal study (Creswell, 2009; Babbie, 2008).
- **Primary Data:** Primary data refers to data that is collected specifically for a research project being undertaken (Saunders, Lewis, & Thornhill, 2009). In this study the researcher collected empirical data to address the research.
- **Empirical Research:** The study is classified as an empirical study as the researcher collected and analysed primary data.
- **Descriptive Research:** Saunders, Lewis, and Thornhill, (2009) mentions that descriptive research's main goal is to portray an accurate profile of people, events or situations. The main aim of this study was to provide an in-depth description of the relationship between Work Stressors, Work Wellness and the Intention to quit in management in a large mining house.
- **Quantitative Data (Numeric Data):** Quantitative data refers to numerical data that can be statistically analysed to determine the results of the research project. The

data collection technique that was used for this study was questionnaires which generated numerical data (Saunders, Lewis, & Thornhill, 2009). This type of data was then used to perform statistical analysis and draw conclusions thereof. This study attempted to find a relationship by means of correlation analysis which is a statistical technique and therefore the use of numerical data was necessary.

3.5 SAMPLING

To answer the research question and hypotheses stated, the researcher selected a non-experimental strategy of inquiry. This required the researcher to select a non-experimental data collection method. The purpose of selecting the non-experimental method was that the researcher was trying to determine the relationship between Work Stressors, Work Wellness and the Intention to quit in management in a large mining house. This kind of study could not be done by using an experimental research design.

3.5.1 UNITS OF ANALYSIS

The units of analysis of a study refer to the entities about which the researcher wishes to draw conclusions. The units of analysis can refer to individuals, families, organisations and any other groupings or entities (Terre Blanche, Durrheim, & Painter, 2006). This study used management in a large South African mining house for the purposes of testing the relationship between Work Stressors, Work Wellness and Intention to quit among this sampling population.

3.5.2 TARGET POPULATION

The target population of this study was management in the mining house. These managers did not have to be in a senior management position; they could be in any level of the organisation. However, there were certain conditions that needed to be met. The first condition was that the participants in this study needed to be employed by the large mining house. Secondly, they needed to be working at a managerial level within the

organisation. Thirdly, they needed to have access to a computer and finally they needed to be able to read the questionnaires.

3.5.3 SAMPLING METHOD

To create the most accurate generalisation of the relationship between Work Stressors, Work Wellness and the Intention to quit, the researcher tried to use the biggest sample group possible. To achieve this, the researcher made arrangements with the mining house so that their employees could be used. At the start the selection process, only employees who met the population requirements were selected for the study. Once the correct target population had been selected, the researcher used a purposive convenience sampling method to select the sample for this study. Purposive convenience sampling is a sample method whereby the researcher selects the sample on the basis of the researcher's judgement and knowledge of the sample group. As the sample group was so small it was imperative that this method was used, as there was a great chance that not all the participants would answer the questionnaire and not all the respondents would complete the whole questionnaire (Saunders, Lewis, & Thornhill, 2009; Babbie, 2008).

3.6 DATA COLLECTION

The following section will discuss the specific attributes and characteristics of the units of analysis, as well as the factors that hampered the access to the required data. The section then will shift focus and discuss the specific approach, method and instruments used in the collection of the data. Next there will be a discussion on the specific forms of data collection and the pilot testing done for the study. To end this section there will be a discussion of who was involved in the data collection and the length of data collection period.

3.6.1 SPECIFIC ATTRIBUTES AND CHARACTERISTICS OF THE UNITS OF ANALYSIS

Managers were identified as the units of analysis for this study. The specific characteristics and attributes of the units of analysis were collected through primary data collection method. To understand the result gained from the study it was first important to have a better understanding of the sample population, so that generalisations made on the population could be more accurate. To understand the relationship between Work Stressors, Work Wellness and Intention to quit, the population was first divided by the functions they worked in. The participants were first asked to state the function the managers worked for (Human Resources, Supply Chain Management, Finance, Safety, Health, Environment, Community (SHEC), Technology, etc.) and then their department within the specific function (Payroll, Creditors, Health, Procurement, etc.). By stating one of these the researcher was able to determine which function had the highest levels of Work Stressors, Work Wellness and the Intention to quit and which department in that function had the highest level. By stating the department the researcher was also be able to determine which position has the highest levels of Work Stressors, Work Wellness and Intention to quit. The reason for this is that the researcher will have a better understanding of the division of the respondents and better generalisations could be made about the population.

The second attributes and characteristics that were collected from the sample was gender. This attribute was used to determine if there was any difference between the relationship between Work Stressors, Work Wellness and Intention to quit in males and females. The reason for this is that the researcher will have a better understanding of the division of the respondents and better generalisations can be made about the population.

Some of the other attributes and characteristics that were measured in the study were marital status, home language, age, current level of qualification, ethnicity, work experience, working in current job, promotions, employment basis, hours worked per week, travel time to and from work, entitlement of leave. These were also used to see if there were any significant trends that played a role in the relationship between Work Stressors, Work Wellness and the Intention to quit.

The final attribute and characteristic that was important to the study was the participants' level in management. The respondents were asked to select their managerial level. The respondents were asked to select one of the following levels (supervisor, lower management, middle management or senior management). This attribute was used to determine if different levels in management had different relationships between Work Stressors, Work Wellness and the Intention to quit.

3.6.2 FACTORS THAT HAMPERED ACCESS TO THE REQUIRED DATA SOURCE

In every research study there are certain factors that hamper access to the required data sources. Gaining access to the primary data the researcher needed for the study, depended on gaining access to the required participants. This process is known as gaining physical access or entry (Saunders, Lewis, & Thornhill, 2009). As the researcher needed access to managers in the large mining house, the researcher had to go through the organisation to gain access to them. This was only the first step. The researcher had to start by writing a letter to the organisation asking permission to do the study in the organisation. Once the letter had been accepted, the researcher still had the enormous task of gaining participation from the employees within the organisation. This was a problem as the employees in the organisation are known for not being willing to answer questionnaires.

3.6.3 SPECIFIC APPROACH, METHOD AND INSTRUMENTS TO BE USED IN THE COLLECTION OF THE DATA

The following section will discuss the specific approach used to collect the required data for the study. The next part of the section will discuss the specific measurement instruments used in the collection of the required data.

3.6.3.1 Specific Research Method

The method of data collection that was used in this study was questionnaires. The questionnaires used in this study were all self-administered questionnaires. These were all

administered electronically via the internet. The best way to ask participants in this study to complete the questionnaires was to email them an explanation of the study as well as the link to where they could go to answer the questionnaires (Saunders, Lewis, & Thornhill, 2009). Due to time constraints this study was a cross-sectional study.

3.6.3.2 Measurement Instruments

For the purposes of the study the following questionnaires were administered to the participants. These questionnaires were the Job Characteristics Scale, an Adapted version of the Maslach Burnout Inventory – General Survey, the Utrecht Work Engagement Scale, the General Health Survey, the Dispositional Measure of Employability and finally the Employee Retention Scale.

The Job Characteristics Scale

The Job Characteristics Scale (JCS) (Barkhuizen, 2005) was used to measure the sources of work stressors faced by management in the organisation. The JCS questionnaire consisted of 48 items. The questions were rated on a four – point scale ranging from 1 (never) to 4 (always). The dimensions of the JCS questionnaire focus on the pace and amount of work, the mental load, the emotional load, work variety, opportunities to learn, work independence, relationship with colleagues, the participants' relationship with their immediate supervisor, the ambiguities of the participants' work, the information, communication, participation, contact possibilities, remuneration and finally their career possibilities. The questionnaire has been validated in the South African context (Barkhuizen, Rothmann, & Tytherleigh, 2008).

Maslach Burnout Inventory – General Survey

The second questionnaire used was the *Maslach Burnout Inventory-General Survey (MBI-GS)*. The *MBI-GS* is a 22 item inventory designed to include three subscales used to measure burnout: *Emotional Exhaustion (EX)* (five items: e.g. I feel used up at the end of a work day), *Mental Dissonance (MD)* (five items: e.g. I doubt the significance of my work), and *Professional Efficiency (PE)* (six items: e.g. I can effectively solve the problems that

arise in my work). All items are scored on a seven-point frequency rating scale ranging from 0 (Never) to 6 (Daily). A high score on EX and MD and a low score on PE are indicative of burnout (i.e. all PE scores are reversibly scored).

These three aspects were tested to determine the level of burnout in the participants in the study (Jackson, Rothmann, & van de Vijver, 2006). The internal consistencies (Cronbach's coefficients alphas) for the *MBI-GS* reported by Maslach, Jackson, and Leiter, (1996) varied from 0,87 to 0,89 for Exhaustion, 0,73 to 0,84 for Cynicism and 0,76 for Professional Efficacy.

Applied within the South African context, recent studies using the *MBI-GS* obtained Cronbach's alphas of 0,88 to 0,89 (Exhaustion), 0,76 to 0,78 (Cynicism) and 0,79 to 0,85 (Professional Efficacy) in a sample of police workers (Storm & Rothmann, 2003). The adapted version of the *MBI-GS* measurement scale is included in Appendix A (p. 164).

Utrecht Work Engagement Scale

The *Utrecht Work Engagement Scale (UWES)* (Schaufeli, Gonzalez-Roma, Salanova, & Bakker, 2002) was the third questionnaire used in the study to determine the relationship between Work Stressors, Work Wellness and the Intention to quit in management. This questionnaire was used to measure the participants' levels of engagement. The questionnaire consists of 17-items from the *UWES* with four additional items with simplified language. The three dimensions of engagement can be identified and distinguished in the questionnaire. The dimensions are namely *Vigour* (which consists of 6 items i.e. "I'm bursting with energy in my work"), *Dedication* (which consists of 5 items i.e. "I find full of meaning and purpose) and finally *Absorption* (which consists of 6 items i.e. "When I am working, I forget everything else around me"). Studies have shown that engaged individuals are characterised by high levels of Vigour and Dedication with elevated levels of Absorption. With regard to internal consistency, the reliability coefficient of the three subscales have been determined to be between 0,68 and 0,91.

In a study conducted on a South African sample, the alpha coefficient from police officers obtained the following results. For the two sub-scales, *Vigour* determined an alpha

coefficient of 0,78; *Dedication* 0,89; and *Absorption* 0,78. Other studies conducted on the South African population found to obtain Cronbach's alpha coefficients varying from 0,70 for *Vigour* and 0,81 for *Dedication* to 0,87 (*Vigour/Dedication*) and 0,57 to 0,61 for *Absorption* (Naude & Rothmann, 2004; Barkhuizen & Rothmann, 2006).

General Health Survey

The fourth questionnaire to be used in the data collection process was *The General Health Survey*. *The General Health Survey* is used to measure 19 items on two subscales. The subscales are physical health and psychological well-being. Each item is scored from 1, where the ill-health symptom or change of behaviour is never experienced over the last three months, to 4 where the ill-health symptom or change of behaviour is often experienced over the past three months. A version of this questionnaire can be found in Appendix A (p. 164).

Dispositional Measure of Employability

The *Dispositional Measure of Employability* is a questionnaire that was developed by Fugate and Kinicki (2008) and is used to measure an individual's orientation towards their work and their employability. This questionnaire is used to measure the six dimensions of employability. The dimensions are: *Openness to Change*, *Career Productivity*, *Work Identity*, *Career Resilience*, *Career Motivation* and *Optimism*. The responses of the questionnaire are measured on a six-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (6). This Questionnaire has been validated for the South African context (Barkhuizen & Botha, 2011).

Employee Retention Scale

The final questionnaire used in the study was the *Employee Retention Scale*. This scale consists of three items which are used to determine the managers' intent to quit the organisation. The Respondents in the study were asked to rate the items on a seven point Likert scale from Strongly Disagree (0) to Strongly Agree (6). This questionnaire has been validated for the South African context (Du Plessis, Stanz, & Barkhuizen, 2010).

3.6.4 SPECIFIC FORM OF DATA TO BE COLLECTED

Primary data was collected as the specific form of data for this study. Primary data refers to data that was collected specifically for a research project being undertaken (Saunders, Lewis, & Thornhill, 2009). In this study the researcher collected empirical data to address the research objectives.

The reason for selecting primary data as the specific form of data for this study was because there were no real sources of secondary data available for this specific study. After much searching the researcher realised that there has not been much research done on the relationship between work stressors, work wellness and intention to quit in Management in the large mining industry. As a result of these findings it was decided that to achieve the most accurate results for this research project primary data would have to be collected.

3.6.5 PRE- / PILOT TESTING

To ensure that the questionnaires used in any study are acceptable, researchers recommend that pre-testing of the questionnaire is done to ensure that the questionnaire obtains useful data (Forza, 2002; Hutchinson, 2004).

Although no formal pilot study was undertaken in this study, the researcher followed the recommendations of Forza (2002) for pre-testing a questionnaire. The questionnaire was given to subject matter experts in the field of survey testing, academic professionals and employees from the target population to be analysed, to make sure that the questionnaires actually measure what was required to be measured in the study. The individuals who were consulted in the pre-testing phase of the study did not take part in the final phase of study. These managers did provide valuable information on the wording and content of the different items as well as the time it took them to complete the questionnaire.

3.6.6 WHO IS INVOLVED WITH THE COLLECTION OF THE DATA

As everything is web-based, there was no need for facilitators. There were no specific equipment requirements either, as everything was done electronically and all the participants could self-administer the questionnaires. All the participants needed to complete the questionnaire was a computer and an internet connection, which most managers have access to due to the nature of their work.

3.6.7 LENGTH OF THE DATA COLLECTION PERIOD

As the sample pool was all managers and they are continuously very busy, it was decided to have quite a long data collection period. The data collection period lasted from the 28 July 2012 till the 24 August 2012. During this period weekly notifications were sent out to managers to remind them to fill in the questionnaires and a web-link was attached of where they could fill them in.

3.6.8 RESEARCH PROCEDURE

Before the data collection process could start the researcher first needed to gain permission from the organisation to use its employees in their managerial levels. As soon as permission had been received the sampling process began. The participants were identified through the purposive convenience method. In order to maintain protocol and also maximise the effectiveness and respondents' support of the study, the appropriate reporting and communication routes were followed. The identified sample group were then sent an email explaining the purpose of the study as well as the electronic link for them to answer the questionnaire. In the email sent to the participant the purpose of the study was explained as well as the rights of the participant in the study. The participants were informed of the anonymity of the study as well as their rights to withdraw from the study at anytime without an explanation. By submitting the questionnaire the participant gave their informed consent and this ensured voluntary participation. Confidentiality of the participants was ensured as the survey was conducted in complete anonymity, since the researcher did not at any time request or record the respondents' identity. Once the individual clicked on the submit button on the online questionnaire, the data was directly

sent to the administration data bank of the Lime Survey database programme. The Lime Survey database programme has the functionality of exporting data recorded from the questionnaire into different tools, specifically SPSS which was used for data analysis. To ensure that enough participants answered the questionnaire the participants were reminded once a week to complete the questionnaire. To assist the participants, the reminder email also had the link attached to it.

3.7 DATA ANALYSIS

The main aim of the entire research study was to eventually answer the research objectives. In this section the data analysis process was described starting at the nature of the analysis of the data gathered. Data collected from the study was analysed by means of quantitative techniques.

3.7.1 RECORDING, STORING AND CODING OF THE DATA GATHERED

Responses gathered from the online questionnaires were recorded electronically in the Lime Survey database. These results were then exported into the statistical program called SPSS. The data received from the study were stored on two separate computers as well as an external hard-drive to ensure that the data would not get lost. Due to the fact that the data gathering process was completely anonymous, there was little need to secure the data.

3.7.2 PREPARATION OF DATA FOR ANALYSIS

According to Field (2009) exploring data is seen as the first step in any data analysis procedure. SPSS allows many techniques to prepare the data for analysis. The data was screened in order to ensure that the analysis techniques used did indeed lead to significant results. Before any statistical analysis could be done on the data gathered, it was essential to screen and clean data (Maree, 2010). This was done by SPSS and it shows the researcher errors such as missing data, incorrect data entered, irregular

distributions and outliers (scores with extreme values) which may have result in distorted statistics and incorrect conclusions (Luthans & Avolio, 2009).

3.7.3 ANALYSIS TECHNIQUES

As stated, the study made use of quantitative techniques of data analysis. Quantitative techniques according to Saunders et al. (2009) could range from simple creation of tables or diagrams that show frequencies, to more complex statistical analysis such as comparisons and statistical modelling. In essence quantitative data is data that has been quantified, e.g. put into numbers. Following below are descriptions and motivations for the main types of analysis that were prepared in the study.

Descriptive statistics

Maree (2010, p.183) describes descriptive statistics as the “collective name for a number of statistical methods that are used to organise and summarise data in a meaningful way”. The main reasons for the use of descriptive statistics are (Creswell, 2009):

- To describe the characteristics of the sample.
- To check variables for violation of any assumptions underlining the statistical tests.
- To address and answer the research question.

Descriptive statistics is used to enhance the understanding of the properties of the data and also to identify any severe inaccuracies that may appear in the data. The main forms of descriptive data are the mean, median, mode, standard deviation, counts and the skewness and kurtosis of the data gathered (Field, 2009). In the proposed study these statistics will be used to explore data, describe the sample and ensure that the right tests are used.

Inferential statistics and analysis

According to Maree (2010), the purpose of most research is to use the data gathered from the sample and generalise the findings back to the population. For this specific reason the

use of inferential statistics and analysis was of the essence in the study. The field of statistical inference relies heavily on probability theory (Maree, 2010), as it is by means of probability statements that inferences are made. Inferential statistics are divided into parametric and non-parametric statistics. The first refers to a broad range of statistical procedures or tests that requires data to meet certain assumptions of which normality of sample distribution is most essential (Field, 2009).

The second type, non-parametric, refers to the range of statistical tests for establishing relationships between variables, without having to meet any assumptions regarding distribution or the nature of the data. Parametric procedures are seen to have more statistical power than their non-parametric counterparts (Field, 2009). In this study as far as possible it has been attempted to make use of parametric tests and procedures. However, if the data was found not to conform to the assumptions set by the specific test, the non-parametric alternative was used to analyse the data gathered.

3.7.4 SPECIFIC STATISTICAL TECHNIQUES TO BE USED

The data analysis for this research was carried out with the help of SPSS (SPSS20, 2012). Exploratory Factor Analysis was used to assess the structure of the measuring instruments. For this study the measuring instruments were the JCS, MBI-GS, UWES, the General Health Survey, Dispositional Measure of Employability and the Employees Retention Scale for which Factor Analysis was done on each. The reliability and validity of the measuring instruments to record the data were assessed with the help of factor analysis and Cronbach's alpha coefficients (Field, 2009). Descriptive statistics were conducted on the different variables and included means, standard deviation, skewness and kurtosis (Maree, 2010).

Linear and Multiple Regression Analyses were used to analyse the relationship between the dependent variables and the independent variables.

In terms of statistical significance, a value at a 95% confidence interval level ($p \leq 0,05$) was set. Effect sizes indicate whether obtained results are important (while statistical significance may often show results which are of little practical relevance). A cut-off point

of 0,50 (medium effect) was set for the practical significance of differences between means (Field, 2009).

3.8 ASSESSING AND DEMONSTRATING THE QUALITY AND RIGOUR OF THE PROPOSED RESEARCH DESIGN

This section gives a description of the research philosophy and design, as well as the sampling, data collection and data analysis methods used in the study. Furthermore the quality and rigour of the study is discussed as well as the applicable ethics in the study.

3.8.1 RELIABILITY

Reliability is the “extent to which the data collection technique or techniques will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data” (Saunders, Lewis, & Thornhill, 2009, p. 609)

Cronbach’s correlation coefficient was used to test the reliability. Reliability, according to (Babbie & Mouton, 2001), refers to consistency in measurement, providing a measure to determine how repeatable the results are. Reliability refers to the accuracy of an instrument: to be interpretable, a test must be reliable (Cohen, 1988).

Reliability is important due to the fact that decisions cannot be based on results that cannot be repeated. The result of the reliability analysis is a reliability coefficient (r) where 0 indicates a completely unreliable test and 1 indicates a completely reliable test. Cronbach's alpha measures how well a set of items (or variables) measures a single unit-dimensional latent construct (Field, 2009). The statistical program SPSS was used to determine the Cronbach’s correlation coefficient.

3.8.2 VALIDITY

Validity is the extent to which the data collection method accurately measures what it was intended to measure (Saunders, Lewis, & Thornhill, 2009). As this study used questionnaires that have been previously developed and the validity is known, a pilot study was used to determine if the questionnaires were applicable to what was actually to be tested in the study.

Validity encompasses two very important areas; firstly validity questions the controls enforced to ensure conclusions drawn are truly reflected by the data and secondly it questions if we can make a generalisable conclusion about the population from the initial sample group drawn (Leedy & Ormrod, 2010). Validity is the accuracy, meaningfulness and credibility of a research project as a whole.

3.8.3 RIGOUR

The rigour was tested for this study by using the correct sampling strategy when selecting the sample. By using a purposive convenient sampling method, a better sample was selected as a greatest part of the target population had the chance of being in the study (Creswell, 2009).

Another way of demonstrating rigour in this study was to use the correct application of statistical analysis. Any type of statistical analysis could have been used to get the desired results from the data. However, by using the correct statistical analysis the results were used to make a correct generalisability to the target population.

3.8.4 GENERALISABILITY

Generalisability refers to the transferability of conclusions to other contexts demonstrating that the results of the work at hand can be applied to a wider population. Saunders *et al.*, (2007, p.592) describes generalisation as “the making of more widely applicable propositions based upon the process of deduction from specific cases”. The research

conducted was of a quantitative nature and as a result it is used to search for generalisation in the study's results.

3.8.5 RESEARCHER BIAS

According to Leedy and Ormrod (2010, p. 208), "bias can be defined as any influence, condition, or set of conditions that singly or together distort data". The researcher clearly employed self-awareness and a monitoring approach towards the data as the data could have been prone to manipulation by various influences. It was important to eliminate any bias within a research study, as without acknowledging these critical areas of research it may have given rise to questions on the quality of the research study and as a result may have put the study in dispute.

The researcher may have influenced the study when she expressed her intentions to the participants by addressing what the main purposes of the research were and what they intended to do with the results.

Measurement error may also occur within the study, because the main method of data collecting is quantitative data. Deliberate distortions may occur, where the data was recorded inaccurately on purpose (Saunders, Lewis, & Thornhill, 2009). Therefore the data obtained from the managers may be reordered in such a manner to display the data as favourable. This could have a detrimental effect on the outcome of the research study. In order to avoid any bias and errors, these factors needed to be taken into account and eliminated.

3.8.6 LIMITATIONS

The present study has certain limitations. The research was a cross-sectional survey design. As a result, no casual inferences could be drawn, even though advanced analytical procedures such as structural equation modelling techniques were employed. Additional to this by completing a cross-sectional survey it only gives a snap-shot of the relationship between Work Stressors, Work Wellness and the Intention to quit in managers. By doing this study at one point in time it cannot be determined if this is a longer term problem or if

this problem only appears at the specific point at which the study was done. Another limitation is that the measurement of this model's variables was solely based on self-reports. This could lead to "method variance" or "nuisance" (Schaufeli, Enzmann, & Girault, 1993). A further limitation to this study is the sample procedure in the present study, which may have significant limitations in terms of the findings applied to the total population. Future studies could benefit in terms of a stratified random sample-design, which would ensure sufficient representation of the different groups in the total managerial population.

3.9 RESEARCH ETHICS

According to Saunders *et al.*, (2007, p.610), "research ethics is the appropriateness of the researcher's behaviour in relation to the rights of those who become the subject of a research project, or who are affected by it."

The research was subjected to the following research principles:

- The research study was subject to approval by the University of Pretoria.
- Clear and unambiguous details about the research were communicated to the participant before completion. These details included the purpose of the study, the procedure to be followed and his or her rights to privacy. The participant was given full rights to withdraw from the study at any stage that he/she wished to do so.
- All data collected fell under the property of the University of Pretoria and the researcher; the researcher also undertook the responsibility to keep a record of all data for a minimum of 5 years.
- Results were made available to organisation and participant viewing.
- A conscious effort was made to carry out and also continuously ensure accurate and reliable interpretations.
- The research adheres to the Department of Human Resource Management's code of ethics, guidelines and processes.

3.9.1 PROTECTION FROM HARM AND RISK

The researcher took all cautionary measures to ensure that the participants were not exposed to any undue physical or psychological harm.

3.9.2 INFORMED CONSENT (VOLUNTARY PARTICIPATION)

Consent was strictly voluntary and if at any stage the participant had feelings of discomfort or the need to retract, they had the full right to not further participate. A reasonable compromise was taken when informing participants; it is also critical to not release too much information that may have skewing effects on the data. This in turn will defeat the purpose of the study. The informed consent form is attached in Appendix B (p. 176).

3.9.3 RIGHT TO PRIVACY

Any research study should respect the participant partaking in the process. This respect should cover the individual's right to privacy. All participation should be strictly confidential without disclosing personal information.

All findings and reports were completed in an honest and truthful manner with no intention to manipulate or misrepresent data. Any intentional misleading information and fabrication of data is unethical.

3.10 CONCLUSION

This chapter involved a detailed discussion on the research design and methods applied in the study. This chapter began with an overview of the research paradigm of the study, before a description of the strategy of inquiry and broad research design was given. Subsequently a detailed discussion of the sampling strategies and techniques utilised in the study was then given, and this was followed by a discussion of the data collection methodology. After that there was a brief discussion on the data analysis. Issues which might be impacting on the reliability and validity of the research were considered before ethical concerns related to the study were finally contemplated.

Chapter 4: RESULTS

4.1 INTRODUCTION

This chapter presents the results obtained from the data analysis done by means of SPSS as per the research design and methodology discussed in Chapter 3. This chapter includes all results obtained from the empirical statistical tests run on the data with regards to the objectives set for the study together with the applicable hypotheses.

This chapter is structured in three distinct phases as follows:

- **Phase 1:** The presentation of the sample demographics and descriptive
- **Phase 2:** Analysis of the data measurement instruments, Job Characteristics Scale, Maslach Burnout Inventory-General Survey, Utrecht Work Engagement Scale, General Health Survey, the Dispositional Measure of Employability and the Employee Retention Scale respectively.
- **Phase 3:** Hypothesis testing

Following is the presentation on the demographics of the sample used in this research study presented as phase one of data analysis.

4.2 PHASE 1: SAMPLE DEMOGRAPHICS

The following section shows the demographics of the sample group used in this study with regards to the biographical information supplied by the respondents. Managers were identified as the units of analysis for this study. The specific characteristics and attributes of the units of analysis that were collected through primary data collection are firstly the functions managers work for (e.g. Human Resources, Supply Chain Management, Finance, Safety, Health, Environment, Community (SHEC), Technology, etc.) and then their department within the specific function (Payroll, Creditors, Health, Procurement, etc.). By stating one of these, the researcher was able to determine which function had the highest levels of work stressors, work wellness and the intention to quit and which department in

that function has the highest level. Unfortunately many employees did not fill in these fields and as a result this biographical information was left out of the data analysis part.

The sampling techniques utilised in the study resulted in a diverse group of respondents. Three hundred and forty eight (348) questionnaires were sent out in a large South African Mining House. One hundred and ninety one (191) responses were originally received, a 54.8% response rate, only one hundred and forty one were useable (141), giving a final response rate of 40.5%. The following section provides more insight into the biographical composition of the sample group.

Table 4-1 represents the gender distribution of the sample group. It is apparent that male respondents are the minority (44%), with female respondents accounting for 56 percent of the sample group.

Table 4-1: Frequency Distribution for Gender

	Frequency	Percentage	Cumulative Percentage
Female	79	56.0	56.0
Male	62	44.0	100.0
Total	141	100.0	

The relationship status of the sample group was also considered in the biographical information. As is evidenced by Table 4-2, over half of respondents were married (63.1%); with 11.3% of respondents being single and 12.8% of respondents being in a relationship, or engaged. Thirteen respondents (9.2%) were divorced, and two individual (1.4%) indicated that they were separated. Three respondents (2.1%) responded stating that they were remarried.

Table 4-2: Frequency Distribution for Marital Status

	Frequency	Percentage	Cumulative Percentage
Divorced	13	9.2	9.2
Engaged / In a relationship	18	12.8	22.0
Married	89	63.1	85.1
Remarried	3	2.1	87.2
Separated	2	1.4	88.7
Single	16	11.3	100.0
Total	141	100.0	

The frequency distribution for relationship status (as a percentage) is illustrated in the pie chart below in Figure 4-1.

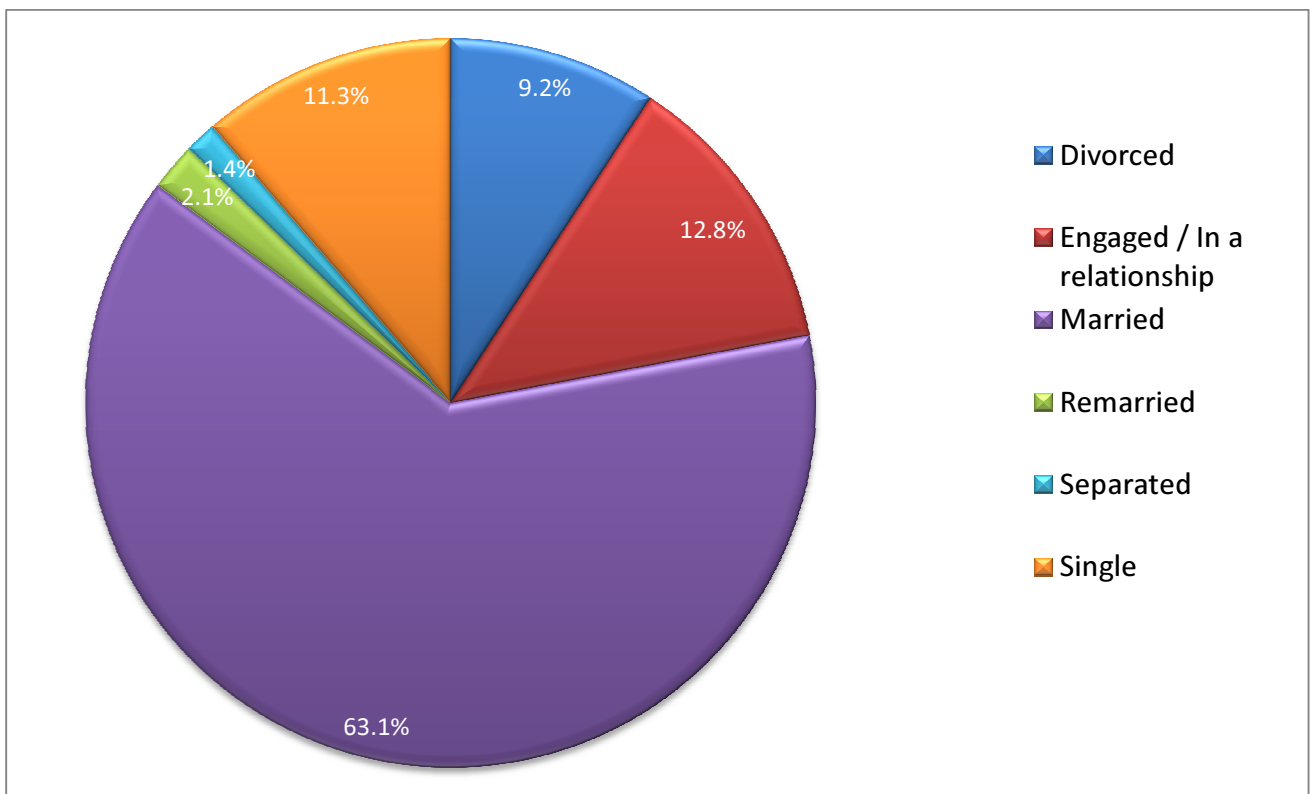


Figure 4-1: Pie Chart Illustrating the Relationship Status Distribution

Various ethnicities were represented by respondents in the present study, with the largest proportions of respondents being of White (65.2%) and African (26.2%) descent. There

were four Indian respondents (2.8%) and other had one respondent (.7%), while there were seven Coloured (5%) respondents.

Table 4-3: Frequency Distribution for Ethnicity

	Frequency	Percentage	Cumulative Percentage
African	37	26.2	26.2
Coloured	7	5.0	31.2
Indian	4	2.8	34.0
Other	1	0.7	34.8
White	92	65.2	100.0
Total	141	100.0	

The frequency for ethnicity is well illustrated in the pie chart in Figure 4-2.

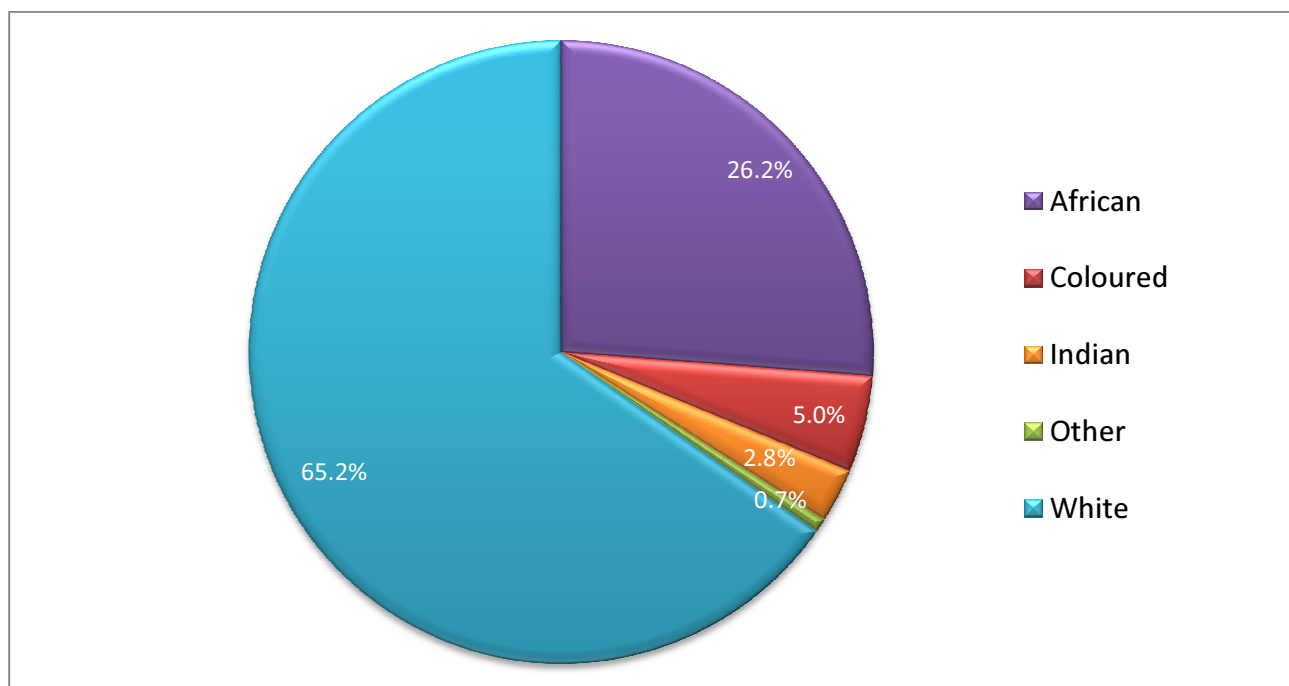


Figure 4-2: Pie Chart Illustrating the Distribution of Ethnicity

As indicated in Table 4-4 below, the home languages of respondents were grouped into the following groups: Afrikaans, English and Indigenous. 83 respondents' (58.9%) indicated that their home language was Afrikaans. A further 24.1 percent indicated that their home

language was one of the nine Indigenous languages recognised as official languages in South African, and 17 percent indicated that their home language was English.

Table 4-4: Frequency Distribution of Home Language

	Frequency	Percentage	Cumulative Percentage
Afrikaans	83	58.9	58.9
English	24	17.0	75.9
Indigenous	34	24.1	100.0
Total	141	100.0	

The biographical information also considered the age of the participants. The majority of the respondents (33.3%) were between the ages of 40 to 49 years. Additionally 25.5 percent of the respondents were between the ages of 30 – 39 years, while 30 respondents (21.3%) were between the ages of 50-59 years. The minority for the participants were in the years of 20-29 years (17.7%) and 60 years and older (2.1%) respectively.

Table 4-5: Frequency distribution of Age

	Frequency	Percentage	Cumulative Percentage
20-29 years	25	17.7	17.7
30 -39 years	36	25.5	43.3
40 - 49 years	47	33.3	76.6
50 - 59 years	30	21.3	97.9
60 years and more	3	2.1	100.0
Total	141	100.0	

Below is a bar graph that figuratively represents the distribution of the age of the respondents.

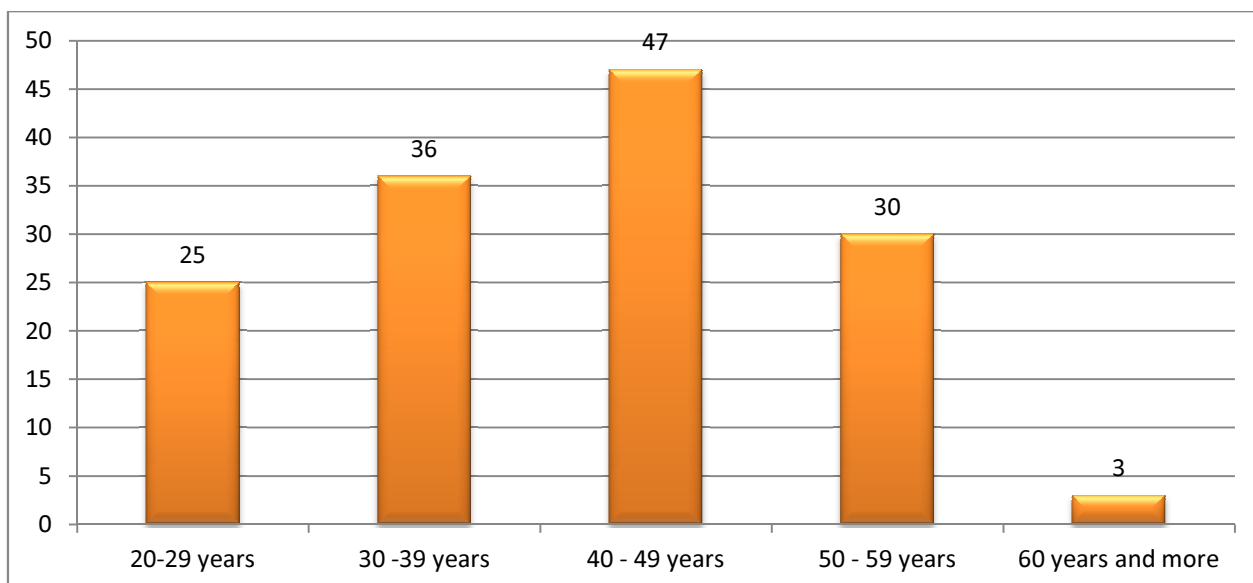


Figure 4-3: Bar Graph Illustration of the Age Distribution

The classification of respondents according to their highest qualifications disclosed that the majority of respondents possessed a Diploma (42.6%) followed by those who had an Honours Degree (24.1%). 17.7 percent of respondents had a three year University Degree. The remainder of respondents possessed Master's Degrees (7.1%); and those registered at a professional board had a professional qualification (8.5%).

Table 4-6: Frequency Distribution of Highest Qualifications

	Frequency	Percentage	Cumulative Percentage
3 Year University Degree	25	17.7	17.7
Diploma	60	42.6	60.3
Honours Degree	34	24.1	84.4
Master's Degree	10	7.1	91.5
Professional Qualification or Registration at Professional Board	12	8.5	100.0
Total	141	100.0	

The pie chart in Figure 4-6 figuratively illustrates the frequency distribution based on the highest qualifications of respondents.

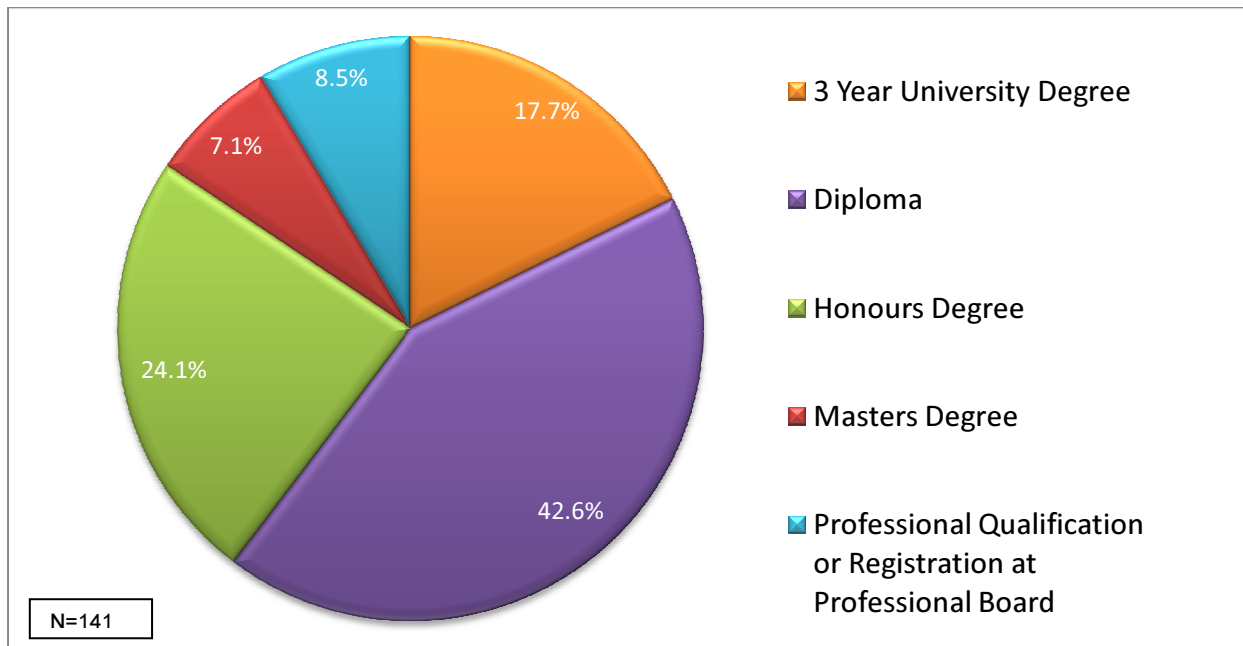


Figure 4-4: Pie Chart Illustration of the Highest Qualification

Respondents were asked to indicate their job level within the organisation. As is evidenced by Table 4-7, the majority of respondents indicated that they are on lower level management (42.6%). A further 21 (14.9%) and 55 (39%) of the respondents respectively indicated that they hold supervisory and middle management positions, followed by five respondents (3.5%) who indicated that they are on a top management level.

Table 4-7: Frequency Distribution of Job Levels

	Frequency	Percentage	Cumulative Percentage
Lower Level	60	42.6	42.6
Middle Level	55	39.0	81.6
Senior Level	5	3.5	85.1
Supervisory	21	14.9	100.0
Total	141	100.0	

Inserted below is a pie chart that graphically represents the frequency of the job levels of the respondents in the study.

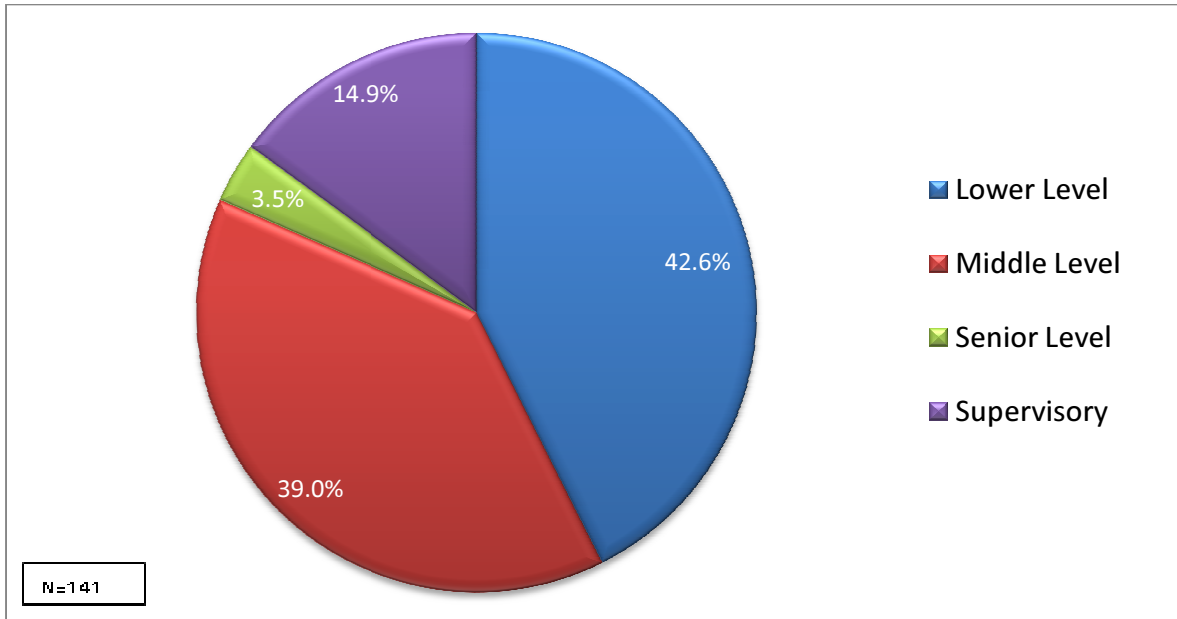


Figure 4-5: Pie Chart Illustrating the Frequency of the Job Levels

The biographical information also took into consideration the number of years work experience the respondents had. The majority of the respondents (29.1%) had 11 to 20 years work experience. Closely followed by this, 40 respondents (28.4%) had 21 to 30 years work experience. As evident in Table 4-8, 24.8 percent of the respondents had between 0 to 10 years work experience and to a lesser extent 21 respondents (14.9%) have worked for 31 to 40 years. The minority of participants (2.8%) have been in the working environment for over 41 years.

Table 4-8: Frequency Distribution of the Number of Years of Work Experience

	Frequency	Percentage	Cumulative Percentage
0 - 10 years	35	24.8	24.8
11 - 20 years	41	29.1	53.9
21 - 30 years	40	28.4	82.3
31 - 40 years	21	14.9	97.2
41 - 50 years	4	2.8	100.0
Total	141	100.0	

The Figure 4-6 gives a figurative representation of the frequency distribution of the number of years of work experience.

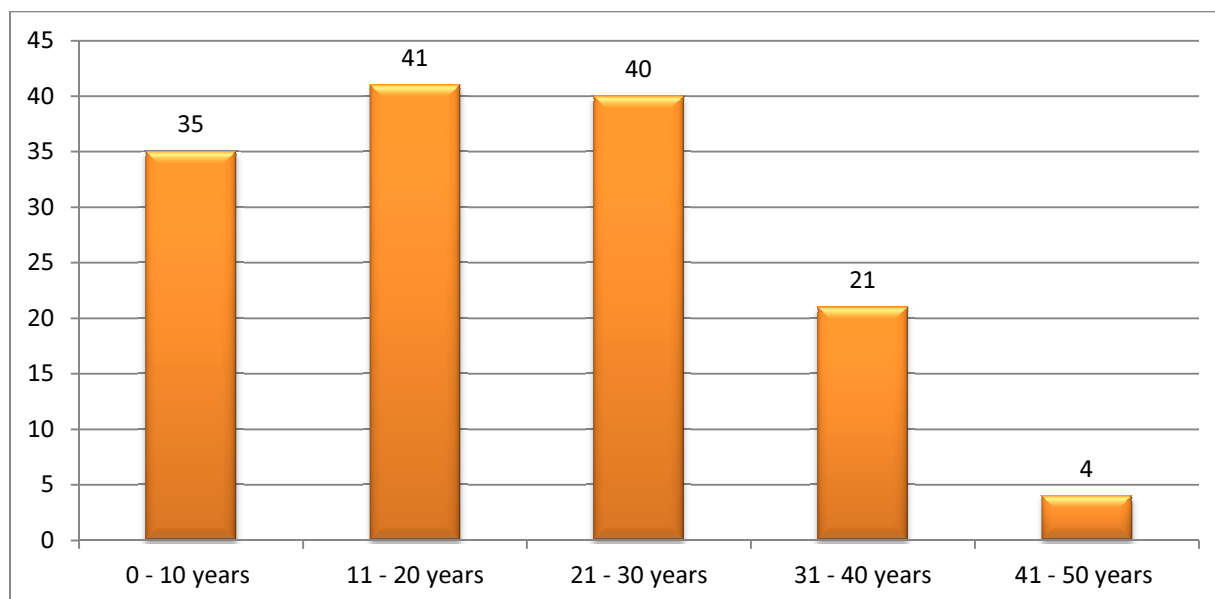


Figure 4-6: Bar Graph Illustrating the Frequency of the Number of Years Work Experience

Table 4-9 below illustrates the frequency distribution of years of service that respondents have in their present position. 85.1 percent of respondents have been in their present organisation for a period of 0 to 10 years, and 9.9 percent have spent 11 to 20 years with their present organisation. The six of the respondents (4.3%) have been with their present organisation for 21 to 30 years. And one respondent (0.7%) has been with the organisation for 31 to 40 years.

Table 4-9: Frequency Distribution of the Number of Years of Service

	Frequency	Percentage	Cumulative Percentage
0 - 10 years	120	85.1	85.1
11 - 20 years	14	9.9	95.0
21 - 30 years	6	4.3	99.3
31 - 40 years	1	0.7	100.0
Total	141	100.0	

The Figure 4-7 gives a figurative representation of the frequency distribution of the number of years of services.

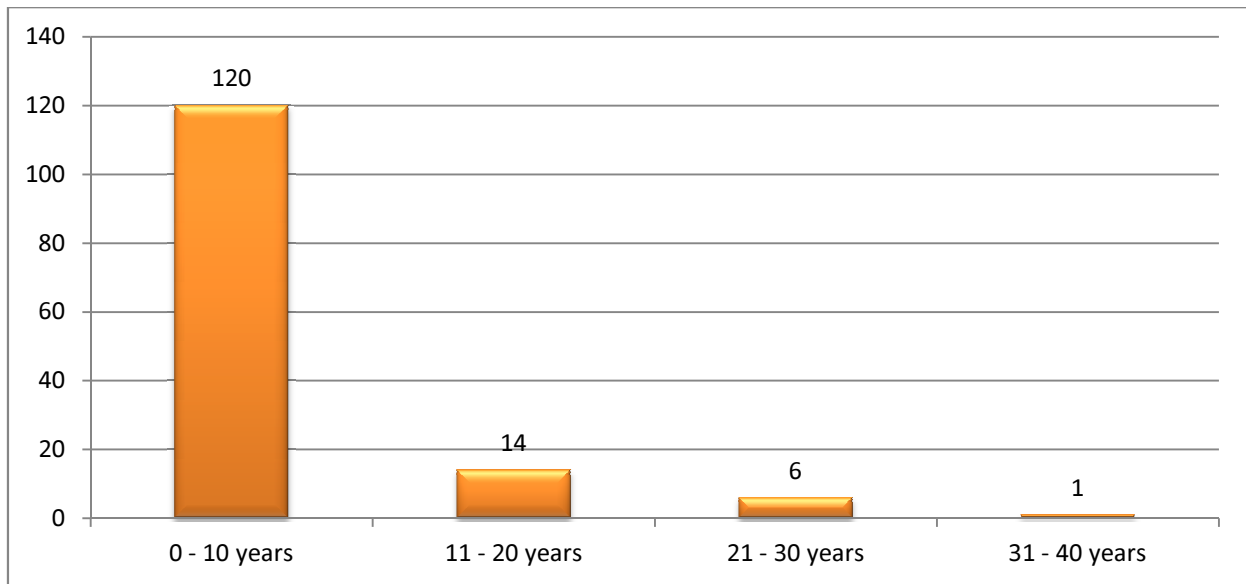


Figure 4-7: Bar Graph Illustrating the Frequency of the Number of Years of Service

The biographical information on chances of promotion shows that just under half (48.2%) of the respondents have not had a chance of promotion in the last 5 years. 38 respondents (27%) stated that they have had one chance of promotion, while 18.4 percent reflected that they have had two chances. Respectively six (4.3%) and three (2.1%) participants revealed that they have had three and four chances of promotion in the last five years.

Table 4-10: Frequency Distribution of Chances of Promotion

	Frequency	Percentage	Cumulative Percentage
0 Chances	68	48.2	48.2
1 Chances	38	27.0	75.2
2 Chances	26	18.4	93.6
3 Chances	6	4.3	97.9
4 Chances	3	2.1	100
Total	141	100.0	

The frequency of the chance of promotion is well illustrated in the bar graph Figure 4-8 below.

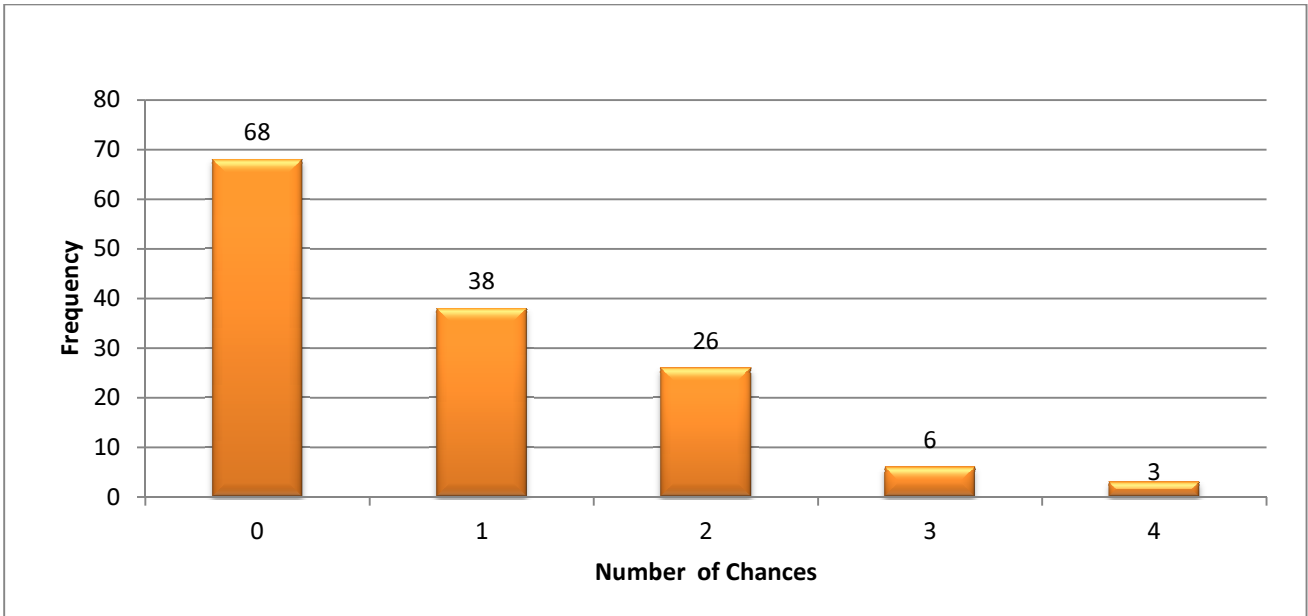


Figure 4-8: Bar Chart Illustrating Number of Chances of Promotion in the Last 5 Years

Employment variable showed that the majority of the respondents (98.6%) are permanent employees while only two participants (1.4%) were fixed term employees.

Table 4-11: Frequency Distribution of Basis of Employment

	Frequency	Percentage	Cumulative Percentage
Fixed Term	2	1.4	1.4
Permanent	139	98.6	100.0
Total	141	100.0	

The Figure 4-9 below shows the frequency of the distribution on the basis of employment of the respondents.

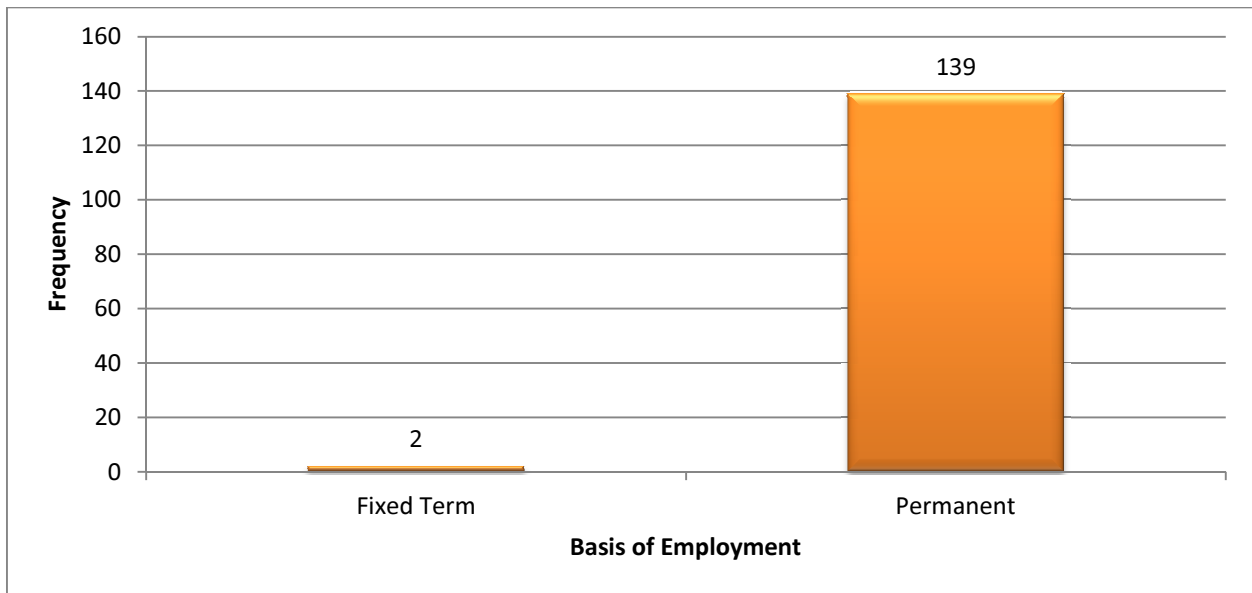


Figure 4-9: Bar Graph Illustrating the Frequency of Basis of Employment

The biographical information also considered the number of hours the respondents worked per week. Two of the respondents worked up to 10 hours (0.7%) and 11-20 hours (0.7%) respectively per week, while the majority (65.2%) of the employees worked between 41-50 hours per week. 12 participants' work between 31 to 40 hours per week. Additionally to this 24.8 percent of the respondents stated that they work 51 or more hours, while no participants reported that they work between 21 to 30 hours a week.

Table 4-12: Frequency Distribution of the Hours Worked Per Week

	Frequency	Percentage	Cumulative Percentage
Up to 10	1	0.7	0.7
11-20	1	0.7	1.4
21-30	0	0	1.4
31-40	12	8.5	9.9
41-50	92	65.2	75.2
51 or more	35	24.8	100.0
Total	141	100.0	

The bar graph in Figure 4-10 below illustrates the frequency distribution of table 4-12 in the number of hours worked per week.

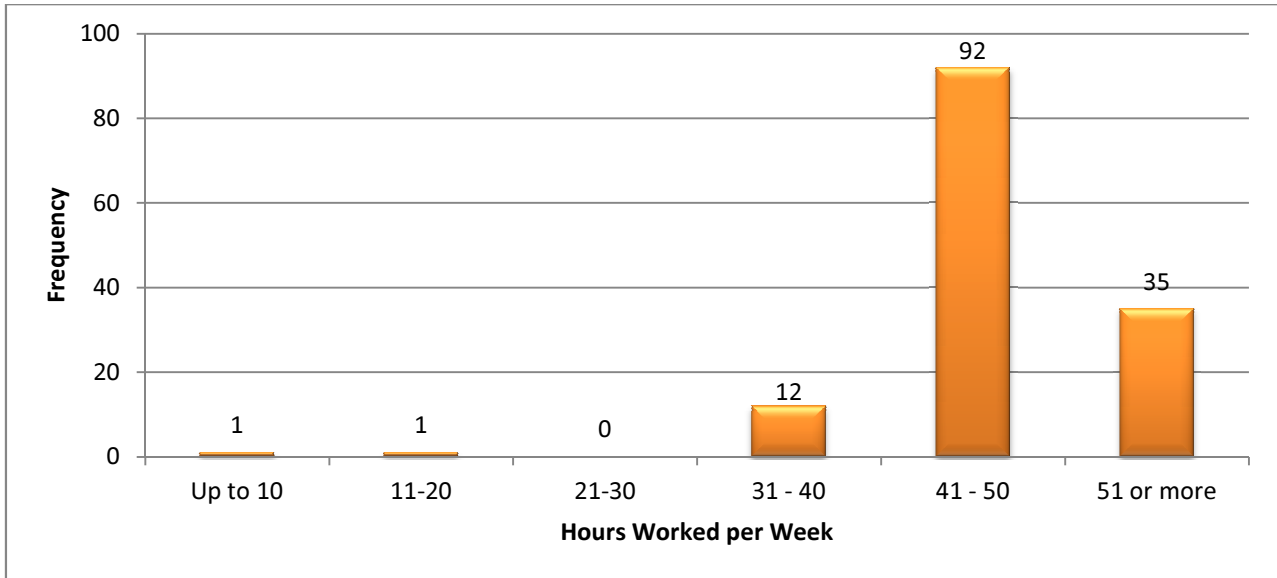


Figure 4-10: Bar Graph Illustrating the Number of Hours Worked Per Week

Additional to the number of hours worked per week the biographical information also focused on the time it takes the respondents travel to and from work. Just over half (54.6%) of the participants stated that it takes them less than an hour to travel to and from work per day. 39.7 percent mentioned that they travel between one to two hours a day, while 8 participants revealed that they travel three or more hours a day to get to and from work.

Table 4-13: Frequency Distribution of the Daily Hours Spent Travelling to and from Work

	Frequency	Percentage	Cumulative Percentage
Less than 1 Hour	77	54.6	54.6
1-2 Hours	56	39.7	94.3
2-3 Hours	0	0	94.3
3 or more Hours	8	5.7	100.0
Total	141	100.0	

The frequency of the daily hours travelling to and from work is well represented in the bar graph in Figure 4-11.

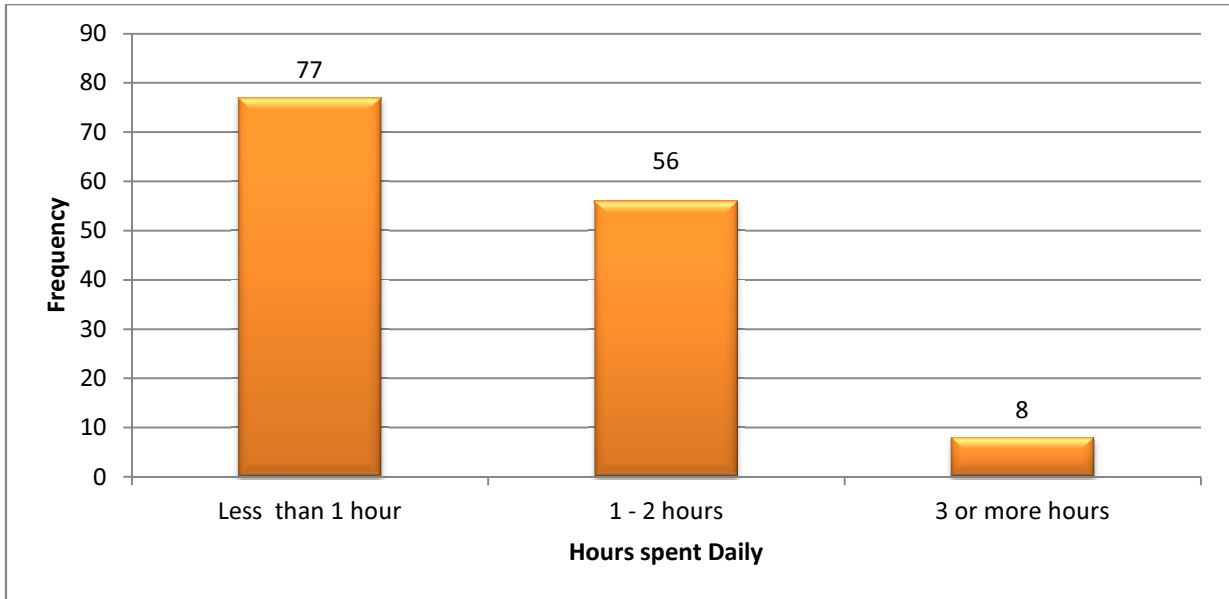


Figure 4-11: Bar Graph Representing the Frequency of the Daily Hours Spent Travelling to Work

The final biographical question which focused on the respondents, enquired about the participants annual leave entitlement. The majority of the respondents stated that they sometimes use all of their annual leave entitlement, while 23.4 percent of the participants respectively mentioned that they either never or always use their leave.

Table 4-14: The Frequency Distribution of Full Annual Leave Entitlement Used

	Frequency	Percentage	Cumulative Percentage
Never uses it all	33	23.4	23.4
Sometimes uses it all	75	53.2	76.6
Always uses it all	33	23.4	100.0
Total	141	100.0	

The Figure 4-12 below shows the frequency of the distribution the annual leave entitlement of the respondents.

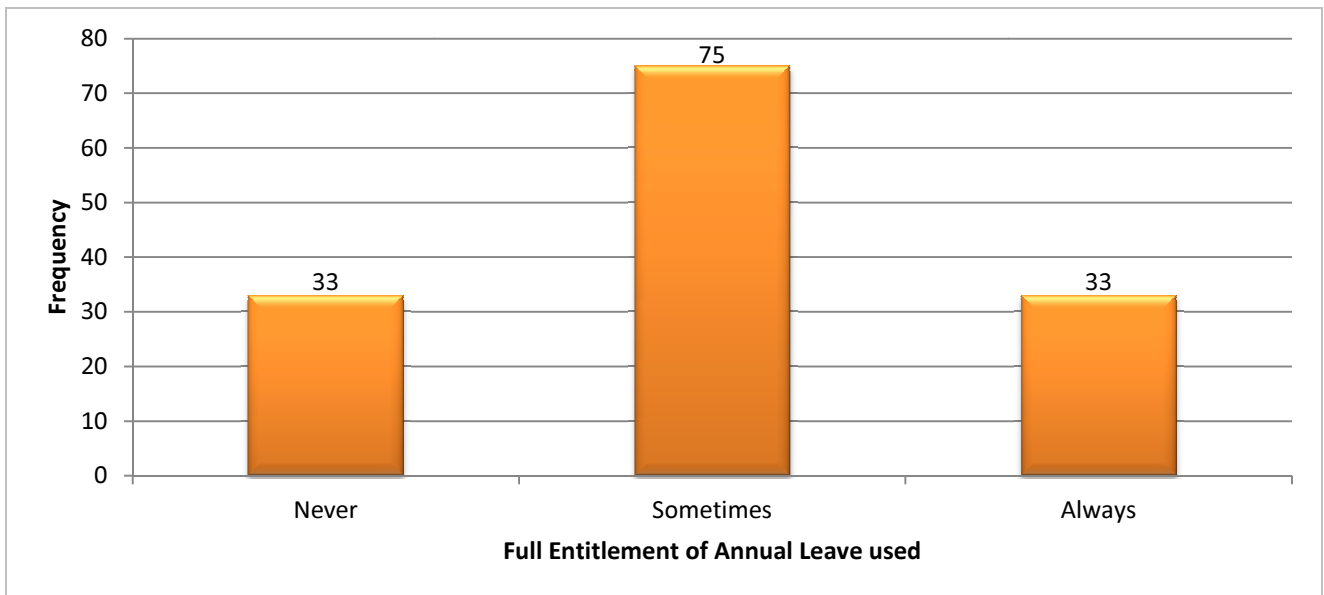


Figure 4-12: Bar Graph Representing Full Annual Leave Entitlement Used

This part gave a detailed summary of the respondents who participated in the study. The biographical data showed that a large number of the respondents in the study were in between the ages of 40 to 49. The demographics of the respondents' group was interesting as there were more women respondents than men. A large majority of these respondents were of the white ethnicity. Additionally to this the most spoken language of the group was Afrikaans. Most of the respondents were from the lower managerial levels in the organisation and had 11 to 20 years of work experience. Many of the respondents in the study revealed that they work between 41 to 50 and more hours a week, with many of them having to travel between one to two hours to get to and from work on a daily basis. The analysis of the questionnaires in the study will be discussed in the next section.

4.3 PHASE 2: RESULTS PERTAINING TO THE INSTRUMENTS

Following is the presentation on the demographics of the sample used in this research study presented as phase two, which will discuss the results pertaining to the data collection instruments.

4.3.1 INTRODUCTION

The following section will present the results obtained from the measures. The measures are the JCS, UWES, Dispositional Measure of Employability (DME), MBI-GS, General Health Survey (GHS), and finally the Employee Retention Scale (ERS). Each measure is discussed in terms of its adequacy for analysis, factor analyses, reliability and descriptive statistics of the subscales.

4.3.2 RESULTS: JOB CHARACTERISTICS SCALE

The emphasis of this section is placed on the statistical analysis of the Job Characteristics Scale (JCS) data to determine if there are work stressors within the large mining house. This is also used to determine the reliability of the instrument and data received from using the instrument. To achieve this outcome the following statistical techniques were implemented:

4.3.3 SAMPLE ADEQUACY AND SPHERICITY

The Sampling Adequacy and Sphericity of the inter-item correlation matrix was determined by applying the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity to the inter-item correlation matrix of the JCS. The results of the KMO for the JCS are presented in Table 4-15 below.

Table 4-15: KMO and Bartlett's test of inter-item correlation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.84	
Bartlett's Test of Sphericity	Approx. Chi-Square	4151.76
	df	1128
	Sig.	0.000

As evidenced in Table 4-15 above, the KMO measure verified the sampling adequacy for factor analysis, since the value of KMO is 0.84 which is above the 0.6 cut off point set by Pallant (2005) and Hair *et al.* (2010). Bartlett's Test of Sphericity was significant ($p < 0.05$),

indicating correlations between items were sufficiently large for a factor analysis. Thus the sample is suitable for further analysis by means of factor analysis.

4.3.4 FACTOR ANALYSIS

An exploratory factor analysis using the Principle Axis Factoring extraction method was performed on the 48 items of the Job Characteristic Inventory. The Principle Axis Factor Analysis initially resulted in eight factors. However a closer inspection of the pattern matrix indicated the items primarily loaded onto four factors. A Principle Factor Analysis was done by using the Direct Oblimin Rotation to specify the four factors. Six items were excluded due to low and problematic factor loadings. The four factors were labelled Work Support (Factor 1), Workload (Factor 2), Opportunities for Growth and Development (Factor 3), and Job Security (Factor 4). The four factors explained 47.086% of the variance. The results of the Factor analysis as well as the Pattern Matrix are shown below in Table 4-16 and Table 4-17. The item loadings were acceptable for the four specified factors.

Table 4-16: Total Variance Explained for JCS

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	11.768	28.702	28.702	11.253	27.447	27.447	10.298
2	3.634	8.863	37.565	3.093	7.544	34.991	3.061
3	3.188	7.776	45.341	2.684	6.547	41.538	6.623
4	2.53	6.171	51.512	2.275	5.548	47.086	2.73
5	1.877	4.579	56.091				
6	1.652	4.029	60.12				
7	1.365	3.328	63.448				
8	1.176	2.868	66.316				
9	1.092	2.663	68.979				
10	0.974	2.376	71.354				
11	0.87	2.121	73.475				
12	0.812	1.982	75.457				
13	0.748	1.824	77.282				

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
14	0.728	1.777	79.058				
15	0.697	1.699	80.758				
16	0.611	1.49	82.248				
17	0.586	1.429	83.677				
18	0.548	1.336	85.013				
19	0.53	1.292	86.305				
20	0.449	1.095	87.401				
21	0.434	1.059	88.459				
22	0.415	1.013	89.473				
23	0.4	0.975	90.447				
24	0.361	0.88	91.327				
25	0.352	0.859	92.186				
26	0.337	0.821	93.007				
27	0.314	0.765	93.772				
28	0.287	0.7	94.472				
29	0.268	0.654	95.126				
30	0.249	0.607	95.733				
31	0.223	0.545	96.278				
32	0.216	0.526	96.804				
33	0.201	0.491	97.295				
34	0.181	0.442	97.737				
35	0.167	0.408	98.145				
36	0.152	0.371	98.516				
37	0.147	0.359	98.875				
38	0.14	0.342	99.217				
39	0.136	0.332	99.549				
40	0.106	0.258	99.807				
41	0.079	0.193	100				

Table 4-17: Pattern Matrix^a for JCS

	Factor			
	1	2	3	4
JCS1	-0.163	0.734	-0.122	-0.11
JCS2	-0.037	0.745	-0.012	-0.07
JCS4	-0.185	0.705	-0.027	-0.111
JCS5	0.068	0.509	0.004	0.072
JCS6	0.098	0.471	0.031	0.038
JCS7	0.006	0.33	-0.261	0.12
JCS11	0.33	0.397	0.342	0.086
JCS12	0.178	0.373	0.334	0.089
JCS13	0.17	0.28	0.622	-0.08
JCS14	0.372	0.25	0.494	0.045
JCS15	0.323	0.124	0.472	-0.071
JCS16	0.298	0.092	0.404	-0.021
JCS17	0.396	-0.082	0.275	-0.091
JCS18	0.503	-0.138	0.343	0.051
JCS19	0.582	-0.111	0.109	0.022
JCS20	0.367	-0.283	0.234	-0.05
JCS21	0.477	0.077	-0.055	-0.046
JCS22	0.711	-0.047	-0.1	-0.065
JCS23	0.676	0.007	-0.132	-0.117
JCS24	0.78	-0.102	-0.032	-0.043
JCS25	0.518	0.08	0.052	0.096
JCS26	0.446	0.144	0.115	0.135
JCS27	0.752	-0.023	-0.056	-0.044
JCS28	0.676	0.066	0.06	0.065
JCS29	0.743	0.007	0.039	0.054
JCS30	0.812	-0.122	-0.075	-0.015
JCS31	0.657	0.085	0.058	0.05
JCS32	0.583	0.045	0.159	-0.008
JCS33	0.532	0.088	0.057	-0.013
JCS34	0.836	-0.076	-0.246	-0.062
JCS35	0.733	-0.09	0.001	-0.097
JCS36	0.514	0.113	0.225	-0.045
JCS40	-0.096	-0.114	-0.104	0.874
JCS41	-0.055	-0.02	-0.049	0.957
JCS42	0.006	-0.044	0.014	0.774
JCS43	-0.145	-0.005	0.699	-0.014
JCS44	-0.17	-0.065	0.676	-0.005
JCS45	-0.122	-0.237	0.702	-0.05
JCS46	0.084	-0.032	0.751	0.009
JCS47	0.155	0.013	0.48	-0.109
JCS48	0.13	-0.06	0.591	-0.016

Extraction Method: Principal Axis Factoring.
 Rotation Method: Oblimin with Kaiser Normalization
^a Rotation converged in 8 iterations

4.3.5 SECOND ORDER FACTOR ANALYSIS

A second order factor analysis was conducted to specify the Job Demands and Job Resources. Exploratory factor analysis using the Principal Component Method was performed on the four factors as shown above. Work Support and Opportunities for Growth and Development were loaded onto one factor and was labelled Job Resources. Workload and Job Security were loaded onto one factor and were labelled Job Demands. The factor was explained by the 68.64% of the variance as indicated in Table 4-18 and Table 4-19 below. The Factor loadings were acceptable for both the Job Demands and Job Resources.

Table 4-18: Total Variance Explained for JCS

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	1.715	42.88	42.88	1.715	42.88	42.88	1.713
2	1.03	25.762	68.642	1.03	25.762	68.642	1.032
3	0.799	19.966	88.608				
4	0.456	11.392	100				

Extraction Method: Principal Component Analysis.

^a When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 4-19: Pattern Matrix^a for Second Order Factor Analysis

	Component	
	1	2
Work Support	0.837	0.068
Work load	0.298	0.811
Growth Develop	0.83	0.052
Job Security	-0.486	0.607

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization

^a Rotation converged in 5 iterations

4.3.6 DESCRIPTIVE STATISTICS AND RELIABILITIES OF THE JCS

Descriptive statistics were used to explore the data. Table 4-20 below provides the descriptive statistics of the JCS once the items have been grouped together after the Factor Analysis was conducted.

A four-point response scale ranging from “Never” to “Always” was utilised. The mean values for the respondents ranged between 2.26 and 3.0745. This indicates that respondents tended to have answers which fell toward the middle of the range. On average it seemed that the respondents perceived a higher level of job resources compared to job demands.

Table 4-20: Descriptive Statistics of the JCS

	N	Mean	Std. Deviation	Skewness	Kurtosis	Cronbach Alpha
Job Demands	141	2.6673	0.52636	0.374	-0.615	0.713
Job Resources	141	2.8340	0.51816	-0.020	-0.428	0.938
Work Support	141	2.9177	0.56635	-0.234	-0.441	0.932
Workload	141	3.0745	0.44970	-0.134	-0.573	0.748
Growth Development	141	2.7504	0.61291	-0.151	-0.153	0.879
Job Security	141	2.2600	0.93782	0.328	-0.854	0.914
Valid N (listwise)	141					

Table 4-20 provides an overview of the number of valid cases ($N=141$) per group for each of the 6 grouped items, measures of central tendency and dispersion. The sample group consists of a total of 141 respondents.

Standard Deviation values for group range between 0.449 and 0.937, indicating a relatively small degree of dispersion. The skewness values for the group range between -0.020 and 0.374, indicating a positively skewed distribution. The kurtosis values for the range are between -0.153 and 0.854.

The Cronbach Alpha Coefficients range from 0.713 for Job Demands to 0.938 for Job Resources and accordingly the relationships go from the acceptable to the excellent level of reliability (George & Mallery, 2003).

4.3.7 SUMMARY OF RESULTS

To conclude the information presented in the preceding section (section 4.3), the results of the statistical analysis of the JCS can be summarised as follows:

- The KMO of the Sampling Adequacy and Sphericity inter-item correlation was at a great level and there was a significant correlation between the items according to the Bartlett's test.
- The EFA was run and it was determined according to the Principle Axis Factor Analysis that there were eight main factors. The Direct Oblimin Rotation broke the 8 factors to four main factors which had 47.086% of the cumulative variances.
- This required a Second Order Factor Analysis to be run. The four factors were loaded onto factors namely Job Demands and Job Resources with the cumulative variance of 68.64%.
- The overall value of Cronbach's Alpha indicates an excellent level of reliability for the Job Resources and an acceptable level for Job Demands.
- And the reliability statistics for all the sub-scales were between good and excellent.

4.4 RESULTS: UTRECHT WORK ENGAGEMENT SCALE

The emphasis of this section is placed on the statistical analysis of the Utrecht Work Engagement Scale (UWES) data to determine if there is work engagement within the large mining house. This is also used to determine the reliability of the instrument and data received from using the instrument. To achieve this outcome the following statistical techniques were employed:

- The Keyser-Meyer Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity;
- Exploratory Factor Analysis;
- Reliability Analysis of the whole data received from the questionnaire

4.4.1 SAMPLE ADEQUACY AND SPHERICITY

The Sampling Adequacy and Sphericity of the inter-item correlation matrix was determined by applying the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity to the inter-item correlation matrix of the UWES. The results of the KMO for the UWES are presented in Table 4-21 below.

Table 4-21: KMO and Bartlett's test of inter-item correlation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.895
Bartlett's Test of Sphericity	Approx. Chi-Square	1153.85
	df	136
	Sig.	0.000

As evidenced in Table 4-21 above, the KMO measure verified the sampling adequacy for factor analysis, since the value of KMO is 0.895 which is above the 0.6 cut off point set by Pallant (2005) and Hair *et al.* (2010). It can be seen to be a great inter-item correlation. Bartlett's Test of Sphericity was significant ($p < 0.05$), indicating correlations between items that were sufficiently large for a factor analysis. Thus the sample is suitable for further analysis by means of factor analysis.

4.4.2 FACTOR ANALYSIS

An EFA was conducted on the 17 items of the UWES using the Principle Axis Factoring extraction method. From the initial results it was clear that two factors could be specified for the UWES. However closer inspection of the factor matrix showed that most of the items loaded onto one factor. Two items were problematic and deleted due to low factor loadings. An exploratory factor analysis was conducted again specifying one factor. The one factor was labelled Work Engagement. The one factor explains 42.025% of the variance. The results of the factor analysis as well as the Factor Matrix are shown below in Table 4-22 and Table 4-23. The item loadings are acceptable for the one factor of work engagement.

Table 4-22: Total Variance Explained for UWES

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.803	45.356	45.356	6.304	42.025	42.025
2	1.388	9.256	54.611			
3	0.995	6.632	61.243			
4	0.914	6.091	67.334			
5	0.763	5.084	72.418			
6	0.680	4.533	76.951			
7	0.649	4.328	81.279			
8	0.584	3.893	85.172			
9	0.483	3.220	88.392			
10	0.449	2.995	91.387			
11	0.356	2.372	93.759			
12	0.323	2.152	95.911			
13	0.280	1.867	97.778			
14	0.189	1.263	99.041			
15	0.144	0.959	100.000			

Extraction Method: Principal Axis Factoring.

Table 4-23: Factor Matrix for UWES

	Factor
	1
UWES 1	0.622
UWES 2	0.839
UWES 3	0.767
UWES 4	0.502
UWES 5	0.397
UWES 6	0.448
UWES 7	0.754
UWES 8	0.873
UWES 9	0.774
UWES 10	0.612
UWES 11	0.594

	Factor
	1
UWES12	0.642
UWES 13	0.73
UWES 14	0.498
UWES 15	0.405

Extraction Method: Principal Axis Factoring.
^a 1 factor extracted.
4 iterations required.

4.4.3 DESCRIPTIVE STATISTICS AND RELIABILITIES OF THE UWES

Descriptive statistics were used to explore the data. Table 4-24 below provides the item descriptive statistics of the UWES once the items have been grouped together before the Factor Analysis was conducted.

Table 4-24 provides an overview of the number of valid cases (N) per group for the 1 grouped item, with the measure of central tendency and dispersion. The sample group consists of a total of 141 respondents.

Table 4-24: Descriptive Statistics for UWES

	N	Mean	Std. Deviation	Skewness	Kurtosis	Cronbach Alphas
Work Engagement	141	5.4080	1.04178	-0.737	0.022	0.906
Valid N (listwise)	141					

A six-point response scale ranging from “Strongly Disagree” to “Strongly Agree” was utilised. The mean value for the respondents was 5.4080. This indicates that respondents’ answers tended to fall toward the top of the answer range. This suggests many agreed with the statements and experience a relatively high level of work engagement. .

Standard Deviation values for group was 1.04178, indicating a small degree of dispersion. The skewness value for the group was -0.737, indicating a negatively skewed distribution. The kurtosis value was 0.022. The Cronbach’s Alpha Coefficient for Retention is 0.906

which suggests that the overall value is at a good level of reliability, therefore it can be said that Retention is at a good level of reliability.

4.4.4 SUMMARY OF RESULTS

To conclude the information presented in the preceding section (section 4.4), the results of the statistical analysis of the UWES can be summarised as follows:

- The KMO of the Sampling Adequacy and Sphericity inter-item correlation was at a great level and there was a significant correlation between the items according to the Bartlett's test.
- The EFA was run and it was determined according to the Principle Axis Factor Analysis using The Direct Oblimin Rotation that there was one main factor. Main factor had 42.025% of the cumulative variances.
- The overall value of Cronbach's Alpha indicates an excellent level of reliability for the Work Engagement.

4.5 RESULT: DISPOSITIONAL MEASURE OF EMPLOYABILITY

The emphasis of this section is placed on the statistical analysis of the Dispositional Measure of Employability (DME) data to determine if there is Dispositional Employability within the large mining house. This is also used to determine the reliability of the instrument and data received from using the instrument. To achieve this outcome the following statistical techniques were employed:

- The Keyser-Meyer Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity;
- Exploratory Factor Analysis;
- Second Order Factor Analysis; and
- Reliability Analysis of the factors based on the questionnaire

4.5.1 SAMPLE ADEQUACY AND SPHERICITY

The Sampling Adequacy and Sphericity of the inter-item correlation matrix was determined by applying the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity to the inter-item correlation matrix of the DME. The results of the KMO for the DME are presented in Table 4-25 below.

Table 4-25: KMO & Bartlett's Test of the inter-item correlation of DME

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.839
Bartlett's Test of Sphericity	Approx. Chi-Square	1684.702
	df	300
	Sig.	0.000

As evidenced in Table 4-25 above, the KMO measure verified the sampling adequacy for factor analysis, since the value of KMO is 0.839 which is above the 0.6 cut off point set by Pallant (2005) and Hair *et al.* (2010). Bartlett's Test of Sphericity was significant ($p < 0.05$), indicating correlations between items were sufficiently large for a factor analysis. Thus the sample is suitable for further analysis by means of factor analysis.

4.5.2 FACTOR ANALYSIS

An exploratory factor analysis using the Principle Axis Factoring extraction method was performed on the 25 items of the Dispositional Measure of Employability. The Principle Axis Factor Analysis initially resulted in five factors. However a closer inspection of the factor matrix indicated the items primarily loaded onto four factors. A Principle Factor Analysis was done by using the Direct Oblimin Rotation to specify the four factors. Six items were excluded due to low and problematic factor loadings. The four Factors were labelled Openness to Change (Factor 1), Work Identity (Factor 2), Career Motivation and Proactivity (Factor 3) and Career Resilience and Optimism (Factor 4). The four factors explained 50.876% of the variance. The results of the Factor analysis as well as the Pattern Matrix are shown below in Table 4-26 and Table 4-27. The item loadings are acceptable.

Table 4-26: Total Variance Explained of DME

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6.542	34.432	34.432	6.094	32.076	32.076	4.830
2	1.875	9.867	44.299	1.375	7.239	39.315	1.732
3	1.709	8.993	53.292	1.261	6.637	45.952	4.127
4	1.328	6.989	60.281	0.936	4.925	50.876	4.021
5	1.013	5.332	65.612				
6	0.929	4.892	70.504				
7	0.770	4.051	74.555				
8	0.682	3.588	78.143				
9	0.613	3.224	81.367				
10	0.561	2.955	84.322				
11	0.492	2.590	86.912				
12	0.445	2.340	89.252				
13	0.398	2.095	91.347				
14	0.379	1.997	93.345				
15	0.315	1.656	95.000				
16	0.272	1.432	96.432				
17	0.251	1.321	97.753				
18	0.236	1.241	98.994				
19	0.191	1.006	100.000				

Extraction Method: Principal Axis Factoring.

^a When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 4-27: Pattern Matrix

	Factor			
	1	2	3	4
DME1	0.725	0.091	0.028	-0.047
DME2	0.764	-0.012	0.13	-0.024
DME 3	0.399	-0.103	0.234	0.111
DME 4	0.77	-0.11	-0.081	0.203
DME 5	0.875	0.077	-0.078	0.032
DME 6	0.005	0.003	0.119	0.777
DME 7	0.152	0.118	0.133	0.398
DME8	0.029	-0.137	0.555	0.134
DME 9	0.157	-0.088	0.785	-0.234
DME 10	-0.039	0.088	0.479	0.035
DME 11	0.07	0.063	0.531	0.081
DME 12	0.083	0.128	0.57	0.147
DME 13	-0.095	0.005	0.765	0.038
DME 14	0.042	-0.06	-0.035	0.674
DME 15	0.237	0.167	0.063	0.399
DME 16	0.062	0.04	0.05	0.718
DME 17	0.002	0.529	-0.031	0.012
DME 18	-0.028	0.504	0.007	0.147
DME 19	0.074	0.869	0.071	-0.181

Extraction Method: Principal Axis Factoring.
 Rotation Method: Oblimin with Kaiser Normalization.
^a Rotation converged in 9 iterations.

4.5.3 SECOND ORDER FACTOR ANALYSIS

A second order factor analysis was conducted to specify the Dispositional Measures of Employability. Exploratory factor analysis using the Principal Component Method was performed on the four factors as shown above. The four factors Openness to Change, Work Identity, Career Motivation and Proactivity, Career Resilience and Optimism were loaded onto one factor and were labelled Dispositional Employability. The factor was explained by the 43.635% of the variance as indicated in Table 4-28 and Table 4-29 below. The Factor loadings were considered acceptable.

Table 4-28: Total Variance Explained for the DME Second Order Factor Analysis

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.241	56.030	56.030	1.745	43.635	43.635
2	0.846	21.148	77.178			
3	0.537	13.433	90.611			
4	0.376	9.389	100.000			

Extraction Method: Principal Axis Factoring.

Table 4-29: Factor Matrix^a for Second Order Factor Analysis for DME

	Factor
	1
Openness Change	0.762
Work Identity	0.370
Career Motivation Proactivity	0.651
Career Resilience Optimism	0.778

Extraction Method: Principal Axis Factoring.

^a 1 factor extracted.

8 iterations required.

4.5.4 DESCRIPTIVE STATISTICS AND RELIABILITY OF THE DME

Descriptive statistics were used to explore the data. Table 4-30 below provides the item descriptive statistics of the DME once the items had been grouped together before the Factor Analysis was conducted.

Table 4-30: Descriptive Statistics of the DME

	N	Mean	Std. Deviation	Skewness	Kurtosis	Cronbach Alpha
Dispositional Employability	141	4.9407	.51175	-.263	.832	0.874
Openness Change	141	4.8837	.63613	-.602	1.660	0.854
Work Identity	141	5.0260	.75285	-.800	.464	0.633
Career Motivation Proactivity	141	4.8274	.70469	-.504	.295	0.773
Career Resilience Optimism	141	5.0255	.67859	-1.016	2.003	0.818
Valid N (listwise)	141					

Table 4-30 provides an overview of the number of valid cases (N) per group for each of the 5 grouped items, measures of central tendency and dispersion. The sample group consists of a total of 141 respondents.

A six-point response scale ranging from “Strongly Disagree” to “Strongly Agree” was utilised. The mean values for the respondents range between 4.8274 and 5.026. This indicates that respondents tended to have answers which fell between just above the middle of the range and the top of the range.

Standard Deviation values for group range between 0.5117 and 0.752, indicating a small degree of dispersion. The skewness values for the group range between -1.016 and -.263, indicating a high negatively skewed distribution. The kurtosis values for the range are between 0.295 and 2.003.

The Cronbach Alpha Coefficient ranges from 0.633 for work identity to 0.854 for openness to change and accordingly the relationships go from the acceptable to the high level of reliability. The overall Cronbach Alpha Coefficients is 0.874 for Dispositional Employability which states that it has a high overall level of reliability (George & Mallery, 2003).

4.5.5 SUMMARY OF RESULTS

To conclude the information presented in the preceding section (section 4.5), the results of the statistical analysis of the DME can be summarised as follows:

- The KMO of the Sampling Adequacy and Sphericity inter-item correlation was at a superb level at 0.839 and there was a significant correlation between the items according to the Bartlett’s test.
- The EFA was run and it was determined according to the Principle Axis Factor Analysis that there were four main factors. The Direct Oblimin Rotation determined that the four main factors had 50.876% of the cumulative variances.
- This required a Second Order Factor Analysis to be run. The four factors were loaded onto one factor namely Dispositional Employability with the cumulative variance of 43.635%.

- The overall value of Cronbach's Alpha indicates a good level of reliability for Dispositional Employability.
- And the reliability statistics for all the sub-scales were between acceptable and good.

4.6 RESULT: MASLACH BURNOUT INVENTORY

The emphasis of this section is placed on the statistical analysis of the Maslach Burnout Inventory-General Survey (MBI-GS) data to determine if there is a tendency towards burnout within the large mining house.

4.6.1 SAMPLE ADEQUACY AND SPHERICITY

The Sampling Adequacy and Sphericity of the inter-item correlation matrix was determined by applying the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity to the inter-item correlation matrix of the MBI-GS. The results of the KMO for the MBI-GS are presented in Table 4-31 below.

Table 4-31: KMO and Bartlett's test of inter-item correlation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.866	
Bartlett's Test of Sphericity	Approx. Chi-Square	1460.944
	df	210
	Sig.	0.000

As evidenced in Table 4-31 above, the KMO measure verified the sampling adequacy for factor analysis, since the value of KMO is 0.866 which is above the 0.6 cut off point set by Pallant (2005) and Hair *et al.* (2010). Bartlett's Test of Sphericity was significant ($p < 0.05$), indicating correlations between items were sufficiently large for a factor analysis. Thus the sample is suitable for further analysis by means of factor analysis.

4.6.2 FACTOR ANALYSIS

An EFA was run using the Principle Axis Factoring extraction method. The PAF extraction method was performed on the 21 items of the Maslach Burnout Inventory-General Survey. The initial results showed that 4 factors could be extracted. However closer inspection of the factor matrix showed that the most of the items tended to load onto three factors. Principle Factor Analyses were run this time specifying three factors. One item was deleted because of problematic and low loadings. Cynicism and Depersonalising loaded onto one factor to form Mental Distance. The three factors were labelled Mental Distance (Factor 1), Professional Efficiency (Factor 2), and Exhaustion (Factor 3). The three factors explain 48.823% of the variance. The results of the factor analysis as well as the Pattern Matrix are shown below in Table 4-32 and Table 4-33. The item loadings were considered acceptable.

Table 4-32: Total Variance^a Explained for MBI-GS

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6.769	33.847	33.847	6.307	31.533	31.533	4.3
2	2.978	14.889	48.736	2.548	12.742	44.274	4.316
3	1.419	7.097	55.833	0.91	4.549	48.823	4.819
4	1.055	5.274	61.107				
5	0.92	4.602	65.709				
6	0.849	4.247	69.957				
7	0.775	3.873	73.829				
8	0.773	3.864	77.694				
9	0.665	3.325	81.019				
10	0.561	2.805	83.824				
11	0.476	2.379	86.203				
12	0.462	2.31	88.513				
13	0.428	2.139	90.652				
14	0.368	1.841	92.493				
15	0.31	1.551	94.044				
16	0.3	1.5	95.544				
17	0.281	1.403	96.947				
18	0.26	1.3	98.247				
19	0.196	0.981	99.228				
20	0.154	0.772	100				

Extraction Method: Principal Axis Factoring.

^a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 4-33: Pattern Matrix^a for MBI-GS

	Factor		
	1	2	3
MBI 1	-0.097	0.038	-0.958
MBI 2	-0.106	0.025	-0.856
MBI 3	0.374	-0.134	-0.508
MBI 4	0.207	-0.063	-0.581
MBI 5	0.072	0.065	-0.824
MBI 6	0.634	-0.036	-0.032
MBI 7	0.507	0.001	0.025
MBI 8	0.346	-0.182	-0.339
MBI 9	0.574	0.064	0.024
MBI 10	0.379	-0.145	-0.159
MBI 11	0.331	-0.341	-0.179
MBI 12	0.383	0.13	-0.033
MBI 13	0.542	-0.193	-0.037
MBI 14	0.435	-0.384	-0.053
MBI 15	-0.036	0.662	-0.065
MBI 16	-0.001	0.641	0.001
MBI 17	-0.064	0.741	-0.009
MBI 18	0.164	0.803	-0.059
MBI 19	-0.03	0.594	0.067
MBI 20	0.065	0.874	0.052

Extraction Method: Principal Axis Factoring.
 Rotation Method: Oblimin with Kaiser Normalization.

4.6.3 DESCRIPTIVE STATISTICS AND RELIABILITIES OF THE MBI-GS

Descriptive statistics were used to explore the data. Table 4-34 below provides the item descriptive statistics of the MBI-GS once the items have been grouped together before the Factor Analysis was conducted.

Table 4-34 provides an overview of the number of valid cases (N) per group for each of the 3 grouped items, measures of central tendency and dispersion. The sample group consists of a total of 141 respondents.

Table 4-34: Descriptive Statistics of the MBI-GS

	N	Mean	Std. Deviation	Skewness	Kurtosis	Cronbach Alphas
Burnout	141	4.1685	.75293	.267	-.520	0.787
Exhaustion	141	3.9078	1.54818	-0.033	-1.034	0.898
Mental Distance	141	2.7762	1.09198	0.534	-0.424	0.798
Professional Efficiency	141	5.8215	1.00251	-1.029	0.590	0.852
Valid N (listwise)	141					

A six-point response scale ranging from “Never” to “Everyday” was utilised. The mean values for the respondents range between 5.8215 and 2.7762. This indicates that respondents tended to have answers which fell toward the middle of the range to the top of the range.

Standard Deviation values for group range between 1.002 and 1.548, indicating a small degree of dispersion. The skewness values for the group range between -1.029 and .0534, indicating a negatively skewed distribution. The kurtosis values for the range are between -1.034 and 0.590.

From Table 4-34 below it is seen that the Cronbach’s Alpha Coefficient for Burnout is 0.787 which suggests that the overall value is at an acceptable level of reliability. Therefore it can be said that Burnout is at an acceptable level of reliability, while the three dimensions of Burnout range from acceptable to good.

4.6.4 SUMMARY OF RESULTS

To conclude the information presented in the preceding section (section 4.6), the results of the statistical analysis of the MBI-GS can be summarised as follows:

- The KMO of the Sampling Adequacy and Sphericity inter-item correlation was at a great level at 0.866 and there was a significant correlation between the items according to the Bartlett’s test.

- The EFA was run and it was determined according to the Principle Axis Factor Analysis using the Direct Oblimin Rotation that three main factors were identified which had a 48.823% of the cumulative variances.
- The overall value of Cronbach’s Alpha indicates an acceptable level of reliability for Burnout.
- And the reliability statistics for all the sub-scales were between acceptable and good.

4.7 RESULT: GENERAL HEALTH SURVEY

The emphasis of this section is placed on the statistical analysis of the General Health Survey (GHS) data to determine the general health of the respondents within the large mining house. This was also used to determine the reliability of the instrument and data received from using the instrument. To achieve this outcome the following statistical techniques were employed:

- The Keyser-Meyer Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity;
- Exploratory Factor Analysis;
- Reliability Analysis of the whole data received from the questionnaire

4.7.1 SAMPLE ADEQUACY AND SPHERICITY

The Sampling Adequacy and Sphericity of the inter-item correlation matrix was determined by applying the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s Test of Sphericity to the inter-item correlation matrix of the GHS. The results of the KMO for the GHS are presented in Table 4-35 below.

Table 4-35: KMO and Bartlett’s test of inter-item correlation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.924	
Bartlett's Test of Sphericity	Approx. Chi-Square	1198.216
	df	171
	Sig.	0.000

As seen in Table 4-30 above, the KMO measure verified the sampling adequacy for factor analysis, since the value of KMO is 0.924 which is above the 0.6 cut off point set by Pallant (2005) and Hair *et al.* (2010). This means that there is a superb sampling adequacy. Bartlett's Test of Sphericity was significant ($p < 0.05$), indicating correlations between items were sufficiently large for a factor analysis. Thus the sample is suitable for further analysis by means of factor analysis.

4.7.2 FACTOR ANALYSIS

An EFA was run using the Principle Axis Factoring extraction method on the 19 items of the General Health Survey. The initial results showed that three factors can be specified, but closer inspection of the factor matrix indicated that most of the items loaded onto one factor. One item was excluded due to low factor loadings. The one factor was loaded and was labelled Ill-health. The one factor explained 41.126% of the variance. The results of the factor analysis as well as the Factor Matrix are shown below in Table 4-36 and Table 4-37. The item loadings were considered acceptable.

Table 4-36: Total Variance Explained for GHS

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.953	44.183	44.183	7.403	41.126	41.126
2	1.268	7.044	51.227			
3	1.023	5.684	56.911			
4	0.945	5.249	62.16			
5	0.853	4.737	66.896			
6	0.779	4.326	71.223			
7	0.655	3.639	74.862			
8	0.625	3.475	78.336			
9	0.558	3.098	81.434			
10	0.533	2.963	84.398			
11	0.467	2.595	86.993			
12	0.439	2.441	89.434			
13	0.399	2.216	91.65			
14	0.372	2.068	93.718			
15	0.315	1.75	95.468			

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
16	0.286	1.591	97.059			
17	0.268	1.49	98.549			
18	0.261	1.451	100			

Extraction Method: Principal Axis Factoring.

Table 4-37: Factor Matrix^a for the GHS

	Factor
	1
GHS 1	0.591
GHW 2	0.378
GHS 3	0.492
GHS 4	0.523
GHS 5	0.615
GHS 6	0.61
GHS 7	0.607
GHS 8	0.446
GHS 9	0.777
GHS 10	0.653
GHS 11	0.674
GHS 12	0.66
GHS 13	0.731
GHS 14	0.702
GHS 15	0.759
GHS 16	0.732
GHS 17	0.708
GHS 18	0.719

Extraction Method: Principal Axis Factoring.

^a 1 factor extracted.

3 iterations required.

4.7.3 DESCRIPTIVE STATISTICS AND RELIABILITIES OF THE GHS

Descriptive statistics were used to explore the data. In Table 4-38 below, the item descriptive statistics of the GHS can be seen once the items have been grouped together before the Factor Analysis was conducted.

Table 4-38 provides an overview of the number of valid cases (N) per group for the grouped item, it also shows measures for the central tendency and as well as dispersion. The sample group consists of a total of 141 respondents.

Table 4-38: Descriptive Statistics for GHS

	N	Mean	Std. Deviation	Skewness	Kurtosis	Cronbach Alpha
Ill-health	141	2.2963	0.58714	0.289	-0.145	0.920
Valid N (listwise)	141					

A four-point response scale ranging from “Never” to “Often” was utilised. The mean value for the respondents was 2.2963. This indicates that respondents tended to have answers which fell toward the bottom of the range.

Standard Deviation value for the group was 0.58714, indicating a small degree of dispersion. The skewness value was 0.289, indicating a slightly positive skewed distribution. The kurtosis value for the group was -0.145. The Cronbach’s Alpha Coefficient for Ill-health is 0.920 which suggests that the overall value is at an excellent level of reliability, therefore it can be said that the Ill-health factor is at an excellent level of reliability.

4.7.4 SUMMARY OF RESULTS

To conclude the information presented in the preceding section (section 4.7), the results of the statistical analysis of the GHS can be summarised as follows:

- The KMO of the Sampling Adequacy and Sphericity inter-item correlation was at a superb level and there was a significant correlation between the items according to the Bartlett’s test.
- The EFA was run and it was determined according to the Principle Axis Factor Analysis which was run using The Direct Oblimin Rotation that there was one main factor Ill-health, which had 41.126% of the cumulative variances.
- The overall value of Cronbach’s Alpha indicates an excellent level of reliability for the Ill-health factor.

4.8 RESULT: EMPLOYEE RETENTION SCALE

The emphasis of this section is placed on the statistical analysis of the Employee Retention Scale (ERS) data to determine if there is an Intention to quit within the large mining house. This is also used to determine the reliability of the instrument and data received from using the instrument. To achieve this outcome the following statistical techniques were employed:

- The Keyser-Meyer Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity;
- Exploratory Factor Analysis;
- Reliability Analysis of the whole data received from the questionnaire

4.8.1 SAMPLE ADEQUACY AND SPHERICITY

The Sampling Adequacy and Sphericity of the inter-item correlation matrix was determined by applying the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity to the inter-item correlation matrix of the ITQ. The results of the KMO for the ITQ are presented in Table 4-39 below.

Table 4-39: KMO and Bartlett's test of inter-item correlation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.713	
Bartlett's Test of Sphericity	Approx. Chi-Square	278.620
	df	3
	Sig.	0.000

As evidenced in Table 4-39 above, the KMO measure verified the sampling adequacy for factor analysis, since the value of KMO is 0.713 which is above the 0.6 cut off point set by Pallant (2005) and Hair *et al.* (2010). Bartlett's Test of Sphericity was significant ($p < 0.05$), indicating correlations between items were sufficiently large for a factor analysis. Thus the sample is suitable for further analysis by means of factor analysis.

4.8.2 FACTOR ANALYSIS

An EFA was run using the Principle Axis Factoring extraction method. The PAF extraction method was performed on the 3 items of the Employee Retention Survey. The results showed that one factor can be specified. This one factor was loaded and labelled Intention to quit. The factor explained 75.246% of the variance. The results of the factor analysis as well as the Factor Matrix are shown below in Table 4-40 and Table 4-41.

Table 4-40: Total Variance Explained for the ERS

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.485	82.839	82.839	2.257	75.246	75.246
2	0.370	12.336	95.176			
3	0.145	4.824	100.000			

Extraction Method: Principal Axis Factoring.

Table 4-41: Factor Matrix^a for ERS

	Factor
	1
Quit1	0.939
Quit2	0.741
Quit3	0.910

Extraction Method: Principal Axis Factoring.

^a 1 factor extracted.

9 iterations required.

4.8.3 DESCRIPTIVE STATISTICS AND RELIABILITY OF THE ERS

Descriptive statistics were used to explore the data. Table 4-42 below provides the item descriptive statistics of the ERS once the items have been grouped together before the Factor Analysis was conducted.

Table 4-42 provides an overview of the number of valid cases (N) per group for the grouped item, as well as the measure of central tendency and dispersion. The sample group consists of a total of 141 respondents.

A seven-point response scale ranging from “Strongly Disagree” to “Strongly Agree” was utilised. The mean value for the respondents was 3.0709. This indicates that respondents tended to have answers which fall toward the bottom of the range.

Table 4-42: Descriptive Statistics of the ERS

	N	Mean	Std. Deviation	Skewness	Kurtosis	Cronbach Alpha
Retention	141	3.0709	1.92882	0.465	-1.054	.896
Valid N (listwise)	141					

Standard Deviation values for group range was 1.92882, indicating a medium degree of dispersion. The skewness value for the group was 0.465, indicating a slightly positively skewed distribution. The kurtosis value for the range was -1.054. The Cronbach’s Alpha Coefficient for Retention was 0.896 which suggests that the overall value is at a good level of reliability, therefore it can be said that Retention is at a good level of reliability.

4.8.4 SUMMARY OF RESULTS

To conclude the information presented in the preceding section (section 4.8), the results of the statistical analysis of the ERS can be summarised as follows:

- The KMO of the Sampling Adequacy and Sphericity inter-item correlation was at a good level with the result of 0.713 and there was a significant correlation between the items according to the Bartlett’s test.
- The EFA was run and it was determined according to the Principle Axis Factor Analysis through running The Direct Oblimin Rotation that there was one main factor, which had 75.246% of the cumulative variances.
- The overall value of Cronbach’s Alpha indicates a good level of reliability for Retention.

4.4 PHASE 3: TESTING OF HYPOTHESES

For the purposes of this research study eleven hypotheses were formulated. The statistical tests run for these hypotheses are briefly discussed below.

4.4.1.1 Hypothesis 1

H₁: There is a positive relationship between Job Demands and Burnout

A simple linear regression analysis was carried out on the data to assess whether the Job demands predicts each of the three sub-scales of Burnout, namely the exhaustion dimension, the mental distancing dimension and the professional efficiency dimension. The results of the regression analysis are presented in Table 4-43.

Table 4-43: Regression Analysis between Job Demands and Burnout sub-groups

Model	Un-standardised Coefficients		Standardised Coefficients	t	p (Sig)	R	R ²	ΔR ²
	B	SE	Beta					
Job Demands and Burnout						0.263 ^a	0.069	0.062
(Constant)	3.166	0.318		9.950	0.000			
Job Demands	0.376	0.117	0.263	3.209	0.002			
Job Demands and Exhaustion						0.211 ^a	0.045	0.038
(Constant)	2.249	0.663		3.393	0.001			
Job Demands	0.622	0.244	0.211	2.551	0.012			
Job Demands and Mental Distance						0.179 ^a	0.032	0.025
(Constant)	1.785	0.471		3.793	0.000			
Job Demands	0.372	0.173	0.179	2.147	0.034			
Job Demands and Professional Efficiency						0.070 ^a	0.005	-0.002
(Constant)	5.466	0.438		12.477	0.000			
Job Demands	0.133	0.161	0.070	0.828	0.409			

As can be determined from Table 4-43 above, Job Demands is a significant predictor of the Burnout dimensions ($r_{(df=141; p \leq .005)} = 0.263$, small effect). The Results also showed that there is a positive relationship between Job Demands and Exhaustion ($r_{(df=141; p \leq .005)} = 0.211$, small effect) and Mental Distance ($r_{(df=141; p \leq .005)} = 0.179$, small effect). The results showed no significant relationship between Job Demands and Professional Efficacy ($r_{(df=141; p \leq .005)} = 0.070$, very small to no effect).

- Job Demands produced an R^2 value of 0.045 for the prediction of the exhaustion dimension, indicating that 4.5 percent of the total variance in the exhaustion dimension was explained by the regression model consisting of Job Demands.
- Job Demands produced an R^2 value of .032 for the prediction of the mental distance dimension, indicating that 3.2 percent of the total variance in the mental distance dimension was explained by the regression model consisting of the Job Demands.
- Job Demands produced an R^2 value of .005 for the prediction of the professional efficiency dimension, indicating that 0.05 percent of the total variance in professional efficiency dimension was explained by the regression model consisting of Job Demands.

4.4.1.2 Hypothesis 2

H_2 : Job Resources has a positive effect on Work Engagement

Next a simple linear regression analysis was carried out on the data to assess whether the Job Resources predicts Work Engagement. The results of the regression analysis are presented in Table 4-44.

Table 4-44: Regression Analysis for Job Resources and Work Engagement

Model	Un-standardised Coefficients		Standardised Coefficients	<i>t</i>	<i>p</i> (Sig)	<i>R</i>	<i>R</i> ²	Δ <i>R</i> ²
	<i>B</i>	<i>SE</i>	<i>Beta</i>					
Job Resources and Work Engagement						0.583 ^a	0.340	0.335
(Constant)	2.087	0.399		5.229	0.000			
Job Resources	1.172	0.139	0.583	8.456	0.000			

From the Table 4-44 above, it can be determined that the total score of Job Resources is a significant predictor Work Engagement ($r_{(df=141; p \leq .005)} = 0.583$, large effect). Job Resources produced an R^2 value of 0.340 for the prediction of Work Engagement, indicating that 34 percent of the total variance in Work Engagement was explained by the regression model consisting of Job Resources.

4.4.1.3 Hypothesis 3

H₃: Burnout has a negative effect on Dispositional Employability

A simple linear regression analysis was carried out on the data to assess whether Burnout predicts Dispositional Employability. The results of the regression analysis are presented in Table 4-45 below.

Table 4-45: Regression Analysis for Burnout and Dispositional Employability

Model	Un-standardised Coefficients		Standardised Coefficients	<i>t</i>	<i>p</i> (Sig)	<i>R</i>	<i>R</i> ²	ΔR^2
	<i>B</i>	<i>SE</i>	<i>Beta</i>					
Burnout and Dispositional Employability						0.015 ^a	0.000	-0.007
(Constant)	4.983	0.244		20.411	0.000			
Burnout	-0.010	0.058	-0.015	-0.177	0.860			
Exhaustion and Dispositional Employability						0.186 ^a	0.035	0.028
(Constant)	5.181	0.116		44.763	0.000			
Exhaustion	-0.061	0.028	-0.186	-2.230	0.027			
Mental Distance and Dispositional Employability						0.369 ^a	0.136	0.130
(Constant)	5.421	0.110		49.215	0.000			
Mental Distance	-0.173	0.037	-0.369	-4.684	0.000			
Professional Efficiency and Dispositional Employability						0.655 ^a	0.430	0.425
(Constant)	2.993	0.193		15.495	0.000			
Professional Efficiency	0.335	0.033	0.655	10.230	0.000			

It can be determined from Table 4-45 above, that the total score of Burnout is not a significant predictor of Dispositional Employability. A small positive correlation exists between Burnout and Dispositional Employability. Furthermore positive correlations of moderate to large size also exist between the dimensions of Burnout and Dispositional Employability.

The dimension Exhaustion produced an *R*² value of 0.186 for the prediction of Dispositional Employability, indicating that 18.6 percent of the total variance in the Dispositional Employability was explained by the regression model consisting of the Exhaustion dimension.

The Mental Distance produced an *R*² value of 0.369 for the prediction of Dispositional Employability, indicating that 36.9 percent of the total variance in the Dispositional Employability dimension was explained by the regression model consisting of Mental Distance.

Professional Efficiency produced an R^2 value of 0.655 for the prediction of Dispositional Employability, indicating that 65.5 percent of the total variance in the Dispositional Employability was explained by the regression model consisting of Professional Efficiency.

4.4.1.4 Hypothesis 4

H_4 : Work Engagement has a positive effect on Dispositional Employability

A simple linear regression analysis was carried out on the data to assess whether Work Engagement predicts Dispositional Employability. The results of the regression analysis are presented in Table 4-46 below.

Table 4-46: Regression Analysis for Work Engagement and Dispositional Employability

Model	Un-standardised Coefficients		Standardised Coefficients	<i>t</i>	<i>p</i> (Sig)	<i>R</i>	<i>R</i> ²	ΔR^2
	<i>B</i>	<i>SE</i>	<i>Beta</i>					
Work Engagement and Dispositional Employability						0.654 ^a	0.428	0.424
(Constant)	3.203	0.174		18.455	0.000			
Work Engagement	0.321	0.032	0.654	10.191	0.000			

From the Table 4-46 above, it can be determined that the total score of Work Engagement is a significant predictor of Dispositional Employability ($r_{(df=141; p \leq .005)} = 0.654$, large effect). Work Engagement produced an R^2 value of 0.428 for the prediction of Dispositional Employability, indicating that 42.8 percent of the total variance in Dispositional Employability was explained by the regression model consisting of Work Engagement.

4.4.1.5 Hypothesis 5

H_5 : Burnout has a positive effect on an employee's Intention to Quit

Next a simple linear regression analysis was carried out on the data to assess whether Burnout predicts Intention to Quit. The results of the regression analysis are presented in Table 4-47.

Table 4-47: Regression Analysis Burnout and Intention to Quit

Model	Un-standardised Coefficients		Standardised Coefficients	<i>t</i>	<i>p</i> (Sig)	<i>R</i>	<i>R</i> ²	ΔR^2
	<i>B</i>	<i>SE</i>	<i>Beta</i>					
Burnout and Intention to Quit						0.331 ^a	0.110	0.103
(Constant)	-0.464	0.868		-0.535	0.594			
Burnout	0.848	0.205	0.331	4.137	0.000			

From Table 4-47 above, it can be determined that the total score of Burnout is a significant predictor of Intention to quit ($r_{(df=141; p \leq .005)} = 0.331$, small effect). Burnout produced an R^2 value of 0.110 for the prediction of Intention to quit, indicating that 11 percent of the total variance in Intention to quit was explained by the regression model consisting of Burnout.

4.4.1.6 Hypothesis 6

H₆: Work Engagement has a negative effect on an employee's Intention to Quit

Another simple linear regression analysis was carried out on the data to assess whether Work Engagement predicts Intention to quit. The results of the regression analysis are presented in Table 4-48.

Table 4-48: Regression Analysis Work Engagement and Intention to quit

Model	Un-standardised Coefficients		Standardised Coefficients	<i>t</i>	<i>p</i> (Sig)	<i>R</i>	<i>R</i> ²	ΔR^2
	<i>B</i>	<i>SE</i>	<i>Beta</i>					
Work Engagement and Intention to Quit						0.452 ^a	0.204	0.198
(Constant)	7.595	0.771		9.845	0.000			
Work Engagement	-0.837	0.140	-0.452	-5.971	0.000			

It can be determined from the Table 4-48 above, that the total score of Work Engagement is a significant predictor for Intention to Quit ($r_{(df=141; p \leq .005)} = 0.452$, medium effect). Work Engagement produced an R^2 value of 0.204 for the prediction of Intention to quit, indicating

that 20.4 percent of the total variance in Intention to quit was explained by the regression model consisting of Work Engagement.

4.4.1.7 Hypothesis 7

H₇: Job Demands has a positive effect on an employee's Intention to Quit

An additional, simple linear regression analysis was carried out on the data to assess whether Job Demands predicts Intention to quit. The results of the regression analysis are presented in Table 4-49 below.

Table 4-49: Regression Analysis for Job Demands and Intention to Quit

Model	Un-standardised Coefficients		Standardised Coefficients	t	p (Sig)	R	R ²	ΔR ²
	B	SE	Beta					
Job Demands And Intention to Quit						0.045 ^a	0.002	-0.005
(Constant)	2.634	0.844		3.121	.002			
Job Demands	0.164	0.311	0.045	0.528	0.599			

From the Table 4-49 above, it can be seen that the total score of Job Demands is not a significant predictor of the Intention to quit ($r_{(df=141; p \leq .005)} = .045$, very small effect). Job Demands produced an R^2 value of 0.002 for the prediction of Intention to quit, indicating that 0.2 percent of the total variance in Intention to quit was explained by the regression model consisting of Job Demands.

4.4.1.8 Hypothesis 8

H₈: Job Resources has a negative effect on an employee's Intention to Quit

A simple linear regression analysis was carried out on the data to assess whether Job Resources has an effect on the Intention to quit. The results of the regression analysis are presented in Table 4-50.

Table 4-50: Regression Analysis for Job Resources and Intention to Quit

Model	Un-standardised Coefficients		Standardised Coefficients	t	p (Sig)	R	R ²	ΔR ²
	B	SE	Beta					
Job Resources and Intention to Quit						0.607 ^a	0.369	0.364
(Constant)	9.476	0.723		13.113	0.000			
Job Resources	-2.260	0.251	-0.607	-9.009	0.000			

From the Table 4-50 above, it can be determined that the total score of Job Resources is a significant predictor Intention to quit ($r_{(df=141; p \leq .005)} = .607$, large effect). Job Resources produced an R^2 value of 0.369 for the prediction of Intention to quit, indicating that 36.9 percent of the total variance in Intention to quit was explained by the regression model consisting of Job Resources.

4.4.1.9 Hypothesis 9

H₉: Dispositional Employability has a negative effect on an employee’s Intention to Quit

A simple linear regression analysis was carried out on the data to assess whether the Dispositional Employability predicts Intention to quit. The results of the regression analysis are presented in Table 4-51.

Table 4-51: Regression Analysis for Dispositional Employability and Intention to Quit

Model	Un-standardised Coefficients		Standardised Coefficients	t	p (Sig)	R	R ²	ΔR ²
	B	SE	Beta					
Dispositional Employability and Intention to Quit						0.266 ^a	0.071	0.064
(Constant)	8.028	1.531		5.245	0.000			
Dispositional Employability	-1.003	0.308	-0.266	-3.256	0.001			

It can be determined from the Table 4-51 above, that the total score of Dispositional Employability is a significant predictor Intention to quit ($r_{(df=141; p \leq .005)} = 0.266$, small effect).

Dispositional Employability produced an R^2 value of 0.071 for the prediction of Intention to quit, indicating that 7.1 percent of the total variance in Intention to quit was explained by the regression model consisting of Dispositional Employability.

4.4.1.10 Hypothesis 10

H₁₀: Dispositional Employability mediates the relationship between Job Resources and the Intention to Quit

Standard Multiple Regression was performed to determine whether Dispositional Employability mediates the relationship between Job Resources and the Intention to quit. The results of the multiple regression analysis with Job Resources and Dispositional Employability as independent variables, and the interaction between these variables (to test for mediating effects), and Intention to quit is reported in Table 4-52 (Note: All the independent variables were centred). In models 1 and 2, the effects of the independent variables were entered, while in the third model the interaction term was also entered.

Table 4-52: Dispositional Employability as the mediator between Job Resources and the Intention to quit

Model	Un-standardised Coefficients		Standardised Coefficients	t	p (Sig)	R	R ²	ΔR ²
	B	SE	Beta					
Job Resources and Intention to Quit						0.607 ^a	0.369	0.364
(Constant)	9.476	0.723		13.113	0.000			
Job Resources	-2.260	0.251	-0.607	-9.009	0.000			
Job Resources, Dispositional Employability and Intention to Quit						0.608 ^a	0.369	0.360
(Constant)	9.044	1.272		7.112	0.000			
Job Resources	-2.317	0.287	-0.622	-8.084	0.000			
Dispositional Employability	0.120	0.290	0.032	0.414	0.680			
Job Resources, Dispositional Employability, JRXDE and Intention to Quit						0.625 ^a	0.390	0.377
(Constant)	26.319	8.093		3.252	0.001			
Job Resources	-8.384	2.822	-2.252	-2.971	0.004			
Dispositional Employability	-3.317	1.616	-0.880	-2.052	0.042			
JRXDE	1.196	0.554	2.221	2.161	0.032			

From Table 4-52 it is evident that Job Resources explains 36.9% of the variance in the Intention to quit, while the Job Resources and Dispositional Employability combined explains 3.2% of the variance Intention to quit. However adding the interaction of Job Resources and Dispositional Employability in the multiple regression analysis it did result in a significant increase in the explained percentage of variance in the Intention to quit. Therefore it can be concluded that Dispositional employability does mediate the relationship between Job Resources and the Intention to quit.

4.4.1.11 Hypothesis 11

H₁₁: Dispositional Employability moderated the relationship between Job Demands and the Intention to Quit

Standard Multiple Regression was performed to determine whether Dispositional Employability moderated the relationship between Job Demands and the Intention to quit.

The results of the multiple regression analysis with Job Demands and Dispositional Employability as independent variables, and the interaction between these variables (to test for moderating effects), and Intention to quit is reported in Table 4-54 (Note: All the independent variables were centred). In Models 1 and 2, the effects of the independent variables were entered, while in the Third Model the interaction term was also entered.

Table 4-53: Dispositional Employability as the moderator between Job Demands and the Intention to quit

Model	Un-standardised Coefficients		Standardised Coefficients	<i>t</i>	<i>p</i> (Sig)	<i>R</i>	<i>R</i> ²	ΔR^2
	<i>B</i>	<i>SE</i>	<i>Beta</i>					
Job Demands and Intention to Quit						0.045 ^a	0.002	-0.005
(Constant)	2.634	0.844		3.121	0.002			
Job Demands	0.164	0.311	0.045	0.528	0.599			
Job Demands, Dispositional Employability, and Intention to Quit						0.273 ^a	0.075	0.061
(Constant)	7.492	1.685		4.446	0.000			
Job Demands	0.230	0.301	0.063	0.766	0.445			
Dispositional Employability	-1.019	0.309	-0.270	-3.295	0.001			
Job Demands, Dispositional Employability, JDXDE and Intention to Quit						0.274 ^a	0.075	0.055
(Constant)	6.917	8.198		0.844	0.400			
Job Demands	0.444	3.003	0.121	0.148	0.883			
Dispositional Employability	-0.904	1.639	-0.240	-0.552	0.582			
JDXDE	-0.043	0.598	-0.068	-0.072	0.943			

From Table 4-53 it is evident that Job Demands explain 0.2% of the variance in the Intention to quit. While the Job Demands and Dispositional Employability combined explains 7.5% of the variance of Intention to quit. However, adding the interaction of Job Demands and Dispositional Employability in the multiple regression analysis did not result in a significant increase in the explained percentage of variance in the Intention to quit. Therefore one can conclude that Dispositional Employability does not moderate the relationship between Job Demands and the Intention to quit.

4.4.2 SUMMARY OF RESULTS

To conclude the information presented in the preceding section, the results of the statistical analysis of the relationship between Work Stressors, Work Wellness and the Intention to quit can be summarised as follows:

- There is a statistically significant relationship between the Job Demands, Burnout and the three dimensions of Burnout based on the results of a Simple Linear Regression analysis.
- Job Resources are a statistically significant predictor of Work Engagement based on the results of a Simple Linear Regression analysis.
- There is no statistically significant relationship between the Burnout and Dispositional Employability dimensions based on the results of a Simple Linear Regression analysis.
- Based on the results of a Simple Linear Regression analysis there is a statistically significant relationship between Work Engagement and Dispositional Employability.
- There is a statistically significant relationship between the Burnout and Intention to quit dimensions, which was determined from the results of a Simple Linear Regression analysis.
- According to the results of a Simple Linear Regression analysis it has been determined that there is a statistically significant relationship between Work Engagement and the Intention to quit.
- From the results of a Simple Linear Regression analysis it can be determined that there is no statistically significant relationship between Job Demands and the Intention to quit.
- There is a statistically significant relationship between Job Resources and the Intention to quit based on the results of a Simple Linear Regression analysis.
- The final Simple Linear Regression analysis determined that there is a statistically significant relationship between Dispositional Employability and the Intention to quit.
- From the Multiple Regression analysis conducted on the relationship between Job Resources and the Intention to quit it was determined that Dispositional Employability was a statistically significant mediator for the relationship between Job Resources and the Intention to quit.

- According to the Multiple Regression analysis conducted it was determined that Dispositional Employability was not a statistically significant moderator for the relationship between Job Demands and the Intention to quit.

In Figure 5-1 below, the overall correlation coefficients are presented as achieved during the Simple Linear and Multiple Regression analysis of the data collected from the research questionnaires.

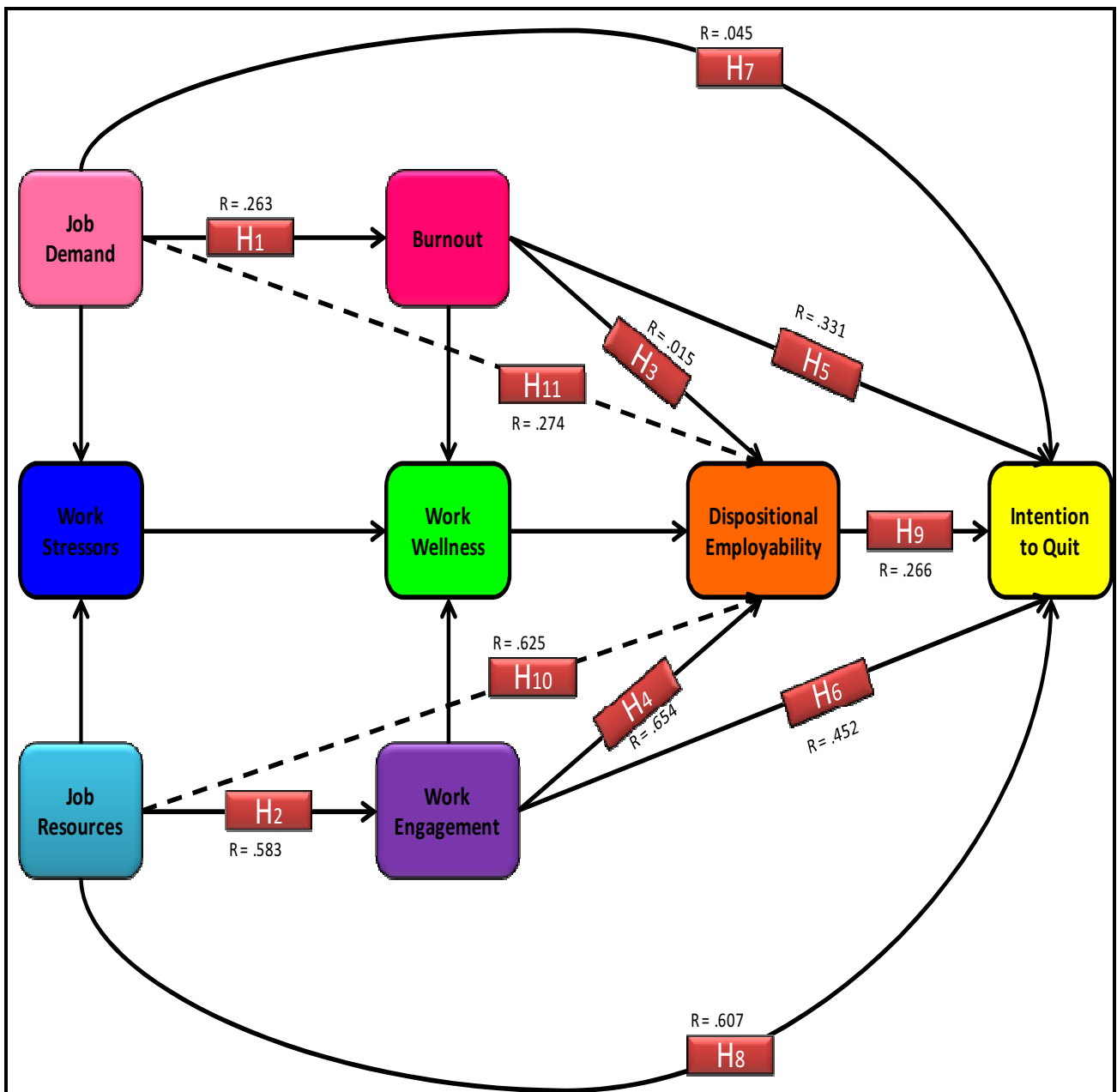


Figure 4-13: The Correlation Coefficients according to the Hypotheses

4.5 CONCLUSION

This section presented the results of the statistical analysis carried out on measures of the relationship between Work stressors, Work Wellness and the Intention to quit. An overview of the statistical techniques employed in the study was given, before the results of the statistical analysis of the measures were presented. This was followed by a presentation of the statistical findings for the relationships between the different concepts which were explored before concluding the chapter.

The next chapter will encompass a discussion of the implications of the statistical results presented in this chapter. In addition, the hypotheses presented in Chapter 2 will be further explored.

Chapter 5: DISCUSSION OF RESULTS

For the purposes of the study, eleven research hypotheses were formulated based on the literature available on the relationship between Work Stressors, Work Wellness and the Intention to quit, as well as previous empirical studies. These research hypotheses were empirically tested using statistical data analysis techniques, the results of which were presented in the previous chapter. The emphasis of this chapter lies on the discussion of the empirical results obtained, and what the implications are for the research hypotheses. The eleven research hypotheses formulated for the study are presented, followed by a discussion of the implications of the statistical results.

The following section presents a discussion of the empirical evidence related to the validation of the relationship between Work Stressors, Work Wellness and the Intention to quit.

5.1 HYPOTHESIS 1: JOB DEMANDS HAS A POSITIVE EFFECT ON BURNOUT

For the results of the Simple Regression analysis to be seen as significant at 95%, the p value needs to be smaller than or equal to 0.05 (Field, 2009). The result of $p=.002$ suggests that there is a significant relationship between Job demands and Burnout with the $p \leq 0.05$. Research has shown that the greater the t value and the smaller the p value the greater the contribution of the predictor (Fields, 2009). Therefore with the $t = 3.209$ being such a large value and the p value being such a small value, it can be determined that Job Demands is a great contributor as the predictor of Burnout. As the t value is a positive value it can be determined that Job Demands has a positive effect on Burnout. This means that the more Job Demands there are the more likely the individual tends towards Burnout. This result was confirmed with the theory and research conducted by Rothmann and Joubert (2007) in the Platinum Mines in the North West Province especially with regard to Job Demands.

From this it can therefore be determined that Hypothesis 1 is accepted.

5.2 HYPOTHESIS 2: JOB RESOURCES HAS A POSITIVE EFFECT ON WORK ENGAGEMENT

The results gained from the Simple Linear Regression Analysis states that there is a significant relationship between Job Resources and Work Engagement. This relationship was proven through the significant value of $p = .000$. It can be stated that Job Resources is a great contributor to the predictor, Work Engagement, as $t = 8.456$. As the t value is a positive value it can be determined that Job Resources and Work Engagement have a positive relationship, as when Job Resources increase, Work Engagement will increase as well. This relationship was proven and accepted by research done by Fourie, Rothmann, and van de Vijver (2008) and Schaufeli and Bakker, (2004). A recent study shows that Job Resources exclusively predicted Work Engagement (Bakker & Demerouti, 2008).

Therefore Hypothesis 2 is accepted.

5.3 HYPOTHESIS 3: BURNOUT HAS A NEGATIVE EFFECT ON DISPOSITIONAL EMPLOYABILITY

From the results gained from the Simple Linear Regression Analysis done on the relationship between Burnout and Dispositional Employability, it was determined that there was no significant relationship between the two concepts. This was determined as the p value was $p \geq .05$ at $p = .860$. The t value was a negative so there was a negative relationship between the two concepts. Had the relationship been significant it could have been said that when Burnout increases then Dispositional Employability would decrease, as they had an inverse relationship. When analysing the dimensions of Burnout with Dispositional Employability they were seen to be significant. Research done by Barkhuizen (2005); Rothmann and Joubert (2008); and Fugate and Kiniki (2008) stated that these two concepts had an inverse relationship.

As the result was not significant, Hypothesis 3 is rejected.

5.4 HYPOTHESIS 4: WORK ENGAGEMENT HAS A POSITIVE EFFECT ON DISPOSITIONAL EMPLOYABILITY

The results gained from the Simple Linear Regression Analysis state that there is a significant relationship between Work Engagement and Dispositional Employability. This relationship was proven through the significant value of $p = .000$. It can be stated that Job Resources is an excellent contributor to the predictor, Work Engagement, as $t = 10.191$. As the t value is a positive value it can be determined that Work Engagement and Dispositional Employability have a positive relationship, as when Work Engagement increases Dispositional Employability will also increase. Researchers acknowledge the importance of employees' abilities to respond to changes in their work place demands. They can only achieve the demands if they are given the correct resources to survive (Frese & Fay, 2001; Fugate & Kinicki, 2008; and Britt, Dickinson, Greene-Shortidge, & McKibben, 2007).

It can therefore be concluded that Hypothesis 4 is accepted.

5.5 HYPOTHESIS 5: BURNOUT HAS A POSITIVE EFFECT ON AN EMPLOYEE'S INTENTION TO QUIT

The results achieved from the Simple Linear Regression Analysis suggest that there is a significant positive relationship between Burnout and the Intention to quit. This relationship was proven through the significant value of $p = .000$. It can be stated that Job Resources is moderate contributor to the predictor, Intention to quit, as $t = 4.137$. As the t value is a positive value, it was determined that the relationship between Burnout and an employee's Intention to quit was positive. This means that when Burnout increases the Intention to quit among employees will also increase. This relationship was supported through the research done by Hawkey (2011), Barkhuizen, Rothmann and Joubert (2007); Maslach, Schaufeli and Leiter, (2001) and Schaufeli, Taris and van Rhenen (2008).

It can be stated that Hypothesis 5 is accepted.

5.6 HYPOTHESIS 6: WORK ENGAGEMENT HAS A NEGATIVE EFFECT ON AN EMPLOYEE'S INTENTION TO QUIT

From the results gained from the Simple Linear Regression Analysis done on the relationship between Work Engagement and the Intention to quit, it was determined that there was significant relationship between the two concepts. This was determined as the p value was $p=.000$. The t value ($t = -5.971$) was a negative so therefore it is determined that there is a negative relationship between the two concepts. As the relationship is a significantly negative relationship, it can be said that when Work Engagement increases then Dispositional Employability would decrease, as they have an inverse relationship. Through research conducted by Moore (2002); Kalliath and Beck, (2001); and Firth, Mellor, Moore, and Loquet, (2004), it was determined that when there is low Work Engagement in employees they are more likely to quit.

Therefore Hypothesis 6 is accepted.

5.7 HYPOTHESIS 7: JOB DEMANDS HAS A POSITIVE EFFECT ON AN EMPLOYEE'S INTENTION TO QUIT.

The results achieved from the Simple Linear Regression Analysis suggest that the relationship between Job Demands and Intention to quit had no significant relationship between the two concepts. This was determined as the p value was $p \geq .05$ at $p=.599$. The t value was positive so therefore there was a positive relationship between the two concepts. Had the relationship been significant it could have been said that when Job Demands increase then an employee's Intention to quit would increase, as they had a complementary relationship. If one increases it would cause the other to increase as well. There are some reasons that may have caused the results to be not significant. Some of these reasons may have been caused by internal factors in the organisation, such as the organisation's turnover which is very low. Their turnover level is half of the current level in the mining industry. An external factor could have been the current job market because of the economy. A third reason could be that there were not enough participants in the study.

Whatever the reason for the fact that no significant relationship was determined, it is stated that Hypothesis 7 is subsequently rejected.

5.8 HYPOTHESIS 8: JOB RESOURCES HAS A NEGATIVE EFFECT ON AN EMPLOYEE'S INTENTION TO QUIT

The results gained from the Simple Linear Regression Analysis states that there is a significant relationship between Job Resources and the Intention to quit. This relationship was proven through the significant value of $p = .000$. It can be stated that Job Resources is an excellent contributor to the predictor, Intention to quit, as $t = -9.009$. As the t value is a negative value it can be determined that Job Resources and Intention to quit have a converse relationship, as when Job Resources increase, Intention to quit will decrease and vice versa. This relationship was proven in Chapter 2 in the Literature review. This relationship was confirmed through research done by Demerouti, Bakker, Nachreiner, & Schaufeli, (2001) on job resources and Moore, (2002) with research on the Intention to quit.

It can therefore be concluded that Hypothesis 8 can be accepted.

5.9 HYPOTHESIS 9: DISPOSITIONAL EMPLOYABILITY HAS A NEGATIVE EFFECT ON AN EMPLOYEE'S INTENTION TO QUIT.

From the results achieved after running a Simple Linear Regression Analysis on the relationship between Dispositional Employability and the employee's Intention to quit, it was determined that there was significant relationship between the two concepts. This was determined as the p value was $p = .001$. The t value ($t = -3.256$) was a negative so therefore it is determined that there is a negative relationship between the two concepts. From the t value it was also determined that Dispositional Employability is an excellent contributor to the predictor, Intention to quit. As the relationship is a significantly negative relationship, it can be said that when Dispositional Employability increases then Intention to quit would decrease as they have an inverse relationship. This relationship is supported through the research done as stated in Chapter 2's Literature review. In the Literature review it stated that according to Fugate and Kinicki (2008), those individuals who were more open to change and new experiences were more adaptable to dynamic work environments. As a result they were better able to deal with stressful situations that could cause an individual to quit their job.

From this it can be determined that Hypothesis 9 is accepted.

5.10 HYPOTHESIS 10: DISPOSITIONAL EMPLOYABILITY MEDIATES THE RELATIONSHIP BETWEEN JOB RESOURCES AND THE INTENTION TO QUIT.

To determine whether Dispositional Employability mediates the relationship between Job Resources and the Intention to quit, a Multiple Regression Analysis was used. The analysis determined that there was a significant relationship between the concepts. With $p=.032$ and $t=2.161$ it can be stated that Dispositional Employability is a positive mediator between Job Resources and the Intention to quit. Through the research done in Chapter 2 it can be determined that this relationship is accepted and supported by the literature on it. From the research done on the relationship between Work Wellness and the Intention to quit by Bakker and Demerouti, (2008) it was determined that the positive states of Work Wellness (e.g. Dispositional Employability) have a positive mediating effect on the Intention to quit.

Due to this it can be concluded that Hypothesis 10 is accepted.

5.11 HYPOTHESIS 11: DISPOSITIONAL EMPLOYABILITY MODERATES THE RELATIONSHIP BETWEEN JOB DEMANDS AND THE INTENTION TO QUIT.

The final hypothesis that Dispositional Employability moderates the relationship between Job Demands and the Intention to quit, was analysed with the assistance of a Multiple Regression Analysis. From the results it was determined that there was no significant moderator relationship between Dispositional Employability, Job Demands and the Intention to quit. The p value was determined to be $p=.582$ and the t value of $t = -.552$. Had there been a significant relationship it would have determined that Dispositional Employability had a negative effect on the employee's Intention to quit due to high Job Demands. Research compiled by (Firth, Mellor, Moore, and Loquet, (2004), deduced that Dispositional Employability had a negative effect on one's Intention to quit. They proposed that if individuals were engaged with their work through Dispositional Employability, they could more easily adapt to problems caused by Job Demands and as a result they would be less likely to quit, as they are more capable of dealing with stressful situations.

From the above discussion it can be determined that Hypothesis 11 is rejected.

In Figure 6-1 below a graphical representation is given of which hypotheses were analysed in this study, highlighting those that were accepted and those which were rejected.

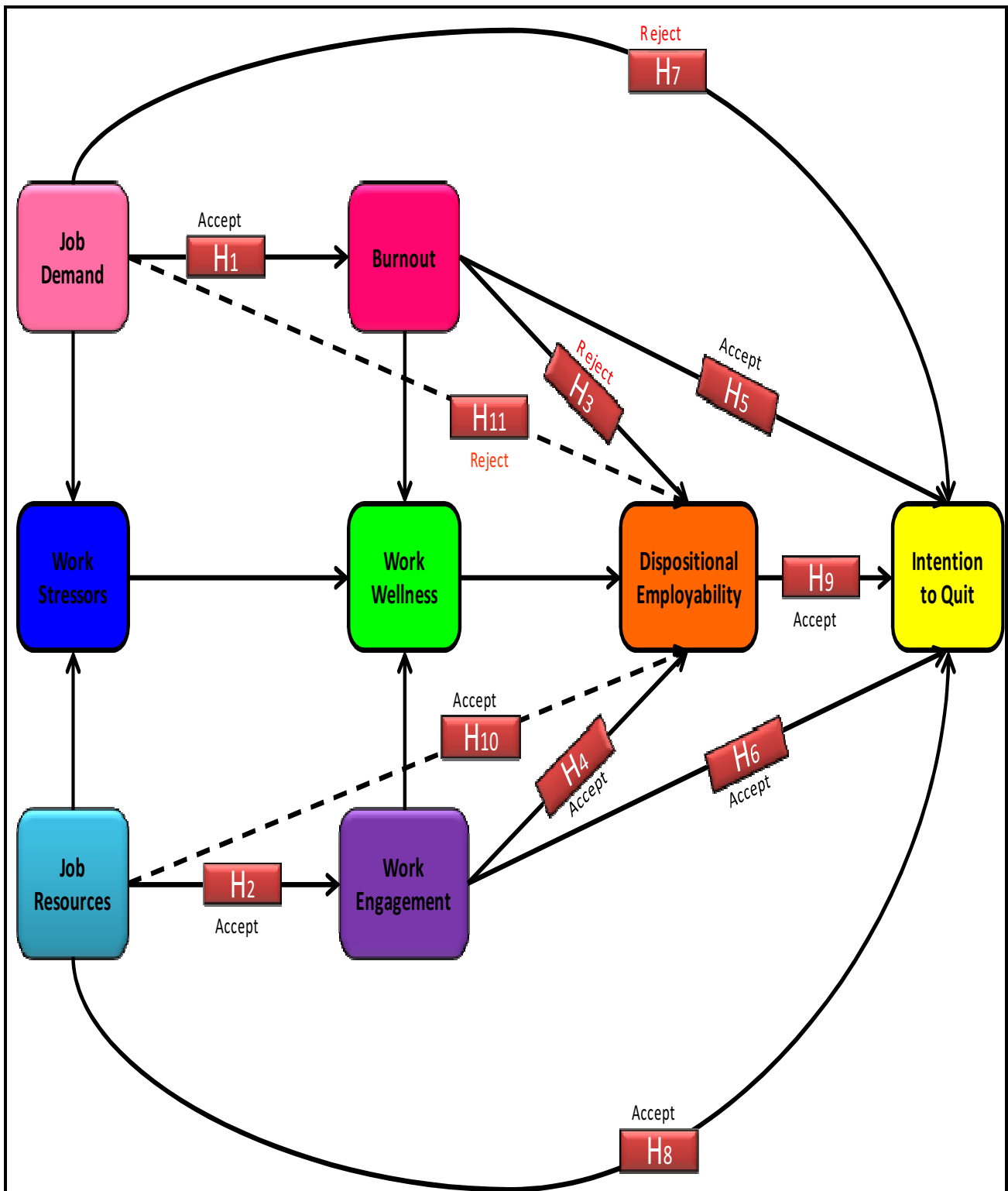


Figure 5-1: Diagram Illustrating the Acceptance and Rejections of the Hypotheses in the Study

5.12 CONCLUSION

This chapter provided a detailed discussion of the eleven research hypotheses which were formulated based on available literature on the relationship between Work Stressors, Work Wellness and the Intention to quit. To address the research objectives of the study, the eleven research hypotheses were empirically tested using the statistical data analysis techniques presented in Chapter 5. Using this empirical information, the researcher embarked on a discussion of the empirical results obtained, and what the implications of these results were for the research hypotheses.

The next chapter will give an overview of the research study in its entirety, and will discuss the conclusions, limitations and possible future research areas associated with the study.

Chapter 6: CONCLUSION, LIMITATIONS, AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter offers a synopsis of the entire study. The most significant findings gleaned from the literature are offered, as well as a summary of the empirical results. The limitations of the study are addressed and selected recommendations for further study in the field of Work Wellness are made.

6.2 OVERVIEW OF THE STUDY

The following section is going to discuss the purpose of the study, the main research objectives in the study and finally it will give an overview of the contents of the study.

6.2.1 PURPOSE OF THE STUDY

The purpose of the study is to examine the relationship between Work Stressors, Work Wellness and Intention to quit of managers in a large South African mining house.

6.2.2 RESEARCH OBJECTIVES

The main research objective for this study is:

- To determine the relationship between Work Stressors, Work Wellness and Intention to quit of managers.

The research objectives for this study are to determine whether:

- Job Demands have a positive effect on Burnout.
- Job Resources have a positive effect on Work Engagement.
- Burnout has a negative effect on Dispositional Employability.
- Work Engagement has a positive effect on Dispositional Employability.
- Burnout has a positive effect on an employee's Intention to quit.

- Work Engagement has a negative effect on an employee's Intention to quit.
- Job Demands have a positive effect on an employee's Intention to quit.
- Job Resources have a negative effect on an employee's Intention to quit.
- Dispositional Employability has a negative effect on an employee's Intention to quit.
- Dispositional Employability mediates the relationship between Job Resources and the Intention to quit.
- Dispositional Employability moderates the relationship between Job Demands and the Intention to quit.

6.2.3 CONTENT OF THE STUDY

The following section summarises the content of the study, with emphasis on the six chapters which are laid out in this document.

Chapter 1 introduced the relationship between Work Stressors, Work Wellness, and the Intention to quit. This chapter also provided the impetus for the research study by highlighting the problem statement and research objectives. An indication of the importance and benefits of the research study was given, before the chapter concluded with a list of definitions and abbreviations frequently used in the study.

Chapter 2 started with an overview of all the concepts and aspects that were related to the study. The chapter began by focusing on each concept of the study individually. Under each of the concepts the different aspects that made up the concepts in the study were discussed, before the relationships between the different concepts represented in a model were discussed. The final section focused on the research proposition. It gave a detailed diagram of the different hypotheses that were to be investigated in the study. These hypotheses were then broken down into smaller diagrams and the research hypothesis for each of the research objectives were discussed in detail, as well as the rationale for each hypothesis was given. This chapter ended with a summary of what the chapter was all about.

Chapter 3 involved a detailed discussion of the research design and methods which were selected as the framework through which the research questions of the study were

answered. The chapter began with an overview of the research paradigm of the study, before a description of the strategy of inquiry and broad research design was given. A discussion of the sampling strategies and techniques utilised in the study were then given and the data collection methodology was presented. Issues which affect the reliability of the research were considered before ethical concerns related to the study were contemplated.

Chapter 4 commenced with a discussion on the biographical information that was collected during the data collection phase of the study. The next phase of the chapter involved discussing the statistical analysis of the different concepts involved in the study. The final section of the chapter (better known as phase 3) discussed the different relationships of the study through the hypotheses developed in chapter 2.

In Chapter 5, a discussion of the empirical results as presented in Chapter 4 was undertaken. Each of the eleven hypotheses of the research study was presented and was either accepted or rejected based on the evidence achieved from the research study.

Chapter 6 consists of an overview of the research findings of the study in relation the literature reviewed and the statistical analysis undertaken. The limitations of the study are addressed and selected recommendations for further study in the fields of Work Stressors, Work Wellness and the Intention to quit are made. In conclusion, final comments are made.

6.3 CONCLUSIONS DRAWN FROM THE STUDY

The following section summarises the conclusions which can be drawn from the study, with emphasis on conclusions drawn from the literature and conclusions drawn from the empirical results.

6.3.1 CONCLUSIONS FROM THE LITERATURE

From the literature review the following conclusions can be drawn:

- Relationship between Work Stressors and Work Engagement. From the research done on Work Stressors it has generally been determined that there are two sets of variables

that define any specific job: Job Demands and Job Resources (Schaufeli & Bakker, 2004; Jones & Fletcher, 1996). Work Engagement has been defined as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption. Engagement is seen as the persistence and pervasive affective cognitive state that is not focused on any one particular object, event, individual or behaviour. This is seen as a positive effect when individuals are happy in their jobs and are most productive (Schaufeli & Bakker, 2004). Research conducted by Schaufeli and Bakker (2004) showed that there was a relationship between Work Stressors and Work Engagement. The study showed that Work Engagement and Job Resources of Work Stressors were more closely related than Job Demands. It was determined that the more Job Resources there were to complete the job successfully, the more engaged individuals were in their jobs. The research also showed that Job Demands had more of a negative effect on the engagement of the individuals. A recent study showed that Job Resources (not Job Demands) exclusively predict Engagement (Bakker & Demerouti, 2008).

- With regard to the relationship between Work Engagement and Dispositional Employability, as investigated by Sonnentag (2003), it was determined that not much research has been done on the relationship between these two concepts. However the article implied that there is a positive relationship between these two concepts. A study conducted by Frese, Fay, Hilburger, Leng, and Tag (1997), found that there is a relationship between Work Engagement and Dispositional Employability. Their first finding was that the happier an individual is, the more likely they are to spend additional effort on work. Secondly they determine that the more vigorous individuals feel, the more they tend to accomplish in their task roles with less effort (Hockey, 2000). Thirdly individuals who engage in proactive behaviour tend to care more about their work and also regard it as worthwhile to spend and invest extra effort into the work they do (Frese, Fay, Hilburger, Leng, & Tag, 1997).
- The relationship between Work Stressors and Dispositional Employability has not had many studies conducted on the relationship between the two concepts. In some of the articles the authors have implied the relationship between the two concepts, but no definite lines have been drawn between them. From the studies conducted on these

concepts it can be deduced, that high Job Demands tend to reduce an individual's task motivation, job satisfaction and performance. This causes a decrease in Dispositional Employability as these concepts play a large role in an individual's Dispositional Employability (Erez & Judge, 2001).

- While investigating the relationship between Work Stressors, Work Engagement and Dispositional Employability, it was seen that there are many articles that investigate the relationship between Work Stressors and Work Engagement (Hockey, 2000). However, there are not many articles that investigate the relationship between these three concepts. After investigating the relationships between the concepts separately, it could be determined that there is a positive relationship between the three concepts. More accurately, Job Resources have a positive effect on Work Engagement and Dispositional Employability (Roberts & Davenport, 2002; Sonnentag, Mojza, Binnewies, & Scholl, 2008; Rothmann & Joubert, 2007).
- Through research done by Maslach, Jackson, and Leiter, (1996) it was proven that Burnout is a result of Job Demands and the lack of Job Resources. When an individual has high Job Demands and there are not enough Job Resources it can lead to Burnout in individuals. It is however not definite that if an individual has high Job Demands and lack of Job Resources that they will suffer from Burnout. Research has shown that some individuals are more capable of dealing with Work Stressors than others and that they are less likely to burn out (Jenkins & Maslach, 1994). Burnout is not solely caused by Work Stressors as very often outside influences can exacerbate the problems one is experiencing at work (Hawkey, 2011).
- With the relationship between Burnout and Ill-health it was proved that Burnout can cause physical and psychological Ill-health in individuals. By the time an individual is suffering from Burnout their bodies are so tired that they are more likely to get sick than someone who still has energy and is not tired all the time. (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).
- With regard to the relationship between Work Stressors and Ill-health research has shown that there is a positive relationship between them (Maslach, Jackson, & Leiter, 1996).

Literature suggests that individuals can become ill of health especially if they push themselves too hard and are often forced to work in situations that are not always conducive to their health. Getting ill does not mean that the individual is burnt out, but it can often be a warning or a defence mechanism used by the body to warn the individual to slow down as they are burning themselves out (Zapf, Seifert, Schmutte, Mertini, & Holz, 2001). Research has shown that very often individuals can become sick from over working and especially from Work Stressors. Becoming ill of health can result in individuals becoming burnt out, because they are continuously sick (Fourie, Rothmann, & van de Vijver, 2008; Ho, 1997).

- After close examination of the research it can be concluded that there is a relationship between the three constructs of Work Stressors, Burnout and Ill-health. According to the research done by Jenkins and Maslach, 1994; Burke and Richardsen, 1993; Bakker, Schaufeli, Leiter, and Taris, 2008; Demerouti, Bakker, Nachreiner, and Schaufeli, 2001; Maslach, Jackson, and Leiter, 1996, and many more researchers, all of these are linked to one another. In an article written by Maslach and Leiter (2005) it discussed the firm relationship between Burnout and Ill-health. From reading the article it can be determined that there is some sort of relationship between Work Stressors, such as Job Demands and Job Resources, Burnout (emotional exhaustion, mental distancing and reduction in professional efficiency) and Ill-health (psychological and physical).
- With regards to the relationship between Work Wellness and the Intention to quit, it has been determined that there are positive and negative states related to Work Wellness. The positive states are Work Engagement and Dispositional Employability. The negative states are Burnout and Ill-health. These are seen as negative states as they have a negative effect on an individual's Work Wellness. Positive Work Wellness is observed when individuals show signs of Work Engagement and Dispositional Employability (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). From the research done on the relationship between Work wellness and the Intention to quit it was concluded that the positive states of Work Wellness (Work Engagement and dispositional Employability) have a negative effect on an individual's Intention to quit. Additional to the research done it was determined that there is a positive relationship between Work Wellness, negative states (Burnout and Ill-health) and an individual's Intention to quit.

6.3.2 CONCLUSIONS FROM STATISTICAL ANALYSIS

From the statistical analysis conducted in the study the following conclusions can be drawn:

- The results of the Simple Regression analysis determined that there was a statistically significantly positive relationship between the Job Resources of Work Stressors and Work Engagement.
- There was a statistically positive significant relationship between the Job Demands (Work Stressors), Burnout and the three dimensions of Burnout based on the results of a Simple Linear Regression analysis.
- There is no statistically significant relationship between Burnout and Dispositional Employability based on the results of a Simple Linear Regression analysis.
- Based on the results of a Simple Linear Regression analysis there is a statistically significant positive relationship between Work Engagement and Dispositional Employability.
- There is a statistically significant positive relationship between Burnout and the Intention to quit determined from the results of a Simple Linear Regression analysis.
- According to the results of a Simple Linear Regression analysis it has been determined that there is a statistically negative significant relationship between Work Engagement and the Intention to quit.
- From the results received of a Simple Linear Regression analysis it can be determined that there is no statistically significant relationship between Job Demands and the Intention to quit.
- There is a statistically significant negative relationship between Job Resources and the Intention to quit based on the results of a Simple Linear Regression analysis.

- The final Simple Linear Regression analysis determined that there is a statistically significant negative relationship between the Dispositional Employability and the Intention to quit.
- From the Multiple Regression analysis conducted on the relationship between Job Resources and the Intention to quit it was determined that Dispositional Employability was a statistically significant mediator for the relationship between Job Resources and the Intention to quit.
- According to the Multiple Regression analysis conducted it was determined that Dispositional Employability was not a statistically significant moderator for the relationship between Job Demands and the Intention to quit.

6.4 LIMITATIONS

The following section below discusses the limitations of the study.

6.4.1 LIMITATIONS AS A RESULT OF THE RESEARCH DESIGN

A cross-sectional research design was utilised in the study. This type of study involves studying a particular phenomenon at a particular point in time. This means that any correlations made on the relationship between Work Stressors, Work Wellness and the Intention to quit in managers, can only be made at the specific point in time. A limitation to this was that the researcher could not study the change and development in the relationship over a period of time with a longitudinal study. Saunders, Lewis, and Thornhill, (2009), pointed out that in observing people over a period of time the researcher would be better able to exercise a measure of control over the variables in the study, provided that they do not affect the research process itself. A longitudinal study would have been good in the case of this study, as it may possibly have removed the factors that may well have hampered the relationship between the concepts. For example, the large mining house just underwent a large change management programme and this may have indirectly affected the concepts and thus the relationship between them.

6.4.2 LIMITATIONS AS A RESULT OF THE DATA COLLECTION METHOD

Questionnaire research and specifically the quality of the data it collects are often criticised (Leedy & Omrod, 2010). Therefore it is important that the questionnaires utilised are constructed and administered appropriately to ensure that high quality data is obtained (Saunders, Lewis, & Thornhill, 2009) This was achieved in the present study by following a rigorous research design, as laid out in this document. However it should be kept in mind, that the questionnaires used were closed questionnaires. So as a result of the use of closed questionnaires the relationships between the concepts could not be probed in depth, as compared to the use of open ended questionnaires.

6.4.3 LIMITATIONS AS A RESULT OF THE SAMPLING METHOD

This study made use of non-probability sampling techniques, specifically purposive convenience sampling. The use of such sampling techniques allowed the researcher to include a variety of respondents to ensure an adequate sample size for the use of factor analysis. However, it is important to note that the proportion of responses collected by this means has an implication on the representativeness and subsequent generalisability of the sample (Cresswell, 2009; Welman & Kruger, 2001). Furthermore, participation in the study was voluntary. The combination of non-probability sampling techniques and the voluntary nature of participation in the study imply that the results of the study can only be generalised to similar organisations or environments.

6.4.4 LIMITATIONS RESULTING FROM THE SAMPLE SIZE AND CHARACTERISTICS

As mentioned above, sample size was an important consideration due to the use of factor analysis. Collecting a sufficient sample was a worry. Three hundred and forty eight (348) questionnaires were sent out to managers in the large organisation. One hundred and ninety-one responded, of which only one hundred and forty-one (141) could be used in the study as fifty questionnaires were not fully completed. It is important to note that sampling was not controlled in terms of language and race groups, only levels of management. A precarious result was achieved with regards to the characteristics of the sample. In the

mining organisation there are more males in management than females. However, a large portion of the respondents (56%) was female. Unfortunately many participants did not complete all the biographical information on their departments and functions, so no analysis could be run on the relationship between Work Stressors, Work Wellness and the Intention to quit on the different functions in the management levels of the organisation.

6.5 RECOMMENDATIONS FOR FUTURE RESEARCH

The results of this study have provided valuable insights into the relationship between Work Stressors, Work Wellness and the Intention to quit. However, it is clear that more research is needed to determine the extent of the relationship between the concepts, as well as the impact they can have on an organisation. In particular, questions are raised as to what areas of research should be focused on to add to the body of knowledge of the subject. The recommendations for future research have been divided into three key areas, namely: the relationship between the concepts, the effect they might have on the organisation and the practical application of the outcomes of the study.

6.5.1 THE RELATIONSHIP BETWEEN THE CONCEPTS

To address some of the limitations of the present study, as well as to gain further insight into the relationship between Work Stressors, Work Wellness and the Intention to quit in managers in a large mining industry in South African, it is recommended that future studies should make use of a larger sample, which is representative of more mining organisations in South Africa. Such a sample should also attempt to collect more information from a wide range of biographical characteristics, particularly in terms of geographic location, job level, language, ethnicity and years of service in the organisation. This will allow for a more in-depth study of biographical characteristics and the experience of the relationship between the concepts. By using a larger sample group the relationship between the concepts can be more clearly investigated, as there will be more data to draw better conclusions from and to obtain more generalisable assumptions on the population.

As this study was conducted as a cross-sectional study, the relationship between Work Stressors, Work Wellness and the Intention to quit were only seen at a specific point in

time. It is recommended that further research on this relationship between the concepts should be done as a longitudinal study. The results of the relationship between the concepts do not happen overnight. Research conducted by Maslach (1993); Rothmann & Joubert, (2007); Barkhuizen, Rothmann, and Tytherleigh, (2004) and Schaufeli, Gonzalez-Roma, Salanova, & Bakker, (2002) showed that the effects of Work Stressors eventually build up to Burnout, to a decrease in Dispositional Employability and that this eventually leads to Ill-health and the Intention to quit. To clearly understand the relationship between these concepts, the researcher should be given a measure of control over the variables in the study, without affecting the research process itself. This will help to prevent any skewing of results due to undetermined factors in the research environment.

6.5.2 EFFECT THE STUDY HAS ON THE ORGANISATION

Many organisations see employees as inanimate objects that are only there to work and complain about the fact that they do not get paid enough. Organisations do understand that employees very often leave and as a result they experience high recruitment costs to employ new employees. What many organisations fail to realise is that work stressors can affect productivity and in conjunction with low work wellness, employees tend to quit in order to find work in other areas that are less demanding. If organisations paid closer attention, they would realise that if they take the relationship between Work Stressors, Work Wellness and the Intention to quit into consideration, they may be able to reduce their overhead recruitment costs and increase productivity. This assumption is made from the fact that if employees are able to cope with their working environments, they will be more productive and less likely to leave.

The future recommendation for organisations is to consider the alternatives to overloading employees with work to make them more productive. They need to consider the relationship between Work Stressors, Work Wellness and the Intention to quit and create and use intervention to assist the problems found in high stress situations in the organisation.

6.5.3 PRACTICAL APPLICATIONS OF THE OUTCOME OF THE STUDY

This type of study was used to determine if there is a relationship between Work Stressors, Work Wellness and the Intention to quit. This relationship occurs in many organisations all over the world. It is suggested that organisations should take notice of this relationship and actually use the results to try and solve any problems, especially in connection with Job Demands, Burnout, Ill-health and the Intention to quit.

The results from this particular study are going to be used as a basis, in conjunction with other sources, to create interventions for the noticeable trend of Burnout and Ill-health in the large mining house the study was run in.

6.6 CLOSING REMARKS

"Burnout is nature's way of telling you, you've been going through the motions, your soul has departed; you're a zombie, a member of the walking dead, a sleepwalker. False optimism is like administering stimulants to an exhausted nervous system"

– Sam Keen –

It is hoped that the empirical evidence presented in this study has demonstrated the significance of the relationship between Work Stressors, Work Wellness and the Intention to quit in management in the large mining house in South Africa, and how important it is to actively manage this relationship between the organisation and its members to the mutual benefit of both parties. To minimise the effects of the negative aspects of the relationship and capitalise on the positive aspects, the organisation needs to pay attention to their employees and notice any changes in the workforce. A healthy and low stressed workforce is a productive workforce.

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APPENDIX A
- Data Collection Instruments -

YOU ARE INVITED TO PARTICIPATE IN A RESEARCH STUDY IN YOUR ORGANISATION

The purpose of the study is to explore and describe the relationship between Work Stressors, Work Wellness and the Intention to quit of management employees in a large mining organisation.

THIS STUDY INVOLVES AN ANONYMOUS SURVEY. Your name will not appear on the questionnaire and the answers you give will be treated as strictly confidential. You cannot be identified in person based on the answers you give.

YOUR PARTICIPATION IN THIS STUDY IS VERY IMPORTANT TO US. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.

PLEASE ANSWER THE QUESTIONS IN THE QUESTIONNAIRE AS COMPLETELY AND HONESTLY AS POSSIBLE. This should not take more than 30 minutes of your time.

THERE ARE NO “RIGHT” OR “WRONG” ANSWERS. The questionnaire will reflect your perceptions of Work Stressors, Work Wellness and the Intention to quit as you experience them in the organisation you work for. Do not spend too much time on any specific item – generally your first response is the most accurate.

THE RESULTS OF THE STUDY WILL BE USED FOR RESEARCH PURPOSES ONLY and may be published in an academic journal. We will provide you with a summary of our findings on request.

INSTRUCTIONS

This questionnaire consists of six sections:

- Section A: Biographical Information
- Section B: Experience and evaluation of your work
- Section C: Burnout Inventory
- Section D: Orientation towards your work
- Section E: Your health
- Section F: Intention to quite

Please complete all the questions in each of the sections of the questionnaire, click on the link below to take you to the questionnaire:

(To activate click CTRL and double click on the link)

<http://www.up.ac.za/hrresearch/index.php?sid=71546&lang=en>

If you have any question, please do not hesitate to contact me at:

[**Monica.Smith@hotmail.co.za**](mailto:Monica.Smith@hotmail.co.za)

Section A: Biographical Information

Please answer all questions in this section by marking the applicable answer with a cross, unless otherwise specified

Please State the department you are working in (E.g. Human Resources, SHEC, Supply Chain)								
Please state the Department where you are working (E.g. Training, Procurement, Payroll, etc.):								
Gender	Male	Female						
Marital Status	Single	Engaged/In a Relationship	Married	Divorced	Separated			
Home Language	Afrikaans	English	Sepedi	Sesotho	Setswana	isiSwati		
	Tshivenda	isiZulu	isiNdebele	isiXhosa	isiTsonga			
Race	African	Coloured	Indian	White	Other			
Please state your age in years								
Highest level of Education/Qualifications		Year 12/Matric	Certificate	Diploma	Advanced Diploma	Bachelor's Degree	Master's Degree	Doctorate
Please Specify Professional Qualifications / Registration at Professional Boards								
What is your job level?		Senior Management	Middle Management	Lower Management	Supervisory			
How many years have you been working (years of work experience)?								
How many years have you been working at your current job?								
How many chances of job promotion have you had in the past 5 years in your current organisation?								
On what basis are you employed?		Permanent	Temporary	Fixed-Term	Hourly Paid			
Please give a rough estimate of the total number of hours you work in a typical week		Up to 10	11 – 20	21 – 30	31 – 40	41 – 50	51 or More	
Please give a rough estimate of how long it takes you to travel to and from your place of work (in hours) on an average day:		Less than 1	1 – 2	3 or more				
Do you use your full entitlement of annual leave?		Never	Sometimes	Always				
To what degree do you agree with the statement: "I consider quitting my job?"		Disagree					Agree	
		1	2	3	4	5		
How frequently do you consider quitting your job?		Frequently					Never	
		1	2	3	4	5		

Section B: Experience and Evaluation of your work

Questions for Section B require you to answer along a 4 point scale where:

- 1 = Never
- 2 = Sometimes
- 3 = Often
- 4 = Always

Please indicate your response for each question by placing a cross over the most applicable answer. An example is provided below.

In your organisation, to what extent do you experience...					
	Scale				
2	Do you work under time pressure	1	2	3	4

	STATEMENT	SCALE			
1	Do you have too much work to do?	1	2	3	4
2	Do you work under time pressure?	1	2	3	4
3	Do you find that you do not have enough work?	1	2	3	4
4	Do you have to be attentive to many things at the same time?	1	2	3	4
5	Do you have to give continuous attention to your work?	1	2	3	4
6	Do you have to remember many things in your work?	1	2	3	4
7	Are you confronted in your work with things that affect you personally?	1	2	3	4
8	Do you have contact with difficult learners/students or parents in your work?	1	2	3	4
9	Does your work put you in emotionally upsetting situations?	1	2	3	4
10	In your work, do you repeatedly have to do the same things?	1	2	3	4
11	Does your work make sufficient demands on all your skills and capacities?	1	2	3	4
12	Do you have enough variety in your work?	1	2	3	4
13	Does your job offer you opportunities for personal growth and development?	1	2	3	4
14	Does your work give you the feeling that you can achieve something?	1	2	3	4
15	Does your job offer you the possibility of independent thought and action?	1	2	3	4
16	Do you have freedom in carrying out your work activities?	1	2	3	4
17	Do you have influence in the planning of your work activities?	1	2	3	4
18	Can you participate in the decision about when a piece of work must be completed?	1	2	3	4
19	Can you count on your colleagues when you come across difficulties in your work?	1	2	3	4
20	If necessary, can you ask your colleagues for help?	1	2	3	4
21	Do you get on well with your colleagues?	1	2	3	4
22	Can you count on your supervisor when you come across difficulties in your work?	1	2	3	4
23	Do you get on well with your supervisor?	1	2	3	4

	STATEMENT	SCALE			
24	In your work, do you feel appreciated by your supervisor?	1	2	3	4
25	Do you know exactly what other people expect of you in your work?	1	2	3	4
26	Do you know exactly for what you are responsible and which areas you are not responsible?	1	2	3	4
26	Do you know exactly what your direct supervisor thinks of your performance?	1	2	3	4
28	Do you receive sufficient information on the purpose of your work?	1	2	3	4
29	Do you receive sufficient information on the results of your work?	1	2	3	4
30	Does your direct supervisor inform you about how well you are doing your work?	1	2	3	4
31	Are you kept adequately up-to-date about important issues within your department/faculty/university?	1	2	3	4
32	Is the decision-making process of your department/faculty/university clear to you?	1	2	3	4
33	Is it clear to you whom you should address within the department/faculty/university for specific problems?	1	2	3	4
34	Can you discuss work problems with your direct supervisor?	1	2	3	4
35	Can you participate in decisions about the nature of your work?	1	2	3	4
36	Do you have a direct influence on your department/faculty/university's decisions?	1	2	3	4
37	Do you have contact with colleagues as part of your work?	1	2	3	4
38	Can you have a chat with colleagues during working hours?	1	2	3	4
39	Do you find that you have enough contact with colleagues during working hours?	1	2	3	4
40	Do you need to be more secure that you will still be working in one year's time?	1	2	3	4
41	Do you need to be more secure that you will keep your current job in the next year?	1	2	3	4
42	Do you need to be more secure that next year you will keep the same function level as currently?	1	2	3	4
43	Does your organisation give you opportunities to follow training courses?	1	2	3	4
44	Does your job give you the opportunity to be promoted?	1	2	3	4
45	Do you think that your organisation pays good salaries?	1	2	3	4
46	Can you live comfortably on your pay?	1	2	3	4
47	Do you think you are paid enough for the work that you do?	1	2	3	4
48	Does your job offer you the possibility to progress financially?	1	2	3	4

SECTION C: MBI General Survey

Questions for Section C require you to answer along a 7 point scale where:

- 0 = Never
- 1 = A Few Times a Year or Less
- 2 = Once a Month or Less
- 3 = A Few Times a Month
- 4 = Once a Week
- 5 = A Few Times a Week
- 6 = Everyday

Please indicate your response for each question by placing a cross over the most applicable answer. An example is provided below.

I feel like this.....									
Scale									
1	I feel emotionally drained from my work	0	1	2	3	4	5	<input checked="" type="checkbox"/>	6

	STATEMENTS	SCALE							
1	I feel emotionally drained from my work.	0	1	2	3	4	5	6	
2	I am bursting with energy in my work	0	1	2	3	4	5	6	
3	I feel used up at the end of the workday.	0	1	2	3	4	5	6	
4	I find my work full of meaning and purpose.	0	1	2	3	4	5	6	
5	I feel tired when I get up in the morning and have to face another day on the job.	0	1	2	3	4	5	6	
6	I feel I treat some learners if they were impersonal objects.	0	1	2	3	4	5	6	
7	Time flies when I'm working.	0	1	2	3	4	5	6	
8	Working all day is really a strain for me.	0	1	2	3	4	5	6	
9	I feel strong and vigorous in my job.	0	1	2	3	4	5	6	
10	I can effectively solve the problems that arise in my work.	0	1	2	3	4	5	6	
11	I am enthusiastic about my job.	0	1	2	3	4	5	6	
12	I've become more callous toward people since I took this job.	0	1	2	3	4	5	6	
13	I feel burned out from my work.	0	1	2	3	4	5	6	
14	When I am working, I forget everything else around me.	0	1	2	3	4	5	6	
15	I feel I am making an effective contribution to what this organisation does.	0	1	2	3	4	5	6	
16	My job inspires me.	0	1	2	3	4	5	6	
17	I have become less interested in my work since I started this job.	0	1	2	3	4	5	6	

	STATEMENTS	SCALE						
18	I worry that this job is hardening me emotionally	0	1	2	3	4	5	6
19	When I get up in the morning, I feel like going to work.	0	1	2	3	4	5	6
20	I have become less enthusiastic about my work.	0	1	2	3	4	5	6
21	I feel happy when I am engrossed in my work.	0	1	2	3	4	5	6
22	In my opinion, I am good at my job.	0	1	2	3	4	5	6
23	I am proud of the work that I do.	0	1	2	3	4	5	6
24	I don't really care what happens to some colleagues.	0	1	2	3	4	5	6
25	I feel exhilarated when I accomplish something at work.	0	1	2	3	4	5	6
26	I am immersed in my work.	0	1	2	3	4	5	6
27	I have accomplished many worthwhile things in this job.	0	1	2	3	4	5	6
28	In my job, I can continue working for very long periods at a time.	0	1	2	3	4	5	6
29	I just want to do my work and not be bothered.	0	1	2	3	4	5	6
30	To me, my work is challenging.	0	1	2	3	4	5	6
31	I have become more cynical about whether my work contributes anything.	0	1	2	3	4	5	6
32	I feel colleagues blame me for some of their problems.	0	1	2	3	4	5	6
33	I get carried away by my work.	0	1	2	3	4	5	6
34	I doubt the significance of my work.	0	1	2	3	4	5	6
35	I am very resilient, mentally, in my job.	0	1	2	3	4	5	6
36	At my work, I feel confident that I am effective at getting things done.	0	1	2	3	4	5	6
37	It is difficult to detach myself from my job.	0	1	2	3	4	5	6
38	I always persevere at work, even when things do not go well.	0	1	2	3	4	5	6
39	I feel happy when my attention is totally focused on my work	0	1	2	3	4	5	6
40	I feel strong and full of life and energy in my work.	0	1	2	3	4	5	6
41	In my job I can comfortably deal with stressful situations and I easily recover from such situations.	0	1	2	3	4	5	6
42	I enjoy devoting all my attention and energy to my work.	0	1	2	3	4	5	6

SECTION D: Orientation towards Your Work

Questions for Section C require you to answer along a 6 point scale where:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Slightly Agree
- 5 = Agree
- 6 = Strongly Agree

Please indicate your response for each question by placing a cross over the most applicable answer. An example is provided below.

I feel like this.....							
						Scale	
3	It is important to me that I am successful in my job	1	2	3	4	5	6

	STATEMENTS	SCALE					
1	It is important to me that I am acknowledged for my successes on the job.	1	2	3	4	5	6
2	I feel that I am generally accepting of changes at work.	1	2	3	4	5	6
3	It is important to me that I am successful in my job.	1	2	3	4	5	6
4	I can handle job and organizational changes effectively.	1	2	3	4	5	6
5	I am involved in my work.	1	2	3	4	5	6
6	I stay abreast of developments in my institution	1	2	3	4	5	6
7	I am a believer that "every cloud has a silver lining" at work.	1	2	3	4	5	6
8	I stay abreast of developments relating to my type of job.	1	2	3	4	5	6
9	In uncertain times at work, I usually expect the best.	1	2	3	4	5	6
10	I have a specific plan for achieving my career goals.	1	2	3	4	5	6
11	My past career experiences have been generally positive	1	2	3	4	5	6
12	I am optimistic about my future career opportunities.	1	2	3	4	5	6
13	I feel changes at work generally have positive implications.	1	2	3	4	5	6
14	I have control over my career opportunities.	1	2	3	4	5	6
15	I have sought job assignments that will help me obtain my career goals.	1	2	3	4	5	6
16	I take a positive attitude toward my work.	1	2	3	4	5	6
17	I have participated in training or schooling that will help me reach my career goals.	1	2	3	4	5	6

	STATEMENTS	SCALE					
18	I always look on the bright side of things at work.	1	2	3	4	5	6
19	I stay abreast of developments in my discipline.	1	2	3	4	5	6
20	I define myself by the work I do.	1	2	3	4	5	6
21	I am able to adapt to changing circumstances at work.	1	2	3	4	5	6
22	It is important to me that others think highly of my job.	1	2	3	4	5	6
23	I would consider myself open to changes at work.	1	2	3	4	5	6
24	The type of work I do is important to me.	1	2	3	4	5	6
25	I feel I am a valuable employee at work.	1	2	3	4	5	6

SECTION E: Your Health

SECTION D - PART 1

Questions for Section D require you to answer along a 4 point scale where:

1 = Strongly Disagree

2 = Disagree

3 = Slightly Disagree

4 = Slightly Agree

Please indicate your response for each question by placing a cross over the most applicable answer. An example is provided below.

Over the last 3 months, have you experienced the following...					
		Scale			
3	Insomnia – sleep loss.	1	2	3	4

	STATEMENTS	SCALE			
1	Lack of appetite or over-eating.	1	2	3	4
2	Indigestion or heartburn.	1	2	3	4
3	Insomnia – sleep loss.	1	2	3	4
4	Headaches.	1	2	3	4
5	Panic or anxiety attacks.	1	2	3	4
6	Muscular tension/aches and pains.	1	2	3	4
7	Feeling nauseous or being sick.	1	2	3	4
8	Tendency to drink more alcohol than usual.	1	2	3	4
9	Tendency to smoke more than usual.	1	2	3	4
10	Constant irritability.	1	2	3	4
11	Difficulty in making decisions.	1	2	3	4
12	Loss of sense of humour.	1	2	3	4
13	Feeling or becoming angry with others too easily.	1	2	3	4
14	Constant tiredness.	1	2	3	4
15	Feeling unable to cope.	1	2	3	4
16	Avoiding contact with other people.	1	2	3	4
17	Mood swings.	1	2	3	4
18	Unable to listen to other people.	1	2	3	4
19	Having difficulty concentrating.	1	2	3	4

SECTION D - PART 2

Questions for section D require you to answer the following:

20	Have you had any significant illnesses the <i>last 6 months</i> ?				Yes	No
21	Over the <i>last 3 months</i> , how would you rate your overall health?			Good	Alright	Poor
22	Over the <i>last 3 months</i> , roughly how productive have you felt in your job?	100%	90-99%	80-89%	70-79%	Less than 70% productive
23	Have you encountered any major stressful events over the <i>last 6 months</i> that have had an important effect on you?				Yes	No
24	Over the <i>last 3 months</i> , how many working days in total have you been off work through illness or injury?		0	1	2-5	6 or more
25	How many times have you been to the doctor over the <i>last 3 months</i> ?		0	1	2	3 or more
26	During the <i>last 3 months</i> , have you not taken sick leave whilst ill and/or returned before you were well due to the pressure of work?				Yes	No
27	During the <i>last 3 months</i> , have you had any chronic illnesses that have been stress-related (e.g. chest complaints, depression, arthritis, digestive problems)?				Yes	No

SECTION F: Intention to Quit

Questions for Section C require you to answer along a 6 point scale where:

0 = Strongly Disagree

1 = Disagree

2 = Slightly Disagree

3= Neither Agree nor Disagree

4 = Slightly Agree

5 = Agree

6 = Strongly Agree

Please indicate your response for each question by placing a cross over the most applicable answer. An example is provided below.

I feel like this.....									
						Scale			
1	I think a lot about leaving the organization	0	1	2	3	4	5	6	

	STATEMENTS	SCALE							
1	I think a lot about leaving the organization	0	1	2	3	4	5	6	
2	I am currently searching for employment outside this organization	0	1	2	3	4	5	6	
3	When possible I will leave the organization	0	1	2	3	4	5	6	

APPENDIX B
- Informed Consent Form –



Informed Consent for Participation in an Academic Research Study

Dept. of Human Resource Management

THE RELATIONSHIP BETWEEN WORK STRESSORS, WORK WELLNESS AND ILL- HEALTH IN MANAGEMENT IN A LARGE MINING HOUSE IN SOUTH AFRICA

Research conducted by:

Miss. M. J. Smith (27010059)

Cell: 084 742 0029

Dear Respondent

You are invited to participate in an academic research study conducted by Monica Janine Smith, a Masters student from the Department of Human Resource Management at the University of Pretoria.

The purpose of the study is to explore and describe the relationship between Work Stressors, Work Wellness and the Intention to quit of management employees in a large mining house in South Africa.

Please note the following:

- This study involves an anonymous survey. Your name will not appear on the questionnaire and the answers you give will be treated as strictly confidential. You cannot be identified in person based on the answers you give.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- Please answer the questions in the attached questionnaire as completely and honestly as possible. This should not take more than 30 minutes of your time.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my supervisor, Dr Nicolene Barkhuizen (Contact number: 082 456 9352 and e-mail: Nicolene.Barkhuizen@nwu.ac.za) if you have any questions or comments regarding the study.

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

Respondent's signature

Date