

**WORK ENGAGEMENT, INTRINSIC MOTIVATION AND JOB SATISFACTION
AMONG EMPLOYEES OF A DIAMOND MINING COMPANY IN ZIMBABWE**

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Declaration

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been acknowledged. This dissertation is being submitted for the degree of Masters of Administration in the faculty of Law, Management, IT and Governance. None of the present work has been previously submitted for any degree or for examination at any other university.

Signed: **Date:**

For my grandfather, Ishe Sweet John Masvaure

Even though you passed on during the course of the study, your support, love and words of wisdom throughout my academic life is priceless. You made me to be who I am today.

Abstract

Orientation: The mining industry has been one of the industries that has struggled the most to deal with employee welfare matters. As a result, it has been difficult to maintain industrial peace and harmony in several workplaces, resulting in negative multiplier effects to the mining business, particularly the unsatisfactory working conditions faced by the lifeblood of any organisation –its employees. In response to this, most organisations directed the bulk of their resources to the basics and tangible things, such as salary and rewards needed by employees to perform their duties, but a lot of unrest is still recorded. This dissertation examined aspects of work engagement, intrinsic motivation and job satisfaction among employees in a diamond mining company in Zimbabwe in order to understand those aspects that drive employees to apply themselves wholly to their work roles.

Research Purpose: The research aimed to quantitatively explore levels and interrelationships between three constructs: work engagement, intrinsic motivation and job satisfaction among mine workers in a diamond mining company in Zimbabwe. In addition, the research qualitatively explored what managers' perceptions of these three constructs are.

Research Design, Approach and Method: This was a mixed methods, viz quantitative and qualitative study, which consisted of two phases of data collection. The first phase was a cross-sectional survey design, consisting of a sample (n= 157) drawn from employees of the diamond company. Three instruments: Utrecht Work Engagement Scale (UWES), Intrinsic Motivation Inventory (IMI) and the Minnesota Job Satisfaction Questionnaire (MSQ) were used to obtain the needed information from these participants. The second phase was the qualitative aspect, which consisted of in-depth individual interviews with functional managers.

Main Findings: The study found that, while most of the participants (74%) are highly satisfied by their work, a substantial number (59%) are moderately (of average level) engaged and 67% are moderately motivated intrinsically. The findings suggest a positive correlation between job satisfaction and work engagement; job satisfaction and intrinsic motivation, and work engagement and intrinsic motivation among the miners.

Of all the factors that play a significant role in determining employees' levels of job satisfaction, intrinsic motivation and work engagement, age and marital status were found to be significant contributors to the way the employees apply themselves to their work roles.

The findings also suggest that the majority of managers in the company believe that the shop floor workers (miners) are highly engaged in their work, highly intrinsically motivated and highly satisfied in their jobs. However, this contradicts the results obtained from the miners themselves.

Practical/ Managerial Implications: The study notes with concern the opposing perceptions that managers seem to have regarding work engagement, job satisfaction and motivation levels among the miners. This attests to a knowledge gap that management has about low-level employees, a fact which may call into question the existence or non-existence, in the company, of a proper communication structure (and infrastructure) that allows employees to communicate with management. This may also point to the management approach adopted by the company, which may be discouraging employees from communicating their feelings to management. The ‘false’ impression which management has about employees may result in negative multiplier effects, such as strikes, high rate of staff turnover, inefficiency and, ultimately, organisational failure.

Key words: Work Engagement, Intrinsic Motivation, Job Satisfaction, Management, Miners

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CHAPTER 1: INTRODUCTION

1.1 Introduction

The value of employees in an organisation has called for a deeper understanding of employees' perceptions and attitudes towards work (Saari & Judge, 2004). Work engagement, intrinsic motivation and job satisfaction – the three key drivers to the competitive advantage of an organisation – are correlated with employees' attitudes towards work. The extent to which employees' needs are satisfied is thus important in determining the above drivers. This dissertation utilised a mixed methods approach: a combination of quantitative and qualitative methods. A quantitative approach was used to explore levels of work engagement, intrinsic motivation and job satisfaction among miners of a diamond mining company in Zimbabwe. The qualitative approach was used to explore the mine management's perceptions of work engagement, intrinsic motivation and job satisfaction. Factors that affect work engagement, intrinsic motivation and job satisfaction are examined and suggestions offered as to how the mining company can address them.

The present chapter outlines the context of the study by introducing the research problem, objectives and the research methodology applied in the execution of the study.

1.2 Problem Statement

Consequences of unproductive actions, like high rates of turnover, reduced efficiency and effectiveness in the organisation, have necessitated continued reassessment of the value of employees in an organisation. In trying to find solutions to such problems, it is important to understand fully the demands of each task to be performed and match them with the perceived needs of the employees. A well balanced environment is characterised by the correct workload, responsibility and “autonomy, recognition, support, justice and meaningfulness that promotes work engagement” (Chughtai, 2010:p.13). This has seen the awareness of the importance of the human resource approach which states that organisational goals and human needs are mutual and compatible (Grobler & Warnich, 2006).

In order to achieve such a goal, aspects like intrinsic motivation, work engagement and job satisfaction have been seen as more valuable, hence the need for more research on them. Intrinsic motivation has become an important phenomenon, especially when considering that anyone who is responsible for the supervision of employees engaged in work duties, needs to be aware that some people participate more out of interest in the task than others do

(Beswick, 2010). Thus, getting to know employees' interests will help management in job structuring as well as in assigning the right people to different project assignments. Intrinsic motivation is experienced when a person is moved to act for the 'fun' or challenge entailed rather than because of external pressures or rewards (Rahman & Jumani, 2010). Having intrinsically motivated employees can be the greatest asset for any organisation, especially management, since less supervision will be needed. In addition, such employees always deliver the best performance which, in turn, motivates them, whilst the organisation enjoys the best outcome. In as much as it is important to know how best to manage, monitor or govern organisational employees, having employees that are self-driven to do their work is more important. The implication of this for management studies is that there is a need to have more knowledge and understanding on how to get the best from employees. This can largely be achieved by knowing and understanding their interests.

On the other hand, work engagement has also become an important aspect in that it has positive consequences for the organisation. Research conducted on work engagement has shown that highly engaged employees become more committed to the organisation, thus leading to "increased job satisfaction, lower absenteeism and turnover rates, improved health and wellbeing, more extra-role behaviours, higher performance and a greater exhibition of personal initiatives, proactive behaviour and learning motivation" (Schaufeli & Salanova, 2007, p.152).

Zimbabwe presents an interesting 'case' and research puzzle in which to conduct a study on work engagement, intrinsic motivation and job satisfaction, considering the economic situation that the country is going through at the moment. From 2007, the Zimbabwe diamond industry has grown to become the highest contributing sector to the economic growth of the country. During the 1980s and 1990s, agriculture was the main source of economic growth, which made Zimbabwe the bread basket of Africa. However, due to the discovery of diamonds in Marange, Zimbabwe became one of the major diamond producers in the world.

Considering the volatile political situation in Zimbabwe, so many players were interested and involved in the diamond discovery that titled to conflicts in terms of ownership and management of the diamond deposits. On the business side, many issues to do with who was to be recruited, the regulation of diamonds, the buying and selling of diamonds, handling of diamond proceeds and, most recently, dispute among management and workers on wages and

working conditions, have been major concerns. Thus, the question that this thesis grapples with concerns the state of employees' welfare in a booming industry within a controversial economy.

Given the deteriorating macro-economic situation, the exodus of skills, migration of mine workers to South Africa and Botswana, poor infrastructure and ineffective policy (or good policy and weak implementation) and uncertainty, the mining companies in Zimbabwe still have to operate profitably. It is against this background that the study investigates how the diamond mining company under study has to ensure that employees' needs and expectations are met as a way of retaining them. Every organisation has employees and the best performance is expected from these employees. Thus, it is from such a need that this research aims to examine the levels of intrinsic motivation, work engagement and job satisfaction among miners of a diamond mining company in a troubled economy. The study hopes to make a policy-driven human resources intervention to address issues around employees' welfare in an organisation.

1.3 Research Questions and Objectives

The deteriorating socio-economic conditions in Zimbabwe, described above, and its impact on staff turnover in the mainstream economy, calls for the need to investigate what motivates employees, particularly miners, to remain engaged and satisfied with their work in troubled economies. Investigating miners' levels of engagement, intrinsic motivation and satisfaction is crucial, especially to the discipline of Human Resources Management, since most studies have been focusing on white collar employees. This study closes this gap by exploring levels and interrelationships between work engagement, intrinsic motivation and job satisfaction among shop floor workers who are miners employed by a diamond mining company in Zimbabwe. Nevertheless, the study also explores the managers' perceptions of work engagement, intrinsic motivation and job satisfaction. This is important in examining if the managers' conceptions of the above three constructs are the same as those of the miners.

Research Objective (s)

- To have a clear understanding of the aspects of work engagement, intrinsic motivation and job satisfaction in a different working environment (mining sector in Zimbabwe) through;
 - i) Determining interrelationships among work engagement, intrinsic motivation and job satisfaction

- ii) Determine the contributing factors to workers' engagement, intrinsic motivation and job satisfaction levels
- iii) Determine managers' perceptions of work engagement, intrinsic motivation and job satisfaction.

In order to achieve this task, the study is guided by the following key research questions which inform the structure and content of this dissertation:

- 1) What is the relationship between job satisfaction and intrinsic motivation amongst mine workers?
- 2) What is the relationship between job satisfaction and work engagement amongst mine workers?
- 3) Is job satisfaction enhanced by intrinsic motivation and work engagement?
- 4) What are the perceptions of managers of why some employees score exceptionally high or exceptionally low on the variables?
- 5) What are the contributing factors for each employee's job satisfaction, intrinsic motivation and work engagement levels?
- 6) What are manager's perceptions of job satisfaction, intrinsic motivation and work engagement of mine workers?

Questions 1, 2, 3 and 5 are answered quantitatively and thus can be hypothetically expressed as follows:

1. H1 There is no significant relationship between job satisfaction and work engagement.
2. H2 There is no significant relationship between job satisfaction and intrinsic motivation.
3. H2. Intrinsic motivation and work engagement can enhance job satisfaction.

Questions 4 and 6 are qualitatively answered through a series of in-depth interviews with line managers and worker representatives.

1.4 Research Methods

The research reported in this dissertation consisted of two phases, namely a literature survey and an empirical study. The literature survey was conducted to determine how work engagement, intrinsic motivation and job satisfaction have been conceptualised within the existing body of literature. Through the literature study, relationships among the variables were determined. The empirical study entailed a mixed methods approach. The first phase of the mixed methods approach was quantitative and the second phase was qualitative. Below,

the researcher briefly outlines the methodological aspects of the study. These are examined in greater detail in chapter 4.

1.4.1 Research design.

A mixed method research ‘design’ involving both quantitative (Creswell, 2006.) and qualitative (Ospina, 2004) approaches, was used in order to obtain a wider and deeper understanding of the issues investigated. According to Tredoux (2002, p.312) a mixed methods research design encompasses a plan for a piece of research that is constructed to maximise the validity of its findings.

The quantitative aspect consisted of a survey design. The design was preferred for its descriptive and predictive functions associated with correlational research (Murtonen, 2005). This was suitable to assess interrelationships between intrinsic motivation, work engagement and job satisfaction - the key variables in this study. This method allowed me to describe phenomena by measuring a relationship, using correlations, to validate the findings (Durheim, 2002). Based on the literature review, key components of the constructs of work engagement, job satisfaction and intrinsic motivation are conceptualised, explained and linked in this dissertation.

The qualitative aspect of the study consists of in-depth interviews with middle and senior managers of the diamond mining company. These interviews allowed the researcher to identify and code themes that enabled easy answering of research questions 4 and 6. Further, the use of interviews allowed the researcher to elicit views of managers whose voices were needed to complement the findings from the workers. In qualitative research, interviews are preferred for their ability to generate richer and more complicated sources of data (Creswell, 2004).

1.4.2 The study population

The population for this study consisted of 200 miners and 9 functional managers of a diamond mining company in Zimbabwe. For the cross-sectional survey, the sample was drawn using stratified random sampling (Cochran, 2011) since there are different functional categories of miners. A sampling frame was obtained from the Human Resources department of the company. All miners were male and African. They all had a literacy level adequate to allow for the valid completion of the questionnaire.

The sampling frame allowed the researcher to group the miners according to functional categories. According to the population-to-sample size table (Sekaran, 2003) the corresponding minimum sample size for a population of 200 is 113 and was considered adequate for this study. The actual sample size achieved for the survey design aspect of the study was 157. For Tabachnick and Fidell (2007, p.123), the sample size is adequate to conduct statistical procedures such as standard multiple regression. Their formula is $N > 50 + 8m$ (where m = number of independent variables). Therefore $N > 50 + 8(2) = 50 + 16 = 66$ cases. Therefore, the sample of 157 was suitable for standard multiple regression.

The population of functional managers consisted of all functional managers employed by the company. The sampling approach for this population was convenience sampling. The rationale for this was that by deliberately targeting line managers, the study could obtain the most meaningful data on their perceptions of job satisfaction, worker engagement and intrinsic motivation. The same sampling strategy was adopted in identifying worker representatives to interview. According to Denscombe (2010, p.35) purposive sampling is especially suited to exploring research questions from a small group of subjects, such as managers, where very specific information is required.

1.4.3 Measuring instruments

Three standardised questionnaires were used in the survey component of the study. These questionnaires are the Utrecht Work Engagement Survey (UWES-17) (Schaufeli, 2002), the Minnesota Satisfaction Questionnaire (Weiss, 1967) and the Intrinsic Motivation Inventory (IMI) (McAuley, 1989). In addition, a biographical data sheet was administered to gather information on each participant's age, functional category, tenure and qualifications.

1.4.3.1 The Minnesota Job Satisfaction Questionnaire (MSQ 20)

According to Weiss (1967) the Minnesota Job Satisfaction Questionnaire measures twenty different areas that pertain to the job. Among others, aspects like autonomy, job variety, recognition and opportunity for promotion, the nature of work, and the work environment all tap into the way company policies are put in place. In addition, the MSQ 20 measures extrinsic job satisfaction (for example, the chance to be somebody in the community) and intrinsic job satisfaction "for example, the chance to do things that do not go against one's conscience" (Labuschagne et al., 2005, p.29).

1.4.3.2 Reliability and Validity of the MSQ 20

According to Labuschagne et al., (2005, p.29) the alpha coefficients for the MSQ 20 range from 0.87 to 0.95, which supports the internal consistency of the scale. Buitendach and Rothman (cited in Labuschagne et al., 2005, p.29) “obtained a reliability coefficient for the MSQ of 0.82 for the extrinsic job satisfaction scale and 0.79 for the intrinsic job satisfaction scale”(p. 29). Evidence for the validity of MSQ as a measure of general job satisfaction came from the test’s performance according to theoretical expectation and from construct validation studies based on the theory of work adjustment (Mitchell, 1994).

1.4.3.3 Reliability and Validity of the UWES-17

- Within the definition of engagement are three concepts, namely: vigour, absorption and dedication (Schaufeli & Bakker, 2003). As a result, a work engagement survey to measure each of these concepts was developed by Schaufeli and Bakker (2003). Considerable research has been done on this instrument and reliability was found to be satisfactory. The UWES -17 also has acceptable internal reliability with Cronbach alpha scores at 0.70. According to Schaufeli and Bakker (2003), test-retest reliability indicated stability over time, as was evidenced by two longitudinal studies. Storm and Rothmann (2003), Stander and Rothmann (2010) and Buitendach (2011) have also demonstrated that the UWES-17 is valid for work done in the South African and Southern African context.

1.4.3.4 Reliability and Validity of the Intrinsic Motivation Inventory (IMI)

The Intrinsic Motivation Inventory (IMI) is “a multidimensional measurement device intended to assess participants’ subjective experience related to a target activity in laboratory experiments” (Butler, 1988, p. 79). It has been widely used in research on intrinsic motivation and self-regulation, for example in studies conducted by Ryan, 1982, Ryan, Mims & Leone, 1994 and Connell, Plant, 1990. The instrument assesses participants’ interest or enjoyment, perceived competence, effort, value/usefulness, felt pressure and tension, and perceived choice while performing a given activity, thus yielding six sub-scale scores.

However, it should be noted that it is the interest or enjoyment subscale which is considered the self-report measure of intrinsic motivation. Thus, although the overall questionnaire is called the Intrinsic Motivation Inventory, it is the only subscale that assesses intrinsic motivation, per se (Butler, 1988). “The IMI consists of varied numbers of items from these subscales, all of which have been shown to be factor analytically coherent and stable across a

variety of tasks, conditions and settings” (McAuley, 1989). The general criteria for inclusion of items on subscales have been a factor loading of at least 0.6 on the appropriate subscale, and no cross loadings above 0.4 (Mc Auley, 1989). However, it is recommended that investigators need to perform their own factor analyses on new data sets (Mc Auley, 1989).

1.4.4 Statistical analysis

This study posits the need for both statistical and descriptive analysis. In the analysis of the obtained data, the SPSS 19 programme was used. A statistician was employed with research funds to assist with the analysis as the data had been captured. In addition, descriptive and inferential statistics were used in order to gain an understanding of the obtained data. These descriptive statistics provide a description of what the data shows which then enhances the understanding of the obtained data. To identify and specify relationships among variables (work engagement, intrinsic motivation and job satisfaction), a chi-square test and a linear by linear association test were conducted.

To identify the predictive contribution of factors determining work engagement, intrinsic motivation and job satisfaction, a cumulative logistic regression model was applied. Cumulative logistic regression is commonly used to model ordinal categorical data. This reduced the large number of items into a smaller set of underlying factors that summarise the major contributing factors affecting the three variables (Govender, 2006, p.59). In addition, outliers were checked for. Outliers refer to very high or very low scores. Checking for these was part of the initial screening process.

To identify predictive relationships between variables (work engagement, intrinsic motivation and job satisfaction) the significance level was set at $p < 0.05$. Factor analysis was conducted to determine the factor structure of UWES, IMS and MJS.

Qualitative data were analysed separately. Themes and patterns relating to the variables of job satisfaction, motivation and work engagement were identified and coded in the interview transcripts. The data were analysed thematically.

1.4.5 Qualitative Analysis

The qualitative data elicited from the nine managers was transcribed. It was then coded into major themes relating to work engagement, intrinsic motivation and job satisfaction. The themes were analysed in light of the research questions whose objectives were to find out

what the managers' perceptions of work engagement, intrinsic motivation and job satisfaction were and what factors they thought determined levels of these constructs among the miners. The qualitative findings were eventually triangulated to find out if the managers' perceptions were the same or different from those of the miners.

1.4.6 Overall Reliability and Validity

Cronbach Alpha coefficients were used to assess the internal consistency of the measuring instruments. Nunnally and Bernstein (1994) suggest that a Cronbach Alpha of at least 0.70 is an acceptable level of internal consistency (also see Fields & Buitendach, 2011, p.6). Validity of the qualitative data was ensured through triangulation of the interviews with various documentary sources, such as company reports

1.5 The Research Process

A gatekeeper's letter was sent to the company under study so as to obtain access to the participants. After authority was granted to conduct the study, three assistants from the Human Resources department assisted the researcher by facilitating distribution and collection of the questionnaires. Such an arrangement made data collection both effective and efficient. The focus of the study was explained to each participant and a consent form was given to all participants. It was made clear to all participants that participation in the study was voluntary. A self-administered questionnaire, which consisted of a biographical data sheet, the UWES, IMS and JSQ, was issued. The onus to return the questionnaire was on the participants. Completed questionnaires were collected from the Human Resources department.

The next chapter gives an overview of the diamond industry in order to understand the context in which the study was conducted.

CHAPTER 2: OVERVIEW OF THE DIAMOND INDUSTRY

2.1 Introduction

The purpose of this chapter is to give an in-depth understanding of the context in which the current study is located. As such, the chapter looks at the diamond industry, beginning with an account of uses of diamonds as well as their extraction. This brings to light differences in locations where diamonds are extracted, processed and consumed. The chapter thus provides an overall picture of how work is organised at each of these stages. An examination of skills used in the diamond industry therefore becomes imperative. The chapter also examines issues pertaining to diamond regulation and, by so doing, the Kimberly Process becomes pertinent. All this is examined within the socio-economic environment where aspects such as poverty, safety and health, child labour and economic development are discussed. Since the current study is based on a mining company in Zimbabwe, the chapter then concludes by giving an overview of the diamond industry in Africa and Zimbabwe so as to understand the real context in which the company under study operates.

2.2 The Diamond Manufacturing Industry

It is quite important to outline what the diamond manufacturing industry is all about because the diamond manufacturing industry has been one of the most important industries to contribute to favourable economic growth in most diamond producing nations. In the context of this study, priority in terms of effectiveness and efficiency should be given to this sector. Understanding diamond manufacturing industry is crucial for the study so as to have a broader picture of how things are done within the sector.

The diamond manufacturing industry includes all the steps that take place, from the initial mining of the diamonds until they reach the market (Van Der Gaaar, 2006). This implies several stages through which the diamonds pass. It is indisputable that diamonds are a major natural resource, given the large amounts that are extracted. For instance, in Africa, an estimate of US\$13 billion worth of rough diamonds are produced (Tjitemisa, 2010).

As highlighted above, the different stages through which diamonds pass imply the need for manpower, resulting in the diamond industry being one of the major employers of approximately ten million people worldwide (Tjitemisa, 2010). The numbers are likely to increase, given increases in the sales of diamond products (Hilson & Clifford, 2010).

Knowing what is done and who is involved in the diamond manufacturing helps to situate the present study in its proper context.

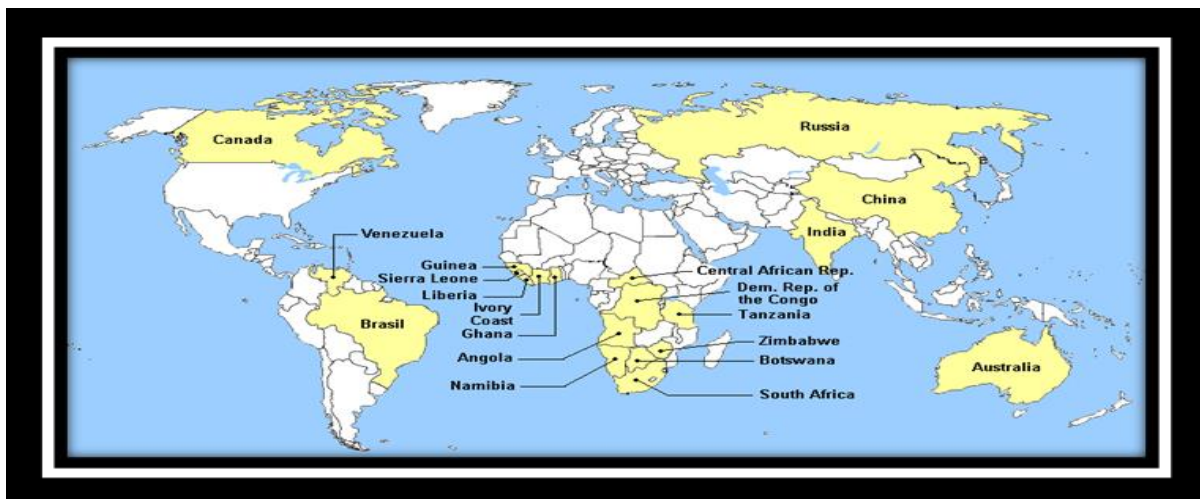
2.2.1 Diamonds and their use

Two major uses of diamonds have been reported to be in jewellery (due to their rarity and aesthetic value) and in industry (due to their unique molecular properties) (Shor & Weldon, 2010). Thirty percent of diamonds are reported to be directed for cutting, polishing and jewellery manufacture, whilst 70 % are sent for industrial applications (Shor & Weldon, 2010). Knowing the uses of diamonds is important to understand the reasons why the company under study ventured into such a business as well as to understand the contribution of workers in the achievement of the stated goals. However, it is important to note that this company is not involved in processing and using these diamonds, only producing and exporting. This is discussed later in the chapter.

2.2.2 Location of diamond mines

Location can be understood as a place or situation occupied. Thus, in the context of diamonds, location of diamonds entails a place where diamonds are found. Diamonds are a precious, yet scarce mineral. Natural diamond sources are found in approximately 35 different countries around the world across several continents (Diamond, 2006).

Figure 2.1. Countries where diamonds are mined ([//www.diamondsnews.com](http://www.diamondsnews.com))



As shown on the map, the majority of diamond mines are found in Africa, with Southern Africa dominating. However, as shall be seen below, the bulk of the processing and marketing takes place in Europe and Asia. Interestingly, two of the three major quality gem producers of the world are in Africa (i.e Botswana and South Africa) (Olsson, 2006).

Although location is quite important in the geo-political environment characterising diamond production and their global use, its significance in terms of global supply chains is beyond the scope of this thesis. The main objective of this study is to establish levels of work engagement, intrinsic motivation and job satisfaction among employees of a diamond mining company in Zimbabwe, which is one of the locations where diamonds are mined. It is therefore pertinent at this point to explain how work is organised in the diamond industry.

2.2.3 Work organisation in the diamond industry

It is inarguable that the way in which work is organised has several implications for both employees and the organisation. The impact of globalisation on the nature of work and hours of work has not spared the mining industry and has called for changes in the ways in which work is structured (Mashilo, 2010). When considering the preferences of today's workforce and the drivers needed for an organisation to be competitive and viable, it can be concluded that employees' well-being is an essential aspect that needs serious consideration (Cronje & Chenga, 2009). There is agreement that the mining industry has had difficulty in securing reasonable hours of work for employees, posing a challenge to unions. For instance, increase in work shift times, including night shifts, has resulted in lots of accidents as well as casualisation of jobs (Finnermore, 2008). This has also posed a threat to work-life balance, causing more industrial problems. For example, in South Africa alone, the death toll from mining accidents was 270 deaths in 2003. An agreement to reduce fatalities by 20% was made by the mining sector, to match Australia, Canada and US levels. In 2010, a 24% decrease, where 128 people were killed in mines in South Africa, was reported (opcit).

Against this background, it is important to examine what motivates miners to remain engaged in their work. It is also important to examine the different roles performed in the diamond industry. Examining how work is organised within the diamond manufacturing industry, especially by looking at different skills found within the sector, is crucial in understanding different expectations of stakeholders, particularly employees, who are the focus of the current study. In addition, this may also help to understand the contributing factors as to why some employees score exceptionally high or low on aspects such as work engagement, intrinsic motivation and job satisfaction, given the different skills and structure of work within the mining company.

2.2.4 Skills used in the diamond industry

Skills encompass one's ability to do something well through the use of knowledge, practice and aptitude (Finnermore, 2008). The ability of an organisation to match the needed skills with the right people ensures organisational effectiveness and efficiency. Considering that there are several factors that influence employees' performance in an organisation, understanding who does what and what needs to be done, can help reduce organisational malfunctioning (Obisi, 2011). For the current study, an understanding of the skills used in the diamond manufacturing industry helps one understand the differences in employees' levels of work engagement, intrinsic motivation and job satisfaction.

As highlighted earlier, the diamond industry is characterised by different kinds of jobs. However, being part of the body of employees in this industry requires training, motivation, dedication and experience (Nagel, 1991). In this industry, job level depends on the amount of training and experience. Diamond manufacturing jobs can be categorised in two ways. The first category comprises technical jobs which are manual in nature. The second category is comprised of administrative and professional jobs. For most jobs in the diamond industry one has to be bondable, because diamonds are so valuable that companies have to take out insurance against accidents, loss or theft by employees or other people (Nagel, 1991). There are, however, some entry levels, e.g. into administrative and skilled jobs that are less specialised, that do not require bonding. Be that as it may, most of these unbonded employees continue to be motivated, satisfied and engaged in their work under the unfavourable conditions highlighted earlier. The relevance of this study, namely: assessing the levels and relationship between work engagement, intrinsic motivation and job satisfaction, becomes apparent.

Meanwhile, it is important to note that skills in general are divided into hard skills and soft skills. On the one hand, hard skills involve technical or administrative procedures related to an organisation's core business (Coates, 2006). On the other hand soft skills, also known as people skills, are needed for everyday life and they are hard to measure and observe. Thus, it is important here to explore how such a distinction works within the diamond manufacturing industry.

Entry Level and General Administrative Jobs

Generally, entry level jobs in the diamond sector require grade 10 or high school graduation, basic maths, good reading and writing skills (Handel, 2003). In addition, little or no

experience is required. Knowledge of computer systems, training and experience are pertinent for administrative jobs (Stasz, 2001). Office clerks, boiler and materials clerks are part of entry level and general administrative jobs.

Technical and Skilled Jobs

Like administrative jobs, it is a requirement for one to have grade 10, good communication skills, good eyesight, and a basic knowledge of maths, physics and computers (Handel, 2003). However, experience is important in this job category. Examples of technical and skilled jobs within the diamond industry are: sawyer, bruter, diamond polisher, laser operator, rough diamond sorter, polished diamond grader, scaife or polishing machine operator, automatic machine setter and jewellery or metal worker.

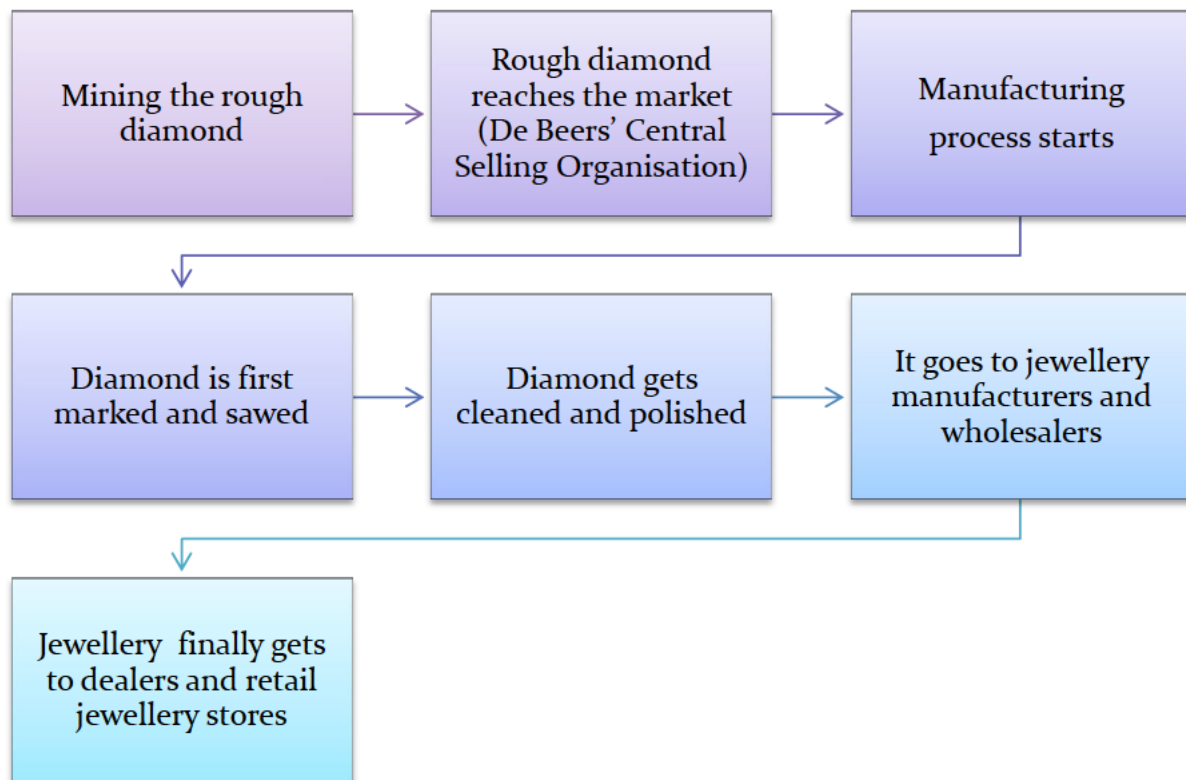
Supervisory and Professional Jobs

It is supervisors' role to oversee people working in different departments within the diamond industry. This calls for assigned supervisors, experienced in technical and management aspects, who will be guided by industry standards (Wall, Corbett, Clegg, Jackson & Martin, 1990). Examples of supervisory and professional jobs include: marker or planner, gemmologist, government valuator and supervisor or foreman.

People who work in some sections within the diamond industry are expected to possess certain qualities and or abilities. These include excellent eyesight and sense of colour, high levels of manual dexterity, concentration, working for long periods and motivation (Wall, Corbett, Clegg, Jackson & Martin, 1990).

The above skills are needed in the processing of diamonds. The diagram below illustrates the diamond manufacturing process discussed in the preceding sections. In the diagram, it can be seen that there are several steps involved in the process, from mining to the final diamond products. The first step involves the mining of rough diamonds from the ground. After the diamond has been mined, it then reaches the market where the diamond manufacturing process starts. Diamond manufacturing is done largely in Israel, Antwerp, Bombay, Johannesburg and New York. The final step is when the manufactured diamond is taken to jewellery manufacturers, wholesalers and dealers.

Figure 2.2: Diamond Manufacturing Process



It is inarguable that the above process requires different skills, some of which have been explained in the preceding section.

It is important to note that, as with any other industry, the diamond industry operates within certain regulations and bodies. The Kimberly Process is a major regulation within the diamond industry. It is imperative, therefore, to discuss the Kimberly Process in order to understand the legal context in which the organisation under study operates. This is crucial in understanding the coherence of such regulations with the employees' welfare in an organisation, understood in the context of work engagement, intrinsic motivation and job satisfaction. Although this is not the major focus of the current study, the researcher felt the need to give the background to the Kimberly Process, given several debates around the diamond mining sector in Zimbabwe. Below is a review of the regulation of the diamond industry showing current controversies pitting the Zimbabwean diamond industry against the Kimberly Process.

2.2.5 Regulation of the diamond industry: The Kimberly Process

The characterisation of diamonds by conflicts and violence triggered the need for Southern African nations to assemble and find ways out of such a state. This resulted in a meeting in

Kimberly, South Africa, in May 2000 and it was from this meeting that the Kimberly Process emanated (Malamut, 2005). In the same year, negotiations for an international certification scheme were conducted by the United Nations General Assembly, leading to the formation of the Kimberly Process Certification Scheme (KPCS) (Maconachie, 2009). Outlined in the KPCS are the rules and regulations governing the production and trading of rough diamonds which were effected in 2003 (Schram, 2007).

2.2.5.1 Who is involved in the Kimberly Process?

The Kimberley Process (KP) comprises all diamond producing countries who can enforce the regulations outlined in the KPCS. "...As of January 2012, the KP has 50 participants, representing 76 countries, with the European Union and its Member States counting as a single participant" (Mirell, 2012). Zimbabwe is one of the participants after the discovery of diamonds at Marange. Also important to note is that the World Diamond Council played a major role in the KP Process (Diamondgirlhawaii.com, 2012).

2.2.5.2 How does the Kimberley Process work?

A lot of requirements are expected from the members of the KPCS to create conflict-free zone within the diamond industry. Among them is the rule that "...participants can only legally trade with other participants who have also met the minimum requirements of the scheme, and international shipments of rough diamonds must be accompanied by a KP certificate guaranteeing that they are conflict-free" (Diamondgirlhawaii.com, 2012).

To ensure greater involvement and participation of its members, the chairing of the KP Process will be rotated. In Africa, South Africa, Botswana, Namibia and the Democratic Republic of Congo have had the privilege of chairing the KP process. "KP participating countries and industry and civil society observers gather twice a year at intercessional and plenary meetings, as well as in working groups and committees that meet on a regular basis" (Diamondgirlhawaii.com, 2012). Progress, as well as monitoring and evaluation of the members, is done through review visits and annual reports.

2.2.5.3 Effectiveness of the Kimberly Process

Through joint efforts with industry leaders, governments and civil societies, Pashas become effective in managing trade of conflict diamonds through promoting peace and security (Morel, 2012). A remarkable contribution to peace by KPC has been evidenced in the report that "...conflict diamonds now represent a fraction of one percent of the international trade in

diamonds, compared with estimates of up to 15% in the 1990s” (Morel, 2012). In addition, the KP has managed to bring development and stabilization to some fragile countries (Morel, 2012). For instance, “...some \$125 million worth of diamonds were legally exported from Sierra Leone in 2006, compared to almost none at the end of the 1990s” (Morel, 2012).

2.2.5.4 Kimberly Process involvement in Zimbabwe Marange diamonds

As has been shown in the literature, every discovery of diamonds is associated with corruption and other socio-economic issues in Africa. This shows the relevance of having a regulatory body in place. KP’s involvement in Zimbabwe brought mixed reactions.

Influenced mainly by the political situation in Zimbabwe, it is inarguable that there have been some biases in as far as KP involvement in the Marange diamonds is concerned. Three review visits and missions to Zimbabwe have been done by the Kimberly Process thus far i.e. in 2004, 2007 and 2009. Prior to major ACR diamond discovery, the 2004 Review Visit (RV) took place when the country was not exporting or importing any diamonds. Hence, RV recommendations were limited and focused primarily on the operations and functions of the Minerals Marketing Corporation of Zimbabwe (MMCZ). The findings revealed the existence of a satisfactory system under the KPCS. This was followed by the 2007 RV headed by the Russian Federation. The RV investigated concerns over reports of violence during the June 2006 first mining rush, specifically Operation Chikorokoza Chapera, and concluded “that the overall structure of the implementation of the KP Certification Scheme appears to be working in a satisfactory manner in Zimbabwe, and, in general, meets the minimum requirements of the KPCS” (Hoffman, 2010, p.112).

In addition to the 2007 RV was the 2009 RV, led by Liberia, in response to the continued reports of violence and smuggling in Marange as well as the Human Rights Watch’s “Diamonds in the Rough” June 2009 report. However, there has been a lot of controversy, according to the gathered data, which made it difficult for KP to reach a conclusion (Morel, 2012). Despite numerous calls to exclude Zimbabwe from the Kimberly Process (KP), instead, the KP chose to draw Zimbabwe into addressing the 2009 identified problems. This led to the development of a Joint Work Plan between KP and the Zimbabwean Government, where the Zimbabwean Government was given a year to resolve its KP compliance and security issues. Despite several barriers and challenges, Zimbabwe was then granted authority to resume the export of diamonds mined at Marange fields.

Considering the uncertainty caused by the politicisation of the KP Process, employees within the diamond industry in Zimbabwe have been working with fear of losing their jobs at any time. This has a great impact on employees' performance and commitment when at work, which can result in major organisational problems if not properly handled. Although the current research did not directly look at the impact of regulations on employees' welfare, it is important to point out the potential influence that the KP Process may have on the employees' levels of work engagement, intrinsic motivation and job satisfaction in the company under study. However, it is essential to acknowledge the role played by the KP Process in ensuring the governing of diamonds, from manufacturing to selling, since stability has been ensured.

In the following section the researcher looks at how diamonds are traded. This is crucial for the current study as it highlights the routes of the proceeds from mined diamonds and provides information on the justification of the industry's wage rate and other extrinsic factors to the job itself.

2.2.6 Rough diamond trade regulation

After diamonds have been mined, they have to be traded so as to get the output(s). As a result, there are several routes that can be taken. Below is a description of different organisations and / or bodies that are involved in diamond trading.

2.2.6.1 Central Selling Organization (CSO)

The most popular means for the selling of diamonds is via the networks of DeBeers' Central Selling Organization (CSO). The Diamond Trading Company (DTC) which is operated by De Beers, is a chief network through which diamonds are traded. The CSO has a global footprint with offices in key cities around the world. The key function of the Diamond Trading Corporation is to "stabilize prices when times are hard, and raise them with inflation and demand when times are good" (Goredema, 2011).

2.2.6.2 Diamond exchange bourse

The key areas in which diamonds are manufactured or processed into consumer diamonds are in Israel, Belgium, India and New York. However, the city that is considered the heart of diamond manufacturing is Antwerp in Belgium. Over 50% of diamonds mined globally are processed in Antwerp.

Having an understanding of how diamonds are traded and the difficulties involved in reaching the market, diamonds still remain a highly valued mineral which have managed to make nations wealthier. Such a positive contribution has also been associated with several concerns, especially from people who are directly involved with diamonds (employees in this case). As a result, there have been a lot of social issues within this industry, as is shown in the discussion below.

2.3 Social Issues in the Diamond industry

Empirical studies have indicated that the bulk of the world's diamonds are mined using practices that cause grave harm and exploitation of vulnerable groups, such as children. In addition, communities and their environments can be negatively impacted. According to Koonar (2006) a million diamond diggers in Africa earn less than a dollar a day (Koonar, 2006). Miners within the diamond industry are reported to be working under poor conditions with high mortality rates, increasing rates of child labour and endemic corruption, causing both environmental damage and rendering communities living near mines vulnerable (Koonar, 2006). Moreover, a lot of issues to do with remuneration, poor sanitation and over-emphasis on management interests have dominated the mining industry. Looking at these aspects helps to understand why employees within this industry act the way they do. It also helps to determine ways to achieve organisational goals, whilst at the same time meet employees' expectations.

2.3.1 Poverty

Poverty has been a major concern in most parts of the world, with Africa being the most affected continent. According to COSATU, in South Africa for example, a lot of uprisings and protests have occurred as a result of continued job losses, especially in the mining, clothing, textile and footwear industries, leading to an increase in inequality in society (Seekings, 2007). The realisation that poverty can be one of the obstacles to economic and social development, prompted the Bench Marks Centre for Corporate Social Responsibility to come up with initiatives to eradicate the problem. However, the extent to which the association has managed to achieve its objective of making the rights of citizens and corporations be well understood and be in harmony with each other, remains to be seen especially after the Marikina incident.

Of greater importance, has been the issue of wages; where continued uprisings and wild cat strikes have been observed within the mining sector. For instance, within the diamond mining

sector, diamond miners who work in small-scale mining – panning or digging for diamonds – produce about 15% of the world’s diamonds, although this does not reflect the value of their work (Dreschler, 2001). An estimated one million diamond diggers in Africa earn less than a dollar a day, which is way below the poverty datum line, resulting in hundreds of thousands of miners lacking basic necessities, such as running water and sanitation (Dreschler, 2001). Similar trends have been reported in the South Africa’s platinum mining industry.

This is the same situation with which miners in the developing countries are faced. It has proved to be difficult to deal with the situation, given escalating costs in electricity, diesel and steel resulting in pressure on production costs, leading to a repeated cycle of poverty. Thus, poverty has been a major problem facing employees in mines. For example, when tracing the labour history of employees in Zimbabwe during the colonial era, it could be seen that, although employees exerted a great deal of effort into their work, they would still earn little and in some instances, the wages would be cut, just to satisfy management’s interests (Nading, 2002).

Although new policies have been developed to improve the living conditions of employees in general, employees within the diamond industry still live way below the poverty datum line. This has led to several strikes and unrests. For example, in South Africa, for a 50 hour work week, an employee gets 25 US dollars, coupled with the fact that 98% of black African miners live in squatter camps, whereas for white managers, spacious houses and green lawns are built (Jenkins & Yakovleva, 2006). In response, reports by Bench Marks Foundation on the mining sector point to the need for a fair and sustainable trade as a powerful catalyst to reduce poverty (Stark, 2011). In their research, the Bench Mark Foundation researchers noted with concern the continued suffering of workers in the mining sector specifically at Lonmin in Marikana as well as employees in other mining companies where the residential and other living conditions are reported to be appalling (The Bench Marks Foundation, 2012).

Although mining has been reported to be the major contributor to economic development, one wonders why diamond miners are some of poorest people on the planet, given the value of the mineral they mine. When tracing the labour history of mine workers in Africa, for instance, it can be noted that the same concerns which are raised by today’s mine employees are still the same as before, although new regulations have been developed. This suggests that there is a lack of labour law enforcement, leaving miners subject to the whims of cruel and exploitative employers. The diamond industry is largely dominated by independent miners,

with the majority being unlicensed and lacking access to global markets, which then limits their bargaining power. In most cases, diamond diggers have little choice but to sell their diamonds to middle-men at below market prices which then perpetuates the poverty cycle. Although a different scenario appears in the South Africa's platinum mine where mining is formal and proper structures being set, reports of exploitation have been made. This is evidenced through reports that “...within weeks of the strike at Lonmin, employees at mining operations across all sectors embarked on unprotected strike action, often accompanied by violence, demanding wage increases” (The Bench Marks Foundation, 2012). Despite a lot of worker grievances in the mining sector in general, credit should be given to non-governmental organisations such as Bench Mark Foundation for its ability to produce critical reports which points to areas that need attention as well as the important interventions to be implemented. Ability to correct these weak areas will not only help eradicate poverty, but mining operations through efficiency and effectiveness will be enhanced. Thus, enhancing the rights of citizens and corporations with the understanding that sustainability through the mining sector can only be realised if and only if citizens enjoy more rights than corporations (The Bench Marks Foundation, 2012).

2.3.2 Safety and Health

Apart from being underpaid, many diamond miners work in extremely dangerous conditions. As has been highlighted above, the diamond industry is largely dominated by informal miners. Mining is often conducted without training or expertise and these miners lack safety equipment and the proper tools. This has led to many deaths and injuries.

Public health problems have also become a major concern within diamond mining. A lot of immoral activities have been reported in many diamond mining towns, leading to epidemics of HIV and a range of Sexually Transmitted Infections (STI's). Environmental devastation, resulting from diamond mining, is a further cause of disease. In Sierra Leone, “miners have littered the landscape with thousands of abandoned mining pits. These pits fill with stagnant rainwater, become infested with mosquitoes, and serve as breeding grounds for malaria” (Nemery, Casier, Roosels, Lahaye & Demedts, 1992, p. 12). Most recently, a continued concern to curb the health and safety problems in the mining sector has been raised. A number of accidents have been reported, calling for an integrated approach to curb the problem (Jansen & Brent, 2011).

In South Africa for example, in 2007, South Africa's Human Rights Commission (SAHRC) requested that the mining industry address safety concerns after 240,000 mine workers went on a strike over occupational health and safety issues (Adler, Claassen, Godfrey & Turton, 2007). The commission was asked to intervene after the release of statistics that put the death toll among miners at 200 in 2007, mainly caused by rock falls and explosions underground (Adler, Claassen, Godfrey & Turton, 2007). According to the Chamber of Mines of South Africa, 199 miners were killed in 2006 and 202 died in 2005. However, their figures showed that the number of deaths has more than halved since 1996, when 463 miners were killed in South African mines”(Dixon, 2012, p.18).

2.3.3 Labour in the mining industry

Labour is one of the most expensive costs incurred by any organisation. As a result, most organisations try to minimise such costs by every means possible leading to child labour being a major concern, especially in manufacturing industries. This leads to children being considered an easily accessible and vulnerable source of cheap labour; they are regularly employed in the diamond mining industry, especially in some parts of Africa and China.

As the activist website <http://www.brilliantearth.com/conflict-diamond-child-labor/> indicates, most consumers are not aware that child labour is extensively used in the diamond industry. According to the website:

“For children trapped in the diamond mines, life is full of hardship. Children work long days, often six or seven days a week. Compared with adults, they are even more vulnerable to injuries and accidents. Physically challenging tasks such as digging with heavy shovels or carrying bags of gravel can leave them hurt or in pain. Because of their small size, children also may be asked to perform the most dangerous activities such as entering narrow mineshafts or descending into pits where landslides may claim their lives. Many, if not most, child miners do not attend school. As adults, these children often will have little choice but to continue working as miners”

In South Africa for example, most employers in the mining sector thrived on the creation of cheap mine labour. This could be traced back to apartheid where laws as well as employment conditions were made in favour of the employers. This point was alluded to by Professor Arthur Mutambara, the Zimbabwean Deputy Prime Minister, at the inaugural World

Diamond Conference in Victoria Falls on 14 November 2012, where he blamed the mining laws in Africa for undermining community development. Mutambara remarked that:

The problem is that our current mining laws in Africa, in Zimbabwe, favour the investor. Our current mining laws be it in Botswana, be it in Namibia . . . in Africa in general, they empower the investor at the expense of the African community and the people...The mining laws were not changed in 1980 in Zimbabwe, the mining laws were not changed in 1957 in Ghana, the mining laws were not changed in 1994 in South Africa and in 1989 in Namibia”. (The Herald, 15November 2012)¹

Mutambara’s remarks reinforce the researcher’s observation in the above discussion on the social factors surrounding the diamond industry. An unfavourable ‘social status’ has characterised the diamond industry. Most of these factors affect employees, especially those at the lower levels of an organisation. Such a state has some implications for employees’ welfare which may have multiplier effects to the organisation. Hence, the exploration of work engagement, intrinsic motivation and job satisfaction of employees becomes imperative.

Owing to its major contribution to the economic status of a nation, diamond mining and manufacturing should be managed well. It is most people’s tendency to just focus on the actual proceeds generated from the sale of diamonds and not take into consideration the inputs and the processes involved. For instance, with a non-motivated, less engaged and less satisfied employee, the value attached to the output of diamonds will not be achieved. This then makes it imperative for the current study to examine the economic developments brought about by diamond mining. Such an understanding will help to establish a framework (especially from a national level) for the enhancement of those aspects that drive an employee to add more value to the expected outcomes (work engagement, intrinsic motivation and job satisfaction). Thus, the next section discusses the economic developments brought about by diamond mining.

2.3.4 Economic Development

As a more valuable resource, diamonds make a major contribution to economic growth through revenues generated as well as taxes levied by governments. In Africa, diamonds worth \$8.5 billion are produced, representing 65% of the world’s diamonds (Forman, 2010). In Southern Africa, the government of Angola generates about \$150 million per year through

¹http://www.herald.co.zw/index.php?option=com_content&view=article&id=57347

diamonds, not to mention other diamond producing nations (Authority & Council, 2000). Although some noticeable developments have been made, diamond mining activities affected some developments, for instance in water supply systems, health clinics and public schools, according to a case in Angola (Authority & Council, 2000). Furthermore, development has been hampered by corruption, incompetence, and weak political systems. Although this has been the situation in most diamond producing nations, Botswana has been a different case through its ability to invest diamond revenues in education, health and infrastructure development (Colclough & McCarthy, 1980; Authority & Council, 2000; IMF, 2006; Noland & Spector, 2006; Chupezi, 2009; Smit, 2009). The picture depicted so far reveals that a great positive contribution has been made by diamonds to the development of Africa. However, analysis shows that more could be generated from diamonds if the whole diamond manufacturing process was performed or housed in Africa. Although developments have been initiated to achieve this in Namibia for instance, this has not been enough. The implication of such a state includes continued reports of high unemployment rates among African people. What is worrying, in as far as employment within this sector is concerned, are the conditions under which employees work, despite the value that diamonds have. For instance, there have been issues of exploitation, and unhealthy, unregulated and dangerous environments that workers are subjected to (Semboja, Selejio & Silas, 2011), poverty, and lack of basic infrastructure and education (Masiya, Mlambo & Mugoni, 2000). Although some efforts have been made to improve the situation; no substantial improvements have been noticed.

The above discussion reveals that diamond mining has made a positive contribution to economic growth, as has been seen in the discussion of the social issues within the diamond industry; however, diamonds have also been associated with conflict in Africa. Such conflict led to diamonds, especially from Africa, being labelled 'blood' diamonds. Although this is not the major focus of the current study, understanding conflict within the diamond industry provides a platform for understanding some of the major issues taking place within this industry which could have an indirect effect on labour issues in the diamond industry or the mining sector in general.

2.4 (Blood) Diamonds and Conflicts in Africa

Although characterised by vast diamond deposits, Africa has been the most troubled continent economically and politically. Diamonds, being the most valued mineral, have been

identified as one of the major sources of conflict in Africa leading to the labelling of the mined diamonds as ‘blood’ diamonds.

Diamond trading has been associated with the funding of civil wars, for example in Ivory Coast and Liberia, with more than 200 000 people in Liberia being killed (Kelbie, 2006; Kupelian, 2010). As revealed in the same article, diamonds in Liberia are also smuggled into other countries, British and other European countries included (Kupelian, 2010).

The above are just some of the major issues within the diamond industry world-wide. However, due to the fact that the current study is based on a diamond mining company in Zimbabwe, the following section gives an outline of the Zimbabwe diamond industry. This is done so as to understand the context within which this company operates and possibly give answers to why things are the way they are, based on the aspects of work engagement, intrinsic motivation and job satisfaction.

2.4.2 Diamond Industry in Zimbabwe

Large diamond deposits were discovered in Marange area of Eastern Zimbabwe (in Manicaland) in June 2006. It is reported that Zimbabwe has the largest diamond deposits world-wide and is the richest diamond field ever seen by several orders of magnitude (Partnership Africa Canada, 2009). However, as diamonds were discovered in 2006, the fields were open to anyone wishing to look for diamonds. As a result, there was a chaotic diamond rush. An estimated 15 000- 20 000 illegal artisanal miners were on these diamond fields, illegally selling the diamonds to dealers outside the country. To end such operations, the government initiated measures such as Operation Chikorokoza Chapera (End to illegal diamond mining) in 2006 and Operation Hakudzokwi (No Return in Marange) in 2008, which were aimed at small miners operating without licenses as well as unauthorised traders in gold and diamonds.

Figure 2.3: Locations of Diamond(s) in Zimbabwe.



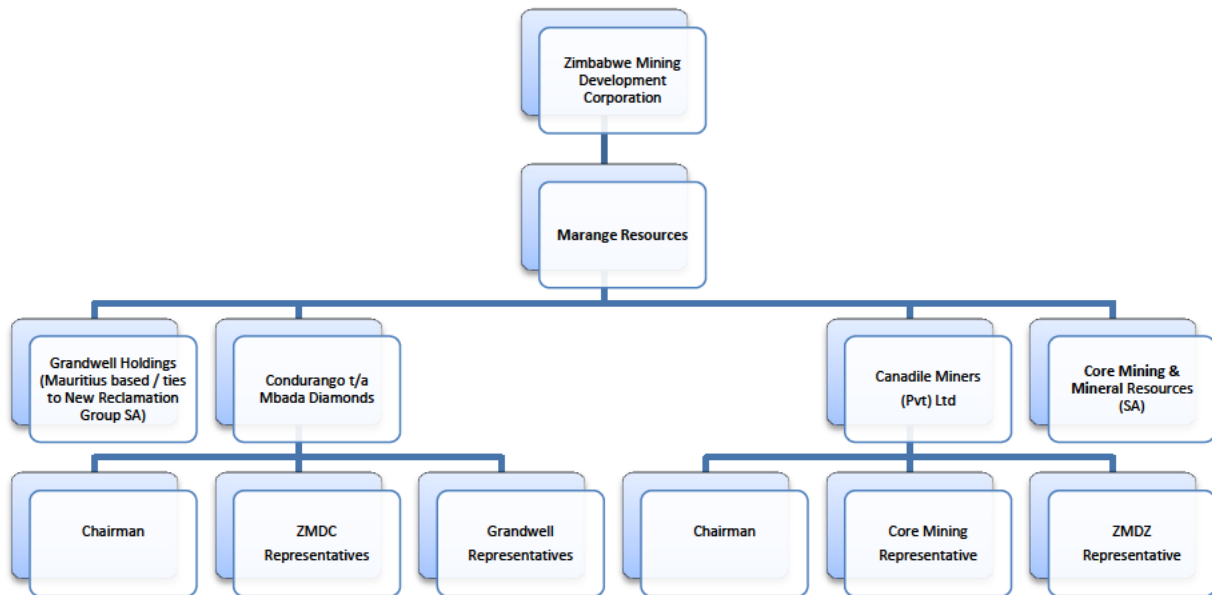
Source : <http://www.infoplease.com/atlas/country/zimbabwe.html>

It was reported that Zimbabwe was losing between US\$ 40million and US\$50 million a week through illegal dealings (Sachikonye, 2007). The discovery of diamond is reported to have led to corruption and exploitation on a larger scale, use of forced labour of both adults and children and brutal killings (Human Rights Watch, 2010). One possible reason that these issues have arisen in Zimbabwe's diamond industry is acute unemployment in the country. However, when looking at other countries where diamond was discovered, it could be seen that the same issues were experienced in other countries, for example the Democratic Republic of Congo.

2.4.3 Ownership of Diamond in Zimbabwe

The ownership of diamonds in Zimbabwe has been surrounded with a lot of controversy. The implementation of economic policies, like the indigenisation policy, has been seen as one of the determinants of diamond ownership.

Figure 2.4 Structure of diamond mining firms at Marange



Adapted from Sokwanele (2011).

During the time the study was conducted, there were four diamond mining firms operating in the Chiadzwa fields, namely: MarangeResources, Mbada Diamonds, Anjin and Diamond Mining Corporation. All the diamond firms in Zimbabwe are jointly owned by the Zimbabwean government and foreign investors.

The above diagram illustrates the structure of diamond mining at Marange. It is shown that the Zimbabwe Mining Development Corporation (ZMDC), a parastatal under the ministry of Mines and Mining Development (MMMD), is the overseer of diamond mining activities at Marange. Under ZMDC is Marange Resources, which is a wholly-owned subsidiary created to represent the commercial interests of ZMDC. Two companies, Core Mining Resources and Grandwell Holdings, were considered for joint ventures with Marange Resources. Grandwell and Marange Resources formed Condurango, known as Mbada Diamonds. Core Mining Resources formed Canadile Miners Private Limited. However, besides diamond operations at Marange, diamonds are also found at Rivers Ranch in Beitbridge (in Matabeleland South Province) and Murowa Zvishavane (in Midlands Province).

The researcher attempted to show how the diamond industry at Marange is structured. In this context, it is important to understand industrial relations within the diamond mining sector and, more specifically, in one of the companies that operates within such a structure. This is

important in understanding the antecedents of labour issues in the diamond industry.

2.5 Globalisation and Industrial relations and the diamond mining industry

Industrial relations vary with place, and the economic and political state of nations. It is important to acknowledge the existence of different perspectives or approaches of labour relations: unitarism, pluralism, societal corporatism and state corporatism (Reddy, 1987). Autocratic unitary proved to be the most adopted approach to labor relations by most employer organizations globally (Finnermore, 2010). However, given the more globalized world of today, such an approach can be detrimental to successful business operations. Thus, given the context in which business operations are taking place, liberal pluralism, where the interests of all groups are taken into consideration, appears to be the best approach, especially when taking into consideration the human resources approach.

In countries like the United Kingdom, the United States, Canada, Australia, New Zealand, France and Italy, pluralism is more dominant. However, in those parts of the world where more power resides in employers like in most African nations for example, corporations enter into individual contracts with employees, avoiding union representation. Globalization, however, has posed many challenges to the unions through employers' organizational restructuring plans to meet global challenges for increased productivity (Fennimore, 2008). In addition, outsourcing and the growing use of part-time and contract employees has led to an erosion of trade union membership in many companies, thus leading to exploitation of employees.

In South Africa for example, the mining industry has been hit by large-scale retrenchment which has had an impact on both the employees and the unions' financial resources. The Marikina incident² in South Africa is a good example of the debates surrounding industrial relations within the mining sector. Given the contribution that the mining sector has made to the South African economy, yet the negative reporting on industrial relations issues, understanding industrial relations in South Africa's mining sector is crucial for the current study. It creates a platform for understanding industrial relations on a broader scale, since South Africa is the closest case for the current study.

² Thousands of miners at Lonmin Platinum mine in Marikana, South Africa embarked on an unprotected industrial action demanding wage increment. The strike went on global news headlines when 34 miners were shot and killed by the South African Police in an attempt to disperse the miners who had gathered on a hill.

2.5.1 Industrial relations in South Africa mining industry

Like other once colonized nations, South Africa's labor relations can be understood in two phases i.e. during apartheid and post-apartheid. The post-apartheid era saw the development of a new Labor Relations Act. Although building on some of the institutions of the past, the new act reflected a completely new direction for labor relations in South Africa, shown by the shifting from an adversarial, pluralist form of labor relations to a form closer to societal corporatism. Following such amendments were other legislations like Basic Conditions of Employment Act, the Employment Equity Act and the Skills Development Act.

Understanding work relations between an employer and an employee is very important, especially if an organization is to be effective and efficient in its operation. South Africa's mining sector is a very interesting case study, considering that despite having all the above legislations in place, there have been many misunderstandings within this sector and most of these problems are issues surrounding industrial relations. For instance, there have been a lot of strikes as a result of the involved parties' failure to reach agreements on employees' conditions of employment (Howe, 2012). Recently, South Africa's mining sector has been hit by wild cat strikes, for instance at AngloGold Ashanti mine, Rustenburg Samancor Chrome Western mine and Atlatsha Resources. All these strikes have been a result of misunderstandings between management and employees over pay and other working conditions, posing a challenge to the labour representatives, both at company level and national level (Howe, 2012).

Although the context of operations within the diamond sector could be different, industrial relations in Africa have similar characteristics despite being governed by different regulations. Below is an account of industrial relations in Zimbabwe.

2.5.2 Industrial Relations in Zimbabwe

Zimbabwe has been an interesting case politically and economically. A lot has been written on Zimbabwe, including a thorough discussion on the Zimbabwean economy (Ncube, 2000). As a result of socio-political factors that have been going on in the country, job creation has been difficult in Zimbabwe, especially after the imposition of sanctions, leading to the high unemployment rate in the country. As it is known that the labour market plays an important role in economic development, as well as contributing to the transmission of both internal and external policy shocks (Ncube, 2000), it is important to understand Zimbabwe's labour

market, especially from the Industrial Relations perspective, since it will help to answer one of the research questions of the current study.

There is a difference between the colonial labour market and the post-Independence labour market. The former was characterised by overt, apartheid-style, racial discrimination. During the colonisation era, labour policy was guided by the Industrial Conciliation Act of 1934 (Ncube, 2000). As in the labour history of most African nations, black African employees were not recognised as employees and, as a result, could not organise or be party to any forum that determined employment conditions. Such a system was put in place to ensure that industry; mining and commercial farms had a cheap source of labour (Ncube, 2000).

Coupled with such unfair treatment was the ban of Africans from skilled jobs and training, leaving Africans stuck in the same jobs for years. However, as time passed, employers realised the advantage of having a stable and permanent labour force compared with casual labour (Schultz, 1997). This then led to the emergence of African labour unions. However, these unions were not very effective as they were used as a forum for control and not for protection of workers' rights.

Thus, these African Unions had little say in employee-related issues, such as wage adjustments and right to strike, to mention a few .

Post-independence saw a change in labour policies. The prohibition of unions for Africans and the existence of a white, unionised workforce, discussed earlier, implied the need for a totally different structure in as far as labour management was concerned. This prompted the appointment of industrial councils by the government for the once unionised workforce. Industrial boards were formed for the non-unionised workers, whose role was to recommend wage adjustments to government. Thus, government's visible hand in labour issues enabled it to make a massive contribution to the formation of trade unions; such as the Zimbabwe Congress of Trade Unions (ZCTU) (Mwamadzingo & Saleshando, 2003).

As a result of the need to enhance the performance of ZCTU, the government of Zimbabwe launched a consultative forum in 1996 which led to the establishment of a consultative body with cross-sectional representation (Torres, 1997) to provide a national base to address socio-economic issues. However, because of the politicisation of ZCTU (Onslow, 2011), it failed to meet its responsibilities of fully representing workers' interests. Moreover, the economic

crisis in Zimbabwe could also have been a contributing factor to the failure of ZCTU. However, efforts to revive the efficiency and effectiveness of trade unions in Zimbabwe are needed if the economic revival is to be sustained. This is because of the urgency of the needs of the mining sector as the major contributor to economic growth in Zimbabwe. What this implies is a greater need for a viable board which will regulate operations, especially those that are associated with relations among relevant stakeholders.

As has been highlighted, wage issues have been a problem in Zimbabwe. It is also important to raise the issue of the rural-urban income gaps in Zimbabwe, especially considering the site where the current research took place and the origin of the bulk of the employees of the company under study. Research has established that incomes in these two markets differ. In rural areas, the main source of income was found to be wage employment followed by remittances, whereas employment was found to be a major source of income for urban dwellers (Ncube, 2000). In the same study, it was found that female-headed households in rural areas had higher incomes than male-headed ones.

Also important to consider is occupational, gender and racial wage differences among employees in Zimbabwe. Fifteen years after Zimbabwe got its independence from the colonial powers, some disparities continued to exist. For instance, females earned lower wages than males. Europeans and Asians earned about six and three times the wage of Africans and there was a wide wage gap between professionals and management (Ncube, 2000).

It can be seen that placing Zimbabwe's labour relations system in a more indigenised regulatory framework has maintained peace, especially within the mining sector, compared with the South African context, where a lot of noise, uncertainty and disputes characterise the so-called 'democratic' nation. Although a lot of factors could have contributed to the strikes in Zimbabwe's mining sector, it is important to note that union representation of workers in Zimbabwe is limited, leaving industrial relations to be managed largely at company level (i.e. between the management and employee representatives at the company).

Thus, given the above debate on industrial relations, it is important to examine the importance of diamonds to Zimbabwe's economy so as to see the contribution made by employees within this sector. This will further determine (if need be), interventions needed to enhance employee performance.

2.5.3 Economic Developments brought up by Diamond Mining in Zimbabwe

It has been shown that it is from the proceeds from diamonds that most government projects and expenses are funded. For example, it has been revealed that after the approval to sell its diamonds abroad, the government of Zimbabwe looks forward to \$600 million from diamond sales in 2012 (New Zimbabwe, 2012). The larger part of these proceeds are said to be coming from India, since it is the major market for Zimbabwean diamond(s). Zimbabwe is ranked 7th in the diamond producing industry with the potential to supply 25% of global demand (The Herald, 2012).

In India, De Beers and the Russian-based Alrosa are Zimbabwe's major competitors; these companies feel so threatened by the competition from Zimbabwe since Zimbabwe's diamonds appear to be the most preferred in India. This is supported by some reports that about 30% of the diamond pieces currently manufactured in Surat in India are Zimbabwe's stones (New Zimbabwe, 2012). The growth in diamond mining in Zimbabwe implies that Zimbabwe's diamond mining companies will be competing on a more international scale (if sanctions are removed), with companies such as De Beers, Alrosa, Rio Tinto and BHP Billiton, who account for 70% of the total production of rough diamonds in the world. This then calls for a need to consider several strategies so as to gain a substantial market share and survive in the industry. Thus, it is in the light of such a need that this research aims to examine intrinsic motivation, work engagement and job satisfaction among employees at Marange Resources.

It has been noted in the above discussion that diamonds played a major role in resuscitating Zimbabwe's economy. Considering the idea that Zimbabwe's diamonds have been labelled 'blood diamonds' by human rights groups, since it is claimed they are tainted by allegations of killings, torture and forced labour (New Zimbabwe.com, 2012), it is important to examine aspects around employee welfare at Marange to see if these claims are justified .

2.5.4 Gender Dynamics in the diamond field at Marange

Gender has been one of the major concerns within workplaces, raising the need to address gender inequality in the workplace. However, there have been successes and failures in different initiatives undertaken. Of more importance in the current study are gender dynamics within the mining industry, where it has been consistently reported that women are disproportionately located and mostly found in low-paying jobs. A major concern as far as gender is concerned has been the employment status of women compared with men, where more women are casual, temporary or part-time workers (Finnermore, 1997).

Diamond fields are known to be dominated by males, both in formal and informal diamond mining. This is due to the risks associated with it, especially by males and mainstream society, which endorse conventional notions of masculinity and femininity in which women are viewed as weak, spineless and fragile whilst men are seen as brave and proactive (Katsaura, 2010). However, there is a slight shift in thinking at Marange, since 40% of the artisanal miners are women (Sachikonye, 2007). Generally, the role of women within the diamond industry has been found to be the same in many countries. Their roles include washing gravel and selecting diamonds from the washed gravel. Reports have also been made on the immoral activities of these women which are popularly known as ‘Magwejeleen’ in Chiadzwa in Zimbabwe. This has seen the spread of HIV /AIDS where 3 % of the registered HIV patients die every month (SAR Watch, 2009).

2.5.5 Employee Welfare at Marange

The available published statistics reveal that, as per 2009, only ZMDC had the authority to mine diamonds in Marange and that it employed 150 workers at Chiadzwa plant. These per month workers earned an average of \$100 with no other benefits (SAR Watch, 2009). However, due to some restructuring and developments in the diamond mining at Marange, changes have been noticed in that there are more players in the industry, compared with three years ago. Although it is much anticipated that the larger the number of players in an industry, the stiffer the competition becomes, in some business areas like labour, such claims fail to apply at Marange. This is because of the high rate of unemployment in the country. As a result, it becomes very difficult for employees to voice their concerns regarding aspects that affect them, as they fear dismissal from work.

However, recently, in one of the diamond mining companies at Chiadzwa, about 1500 workers were suspended after demanding better wages and working conditions. It is believed that the company was failing to comply with local diamond industry standards.

It is important to note that there is limited information about diamond mining in Zimbabwe, especially concerning labour or business-related publications. In general, there have been very few publications for the general mining sector in Zimbabwe, especially post-independence; therefore, it has been very difficult to find information for the current study. It is hoped that the current study will make a valuable contribution to eradicating the dearth of such literature.

2.6 Conclusion

The current chapter gave an overview of the site of the research by looking at the diamond industry. This was done by looking at the uses of diamonds, diamond geology, and location of diamond deposits, as well as diamond deposits from a broader perspective. The discussion was narrowed down to Africa and then Zimbabwe, where issues like the history and expropriation of diamonds at Marange, economic developments brought about by diamond mining, ownership of diamond deposits in Zimbabwe, gender dynamics and employee welfare at Marange. Understanding this context is very important in the examination and understanding of work engagement, intrinsic motivation and job satisfaction among employees in a diamond mining company in Zimbabwe. This is discussed in the next chapter.

Thus, the next chapter reviews aspects of work engagement, intrinsic motivation and job satisfaction.

CHAPTER 3: WORK ENGAGEMENT, INTRINSIC MOTIVATION AND JOB SATISFACTION

3.1 Introduction

This chapter discusses the three major constructs of this study, namely: work engagement, intrinsic motivation and job satisfaction. The chapter begins by explaining the issue of work engagement by looking at its importance and potential contribution to the business world. The chapter also discusses drivers of work engagement, where job resources, the importance of job resources and personal resources are explored to gain an understanding of how engagement can be achieved. A discussion of the psychological aspects of work engagement follows in order to provide a psychological understanding of work engagement, where psychological meaningfulness, psychological safety and psychological availability are considered.

The chapter goes on to look at job satisfaction in terms of definition, drivers – both internal and external - and other influences that affect employees' attitudes towards work. This discussion will be followed by an investigation of past research to look at antecedents of job satisfaction and the factors that contributed to it. The chapter also examines trends in job satisfaction to get a picture of where research on job satisfaction has come from and where it is going. The chapter ends by a discussion of intrinsic motivation, where the definition and theories that explain this construct are reviewed.

3.2 Work Engagement

Although the concept of work engagement is fairly new, there is already a vast amount of research done on this topic. However, the majority of studies on work engagement have been conducted in Europe with very few studies on the topic being conducted in Africa. In Zimbabwe, little or no studies have been conducted on work engagement. The only published research on the aspect of work engagement was conducted on Zimbabwean employees who took part in 2010's national employee satisfaction survey on levels of engagement. The results of the study reflected that the majority (almost three quarters) of the Zimbabwean, economically active population have a low level of engagement in their work (Nguwi, 2011). Since this was a nationwide study, there is a need to explore employees' levels of engagement per economic sector and further narrow it down to an organisational level so as to have a thorough understanding of the issue. There is a dearth of literature on this topic, hence the need for this research which examines the aspect of work engagement in a mining company.

Also concerning is the fact that, until recently, no research has explored engagement as a predictor of job satisfaction (Alarcon, 2010).

It is important, however, to acknowledge the emergence of research in the body of psychology on the positive state of people, since most research in psychology has been centred on negative emotions (Bakker, Schaufeli, Leiter, & Taris, 2008). The organisational variant of positive psychology is known as positive organisational behaviour (POB). According to Luthans (2002, p.59), POB “is the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in today’s workforce”. Luthans’ definition of POB reflects the need for a positive approach towards human resources as well as the need for theory building, research and practical solutions (Luthans & Youssef, 2007; Bakker & Schaufeli, 2008). Work engagement is one of the POB constructs that this study sets out to investigate.

3.2.1 Defining Work Engagement

Work engagement has been defined in various ways in the literature. Two different but related schools of thought exist on work engagement and both of them “consider work engagement as a positive, work related state of wellbeing or fulfilment” (Baker, Schaufeli, Leiter & Taris, 2008). The first school of thought, whose proponents are Maslach and Lieter, posits that “engagement is the direct opposite of burnout and can be assessed by the opposite pattern of score on the three dimensions of the Maslach Burnout Inventory, which are exhaustion, cynicism and ineffectiveness” (Maslach & Lieter, 1997, p.312) .

On the other hand, Baker, Schaufeli, Leiter and Taris suggest that “engagement is characterised by energy, involvement, and efficacy and in the situation of burnout, energy becomes exhaustion, involvement becomes cynicism and efficacy turns into ineffectiveness” (Baker, Schaufeli, Leiter & Taris, 2008, p.124). The second school of thought, however, views work engagement as an autonomous concept which is negatively related to burnout. According to this school of thought, work engagement entails “a positive, fulfilling, work related state of mind that is characterised by vigour, dedication and absorption” (Schaufeli & Bakker, 2004; Schaufeli, Salanova, Gonzá‘lez-Roma’, & Bakker, 2002; Bakker & Demmerouti, 2008, p.125).

Dedication refers to “being strongly involved in one’s work, and experiencing a sense of significance and enthusiasm” (Bakker & Leiter, 2009, p.156). The third dimension of work

engagement is absorption and is characterised by “being fully concentrated and happily immersed in one’s work, whereby time passes quickly and one has difficulties with detaching oneself from work” (Bakker & Demmerouti, 2008, p.125). Thus, engaged employees, according to the second school of thought, feel strong and vigorous at work, enthusiastic about the work they do and are very often immersed in that work.

Work engagement has been found to be different from other psychological constructs like organisational commitment, job satisfaction and job involvement (Maslach, Schaufeli & Leiter, 2001). For instance, organisational commitment defines an employee’s loyalty to the organisation. Thus, while commitment focuses on the organisation, “engagement focuses on the work itself” (Storm & Rothmann, 2003, p.128). Job satisfaction on the other hand, refers to the point to which work is a source of need fulfilment and contentment. Unlike engagement, job satisfaction does not encompass the employee’s relationship with the work itself.

Work engagement and ‘workaholism’ have also been differentiated in the literature. On one hand, engaged employees work hard (vigour), are involved (dedication) and feel happily engrossed (absorbed) in their work and may seem similar to workaholics, but are different in the sense that engaged workers lack the typical compulsive drive possessed by workaholics (Bakker, Schaufeli, Leiter & Taris, 2008). On the other hand, workaholics’ need to work is exaggerated to the point that it endangers their health, reduces happiness and deteriorates their interpersonal relations” (Bakker, et al, 2008). Through this distinction, one can conclude that there is a more positive contribution to the health status of an individual when they are engaged in their work than when they are workaholics.

Work engagement, however, is closely related to the term ‘flow’, as advocated by Csikszentmihayli (1990). It “... represents a state of optimal experience that is characterised by focused attention, a clear mind and body unison, effortless concentration, complete control, loss of self-consciousness, distortion of time and intrinsic enjoyment” (Csikszentmihayli, 1990, p.183). The difference between flow and engagement is that flow is more complex and refers more to a short-term experience, whereas engagement is a persistent state of mind (Storm & Rothmann, 2003).

Having outlined different perspectives and approaches to the understanding of work engagement, it is important now to look at the importance of work engagement.

3.2.2 The importance of work engagement

The topic of work engagement has become particularly salient in industrial psychology over the years because disengagement or alienation is central to the problem of employees' lack of commitment and motivation (Aktouf, 1992). As a result, it is important for an employer to cultivate engagement among the employees to ensure better performance and survival of the organisation. Employee engagement "predicts positive organisational outcomes, including productivity, job satisfaction, motivation, commitment, low turnover intention, customer satisfaction, return on assets, profits and shareholder value" (Bakker, Demerouti & Schaufeli, 2003; Bakker, Schaufeli, Leiter & Taris, 2008; Harter, Schmidt & Hayes, 2002; Schaufeli & Bakker, 2004, p.208,). Literature on work engagement has also found a connection between work engagement and performance. For example, results from a study by Schaufeli, Taris and Bakker (2008, p.187) on Dutch employees from various occupations showed that "work engagement is positively related to in-role performance". Another study by Bakker, Demerouti and Verbeke (2004) showed that engaged employees received high rankings from their colleagues with regards to their performance. Harter (2001) also found a correlation between work engagement and business outcomes; employees with the highest engagement levels were mostly found in the high performing units of the business.

The aspect of work engagement is therefore considered important in making employees have a better in-role fit and extra-role performance which then leads to organisational effectiveness (Bakker, Demerouti & Verbeke, 2004). At an individual level, work engagement has been found to positively correlate with good health as has been supported by the findings in a Dutch service organisation, where engaged employees suffered less from self-reported headaches and psychosomatic complaints (Schaufeli & Bakker, 2004). Several reasons have been given to explain why engaged employees perform better than non-engaged or disengaged workers. Bakker and Demerouti (2008) found four reasons for this: positive emotions which include happiness, joy and enthusiasm; experience of better health; creation of own job and personal resources; and transfer of engagement to others. Thus, these four traits were seen to characterise employees who were engaged in their work.

Considering the former, it is inarguable that work engagement is a crucial aspect for an organisation to achieve its goals. It is imperative, therefore, that organisations cultivate an environment that encourages employees to be engaged in their work. These are the factors that drive work engagement:

3.2.3 Drivers of work engagement

The aspect of work engagement is centred on the issue of resources. Below, the researcher discuss how two major categories of resources – job resources and personal resources – are associated with, and impact on work engagement.

3.2.3.1 Job resources

Job resources have been defined as “... those physical, social, or organizational aspects of the job that may: reduce job demands and the associated physiological and psychological costs; be functional in achieving work goals; and stimulate personal growth, learning, and development” (Bakker & Demerouti, 2007, p.186; Schaufeli & Bakker, 2004, p.231). A positive relationship between work engagement and job resources has been consistently reported (Bakker & Demerouti, 2007; Schaufeli & Salanova, 2007).

It is assumed “that job resources play either an intrinsic motivational role because they foster employees’ growth, learning and development, or an extrinsic motivational role because they are instrumental in achieving work goals” (Barker & Demerouti, 2007, p.169). For the intrinsic motivation role, “job resources fulfil basic human needs, such as the needs for autonomy, relatedness and competence” (Deci & Ryan, 1985, p.180; Ryan & Frederick, 1997, p.124). For instance, proper feedback fosters learning, thereby increasing job competence, whereas decision latitude and social support satisfy the need for autonomy and the need to belong, respectively. This intrinsic motivational potential of job resources is also recognized by job characteristics theory (Hackman & Oldham, 1980).

The extrinsic motivational role played by job resources is through “fostering the willingness to dedicate one’s efforts and abilities to the work task”(Meijman & Mulder, 1998, p.124). Working in such an environment ensures the attainment of the set goals and, as a result, engagement is likely to occur (Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007).

Regarding the antecedents and consequences of work engagement work, life experiences, particularly control, rewards and recognition and value fit, were found to be significant predictors of all three engagement measures (Koyuncu, 2006). Among Finnish health personnel, “Job resources predicted work engagement better than did job demands” (Mauno, 2007, p.170).

Given such positive contributions of job resources to the enhancement of work engagement

and results derived through positive work engagement displayed by employees, it is important to determine the levels of engagement of employees in the company under study, as it will help to fill the gap in the lack of studies on work engagement in Zimbabwe, especially the mining sector.

3.2.3.2 Personal resources

Personal resources are “positive self-evaluations that are linked to resiliency and refer to individuals’ sense of their ability to control and impact upon their environment successfully (Hobfoll et al., 2003, p.248). Having a positive mind-set towards oneself “predicts goal-setting, motivation, performance, job and life satisfaction, career ambition and other desirable outcomes” (Judge et al., 2004, p.124). This then suggests a positive relationship between personal resources and work engagement (Judge et al., 2005). Furthermore, research reveals that intrinsic motivation triggers high performance and satisfaction through goal self-concordance (Luthans & Youssef, 2007).

Since work engagement is an aspect that falls under psychology, more specifically POB, exploring the psychological aspects of work engagement is crucial considering that the focus of the current research is to examine those ‘internal’ aspects that drive an employee to want to work.

3.2.4 Psychological aspects of Work engagement

Exploring challenges in line with employees’ psychological needs calls for the need to reduce discrepancies between personal and organisational values (Briskin, 1998). Briskin further pointed out the need for organisations to understand human complexity and be able match it with organisations’ expectations and goals. Thus, through understanding of that aspect of an employee, which hunts for fulfilment, enables individuals to completely immerse themselves in their work. In support of this, Khan (2008) asserted that “self and role exist in some dynamic, negotiable relation in which a person both drives personal energies into role behaviours and displays the self within the role. Failure to achieve engagement leads to disengagement ‘unemployment of the self in one’s role which is considered an apathetic behaviour’ (Phillips, 1996).

There are determinants and mediating effects of three psychological conditions, namely: meaningfulness, safety and availability – on employees’ engagement in their work (May & Gilson, 2004). Psychological meaningfulness is the value of a work goal or purpose, judged in relation to an individual's own ideals or standards (van Zyl, Deacon & Rothman, 2010).

That is, the individual feels as though he or she is receiving a return on his or her self-investment in work, which provides physical, cognitive and emotional energies (van Zyl, Deacon & Rothman, 2010). Thus, these energies in turn facilitate personal growth and motivation to work. As such, psychological meaningfulness occurs when the individual feels useful and valued for his or her contributions, over and above being an occupant of a given professional role.

The degree of meaningfulness an individual experiences at work is influenced by several factors, including:

- Characteristics of one's job; for example job enrichment, work-role fit (that is the extent to which the professional role enables the individual to express his or her self-concept as well as rewarding co-worker relations i.e. being treated with respect and experiencing a sense of belonging).
- Meaningfulness; this implies the value of a work goal or purpose, judged in relation to an individual's own ideals or standards (Hackman & Oldham, 1980; May, 2003; Renn & Vandenberg, 1995).
- Personal growth and work motivation; this is facilitated by meaningful work (Spreitzer et al., 1997).

3.2.5 Job enrichment, work role fit and co-worker relations

Understanding individuals in an organisation together with the roles they perform has interested many researchers (Kristof, 1996). In light of this, a fit between self-concept and role is reported to result in a sense of meaning (Brief & Nord, 1990; Shamir, 1991). In addition, "...human beings are self-expressive and creative, not just goal oriented" (Shamir, 1991, p.110). This points to the fact that individuals are more comfortable with roles that allow them to express their true self concepts (May, 2003; Britt, 1999). In addition, there has been an emphasis on relatedness among employees which can result in meaningfulness. Psychological safety entails 'feeling able to show and employ one's self without fear of negative consequences to self-image, status or career' (Kahn, 1990, p. 708). The extent to which an individual experiences psychological safety at work is determined by a trusting and supportive supervisor and good co-worker relationships. Trust can come in the form of provision of positive feedback and developing problem-solving skills (Whitener, Brodt, Korsgaard, & Werner, 1998).

3.2.5.1 Supervisor relations

Supervisor relations within an organisation can have several consequences. It has been found that a supportive relationship can foster perceptions of safety (Edmondson, 1999) and enhance employee creativity (Deci, Connell, & Ryan, 1989; Oldham & Cummings, 1996). The ability of supervisors to put in place a supportive work environment will reflect concern for employees' needs and feelings, which will then help to solve work-related problems thus leading to the enhancement of employee self-determination, enjoyment and interest in their work (Deci & Ryan, 1987). Determined individuals engage fully in their work, are novel and they learn from their mistakes (Edmondson, 1996, 1999).

3.2.6 Psychological availability

Psychological availability is an individual's belief that he or she has the physical, emotional or cognitive resources to engage the self at work (Rothmann, 2010). It is also the individual's assessment of his or her readiness to engage in a professional role in the face of other social roles she may have. Individuals are psychologically available to engage in their roles when they have positively assessed their ability to deal with both work and non-work aspects of their lives (Saks, 2006). Thus, an indication of the important contribution of team work among employees through the provision of structural boundaries for appropriate behaviours (Khan, 1990). It is important to note that people differ in their abilities to meet the physical demands of their work, which then explains different levels of engagement among employees (Hochschild, 1983; Sutton, 1991). Exploring this aspect, Kahn's framework reveals an association between security in one's work role and self-consciousness (Khan, 1990).

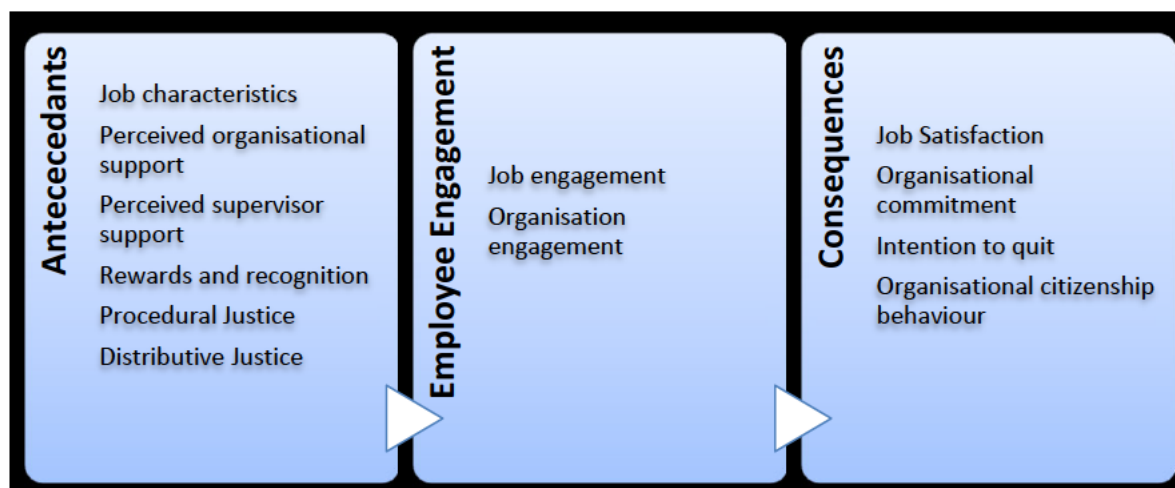
3.2.7 Antecedents and consequences of work engagement

Understanding the antecedents and consequences of work engagement is crucial in the current study since it will help to determine the contribution or impact that work engagement can have in changing organisational problems.

In his study, Kahn (1990, p.156) found that "there were three psychological conditions associated with engagement or disengagement at work: meaningfulness, safety, and availability" (Khan, 1990). Thus, work engagement was experienced when psychological meaningfulness, safety and availability were present (Kahn, 1990; 2004). In addition, according to Maslach et al. (2001), "job engagement is associated with a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive

work community, fairness and justice, and meaningful and valued work” (Maslach et al., 2001, p.186). However, there were concerns that the findings failed to give reasons why people vary in their responses to the stated conditions. The current study provides partial answers by examining managers’ perceptions of employees’ varying levels of work engagement, intrinsic motivation and job satisfaction. However, the understanding of these three aspects cannot be done in isolation of the job and personal resources. This leads to the conclusion that “the amount of cognitive, emotional, and physical resources that an individual is prepared to devote in the performance of one’s work roles is contingent on the economic and socio-emotional resources received from the organization”(Maslach et al.,2001, p.221). An analysis of the literature reveals a dearth of research on the factors that predict employee engagement. However, some potential antecedents can be derived from Kahn’s (1990) and Maslach et al.’s (2001) model.

Figure 3.1: A model of the antecedents and consequences of employee engagement



Adapted from Drake (2000)

Maslach et al. (2001) have also suggested that, while a lack of rewards and recognition can lead to burnout, appropriate recognition and reward is important for engagement.

3.2.8 Consequences of employee engagement

Employee engagement remains a popular concept in theory and praxis for industrial psychologists and human resources practitioners. Its popularity is directly related to the notion that highly engaged individuals will result in optimistic outcomes for organisations. However, as Harter et al., (2002, p.135) “engagement is an individual-level construct and if it does lead to business results, it must first impact individual-level outcomes. Along these lines, there is reason to expect employee engagement to be related to individuals’ attitudes,

intentions, and behaviours”.

3.3 Job satisfaction

Job satisfaction is defined as “the extent to which people like or dislike their job” (Spector, 1997, p.2). Thus, job satisfaction implies an affective reaction towards a job. Hoppock (1935) defined job satisfaction as an outcome of psychological, environmental and physical circumstances combined together (Yew, 2008). Locke (1969) defined job satisfaction as the result of an employee’s evaluation of job experience by drawing a comparison between what is expected from the job and what is actually obtained (Locke, 1969). If the expected outcomes are met, employees develop a positive emotional attachment to the organisation (Yew, 2008). Job satisfaction is a positive emotional state which arises from a positive appraisal of employee job experience (Locke & Lathan, 1976). This involves employees’ appraisal of how well their jobs provide those things that are viewed as important. Job satisfaction was further defined as “a personal evaluation of the job and associated conditions” (Schneider & Snyder, 1975, p.197). This is often determined by how well outcome expectations are met or exceeded. Job satisfaction is concerned with the evaluation and preparation of a person’s job. These perceptions are influenced by an employee’s unique experiences, needs, values and expectations (Buitendach & de Witte, 2005). People evaluate their job on the basis of factors which they regard as being important to them (Butendach et.al, 2009). The working definition of job satisfaction in most research definitions has been that by Locke, who stated that job satisfaction “is a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke, 1976, p.1304). The level of satisfaction an employee experiences is influenced by how he perceives and appraises his commitment to the organisation (Buitendach & de Witte, 2005). Robert Hoppock (1935) coined the term ‘job satisfaction’ (Yew, 2008).

Job satisfaction has been found to have significant associations with many variables, resulting in it being extensively researched (Yousef, 2000, cited in Buitendach & De Witte, 2005). For instance, a positive relationship was found between job satisfaction, organisational commitment and job performance (Judge, Boudreau & Bret 1994, cited in Buitendach & De Witte, 2005 Witte, 2005); Babin & Boles (1996) cited in Buitendach & De Witte). Luthan (1998) state that job satisfaction is an emotional response to a job situation. This is often determined by how well outcome expectations are met or exceeded. Job satisfaction is concerned with the evaluation and preparation of a person’s job. These perceptions are influenced by an employee’s unique experiences, needs, values and expectations (Buitendach

& de Witte, 2005). People “evaluate their job on the basis of factors which they regard as being important to them” (Sempane, Rieger & Roodt, 2002, p.123). Job satisfaction is a multifaceted construct that comprises both intrinsic and extrinsic job elements (Buitendach & De Witte, 2005).

Intrinsic elements of job satisfaction arise from rewards that are mediated internally. Extrinsic elements arise from rewards that are mediated externally (Mosadeghrad, 2008). External rewards refer to aspects that have little to do with work roles and internal rewards refer to work roles themselves (Buitendach & De Witte, 2005). The former includes working conditions and pay, and the latter refers to factors such as skill utilisation and autonomy (Buitendach & De Witte, 2005). Intrinsic determinants of job satisfaction pertain to the nature of and activities inherent to a set of tasks such as appreciation, feeling and intellectual stimulation (Hezberg et al., 1959). This is a subjective variable which is not always quantifiable but is experienced when employees fulfil the needs which they consider important in their work role. Growth when at work is essential for both individual employees’ gain as well as for the organisation, calling for the need for organisations to present employees with such opportunities (Patton & McIlveen, 2009). "Satisfaction dimensions such as nature of the job, management and supervision, task requirement, co-workers relations, job security and recognition, had more effect on employee commitment in organisational set up” (Mosadeghad et al; 2008, p.132). Chadsey (1999) disagrees that the type of relationship that exists and interpersonal misunderstanding can provoke a chain reaction which eventually produces organisational conflict. Job satisfaction, as a crucial aspect in an organisation, attracted a lot of research, with most studies being dominated by the person- environment fit paradigm (Mottaz, 1985). This implies that the greater the ability of a work environment to fulfil employees needs and demands, the higher the job satisfaction levels.

The main criticism in the field of job satisfaction is based on the primary motive of research, which focuses on finding ways to maximise productivity by increasing employee satisfaction. Knowledge is produced not with the aim of enhancing satisfaction for the sole benefit of employees. In so doing, the values and personal needs of employees’ can be taken for granted, leading to the exploitation of workers. Therefore, future research should attempt to create a balance between the needs and values of employers and employees (Bussing et al., 1999) job satisfaction (Saari et al., 2004). In addition, it is crucial to have a thorough understanding of the nature of the work that employees are subjected to. The next section therefore looks at the antecedents of job satisfaction.

3.3.1 Antecedents of Job satisfaction

Personal determinants and organisational factors are two broad categories in which factors affecting job satisfaction can be grouped (Nell et al., 2004). Personal determinants of job satisfaction include race, gender, educational level, tenure, age and marital status (DeSantis & Durst, 1996). However, these were also indicated in other studies Greenhaus, Parasuraman and Wormley (1990). Gender is one of the factors that affect job satisfaction. The relationship between gender and job satisfaction has been extensively researched, yielding contradictory results (Chiu, 1998). In one of such studies, it was found that “females attach more importance to social factors, while males place greater value on pay, advancement and other extrinsic aspects” (Murray & Atkinson, 1981, p.213). This was also supported in some findings which revealed “a significant difference between males and females in terms of job dimensions impacting on job satisfaction where males had higher satisfaction with remuneration compared to females who had higher satisfaction with core workers than males” (Tang & Talpade, 1999, p.189). However, although these findings reveal a relationship between gender and job satisfaction. Some studies failed to find the influence of gender on job satisfaction (Oshagbemi, 2000; Donohue & Heywood 2004). On the other hand, the majority of the studies which investigated the influence of educational level on job satisfaction revealed no consistent pattern (KhMetle, 2003; Crossman & Abou-Zaki, 2003). However, in a similar study, KhMetle (2003) reported a strong relationship between educational level and job satisfaction.

Tenure entails “the number of years spent at work by an employee” (Oshagbemi, 2003, p.182) Research conducted on tenure and job satisfaction revealed a positive relationship (Bedeian, Ferris & Kacmar 1992). Contrary to such sentiments are the findings that “longer tenure in a job may lead to boredom and lower levels of job satisfaction (Savery, 1996, p.145; Clark et al. 1996, p.167). In one of the studies, it was found that “older employees are generally happier with the jobs than younger employees, while people who are more experienced in their jobs are more highly satisfied than those who are less experienced” (Greenberg, 2008, p.156). Marital status was found to be highly related to intrinsic and overall satisfaction (Kuo and Chen, 2004).

3.3.2. Organisational Factors

Organisational factors that influence job satisfaction include fringe benefits, job security, working conditions, opportunities to interact with co-workers among others (House et al, 2002). However, these factors will be discussed in detail in the later sections of the thesis since they also form part of extrinsic factors to job satisfaction.

3.3.3 Importance of Job satisfaction

Managers today, recognise that an organisation's performance should be measured in human dimensions as well as in terms of return on investment, market share and profit after taxes etc. However, many reasons have been put forth in support of the desirability of attending to workers' satisfaction. Considering that most people must work, and that most people will spend the majority of their adult lives at work, it can be argued that employers have a moral obligation to make the experience personally rewarding (or, at a minimum, not painful or dehumanising). Workers' physical and mental well-being appear to be correlated with job satisfaction in that highly satisfied workers have better physical and mental health records.

Job satisfaction can also play an important role in a company's ability to attract and retain qualified workers. An organisation's very survival rests heavily on this ability, and a company that is known to mistreat its personnel will have difficulty in drawing the best people to staff positions. Low levels of job satisfaction have been related to such problems as turnover, absenteeism, union-organising activity and the filing of grievances. As a result of the idea that such problems can be costly and disruptive to an organisation, they cannot be lightly dismissed. Thus, job satisfaction is exceedingly important for the wellbeing of the organisation as well as the individual.

3.3.4 Sources of Job satisfaction

Many studies have been conducted on the aspect of job satisfaction and their results show more or less the same findings. For instance, on one of the variables that have been looked at, that is job level, it has been found that satisfaction is higher among employees in higher level positions while satisfaction tends to be lowest among holders of jobs that can be characterised as hot, heavy or dangerous, such as work in steel mills and unskilled jobs. Length of service and race are also frequently correlated with job satisfaction. For example, long-termers tend to be in higher-level jobs and African-American workers tend to be less educated and more likely to hold unskilled positions. Evidence of sex differences in job satisfaction level has

been mixed. It is possible, however, that rising expectations of women in the labour force may produce differences in job satisfaction between the sexes.

Organisational size has also been correlated with job satisfaction. Employees in smaller organisations tend to be more satisfied than employees in larger organisations. The size of an organisation may itself affect job satisfaction, but size is associated with more specific sources of satisfaction.

3.3.5 Intrinsic versus Extrinsic sources of Satisfaction

Sources of job satisfaction can be classified in two ways that is intrinsic and extrinsic. Intrinsic sources come from within the individual and have psychological value. Intrinsic satisfactions are self-administered. Example of sources of intrinsic satisfaction includes autonomy. On the other hand, extrinsic sources of satisfaction originate from outside the individual that is they come from a person's environment. Examples of sources of extrinsic satisfaction are job security and fringe benefits, working conditions and opportunities to interact with co-workers. However, a dual purpose was found in some factors.

3.3.5.1 Internal job satisfaction

There are six job satisfaction factors that are inherent in the work itself and these are: the work, job variety, task specialisation, autonomy, goal determination, feedback and recognition. These factors are said to be the most difficult to alter without leaving the job (Yankeelovet al., 2009). The work itself has been coined to be the prime factor in job satisfaction for it is difficult, if not impossible, to have job satisfaction if one hates the work one does (Yankeelovet al., 2009). To avoid unnecessary career changes, it is important to distinguish between disliking the work and disliking one's current employer. As the number of skills used in performing a job increases (Job variety), job satisfaction also increases (Yankeelovet al., 2009). In addition, job satisfaction increases as the amount of knowledge needed to perform a job increases. As autonomy or freedom increases, so does job satisfaction. The need for autonomy is sometimes felt more strongly in people trying to fulfil the higher level needs on Maslow's hierarchy of needs. These higher level needs would include the need for status and self-esteem, self-actualisation and knowledge.

Goal determination

Goal determination refers to the freedom people have to establish their own work goals and to determine their own criteria for success. The greater the freedom to determine goals and

success criteria, the greater the job satisfaction (Drake, 2009). Freedom to determine goals may not increase job satisfaction but, in most cases, having clear, explicit goals is better than having vague ones. Having goals and meeting them, coupled with having the freedom to set goals, can also increase job satisfaction.

Feedback and Recognition

To maximise the effect on job satisfaction, feedback must be accurate, timely and frequent. To be accurate, the people doing a job must know they are doing a good job and people not doing a good job must also know how they are performing. If workers are all told they are doing well, the effect on motivation and job satisfaction can be negative. If all are told they are doing well when some are not, then the value of the feedback decreases. Secondly, if all are told they are doing well when some are not, then the ones who are performing well may allow their performance to slip. Why should they try harder if everyone receives the same feedback regardless of performance? By recognising a well done job, job satisfaction increases (Drake, 2009).

There are many forms of recognition ranging from a public acknowledgement of one's contribution, to an outstanding service acknowledgement of employee-of-the-month or year award, to a promotion. Recognition does not have to be as timely or as frequent as feedback.

3.3.5.2 External Job Satisfaction Factors

External job satisfaction factors are related to the work or to the working environment. These factors include achievement, role ambiguity and role conflict, opportunity, job security, social interaction, supervision, organisational culture, work schedules, seniority and compensation. Since these factors have been discussed in a number of sections of the thesis, they will not be explained in detail in this section. However, it is important to explore the individual factors that affect job satisfaction since some of the internal and external sources of job satisfaction are included in the discussion.

3.3.5.3 Individual Job Satisfaction

Of the three groups of factors affecting job satisfaction, the individual factors have the least to do with the actual factors. Individual factors mainly concern the person and his family and network of friends. "Individual job satisfaction factors include commitment, expectations, job involvement, effort or reward ratio, influence of co-workers, comparisons, opinions of others,

personal outlook and age (Drake, 2009). From the foregoing, it can be concluded that both task and organisational rewards contribute to job satisfaction (Yew, 2008).

It is important to note, however, that job satisfaction is a subjective variable which is not always quantifiable but is experienced when employees fulfil the needs which they consider important in their work role. “In order to increase individual satisfaction level, employees should be given advancement opportunities” (Patton & McIlveen, 2009, p.89). Bektas (2003) suggests that interaction within the group is the biggest satisfier. “Nature of the job, management and supervision, task requirement, co-workers relations, job security and recognition had more effect on employee commitment in organisational set up” (Mosadeghrad et al., 2008, p.224).

Of importance also is a positive association between pensions, profit-sharing plans and job satisfaction (Bender & Heywood, 2006). Job satisfaction is an important part of overall life satisfaction for all employees. A lot of research has been conducted on job satisfaction with the person-environment fit paradigm dominating (Mottaz, 1985). According to Bussing, Bissels, Fuchs and Perrar (1999), job satisfaction can be developed through an evaluation of a match between needs, motives, expectations and the work situation.

The main criticism in the field of job satisfaction is based on the primary motive of research which focuses on finding ways to maximise productivity by increasing employee satisfaction. Knowledge is produced not with the aim of enhancing satisfaction for the sole benefit of employees. The underlying intention is to increase productivity and further the gains of employers by motivating employees to work hard. In the process, employees’ personal needs and values can be taken for granted and management can find reasons and opportunities to exploit them. Therefore, future research should attempt to investigate the balance between the needs and values of employers and employees.

3.4 Intrinsic Motivation

Intrinsic motivation has been defined as “the stimulation that drives an individual to adopt or change behaviour for his or her own internal satisfaction or fulfilment” (Ryan & Frederick, 1997, p.193). A lot of theories have been put forth to give an understanding of intrinsic motivation. Among these theories is Hunter’s intrinsic/extrinsic motivation theory (2004). The current study will give more attention to Hunter’s theory since it has given rise to major debates around intrinsic motivation.

3.4.1 Hunter's Intrinsic/ extrinsic Theory

Madeline Hunter, who is known mainly for her work in education, proposes a two-part system of motivation. In her model, Hunter does not specify individual motivators such as money or status, but instead, she explains methods that can be used to motivate - these two types of motivation are intrinsic and extrinsic motivation. Extrinsic motivation, according to Hunter, comprises five external factors that can be affected from the outside. These include: level of concern, success, feedback and interest and feeling tone.

3.4.2 Relationship among Work Engagement, Intrinsic Motivation and Job Satisfaction

To date, little research on the relationship between work engagement, intrinsic motivation and job satisfaction has been conducted. However, there are some studies on the relationship between job satisfaction and work engagement, although they are few. For instance, a positive relationship between work engagement and job satisfaction was found among workers in a surface coatings manufacturing organisation in Gauteng (Durand, 2008). On the other hand, studies that investigated job satisfaction and intrinsic motivation have consistently examined the effects of the two constructs on organisational outcomes, like job performance (Bahar, 2011).

3.5 Conclusion

This chapter has attempted to show the dimensions or angles through which work engagement, intrinsic motivation and job satisfaction can be understood. Despite the fact of it being thoroughly researched, the review of literature has shown that job satisfaction and work engagement within the Zimbabwe mining sector lacked attention, specifically the diamond mining industry. The same scenario has also been detected for intrinsic motivation, thus calling for the need to explore these constructs in Zimbabwe.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

Improving employee welfare is one of the key ingredients of organizational effectiveness and efficiency. It has been noted that every organization is working on finding ways to improve its profits as well as surviving in their business lines. Given the idea that employees have been labelled as the life blood of an organization, there has been a lot of debate concerning employees' welfare in the mining industry. Therefore, this calls for the need to have more studies that contribute to the improvement of employee welfare in organisations.

Research Questions

To reiterate, the research questions and objectives guiding this study are:

- 1) What is the relationship between job satisfaction and intrinsic motivation amongst mine workers?
- 2) What is the relationship between job satisfaction and work engagement amongst mine workers?
- 3) Is job satisfaction enhanced by intrinsic motivation and work engagement?
- 4) What are the perceptions of managers of why some employees score exceptionally high or exceptionally low on the variables?
- 5) What are the contributing factors for each employee's job satisfaction, intrinsic motivation and work engagement levels?
- 6) What are managers' perceptions of job satisfaction, intrinsic motivation and work engagement of mine workers

Research Objective(s)

The overall objective is to gain a deeper understanding of the contributions of work engagement, intrinsic motivation and job satisfaction in the enhancement of employees' welfare in a mining company. A co-relational and associative approach is used for the purpose of this study in order to establish whether:

- a. There is a significant relationship between job satisfaction and work engagement
- b. There is a significant relationship between job satisfaction and intrinsic motivation

c. Intrinsic motivation and work engagement can enhance job satisfaction

The purpose of this chapter is to describe in detail the research methodology and design utilised for the execution of this study, as highlighted in chapter 1.

4.2 Research Methodology

Research methodology entails the approach with which research is executed. Qualitative and quantitative approaches are the dominant methodologies through which research in different disciplines is conducted (Cohen, Manion & Morrison 2007: 165; Creswell 1994: 1; Denzin & Lincoln 2005:p10-12). Qualitative methodology is concerned with how people observe and describe their lives. Researchers using this approach try to portray the issue they are studying in its multifaceted form (Creswell, 1994; Leedy & Ormrod, 2001).

While quantitative methods measure a phenomenon using numbers in conjunction with statistical procedures to process data and summarise results (Creswell, 1994, p. 2; Payne & Payne 2004, p. 180), qualitative methods, as an approach to research, produce detailed and non-quantitative accounts of small groups to interpret the meaning that people make of their lives in a natural setting (Creswell, 1994, p. 2; Payne and Payne, 2004, p. 175). In addition, the mixed methods approach is where more than one method is applied in a research study (Gilbert, 2008)

Considering the nature of the research problem investigated by this study, a mixed methods approach was utilised. Thus, both qualitative and quantitative approaches were employed because of the need to have more confidence and accuracy in the research findings. Mixed methods research methodology enables multilevel analysis (i.e., in the current study, of employees in different departments as well as of different managerial perceptions of their employees). The basis of the choice of such an approach lies in its ability to strengthen validity through triangulation, as well as overcoming the weaknesses of both qualitative and quantitative methods.

The qualitative research approach was employed since it produces detailed and non-quantitative account of small groups to interpret the meaning that people make of their lives in a natural setting. Thus, in the reported research, the qualitative aspect consisted of in-depth interviews with middle and senior managers. Indeed, the use of interviews allowed a managerial voice through to complement the findings from the workers. The quantitative aspect consisted of a survey design. Survey designs were used to assess interrelationships

between the variables in the research (i.e. work engagement, intrinsic motivation and job satisfaction).

4.3 Mixed Methods Design

A mixed methods design entails the use of both quantitative and qualitative data collection techniques and analysis procedures in a research design and is divided in two ways, i.e. a mixed methods approach and a mixed method model (Saunders, Lewis & Thornhill, 2009). Research based on mixed methods requires quantitative and qualitative information. The current research adopted a mixed methods approach because of the need to have confidence in the research outcomes. This was necessitated by the use of both quantitative and qualitative approaches to investigate different aspects of the research. On one hand, a quantitative approach was used to investigate employees' levels of intrinsic motivation, work engagement and job satisfaction. On the other hand, a qualitative approach investigated managers' perceptions of intrinsic motivation, work engagement and job satisfaction. Thus, primary and secondary data methods were used in the current study.

Semi-structured interviews and questionnaires were used as data collection tools in the current study. Interviews are defined as verbal or face-to-face interaction between the researcher and the participants to solicit specific research information (Robson, 2002). There are different types of interviews and these include structured interviews, semi-structured interviews, unstructured or in-depth interviews, standardised and non-standardised interviews (Saunders, Lewis & Thornhill, 2009; Healey & Rawlinson 1993, 1994; Robson 2002). The current study made use of semi-structured interviews where the researcher had a list of themes and questions to be covered within the research process. Although this was the case, the order of questions varied depending with the conversation. Through semi-structured interviews, the researcher had an opportunity to probe and ask follow-up questions. This allowed the gathering of more important information.

Compared with other data-collecting instruments, such as questionnaires, interviews are normally flexible, iterative and continuous (Babbie 2008; O'Leary 2004; Robson 2002; Patton 2002). Such characteristics of interviews proved to be useful in the current study in that, since qualitative interviews consist of open-ended questions, both the researcher and the respondents enjoy a great level of flexibility and freedom. Thus, participants had freedom to express their views in their own terms such that reliable and comparable qualitative data was obtained. Moreover, the content, sequence and wording of the questions (formulated around

the research objective) are entirely in the hands of the interviewer (Cohen, Manion & Morrison, 2000, p. 273; Leedy & Ormrod, 2005, p.146; Robson, 2002, p. 270). This was useful in the current study in that through preparing the questions ahead of time, the interviewer was competent and well prepared for the interviews.

In addition, qualitative interviews allow for a natural conversation between the interviewer and the interviewee to develop in the general area of interest of the researcher (Saunders, Lewis & Thornhill, 2009). To achieve this, the current research had a five minute introductory period for each interview conducted. This helped to neutralise any preconceptions of the interviewee or the researcher. Such a practice was crucial in creating a climate conducive to truthful, unrestricted, unpressurised and thoughtful responses.

The interview process involved collecting information relating to managers' perceptions of why some employees score exceptionally high or exceptionally low on the variables. In addition, interviews were also conducted with the managers to find out their perceptions of job satisfaction, intrinsic motivation and job satisfaction. Moreover, a semi-structured interview was conducted with the trade union representative of the company to determine the role the union plays in employees' perceptions of work engagement, intrinsic motivation and job satisfaction. All these interviews were recorded.

The interview process followed Kvale's seven stages, listed by Babbie (1998, p. 336) as thematising, designing, interviewing, transcribing, analyzing, verifying and reporting. The first stage established the purpose of the interview and important concepts to be explored and outlined broader questions in the form of an interview guide (Appendix D). The designing stage involved laying out the process through which the interview would be conducted, in cognizance of all ethical considerations. In this regard, informed consent (Appendix E) was sought from all those who participated in the interviews. After interviewing, the recorded interviews were transcribed, presented and analysed in chapter six.

4.4 Research Design

Research design entails the general plan, framework or structure the researcher employs to answer the research questions (Straunders, Lewis & Thornhill, 2009; Bryman, 2004; Coldwell & Herbst, 2004). There are different types of case studies and these include descriptive, experimental, quasi-experimental, historical, ethnographic and case studies (Straunders, Lewis & Thornhill, 2009; Robson, 2002; Hakim, 2000; Coghlan & Brannick, 2005; Bryman, 1989). The current study's research design took the form of a case

study 'design'. However, it should be noted that case studies are not the only means of conducting research. Although used in the current research because of the need to have an empirical investigation of work engagement, intrinsic motivation and job satisfaction within an unexplored mining sector, an alternative could be cross-sectional study since this was an investigation of a specific mine.

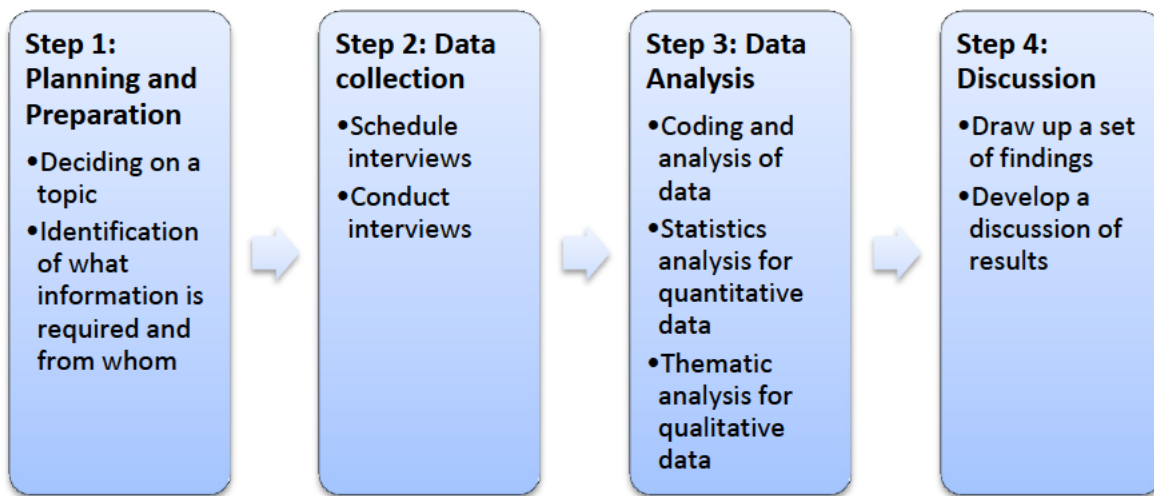
A case study is a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context, using multiple sources of evidence (Saunders, Lewis & Thornhill, 2009). Given that the selection of a research design has implications for a variety of issues, such as the external validity of findings and researchers' ability to impute causality of their findings (Bryman, 2004) a case study was used because of its ability to give the researcher a rich understanding of the context of the research and the processes being enacted (Mouris & Wood, 1991).

In addition, a case study was used because of its considerable ability to generate answers to the questions: why, what, and how of the research. Moreover, the current research was an exploratory study since it sake new insights, asked questions and assessed phenomena of work engagement, intrinsic motivation and job satisfaction in a new light (Saunders, Lewis & Thornhill, 2009).

Thus, through studying a diamond mining company in Zimbabwe, the researcher managed to generate answers on the what, how and why questions of the three aspects under study i.e. Work engagement, intrinsic motivation and job satisfaction. This was necessitated through the use of detailed, in-depth data collection that includes multiple sources of information, such as observations, interviews, audio-visual material, documents and reports (Creswell, 2003). Thus, given the need to have a clear picture of work engagement, intrinsic motivation and job satisfaction at the diamond mining company under study, a descriptive study was adopted.

Coming up with a case study involves a lot of factors that have to be taken into consideration. Among them are the type of research questions posed, the extent of the investigator's control and the degree of focus on contemporary events instead of historical ones (Yin, 2009). In summary, Neale, Thapa and Boyce (2006) provided the steps which need to be considered when coming up with a case study design. The current research followed these steps, as shown in the diagram below.

Figure 4.1: The Research Process applied for this study



The diagram above is a representation of the case study design implemented in the current research.

4.4.1 The Study Setting and Research Participants

The study focused on the shop-floor employees, managers and worker representatives of a mining company in Zimbabwe. A shop-floor employee, in this study, refers to any individual who is directly involved with production in the mining company under study. A manager refers to a person who is responsible for planning and directing the work of a group of individuals, monitoring their work and taking corrective action when necessary. A worker representative implies an individual who is a member of a trade union and represents their work colleagues in relations with an employer.

The reason that motivated the researcher to draw participants from different sections of the company was to obtain a rich insight into the three constructs of work engagement, intrinsic motivation and job satisfaction.

A note of recommendation to encourage participation in the research from the Human Resources Executive of the company was sent to the respective departments and sites of the company. The researcher then started to make contact with different departments. A formal request for permission to carry out the survey within respective departments was made.

The current study used descriptive and survey designs. A survey design entails a design in which data are collected with questionnaires or through personal interviews with members of an identified population (Gonzalez & Etinge, 2010). In the current research, a survey design

using questionnaires and interviews was used. Questionnaires were issued to the participants and semi-structured interviews were conducted with the functional managers and the trade union representatives of the company. The questionnaires were self-administered. Doing so is useful in describing the characteristics of a larger population as well as make measurement more precise by enforcing uniform definitions upon the participants (Gonzalez & Eltinge, 2010).

Permission was granted from the mining company to engage employees at their Chiadzwa site. The fieldwork commenced after ethical clearance was obtained. Informed consent was obtained from all participants and it was made clear that participation was voluntary and that participants were allowed to withdraw their information at any time.

4.4.2 Sampling

There are four sampling procedures; these are: probability sampling, purposive sampling, convenience sampling and mixed methods sampling. Of these, probability sampling is primarily used in quantitative studies whereas purposive sampling is used in qualitative studies. The qualitative aspect of the current study elicited views from purposively selected participants.

Purposive sampling entails selecting units, for example individuals and institutions, based on specific purposes associated with answering a research study's questions (Clark & Creswell, 2008). Purposive sampling was further defined as a type of sampling in which particular settings, persons or events are deliberately selected for the important information they can provide that cannot be obtained adequately from other choices (Maxwell, 1997). Purposive sampling was used in the qualitative aspect of the current study because of the need to achieve representativeness of the organization under study.

Since the current study is a case study, it was important to interview participants with the most relevant information. Doing so provided a true picture of the organization in as far as the constructs under study are concerned (Sekeran, 2003; Saunders, Lewis & Thornhill, 2009). The rationale for this was that, by deliberately targeting line managers, the study would obtain the most meaningful data on their perceptions of job satisfaction, worker engagement and intrinsic motivation.

However, shortcomings associated with this purposive sampling relate to the selection criteria which is said to be subjective and can be very arbitrary (Clark & Creswell, 2008). To

overcome problems with respect to the selection criteria, the researcher used a larger sample. For instance, out of 11 functional departments in the company, the researcher managed to interview 9 functional managers.

The quantitative aspect of the study used stratified random sampling which entails the division of a population into smaller groups called strata. These strata are based on members' shared attributes or characteristics (Sekaran, 2003). In the current study, the investigations were conducted on the workforce as they appear in their respective work departments. Thus, strata were formed into departments from each of which participants were randomly selected (depending on their numbers), to fill in the questionnaires.

This sampling technique was seen as appropriate because of the current study's need to understand differences among the company employees on their levels of work engagement, intrinsic motivation and job satisfaction. Moreover, the need for generalisations with external validity triggered the researcher's use of stratified random sampling. However, the current study managed to overcome certain challenges aligned with stratified random sampling in that the list of the population of the study was available and complete. This was necessitated by the information provided by different department heads. Thus, the problem of unavailability and an incomplete population list, which are normally seen as barriers to obtaining effective results from the use of stratified random sampling, was never a problem in the current study (Sekaran, 2003).

4.4.2.1 Profile of the Sample

The population for this study consisted of 220 miners and 11 functional managers in a mining company in Zimbabwe. For the cross sectional survey, the sample was drawn using stratified random sampling (Cochran, 2011) since there are different functional categories of miners. A sampling frame was obtained from the human resources department which allowed the researcher to group the miners into different groups, such as functional categories.

A total of approximately 220 shop-floor employees are employed at the mining company. Out of a targeted 220 participants (Shop-floor workers), a randomly selected sample of 170 participants (n=170) took part in the study and completed the questionnaires that were distributed. The response rate is acceptable as 77% of the population was accessed, which is an appropriate sample size for this population (Sekaran, 2000). Such a sample size, also allowed the researcher to conduct statistical procedures, such as standard multiple regression (Tabachnick & Fidell, 2007). The population of functional managers consisted of all

functional managers employed by the company.

The majority of the sample comprised males (78%) compared with females (20%) while 2% did not mention their gender status. Such trends prevailed because there were more males employed within the population females. In the study, the majority of the participants belonged to the age category of less than 25 years old, followed by the 25-35 years group (56.37%), 36-45 years (25.16%), 46-55 years (8.5%) and 56+ (3.2%). Therefore, it can be safely concluded that the majority of the sample used in the current study were younger participants, with a cumulative percentage of 56.37% of participants being less than 25 years. The majority of the participants were single (45%), followed by married (44%) divorced (3%) and widowed (3%).

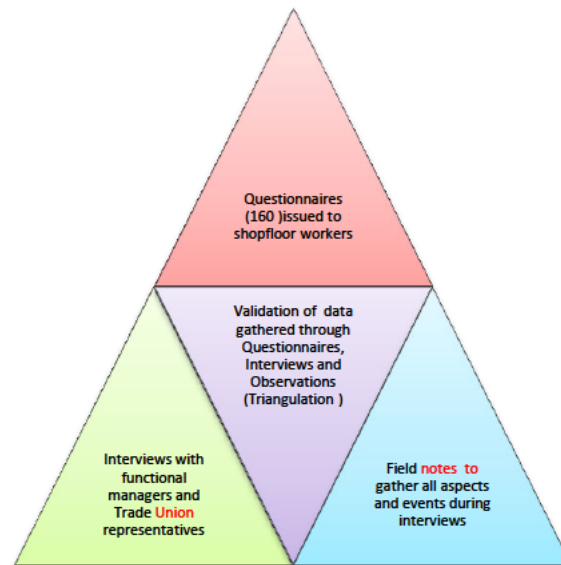
4.5 Data Collection Methods

Since the current research is a mixed research study, three data collection techniques i.e. questionnaires, observations and interviews, were used. Thus, qualitative data was collected through interviews whilst questionnaires were used to collect quantitative data. In addition, the researcher kept a diary where observations were noted and recorded. In the current study, triangulation enabled the researcher to have a clear understanding of work engagement, intrinsic motivation and job satisfaction through cross-checking the obtained results against results of a different method in another study (Bryman & Bell, 2007). Triangulation involves measuring a phenomenon in two or three (or more) different ways in order to generate a more accurate measurement of it (Gilbert, 2008). Triangulation also entails using two or more methods or sources of data, so that findings can be cross-checked and validated (Bryman, 2004).

Triangulation can take different forms, viz., data triangulation, methodological triangulation, theoretical triangulation, investigator triangulation and environmental triangulation (Bryman & Bell, 2007). The diagram below shows how the aspect of triangulation applies in the current study.

Interviews and observations form the qualitative aspect whereas questionnaires represent the quantitative aspect of the research. Thus, when combined, the validity of the two approaches can be determined through triangulation.

Figure 4.2: Triangulation applied in this study



4.5.1 Research Instruments

For the quantitative survey component of the study, three standardised questionnaires were used. These questionnaires are the Utrecht Work Engagement Survey (UWES), the Minnesota Satisfaction Questionnaire (MSQ) and the Intrinsic Motivation Inventory (IMI). In addition, a biographical data sheet was administered to gather information on the participants' age, marital status, functional category, tenure and qualifications.

In the tradition of research, the three questionnaires were tested on 9 employees from different functions of the organization. Stratified random sampling was used to select participants for the pilot study. Ethical considerations, like confidentiality and informed consent, were applied throughout this process. Pre-testing is intended to measure the effectiveness of the instrument in relation to aspects such as its length, wording and validity whilst the pilot study is the preliminary small study (Treece & Treece, 1986). Thorough scrutiny and analysis of the instruments was done by lecturers who made several contributions, especially on the wording and rephrasing of the questions.

4.5.1.1 Reliability and Validity of the Utrecht Work Engagement Scale (UWES)

Engagement levels of the participants in the current study were measured using UWES. This instrument was chosen for the current study because of its perceived suitability and conformance to the definition of work engagement. Within the definition of engagement are three concepts which include vigour, absorption and dedication (Schaufeli & Bakker, 2003). Considerable research has been done on this instrument and reliability was found to be

satisfactory. The UWES also has acceptable internal reliability with Cronbach alpha scores at 0.70. According to Schaufeli and Bakker (2003), test-retest reliability indicated stability over time, as was evidenced by two longitudinal studies. Internal consistency and reliability for the three subscales of the UWES have been found to range between 0.68 and 0.91 (Coetzee & Rothman, 2005). Furthermore, Storm and Rothmann (2003), Stander and Rothmann (2010) and Buitendach (2011) have also demonstrated that the UWES is valid for work done in the South African and Southern African context, with high levels of internal consistency of the scale items: vigour: 0.79; dedication: 0.89; and absorption: 0.78 (Storm & Rothmann, 2003).

4.5.1.2 Reliability and Validity of the Intrinsic Motivation Inventory (IMI)

The Intrinsic Motivation Inventory (IMI) is a multi-dimensional measurement device intended to assess participants' subjective experience related to a target activity in laboratory experiments (Butler, 1988). It has been used in several experiments related to intrinsic motivation and self-regulation, for example in studies conducted by Ryan, 1982, Ryan, Mims & Leone, 1994 and Connell & Plant, 1990. The instrument assesses participants' interest or enjoyment, perceived competence, effort, value/usefulness, felt pressure and tension, and perceived choice while performing a given activity, thus yielding six subscale scores. However, it should be noted that it is the interest or enjoyment subscale which is considered the self-report measure of intrinsic motivation. Thus, although the overall questionnaire is called the Intrinsic Motivation Inventory, it is only the one subscale that assesses intrinsic motivation, per se (Butler, 1988).

The IMI "consists of varied numbers of items from these subscales, all of which have been shown to be factor-analytically coherent and stable across a variety of tasks, conditions and settings" (Mc Auley, 1989, p.182). The general criteria for inclusion of items on subscales have been a factor loading of at least 0.6 on the appropriate subscale, and no cross loadings above 0.4 (Mc Auley, 1989). However, it is recommended that investigators need to perform their own factor analyses on new data sets (Mc Auley, 1989)

4.5.1.3 Reliability and Validity of the Minnesota Job Satisfaction Questionnaire (MSQ 20)

The Minnesota Job Satisfaction Questionnaire measures twenty different areas that pertain to the job. Among others, aspects like autonomy, job variety, recognition and opportunity for promotion, the nature of work, and the work environment taps into the way company policies are put in place. In addition, the MSQ 20 measures extrinsic job satisfaction (for example, the

chance to be a person of significance in the community) and intrinsic job satisfaction (for example, the chance to do things that do not go against one's conscience)" (Labuschagne et al., 2005, p.29).

The alpha coefficients for the MSQ 20 range from 0.87 to 0.95, which supports the internal consistency of the scale(Labuschagne et al., 2005, p.29).In their study, Buitendach and Rothman(cited in Labuschagne et al., 2005) "obtained a reliability coefficient for the MSQ 20 of 0.82 for the extrinsic job satisfaction scale and 0.79 for the intrinsic job satisfaction scale"(p. 29).In addition, evidence for the validity of MSQ as a measure of general job satisfaction came from the test's performance according to theoretical expectation and from construct validation studies based on the theory of work adjustment (Weiss et al., as cited in Mitchell,1994).

4.5.1.4 Interviews

For the qualitative component of the study, individual interviews and field notes were used. Interviews conducted in the study were tape-recorded. This method was used because of its ability to maintain all verbal productions of the interview. In addition, note taking was also done by the researcher. This helped the researcher to note key points raised by the interviewee, which then helped in the building up of other questions relevant to the study.

4.5.1.5 Field notes

Despite using a tape recorder, the researcher also made field notes, which comprised interesting aspects or events during interviews as well as when touring the research site. These field notes were important in making the researcher remember major events or points that came in during the research process, especially as the recorded information was transcribed. Moreover, since the site of the research was a diamond mining environment, the use of cameras was prohibited with the result that events that could have been of use to the current research study could not be captured digitally, hence the need to take down notes (Terre Blanche, Durrheim & Painter, 2006).According to Bryman and Bell (2007), field notes can be classified into mental notes, jotted notes and full field notes. In the current research, jotted notes were used since they would help to refresh the researcher's memory of the major events during research. In addition, by taking field notes, the researcher was able to do some follow-ups of certain aspects. For instance, when conducting interviews with managers, a certain aspect maybe repeated by several managers so the researcher would do a follow-up on that aspect through observation, for example.

4.5.2 Overall Reliability and Validity

Cronbach Alpha coefficients were used to assess the internal consistency of the measuring instruments. Nunnally and Bernstein (1994) suggest that a Cronbach Alpha of at least 0.70 is an acceptable level of internal consistency (Fields & Buitendach, 2011, p.6). Validity of the qualitative data was ensured through triangulation of the interviews with various documentary sources, such as company reports.

4.6 Data Presentation and Analysis

This study posited the need for both statistical and descriptive analysis. In the analysis of the obtained data, the SPSS 19 programme was used. In addition, descriptive and inferential statistics were used in order to gain an understanding of the obtained data. Descriptive statistics that were used in this study included standard deviation, range and mean. These descriptive statistics provided a description of the data which then enhanced the understanding of the obtained data.

To identify relationships on work engagement, intrinsic motivation and job satisfaction, Chi-Square tests were conducted. Thus, the statistical significance was set at $p < 0.05$.

To identify the factors that play a significant role in determining job satisfaction, a work engagement and intrinsic motivation cumulative logistic regression model was used. In addition, a table of p- values was constructed in order to determine the significance of the variables. Probability graphs were constructed in order to identify changes caused by different elements of intrinsic motivation on job satisfaction and work engagement. This technique was used as a result of the existence of ordinal responses.

To identify the contributing factors for each employee's job satisfaction, intrinsic motivation and work engagement levels, factor analysis was conducted. This reduced the large number of items into a smaller set of underlying factors that summarise the major contributing factors affecting the three variables (Govender, 2006, p.59).

To determine the reliability of the instruments used in the study, Cronbach's Alpha was conducted. Cronbach's Alpha reliability coefficient normally ranges between 0 and 1, although there is no value.

Thematic analysis was done to analyse the qualitative data of the current research. Thematic analysis involves a search for themes that develop in relation to the investigation and description of a phenomenon (Clark & Creswell, 2009). Thus, after going through the

transcripts several times as well as having a thorough investigation of the three constructs under study, themes and patterns relating to the variables of job satisfaction, motivation and work engagement were identified and coded in the interview transcripts.

In undertaking thematic analysis, the researcher followed three steps proposed by Thomas and Harden (2007). Thus, the researcher began by doing free line by line conducting, followed by organizing codes into areas to create themes and finally, construction of analytical themes. Thus, the emerging themes were chosen according to their relevance to the research questions.

4.7 Limitations of the study

Studies of the aspects of work engagement, job satisfaction and intrinsic motivation in one company in a mining sector have been rare, hence the reason for carrying out the current study. However, there are some limitations associated with the current study. For instance, the study is limited to one company which maybe generalised to mean that what is happening in this company maybe happening in other companies.

Also important to note is the fact that diamond was discovered recently by the public at Marange in Zimbabwe and diamond mining has become a sensitive issue. This raises the probability that workers could be coached or be selective with the information they give to outsiders. With such a scenario, the information obtained maybe inadequate or culched to fulfil management interests. It is feared that this may have impacted on the validity of the findings.

Although this study has shown work engagement, intrinsic motivation and job satisfaction at the company under study, this does not mean that work engagement at this company is a result of intrinsic motivation. Hence, the partial view of factors that contributes to work engagement.

4.8 Summary

In the current chapter, the research methodology which directed the research study was outlined. The chapter's aim was to provide information on the research design used, participants in the study and the sampling methods that were used. Moreover, the measuring instruments used for data collection, their validity and reliability levels were also discussed. The chapter further discussed statistical analysis procedure as it was done in the study. The chapter concluded by giving the procedure which was undertaken for data collection and

ethical considerations for the study. The next chapter presents quantitative study findings.

CHAPTER 5: WORK ENGAGEMENT, INTRINSIC MOTIVATION AND JOB SATISFACTION

QUANTITATIVE FINDINGS

5.1 Introduction

The purpose of this chapter is to present and analyse the quantitative findings of the study. Firstly, some descriptive statistics of each of the measures of the study as well as Cronbach Alpha coefficients for each of the instruments are outlined. Results of exploratory factor analysis on the UWES, IMI and MSQ are also presented. The results from the Pearson product-moment correlation coefficients are discussed in order to show the relationships found among the research variables. This is followed by multiple regression analysis to determine whether intrinsic motivation and work engagement enhance job satisfaction, and other regression analyses undertaken in order to test the hypothesised effects for each hypothesised relationship in the current study.

5.2 Descriptive statistics

The majority of employees in this study are males (78%). Such gender representation echoes the assumption that work is primarily the domain of men and home the domain of women, such that the two spheres are not connected. This then affects working practices and family roles (Rapoport, Bailyn, Fletcher & Pruitt, 2002; Bailyn, 2007; Lewis, 1997, 2001). Such trends have dominated the diamond industry, where males continue to dominate the industry. Hence, it is expected that the majority of the responses will be from male because of the nature of the workforce that this study is exploring. Only 2% of the sample did not specify their gender.

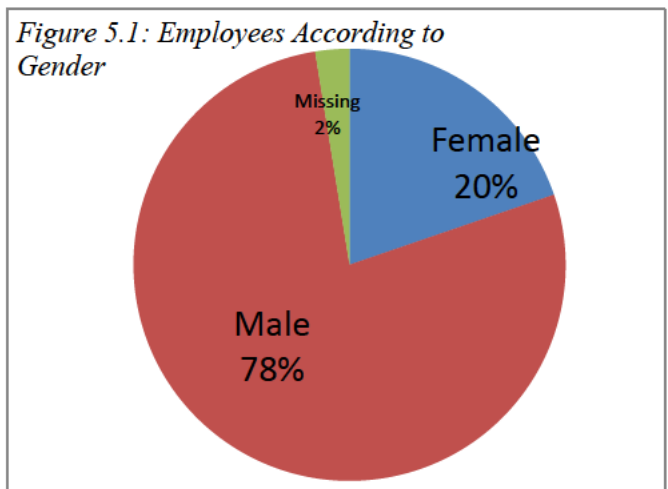
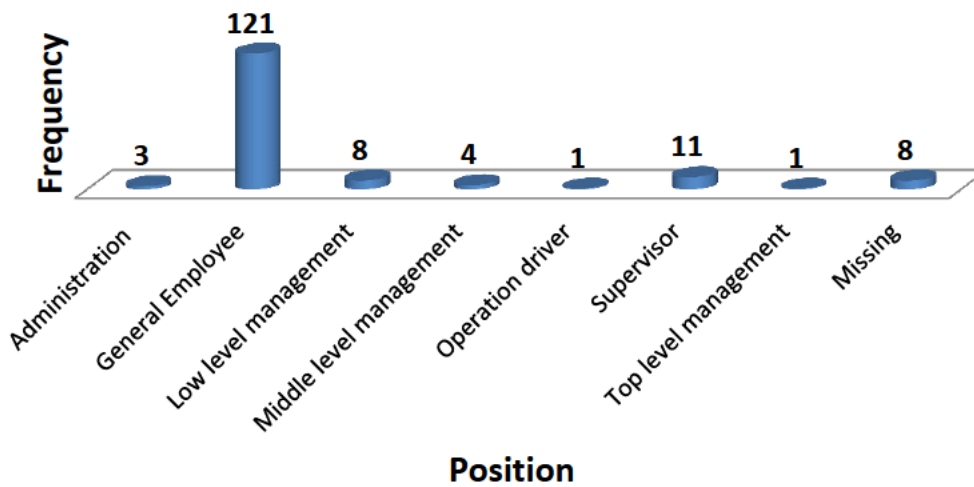


Figure 5.2 below presents the distribution of participants according to job positions in the workforce. The figure indicates that the majority of participants were general employees. There is only 1 operational driver and 1 top level manager in the company. There are 3 employees responsible for the company's administration.

Figure 5.2: The Distribution of Employees According to Position

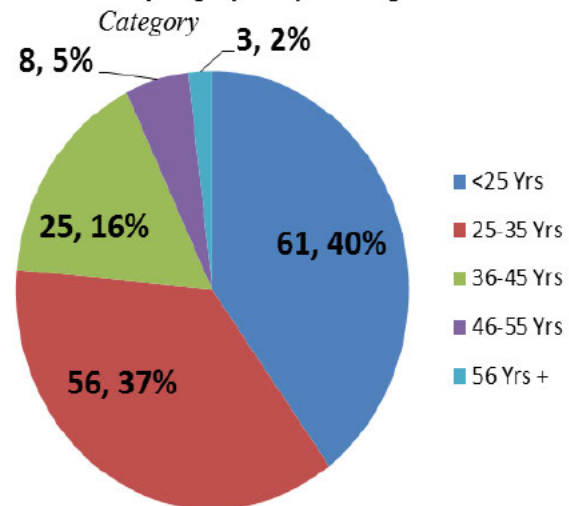


As far as management is concerned, the low management level consists of 8 employees while the middle management has 4 employees.

Aggregated in terms of age, the results show that the company under study has a young workforce. The chart below presents the age of the respondents.

It is clear from the chart that this company has a young population, with the majority below 35 years (77%). About 16% of the employees in the company are between the ages of 36-45 years. The employees between the ages of 46-55 constitute 5%, while only 3 employees are 56 years and above.

Figure 5.3: Distribution of Employees by their Age-Category



The next table further disaggregates the distribution of the participants according to their working position and gender. This is to provide a picture regarding the kinds of position females hold in the company of interest.

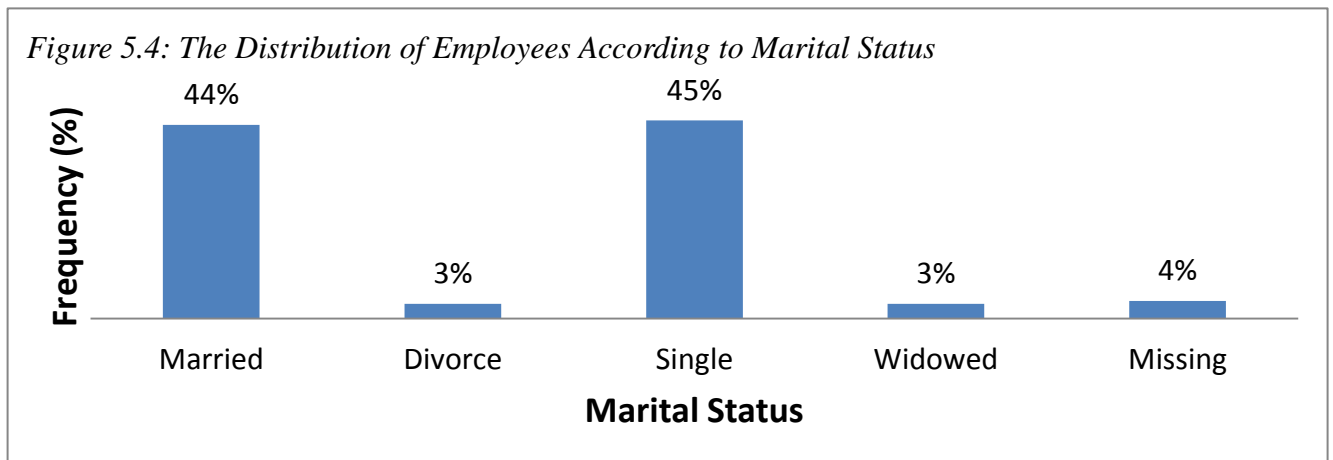
Table 5.1: Position According to Gender

	No	%
Administrator	<u>3</u>	<u>1.99%</u>
FEMALE	2	1.32%
MALE	1	0.66%
General employee	<u>121</u>	<u>79.47%</u>
FEMALE	25	16.56%
MALE	95	62.91%
Low level manager	<u>8</u>	<u>5.30%</u>
FEMALE	1	0.66%
MALE	7	4.64%
Middle level manager	<u>4</u>	<u>2.65%</u>
FEMALE	1	0.66%
MALE	3	1.99%
Operator-Driver	<u>1</u>	<u>0.66%</u>
MALE	1	0.66%
Supervisor	<u>11</u>	<u>7.28%</u>
MALE	11	7.28%
Top-level manager	<u>1</u>	<u>0.66%</u>
FEMALE	1	0.66%
(blank)	<u>8</u>	<u>1.99%</u>
FEMALE	1	0.66%
MALE	7	1.32%
Grand Total	157	100.00%

The above table shows that there are a fair number of females employed as general employees (16% of the general employees are females). Only 1 female and 7 males did not identify their position in the company. The team at middle management level is made up of 1 female and 3 males, while the lower management level comprises 1 female and 3 males. It is further observed that the top management position in this company is held by a female.

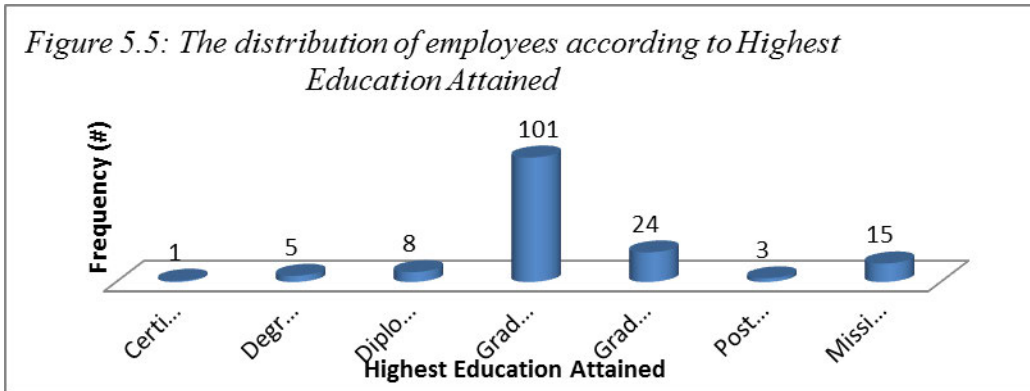
Marital status is one of the most significant factors to the production and the operations of the company. Having a family might provide an incentive for employees to work hard so that

they can feed the family. The figure below indicates the marital status of the employees in the company.

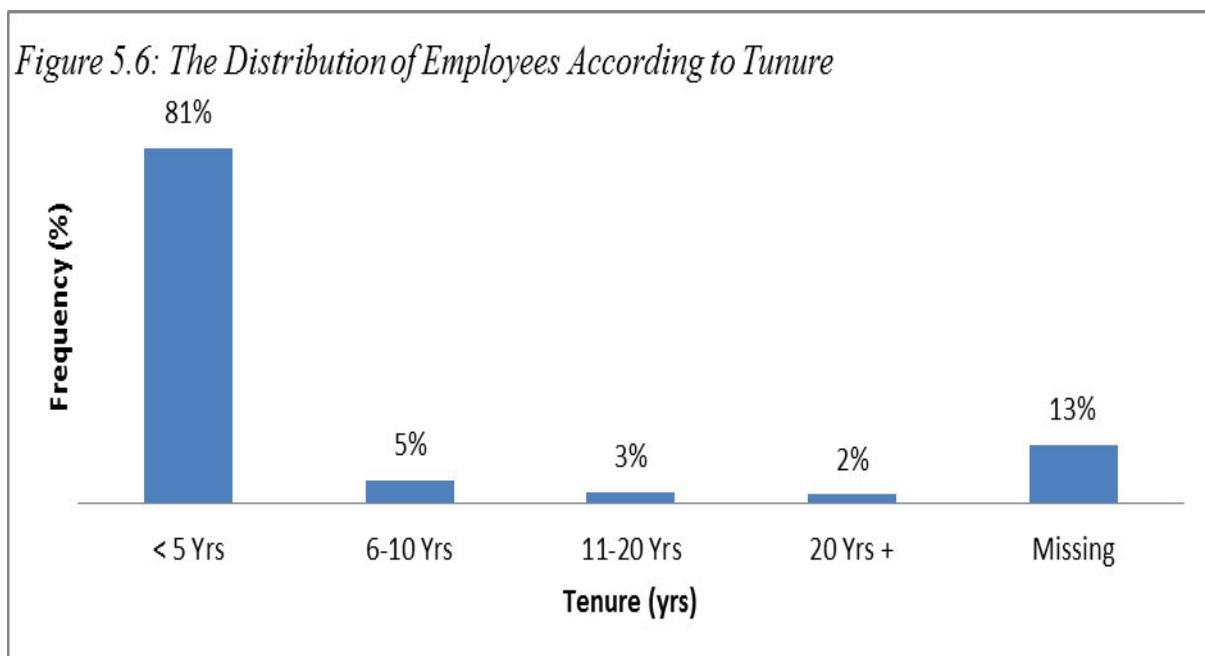


It is interesting to find that the percentage of employees who are married in this company is almost the same as the percentage of employees who are single, 44% and 45% respectively. Marital status has been found to have an influence on an individual's work. For instance, in one of the studies conducted, it was found that family resources, such as support from spouse, may also be relevant and influence work engagement (Bakker et al 2005). The percentage of widowed employees is the same as the percentage of those who are separated, 3%. About 4% of the employees did not identify their marital status.

Educational levels among employees are also critical. The next figure presents the educational attainments of the employees in the company. Figure 5.5 indicates that the majority of the employees in the company have a Grade 10 as the highest education attained. There are 24 employees with grade 12, 1 employee with a certificate, 8 employees with diplomas, 5 employees with degrees, and 3 employees with post-graduate qualifications. It is interesting to note that most of the general employees have Grade 10 as the highest educational qualification. The middle and low management teams are made up of employees with different qualifications, ranging from grade 8 to post-graduate. The findings also show that 1 of the 5 supervisors has a post-graduate qualification. The top level manager, who presides over the operations and the production of the company, only holds grade 10. Digging further, it might be found that s/he has been working in the company for a long time and that it is not the educational qualification that has landed her/him a big position but the experience s/he has in the industry. The next figure shows the years of tenure for the employees in the company.



The year of tenure is one of the most significant factors to explore in this study. The results (Figure 5.6) indicate that the majority of the employees, about 81% of the employees in the study, have been working in the company for less than 5 years.



5.3 Reliability Analysis - Cronbach's Alpha

Reliability analysis and Factor Analysis (using the maximum likelihood procedure) were performed in SPSS. All items that were asked in reverse order relative to their respective counterparts were re-reversed to avoid negative Cronbach's alpha.

The research was interested in identifying the questions (items) in the survey which were responsible for lowering the reliability of the survey. Cronbach's alpha, a tool used to give some measure of reliability was used. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0, the greater the internal consistency of the items

in the scale. Based upon the formula $\alpha = rk / [1 + (k - 1)r]$ where k is the number of items considered and r is the mean of the inter-item correlations, the size of alpha is determined by both the number of items in the scale and the mean inter-item correlations. George and Mallery (2003) provide the following rules of thumb:

“ $\alpha > 0.9$ – Excellent, $\alpha > 0.8$ – Good, $\alpha > 0.7$ – Acceptable, $\alpha > 0.6$ – Questionable, $\alpha > 0.5$ – Poor, and $\alpha < 0.5$ – Unacceptable”

5.4 Factor Analysis

In order to determine the factor structure of UWES, IMS and MJS, factor analysis was undertaken. Thus, investigating how well items of a similar scale are correlated to each other. Instead of looking at bivariate correlation coefficients (because the tables would be long and unnecessary to read), the researcher looked at performing confirmatory factor analysis, using a maximum likelihood procedure with only one factor. What this does is identify a latent (hidden) factor that relates all the items on this scale to each other. The reason for doing so is for all items on the same scale to imply the same thing. Furthermore, an investigation of the correlation between each of these items and this latent factor was done. The literature suggests that one considers correlations between 0.3 and 0.9 as acceptable. Correlations that are near perfect might propose multi-collinearity. It was set that if the chi-squared values are high then there might be a need to increase the minimum acceptable correlation to 0.4.

The following table indicates each scale, the chi-square goodness of fit value, the value of Cronbach's alpha, the item/s on the scale that would increase the value of Cronbach's alpha if they were removed, the items on the scale that have a correlation (r) of less than 0.3 with the factor of the scale, and the items that were removed from the analysis – because of previous unreliability.

For work engagement and job satisfaction, the chi-squared values were still very high even in the reduced models. This indicates that the model does not fit too greatly to a single factor. There might be two or more factors that could explain more of the variation in the item responses. The problem in using two or more factors is that these factors would be orthogonal to each other (i.e. they would not be related). The analysis will continue, keeping in mind that work engagement and job satisfaction do not have the greatest fit when being used as a single factor.

Table 5.2: Cronbach's alpha Values

Scale	χ^2	Cronbach's α	Removing items to increase α	Item's with $r < 0.30$	Removed
Work Eng.	315.148	0.724	2 and 10	2, 10 and 14	-
Work Eng.*	288.417	0.879	14	14	2 and 10
Work Eng.*	206.299	0.886	13	-	2, 10 and 14
Intrinsic Mot.	50.073	0.681	3 and 4	3	-
Intrinsic Mot.*	18.221	0.755	2 and 4	-	3
Perceived Comp	23.959	0.695	6	6	-
Perceived Comp*	10.442	0.862	-	-	6
Eff/Importance	37.29	0.816	-	-	-
Press/tension	6.435	0.681	-	-	-
Perceived Choice	108.301	0.589	3 and 6	3 and 6	
Perceived Choice*	11.24	0.771	1	-	3 and 6
Relatedness	106.691	0.791	-	-	
Relatedness*	3.00	0.823	-	-	3, 4, 7
Job Satisfaction	425.692	0.576	5, 9 and 11	5, 9 and 11	-
Job Satisfaction*	346.597	0.902	-	-	5, 9 and 11

* indicates the same scale as above but some items (indicated) were removed.

Work engagement showed the best fit (without the loss of too many items) and a good (close to excellent) Cronbach's alpha (0.886) when items 2, 10 and 14 were removed.

Perceived competence had a good fit and Cronbach's alpha (0.862) when item 6 was removed. Effort/Importance had a reasonable fit and a good Cronbach's alpha (0.816) without the need to remove any of the items. Pressure/Tension had a reasonable fit and an average Cronbach's alpha (0.681). The effect on the fit and Cronbach's alpha would be worse

if any item was removed. The scale is thus left with its original items. Perceived choice had an acceptable Chronbach's alpha (0.771) and showed a good fit between the items and the latent factor when items 3 and 6 were removed. Relatedness had a good Cronbach's alpha (0.823) and an extremely good fit when items 3, 4 and 7 were removed. Thus, overall, intrinsic motivation had an acceptable Cronbach's alpha (0.755) and showed a good fit between the items and the latent factor, when item 3 was removed

Job satisfaction had an improved fit and an excellent Cronbach's alpha (0.902) when items 5, 9 and 11 were removed from the scale.

Table 5.3 Communalities^a

	Initial	Extraction
at my work, I feel bursting with energy	.589	.615
I find the work i do full of meaning and purpose	.140	.056
times flies when I am working	.513	.570
at my job I feel strong and vigorous	.644	.603
I am enthusiastic about my job	.558	.605
when I am working, I forget everything else around me	.519	.440
my job inspires me	.475	.619
when I get up in the morning, I feel like going to work	.645	.589
I feel happy when I am working intensely	.566	.643
I am proud on the work that I do	.152	.041
I am immersed in my work	.447	.465
I can continue working for very long period of time	.625	.650
to me, my job is challenging	.300	.280
I get carried away when I am working	.561	.791
at my job, I am very resilient, mentally	.473	.486
It's difficult to detach myself from my job	.480	.778
at my work I always persevere, even when things do not go well	.480	.440

Extraction Method: Maximum Likelihood.

5.5 Relationships among Work Engagement, Intrinsic Motivation and Job Satisfaction

The objective of this study is to determine relationships among work engagement, intrinsic motivation and job satisfaction. In order to complete this task, a chi-square test for independence on SPSS was used to provide answers to the following three questions:

1. Is there a significant relationship between Job Satisfaction & Work Engagement?
2. Is there a significant relationship between Job Satisfaction & Intrinsic Motivation?
3. Is there a significant relationship between Work Engagement & Intrinsic Motivation?

This test looks at two categorical variables at a time and determines whether there is a significant association between them.

In statistical inference, a null hypothesis refers to a “default” claim made by a researcher and an alternative hypothesis is the alternate claim which will be investigated. For the chi-square test for independence, the null hypothesis for the current study was always that the two variables of interest are independent of each other and the alternative was that they are not independent of each other. After the analysis was performed, a p-value for this test was determined and set, such that if the p-value is less than the desired level of significance, normally set at 5% (or 0.05), then a conclusion that there is sufficient evidence to show that the two variables are not independent of each other will be reached.

1. Is there a significant relationship between Job Satisfaction & Work Engagement?

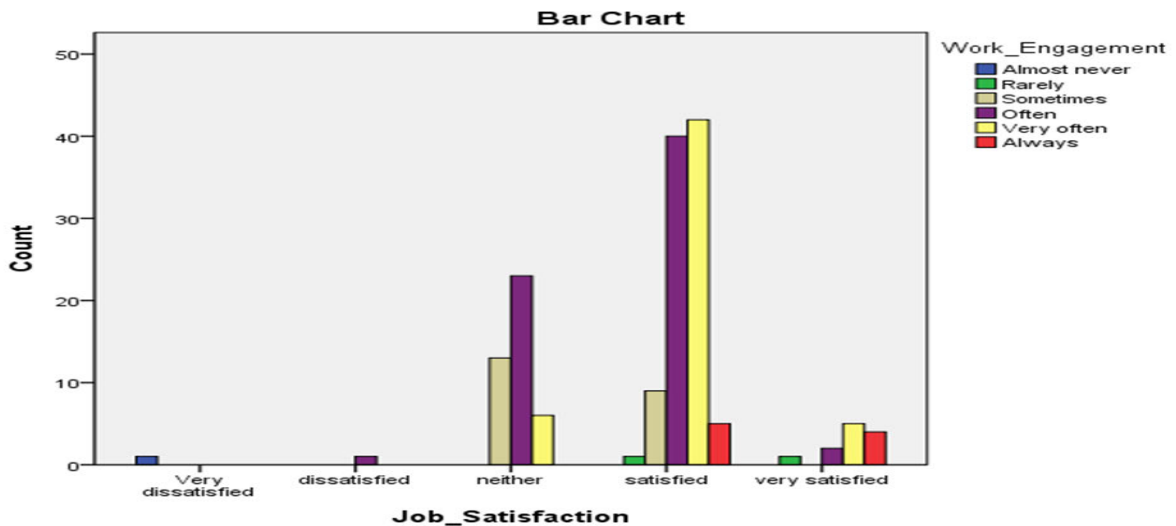
Table 5.4 Chi-Square Tests: Job Satisfaction & Work Engagement

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	199.516	20	.000
Likelihood Ratio	53.103	20	.000
Linear-by-Linear Association	29.646	1	.000
N of Valid Cases	153		

SPSS provides the analysis for three separate chi-square tests for independence, namely the Pearson Chi-Square test, the Likelihood Ratio test, and the Linear-by-Linear Association test.

For all of the tests, an extremely low p-value (< 0.001) can be seen. Thus, it can be concluded that there is sufficient evidence to show that there is an association between job satisfaction & work engagement. When looking at the bar chart below, an increased level of work engagement implies an increased level of job satisfaction.

Figure 5.7: Relationship between Job Satisfaction & Work Engagement



There have been few studies that have examined the relationship between job satisfaction and work engagement. In one of the studies, a significant positive relationship between the two constructs was found (Mauno, Kinnunen, Makikangas & Natti, 2005). However, it is important to bear in mind that the constructs were treated as unidimensional.

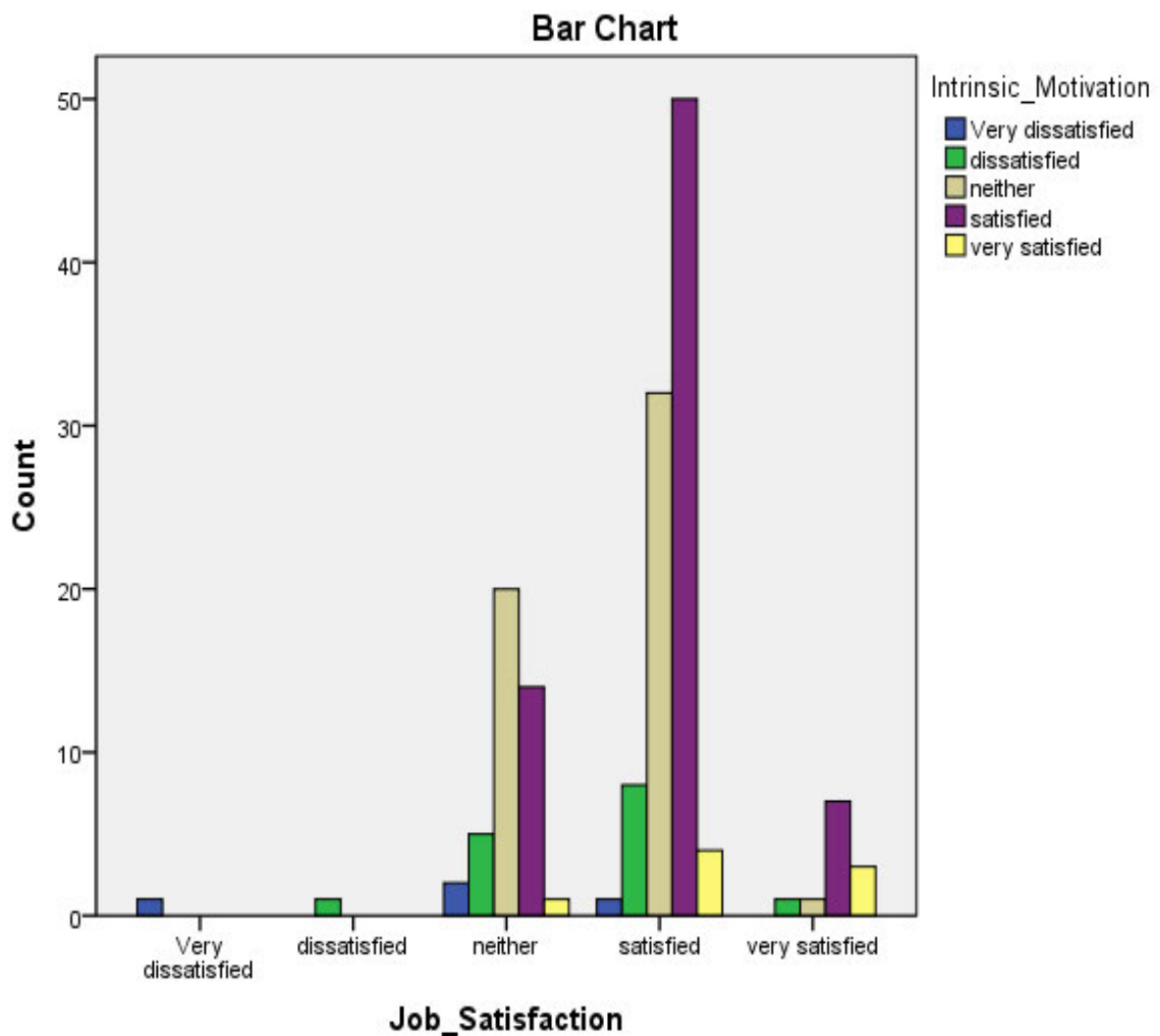
2. Is there a significant relationship between Job Satisfaction & Intrinsic Motivation?

Table 5.5 Chi-Square Tests: Job Satisfaction & Intrinsic Motivation

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	64.864	16	.000
Likelihood Ratio	28.421	16	.028
Linear-by-Linear Association	18.465	1	.000
N of Valid Cases	151		

For the Pearson Chi-square and Linear-by-linear association test an extremely low p-value (< 0.001) is seen and for the likelihood ratio test, a significantly low p-value of 0.028 was obtained. As a result, it can be concluded that there is sufficient evidence to show that there is an association between job satisfaction & intrinsic motivation. Moreover, when looking at the bar chart below, it can be seen that an increased level of intrinsic motivation implies an increased level of job satisfaction.

Figure 5.8: Relationship between Job Satisfaction & Intrinsic Motivation



Studies investigating job satisfaction and intrinsic motivation have consistently been looking at their effects or contribution or some other factor(s) like organisational performance or job performance (Bahar, 2011). However, there is limited research on the relationship between the 2 constructs. Within the current research, a positive relationship between job satisfaction and intrinsic motivation was established.

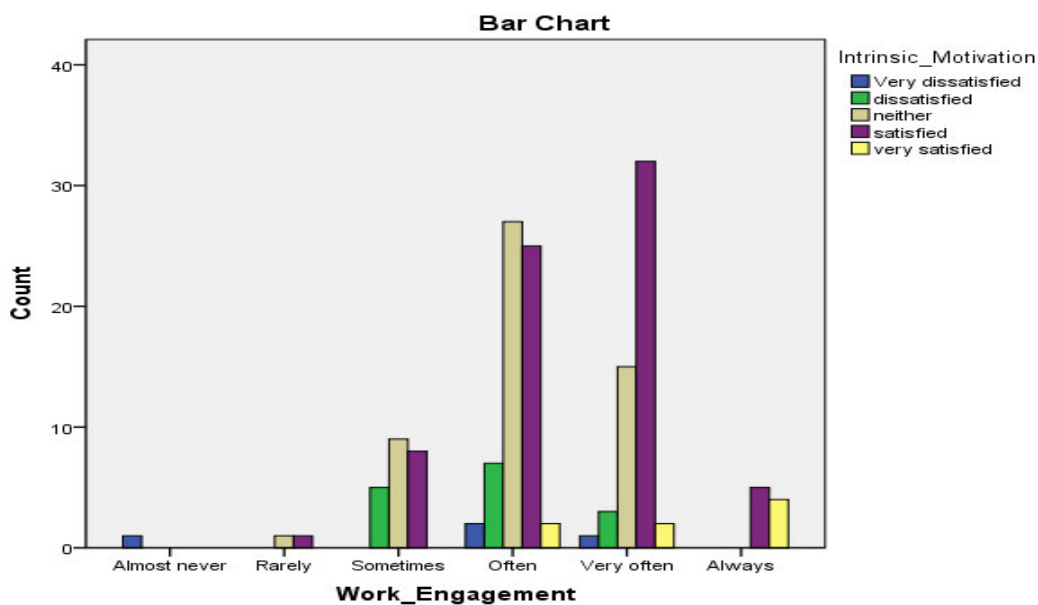
3. Is there a significant relationship between Work Engagement & Intrinsic Motivation?

Table 5.6 Chi-Square Tests Work Engagement & Intrinsic Motivation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	79.903	20	.000
Likelihood Ratio	40.363	20	.004
Linear-by-Linear Association	19.300	1	.000
N of Valid Cases	150		

For the Pearson Chi-square and Linear-by-Linear association test, an extremely low p-value (< 0.001) was obtained. For the likelihood ratio test a very significantly low p-value of 0.004 can be seen. Thus, it can be concluded that there is sufficient evidence to show that there is an association between work engagement & intrinsic motivation. The bar chart below shows that an increased level of intrinsic motivation implies an increased level of work engagement.

Figure 5.9: Relationship between Work Engagement & Intrinsic Motivation



In support of the above findings, a study conducted in a surface coatings manufacturing organisation in Gauteng revealed a statistically significant positive correlation between intrinsic motivation and work engagement (practically significant, medium effect) and

meaning, correlated positively (practically significant, medium effect) with intrinsic motivation and work engagement (Lenard, 2008). Extrinsic motivation correlated statistically significantly (practically significant, large effect) with work engagement.

5.6 Factors determining Job Satisfaction, Work Engagement and Intrinsic Motivation

A cumulative logistic regression model was applied to the data through the logistic procedure in SAS 9.2. Cumulative logistic regression is most commonly used to model ordinal categorical data. The factors that were considered were: gender, age, marital status, and years of tenure, highest education attained, position, perceived competence, effort/importance, pressure/tension, perceived choice and relatedness. The section below presents findings on how each of these factors contributes to job satisfaction, work engagement and intrinsic motivation among the studied miners.

5.6.1 Job Satisfaction

The output of the cumulative logistic regression modelling is shown below. The last column of the table shows the p-values which indicate whether the respective variables are significant in determining Job Satisfaction. From the table, it can be seen that Marital Status and Perceived Competence are significant at the 5% level of significance, as indicated by the p-values 0.0455 and 0.0022 respectively (since these p-values are less than 0.05).

Table 5.7: Cumulative logistic regression modelling (Job Satisfaction)

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	1	-2.9245	2.6347	1.2321	0.2670
Intercept	3	1	1.0683	2.4885	0.1843	0.6677
Intercept	4	1	4.7945	2.5234	3.6100	0.0574
GENDER		1	0.3398	0.5410	0.3946	0.5299
AGE_GROUP		1	0.1799	0.2736	0.4324	0.5108
MARITAL_STATUS		1	0.3532	0.1766	3.9996	0.0455
YEARS_TENURE		1	-0.1950	0.3582	0.2964	0.5861
HIGH_EDU_ATTAINED		1	0.2352	0.2162	1.1828	0.2768
POSITION		1	-0.00351	0.1975	0.0003	0.9858
PC_MEAN		1	-0.7906	0.2581	9.3836	0.0022
EI_MEAN		1	-0.3150	0.2606	1.4619	0.2266
PT_MEAN		1	-0.0531	0.2600	0.0418	0.8380
PCHOICE_MEAN		1	-0.2374	0.2351	1.0202	0.3125
Rel_MEAN		1	0.3387	0.2545	1.7706	0.1833

Figure 5.10 and 5.11 are probability graphs that reflect how changes in Marital Status and Perceived Competence respectively, would affect Job Satisfaction. Figure 5.10 show that single employees have the greatest probability of experiencing higher levels of Job

Satisfaction. In Figure 5.11, it is revealed that the higher the level of perceived competence, the higher the individuals' job satisfaction. However, there is a discrepancy: many of those who chose level 2 for perceived competence also claimed they were very satisfied with their jobs. This may lead one to suspect that individuals were not being completely honest about their job satisfaction.

Figure 5.10: Predicted Cumulative probabilities for Job Satisfaction (Marital Status)

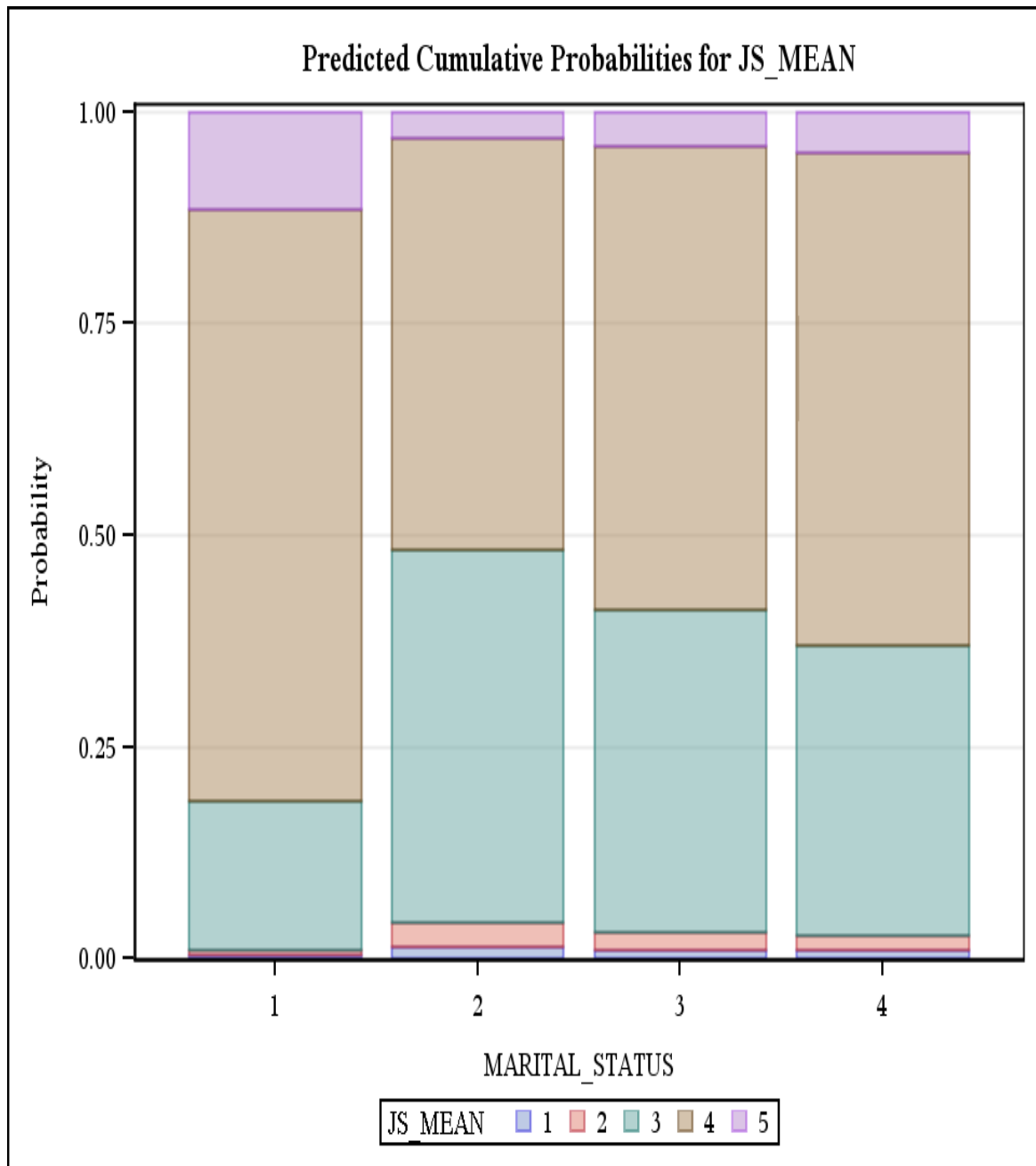
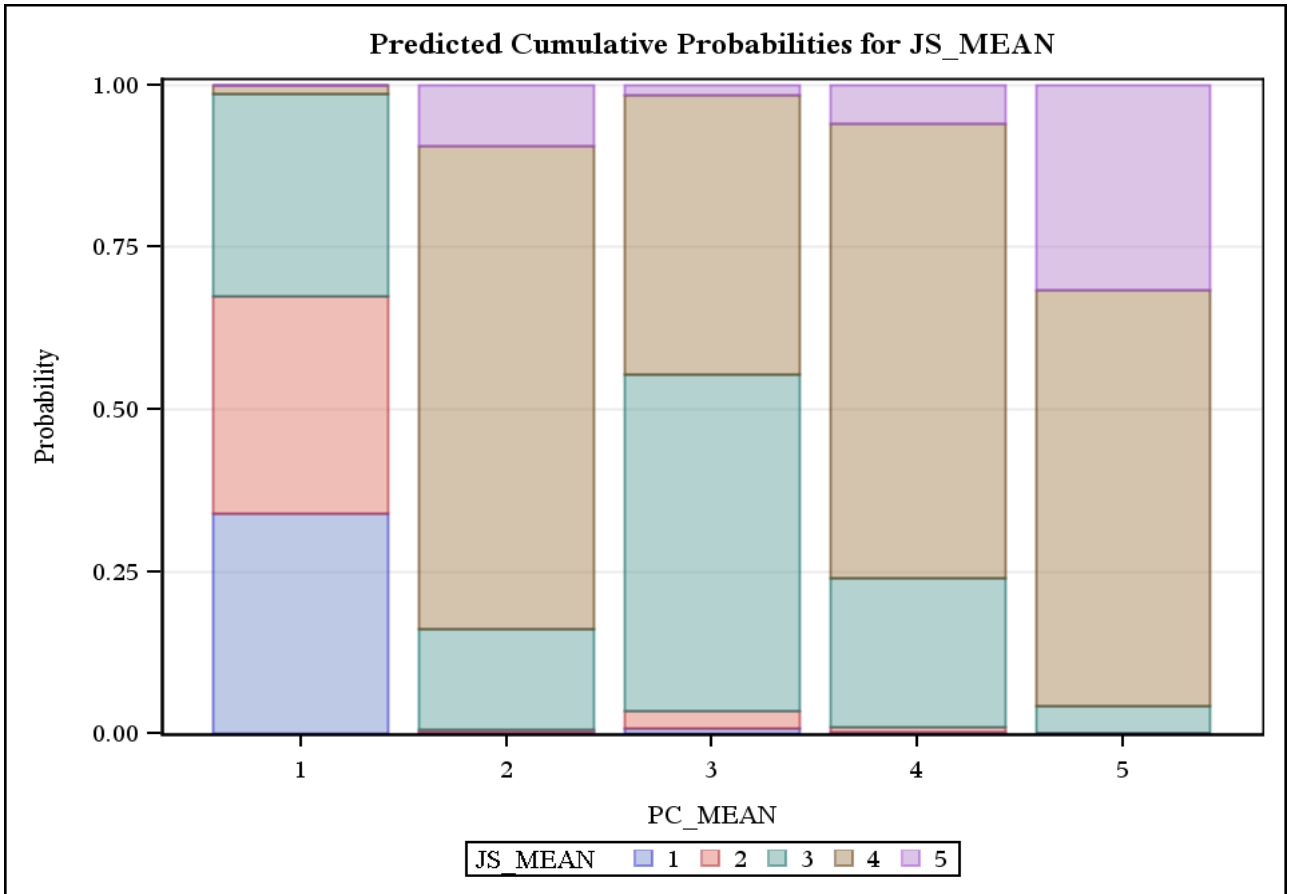


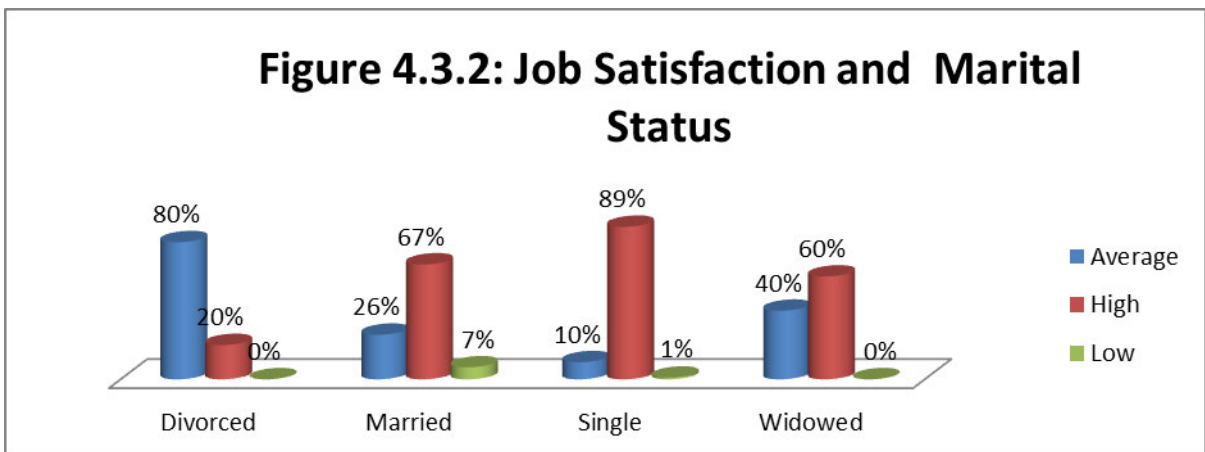
Figure 5.11 Predicted Cumulative probabilities for Job Satisfaction (Perceived Competence)



Other contributing factors to employees’ job satisfaction levels

It is interesting to explore the distribution of job satisfaction according to marital status. The findings are presented in figure 5.12 below.

Figure 5.12: Job Satisfaction and Marital Status

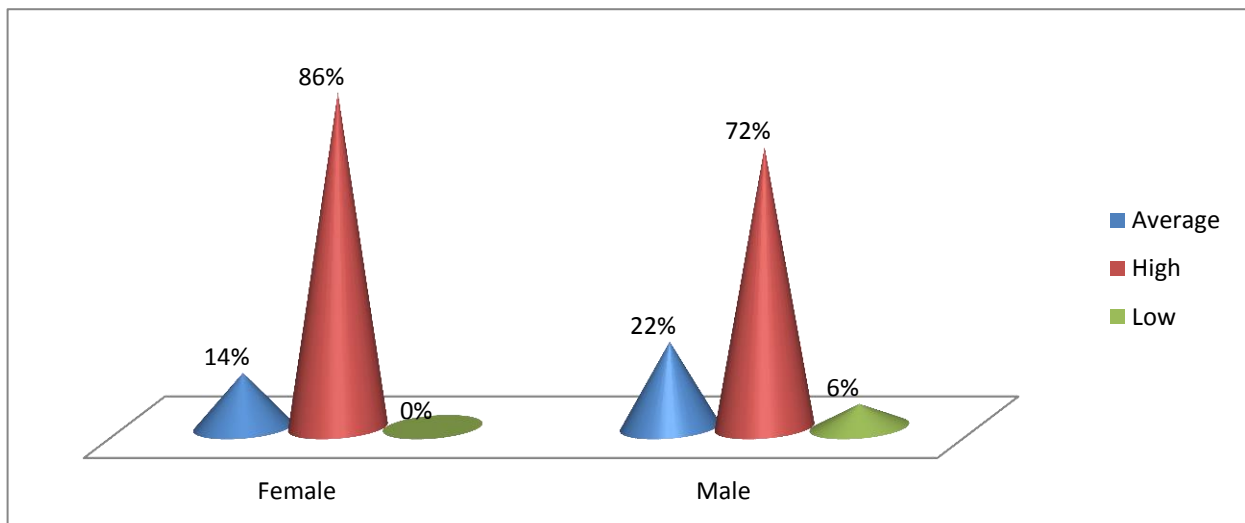


From figure 5.12, the majority of divorced employees have an average degree of job satisfaction. The majority of single, married and widowed employees seem to have a high

degree of job satisfaction. About 7% and 1%, respectively, of the married and single employees have low levels of job satisfaction.

A further analysis of factors that contribute to job satisfaction follows. The factors selected, such as demographic and work-related factors, are explored to assess their contribution to the levels of satisfaction among the employees. The findings regarding levels of job satisfaction according to gender are presented in figure 5.13 below.

Figure 5.13: Job Satisfaction and Gender



The findings suggest that the majority of female employees have a high degree of job satisfaction compared with their counterparts (86% and 72% respectively). The only employees who indicated a low level of job satisfaction were males.

As far as the current age of an employee is concerned, table 5.8 indicates that the distribution according to level of job satisfaction is across all age groups. However, the majority of employees show a higher level of job satisfaction than moderate and lower levels. (See table 5.8 in Appendixes)

Table 5.9 below indicates the years of experience (tenure) and degree of job satisfaction. The findings suggest that, among employees with 6-10 years of experience in the company, the majority have an average degree of satisfaction. All employees with 11-20 years of experience are highly satisfied with their work.

Table 5.9: Job Satisfaction and Tenure

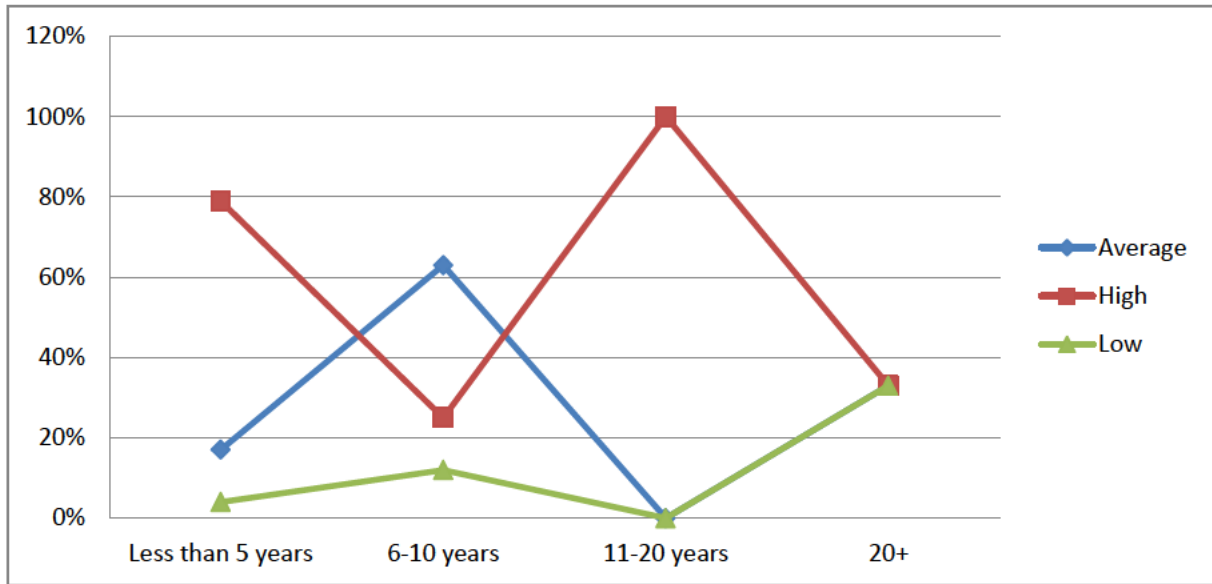
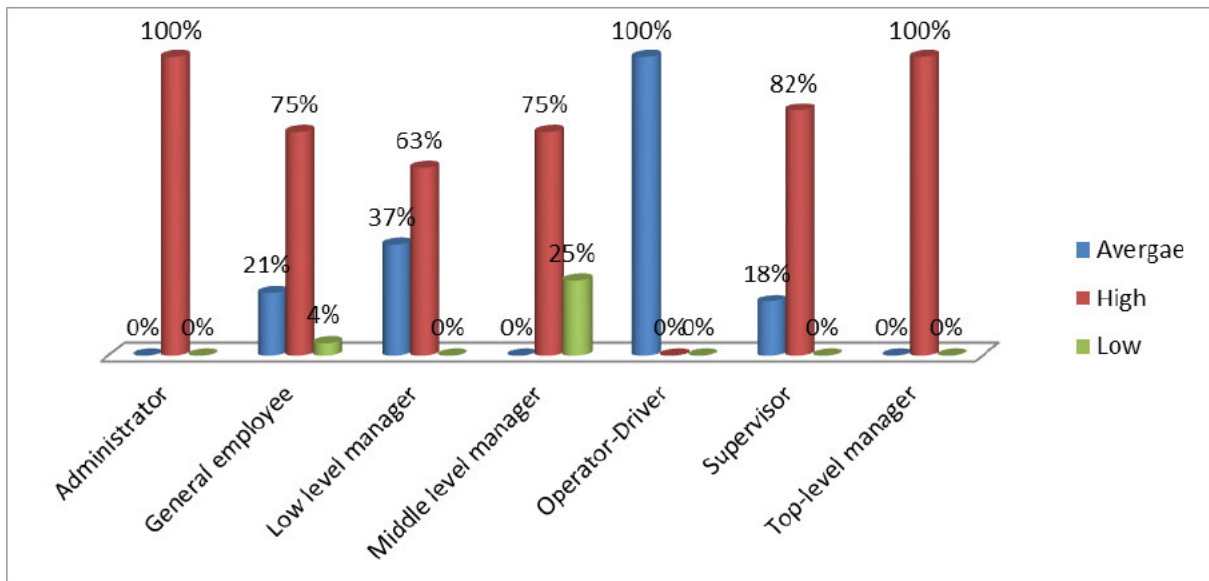


Table 5.10(in Appendixes) presents the distribution of job satisfaction levels according to education attainment. The majority of employees indicated a high degree of satisfaction for all education attainment categories.

Figure 5.14 below presents the distribution of job satisfaction according to the position of employees in the company. The majority of employees in each category indicated that they are highly satisfied, except the Operator-Drivers who have average levels of satisfaction. Employees with low degrees of satisfaction are among general employees and middle managers.

Figure 5.14: Job Satisfaction and Position



5.6.2 Work Engagement

For the sake of understanding the factors associated with work engagement, it is important to explore how selected factors influence the levels of work engagement. The two sets of factors are explored, namely, demographics such as gender, age, marital status and educational attainment of the employee. The second set is work environment factors such as tenure, which resembles years of experience in the company, and the position of the employee within the company.

The output of the cumulative logistic regression modelling is shown in Table 5.11 below. The last column of Table 5.11 shows the p-values which indicate whether the respective variables are significant in determining Work Engagement. From Table 5.11 we see that Perceived Competence, Effort/Importance and Pressure/Tension are significant at the 7% level of significance, as indicated by the p-values 0.0264, 0.0039 and 0.0653 respectively (since these p-values are less than 0.07).

Table 5.11: Cumulative Logistic Regression Modelling (Work Engagement)

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	1	-0.5950	2.4220	0.0604	0.8059
Intercept	2	1	0.5633	2.2831	0.0609	0.8051
Intercept	3	1	2.5793	2.2534	1.3102	0.2524
Intercept	4	1	4.7924	2.2876	4.3887	0.0362
Intercept	5	1	7.6548	2.3399	10.7022	0.0011
GENDER		1	-0.1231	0.4858	0.0642	0.8000
AGE_GROUP		1	-0.0451	0.2479	0.0330	0.8558
MARITAL_STATUS		1	0.1251	0.1557	0.6457	0.4217
YEARS_TENURE		1	-0.0531	0.3311	0.0257	0.8727
HIGH_EDU_ATTAINED		1	0.3105	0.1986	2.4433	0.1180
POSITION		1	0.1588	0.1809	0.7708	0.3800
PC_MEAN		1	-0.4926	0.2219	4.9277	0.0264
EI_MEAN		1	-0.6923	0.2397	8.3412	0.0039
PT_MEAN		1	-0.4339	0.2354	3.3971	0.0653
PCHOICE_MEAN		1	-0.0583	0.2108	0.0765	0.7821
Rel_MEAN		1	-0.0208	0.2278	0.0084	0.9271

Figure 5.15, Figure 5.16 and Figure 5.17 are probability graphs that reflect how changes in Perceived Competence, Effort/Importance and Pressure/Tension respectively, would affect Work Engagement. Figure 5.15 shows that the greatest probability of higher work engagement is when Perceived Competence is at a level 2 or 4. In Figure 4, we see that the

higher the level of Effort/Importance, the higher the level of work engagement. In Figure 5.17, we see an obvious discrepancy. This is that the results suggest that the highest level of work engagement is when pressure/tension is ranked at 1. There were however, only two individuals who selected 1 for pressure/tension, and the same two individuals selected 6 for work engagement. Other than this discrepancy, a distinct trend can be seen: a higher rank of pressure/tension indicates a higher level of work engagement. It should be noted that a higher rank of pressure/tension is actually indicative of a lower amount of pressure/tension that is felt by an individual. This implies that an individual who feels less pressure/tension will have a higher level of work engagement.

Figure 5.15 Predicted Cumulative probabilities for Work Engagement (Perceived Competence)

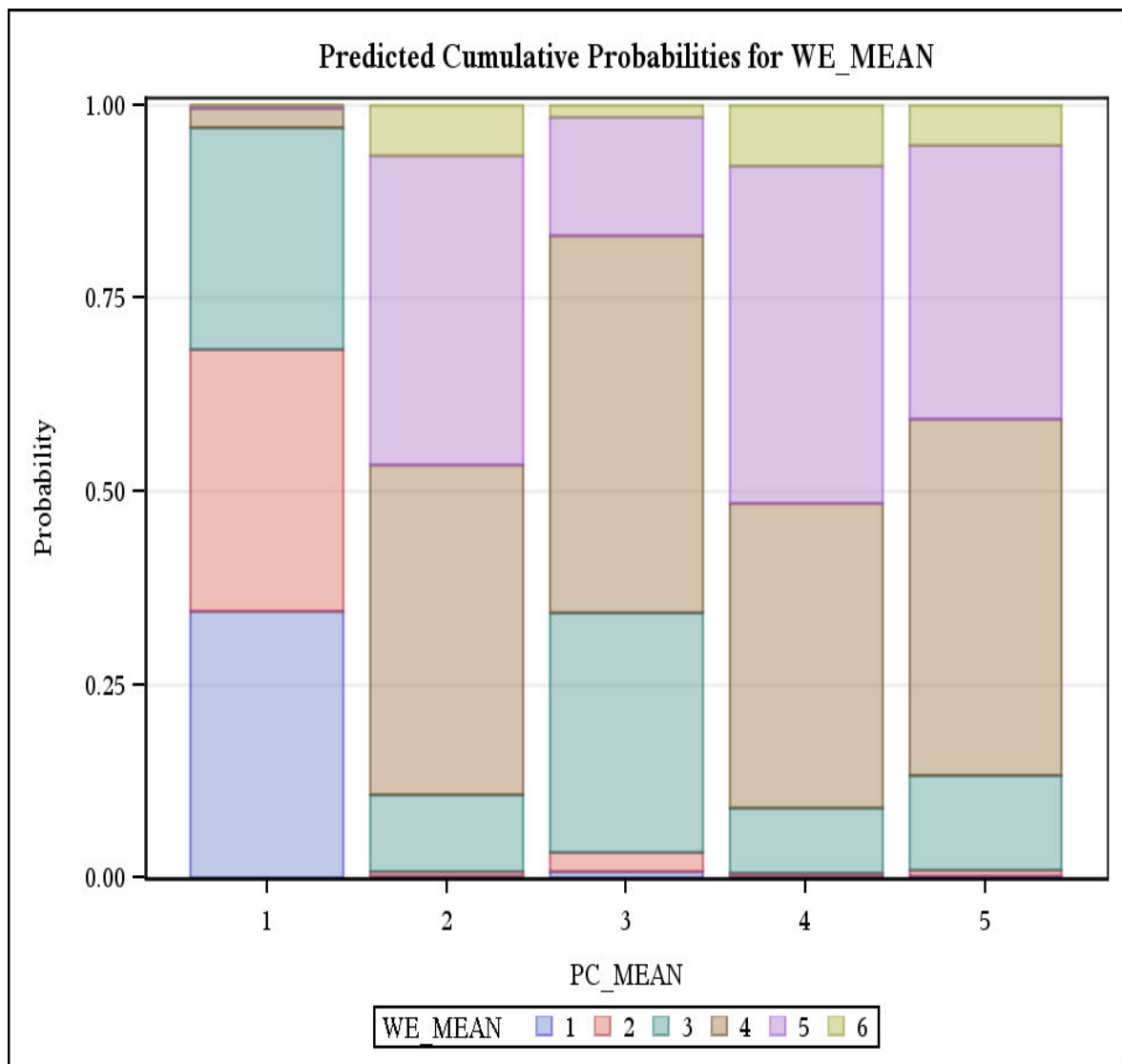


Figure 5.16: Predicted Cumulative probabilities for Work Engagement (Effort and Importance)

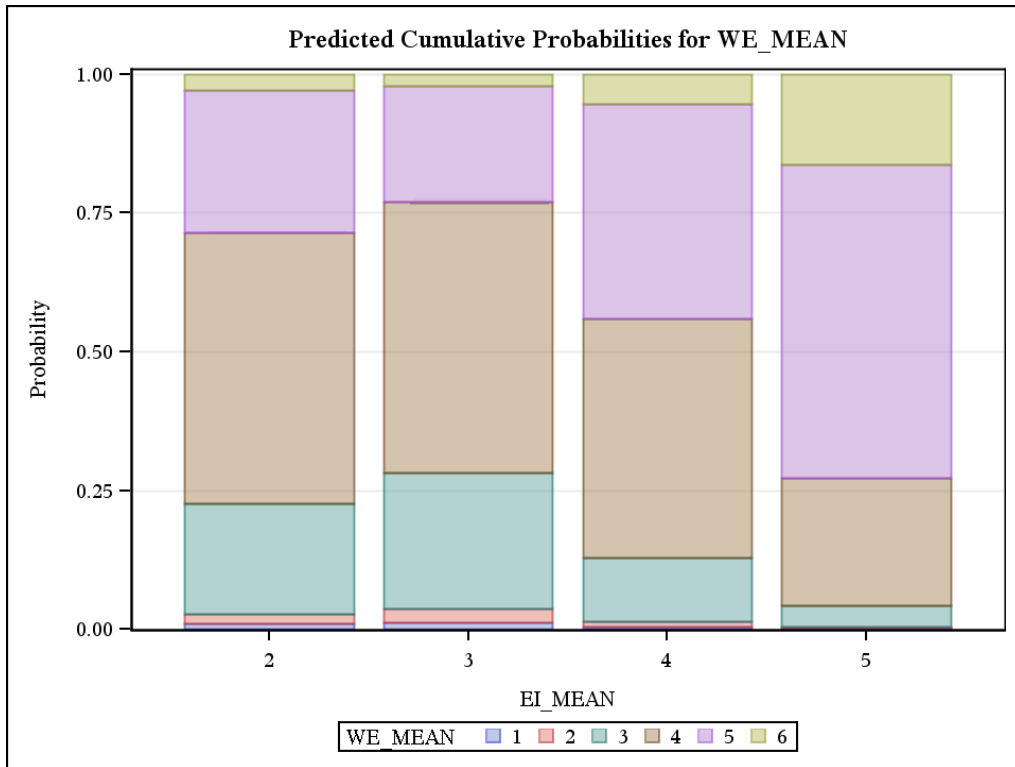
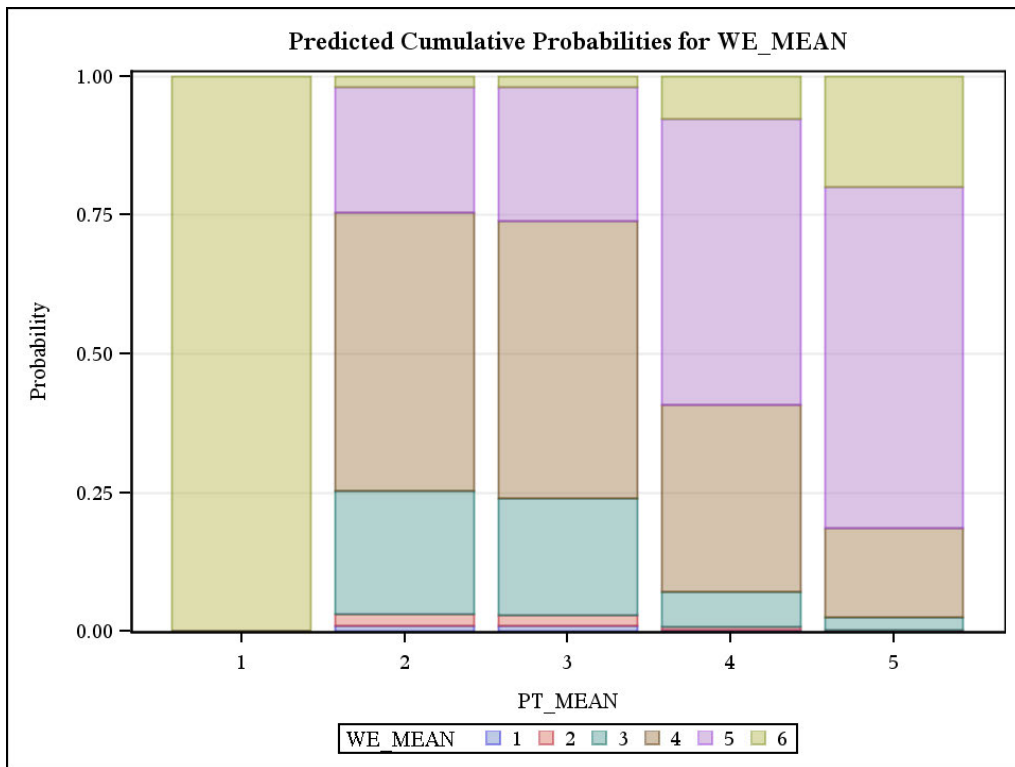


Figure 5.17 Predicted Cumulative probabilities for Work Engagement (Pressure and Tension)



For further understanding of the factors associated with work engagement, it is important to explore how selected factors influence the levels of work engagement. Two sets of factors are explored, namely demographics such as gender, age, marital status and educational attainment of the employee. The second set is work environment factors such as tenure, which resembles the years of experience in the company, and the position of the employee within the company. Each of these factors is explored and the findings are presented in tables (see Appendixes).

As far as gender is concerned, it is clear from table 5.12 (Appendixes) that the majority of employees are males. Among the employees who are averagely and highly engaged in their work, the majority of them are males. One can conclude from these findings that gender does not have an influence on the level of work engagement. This supports the findings of Bakker et al. (2005) in a study of work engagement and crossover between spouses among highly educated Dutch couples, where little difference in crossover between husband to wife and wife to husband was found. However, it is also reported that there is divergence of men and women's experiences at work and at home which may, in turn, influence women's capacity to be fully engaged in work (and men's capacity to engage in families) despite shifts in gender expectations (Crompton, Lewis & Lyonette, 2007) thus leading to the conclusion that work engagement may vary with gender.

Table 5.13 (Appendixes) presents employees and their level of work engagement according to the employee's current age. There is no statistical difference in the level of work engagement between employees in the age categories younger than 24 years, 25-35, and 36-45. However, most of the employees aged 46-55 years are highly involved. The other factor of interest is marital status. It is interesting to explore whether marital status has any influence on the work engagement outcomes. Table 5.14 (Appendixes) provides the findings.

Levels of engagement among married and single employees seem not to differ. These findings are interesting since they differ with most of the findings of other studies on the influence of marital status on work engagement. For instance, it has been reported that there is evidence of strong gender differences in men's and women's experience of the work-family interface (Kossek & Ozeki, 1998; Rothbard & Brett, 2000). Although this has been the case, inconsistent results have been found in investigations of the influence of family on work engagement (Kirchmeyer, 1992; Rothbard, 2001; Greenhaus & Powell, 2006).

It is interesting to observe that, among the single employees, the number of employees who are highly involved is greater than the number of single employees who are averagely engaged. It can then be concluded from such findings that marital status does not have a great impact on an individual's work engagement levels. This contradicts past findings in the area. However, the current study has also revealed that most of the widows are averagely engaged. Such a trend can validate the claim that work-life balance is a crucial element, especially when looking at the aspect of employee efficiency, where work engagement is a contributing factor (Greenhaus, Collins & Shaw, 2003). As a result, having too much to handle i.e. on the social side, as well as occupational demands, can mean one may not apply oneself fully to the demands of the work. There is 1 married employee and 1 single employee who are not engaged in their work.

Table 5.15 (Appendixes) presents the level of engagement according to years of experience in the company. It is indicated in the table that, among the employees who have been in the company for less than 5 years, the majority are highly involved (42%). The findings suggest that the more the tenure, the more disengaged the employees get from their work. These results contradict some findings which reveal that tenure does not influence employees' work engagement levels (Rice, 2009).

Table 5.16 (Appendixes) presents work engagement according to the education attained by the employees. Six education qualifications were explored. The findings suggest that, for every qualification, the majority are highly engaged. However, there are only 3 employees with a post graduate qualification, and all these employees are averagely involved.

Table 5.17 (Appendixes) presents the positions of the employees and their levels of engagement. There is no statistical difference between the general employees who are averagely and highly engaged. However, it is observed that the employees in low, middle, and top management are highly engaged.

As shown in figure 6.1, the majority (74%) of the employees are engaged in their work at an average level. Only 6% of the respondents have a low score when it comes to engagement in their work. These are the employees who answered 'almost never' and 'rarely' to the set of questions that were asked to assess work engagement. About 30% of the employees are highly engaged in their work.

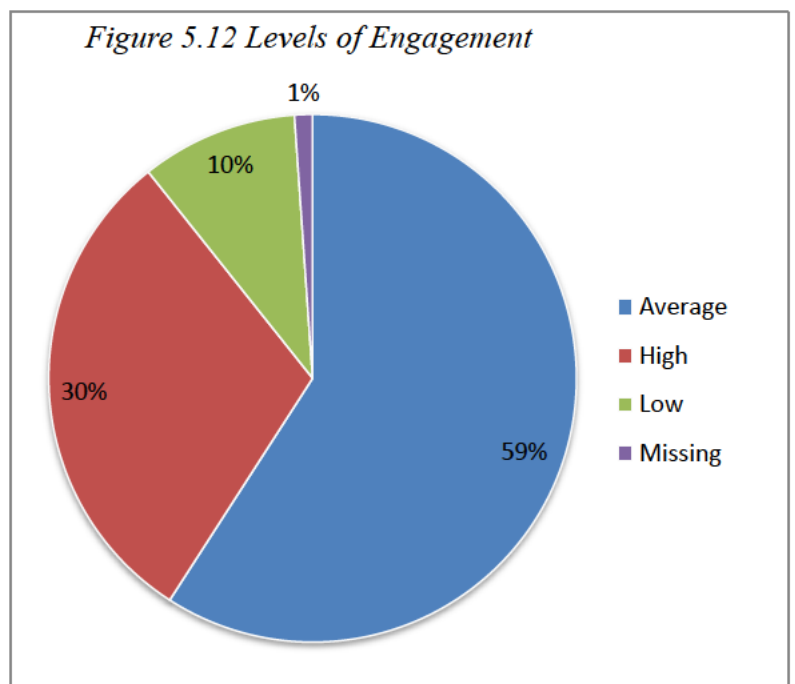
5.6.2.1 Contributing factors for each employee's work engagement levels

As far as gender is concerned, the majority of employees are males. Among the employees who are averagely and highly engaged in their work, the majority of them are males. One can conclude from these findings that gender does not have an influence on the level of work engagement. This supports the findings of Bakker et al. (2005) in a study of work engagement and crossover between spouses among highly educated Dutch couples where little difference in crossover between husband to wife and wife to husband was found.

However, it is also reported that there is divergence in men and women's experiences at work and at home which may, in turn, influence women's capacity to be fully engaged in work (and men's capacity to engage in families) despite shifts in gender expectations (Crompton, Lewis and Lyonette, 2007). A conclusion can be made that work engagement may vary with gender.

In terms of age, there is no statistical difference in the level of work engagement between employees in the age categories younger than 24 years, 25-35, and 36-45. However, most of the employees aged 46-55 years are highly involved.

The other factor of interest is marital status. Levels of engagement among married and single employees seem not to differ. These findings are interesting since they differ with most of the findings of other studies on the influence of marital status on work engagement. For instance, it has been reported that there is evidence of strong gender differences in men's and women's experience of the work-family interface (Kossek and Ozeki, 1998; Rothbard and Brett, 2000). Although this has been the case, inconsistent results have been found in investigations of the influence of family on work engagement (Kirchmeyer, 1992; Rothbard, 2001 and Greenhaus and Powell, 2006).



It is interesting to observe that, among single employees, the number of employees who are highly involved is greater than the number of single employees who are averagely engaged. It can then be concluded from such findings that marital status does not have a greater impact on an individual's work engagement levels, thus contradicting past findings in the area. However, the current study has also revealed that most of the widows are averagely engaged. Such a trend can validate the claim that work-life balance is a crucial element, especially when looking at the aspect of employee efficiency, where work engagement is a contributing factor (Greenhaus, Collins and Shaw, 2003). As a result, having too much to handle i.e. on the social side, as well as occupational demands, one may not apply oneself fully to the demands of one's work. There is 1 married employee and 1 single employee who are not engaged in their work.

Another factor is work experience. The level of engagement differs according to the years of experience in the company. Among the employees who have been in the company for less than 5 years, the majority are highly involved (42%). The findings suggest that the more the tenure the more disengaged the employees get from their work. These results contradict some findings where it was revealed that tenure does not influence employees' work engagement levels (Rice, 2009).

Level of education was another factor considered. Six educational qualifications were explored. The findings suggest that for every qualification, the majority are highly engaged. However, there are only 3 employees with a post graduate qualification, and all these employees are averagely involved.

Regarding the positions of the employees and their levels of engagement, there is no statistical difference between the general employees who are averagely engaged and those who are highly engaged. However, it is observed that employees in low, middle and top management are highly engaged.

The findings suggest that employees' levels of engagement can be attributed to the amount of energy they possess when at work. The findings also show that employees in this company have a higher rating in meaning and purpose of work. In addition, higher levels of enthusiasm play a greater role in rendering employees in this company to be highly engaged in their work. This supports the findings of Bakker and Demerouti (2008) who, in their study, found that enthusiasm is one of the characteristics of an engaged employee.

It has also been found that job inspiration is one of the major contributors to employees' work engagement levels. Being happy and proud of one's work plays a major role in employees being highly engaged in their work. Results shows that employees in this company immerse themselves as well as work for a very long time. This supports the findings of Bakker and Demerouti (2008) that engaged employees often experience positive emotions such as enthusiasm, happiness and personal resourcefulness.

Thus, as a result of the contribution of the above mentioned factors, employees in this company are highly engaged in their work, as has been depicted by the results of the study. What can be noted from the findings is that there is not much difference from the findings of other studies in as far as the contributing factors to work engagement are concerned.

5.6.3 Intrinsic Motivation

The output of the cumulative logistic regression modelling is shown below. The last column of the table (Table 5.18) shows the p-values which indicate whether the respective variables are significant in determining Intrinsic Motivation. As shown earlier, Perceived Competence, Effort/Importance, Pressure/Tension and Perceived Choice are significant at the 5% level of significance, as indicated by the p-values <0.0001, 0.0010, 0.0432 and 0.0461 respectively (since these p-values are less than 0.05).

Figure 5.18, Figure 5.19, Figure 5.20 and Figure 5.21 are probability graphs that reflect how changes in Perceived Competence, Effort/Importance, Pressure/Tension and Perceived Choice respectively, would affect Intrinsic Motivation. From figure 5.19 it can be seen that the higher the level of Perceived Competence, the greater the probability that Intrinsic Motivation is higher. In Figure 5.16 one sees that the higher the level of Effort/Importance, the greater the probability that Intrinsic Motivation is higher. In Figure 8, one sees an obvious discrepancy. This is that the results suggest that the highest level of intrinsic motivation is when pressure/tension is ranked at 1 and 5. There were, however, only two individuals who selected 1 for pressure/tension and this is too small a sample from which to make accurate inferences. Other than this discrepancy one sees a distinct trend: a higher rank of pressure/tension indicates a higher level of intrinsic motivation.

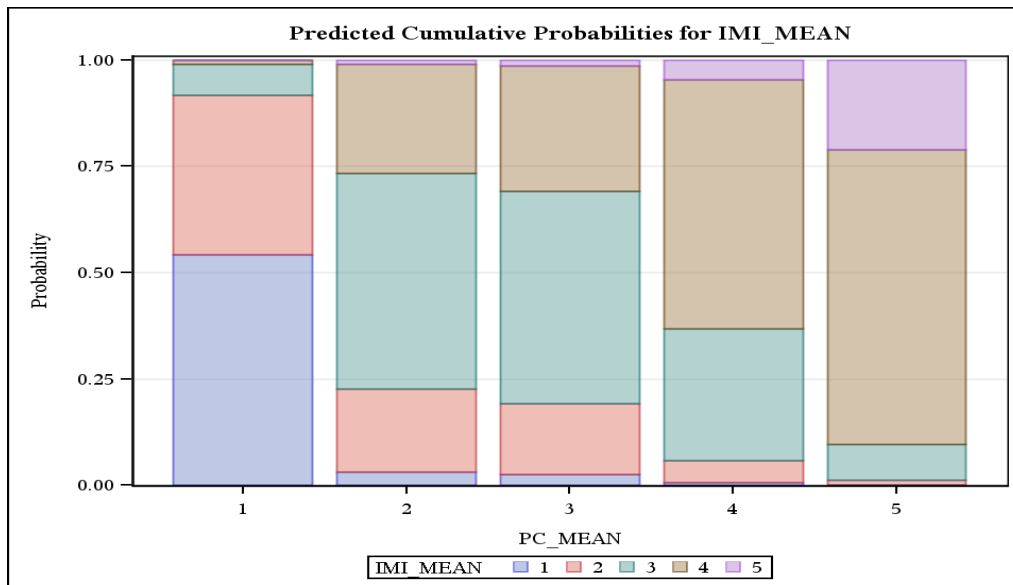
One should note that a higher ranking of pressure/tension is actually indicative of a lower amount of pressure/tension felt by an individual. This implies that an individual who feels less pressure/tension will have a higher level of intrinsic motivation. Figure 5.17 shows the

probabilities of the different levels of intrinsic motivation being felt at different levels of perceived choice.

Table 5.18 Cumulative logistic regression modelling (Intrinsic Motivation)

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	1	5.4276	2.5285	4.6079	0.0318
Intercept	2	1	7.6146	2.5494	8.9208	0.0028
Intercept	3	1	10.2629	2.6440	15.0662	0.0001
Intercept	4	1	14.3458	2.7879	26.4789	<.0001
GENDER		1	-0.5457	0.5360	1.0364	0.3087
AGE_GROUP		1	-0.3764	0.2678	1.9751	0.1599
MARITAL_STATUS		1	0.2621	0.1677	2.4429	0.1181
YEARS_TENURE		1	-0.1263	0.3765	0.1126	0.7372
HIGH_EDU_ATTAINED		1	0.0673	0.2177	0.0957	0.7571
POSITION		1	-0.0261	0.2004	0.0169	0.8964
PC_MEAN		1	-1.2167	0.2598	21.9351	<.0001
EI_MEAN		1	-0.8575	0.2595	10.9162	0.0010
PT_MEAN		1	-0.5238	0.2591	4.0882	0.0432
PCHOICE_MEAN		1	-0.4627	0.2321	3.9762	0.0461
Rel_MEAN		1	0.4020	0.2463	2.6638	0.1027

Figure 5.18 Predicted Cumulative probabilities for Intrinsic Motivation (Intrinsic Motivation Inventory)



It must be noted that a lower level of perceived choice is indicative of an individual exercising more choice in their job. We see from Figure 5.18 that lower levels of perceived choice imply a greater probability of higher levels of intrinsic motivation. This, in turn, means that the more choice an individual feels s/he has indicates a higher level of intrinsic motivation.

Figure 5.19 Predicted Cumulative probabilities for Intrinsic Motivation (Interest and Enjoyment)

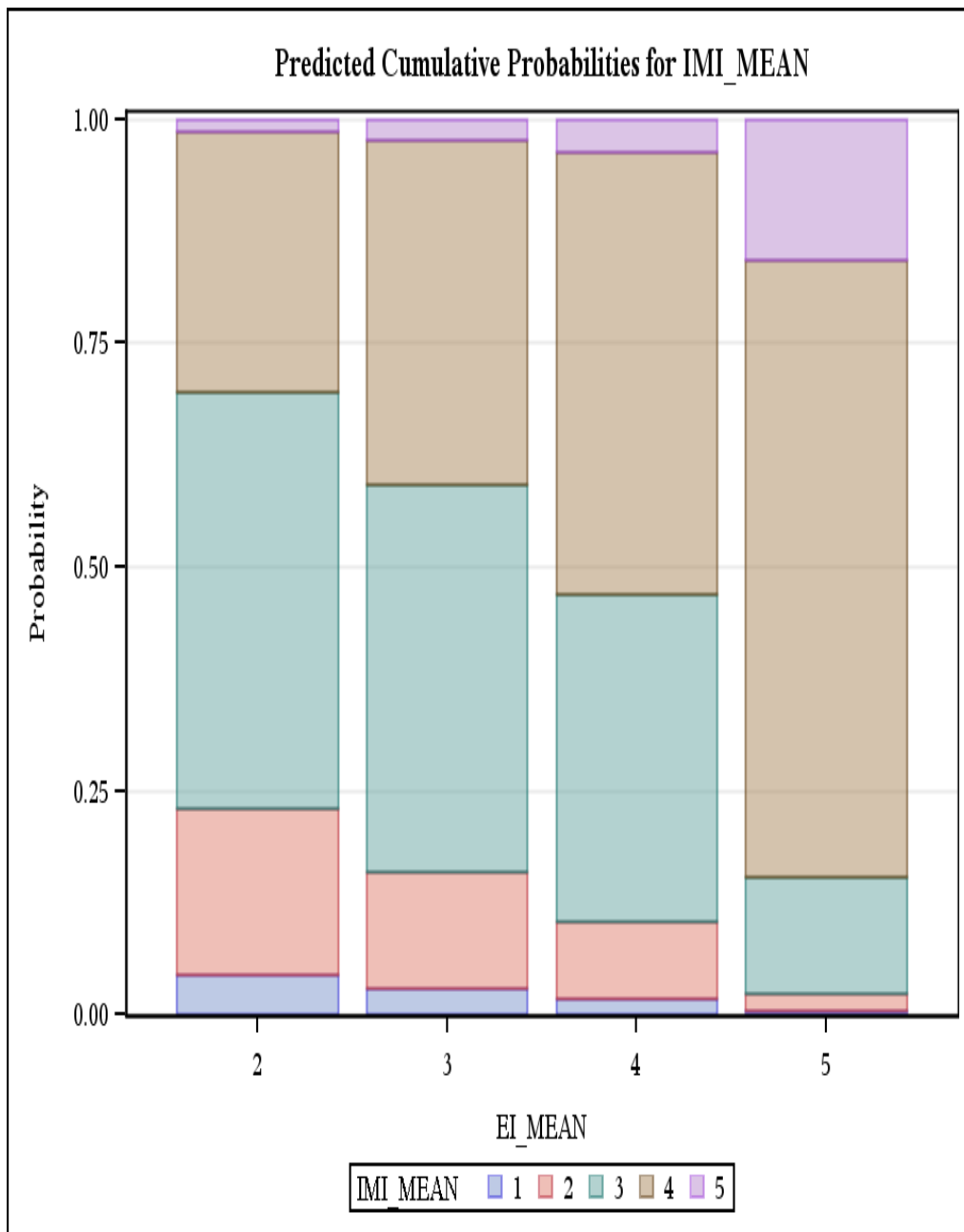


Figure 5.20 Predicted Cumulative probabilities for Intrinsic Motivation

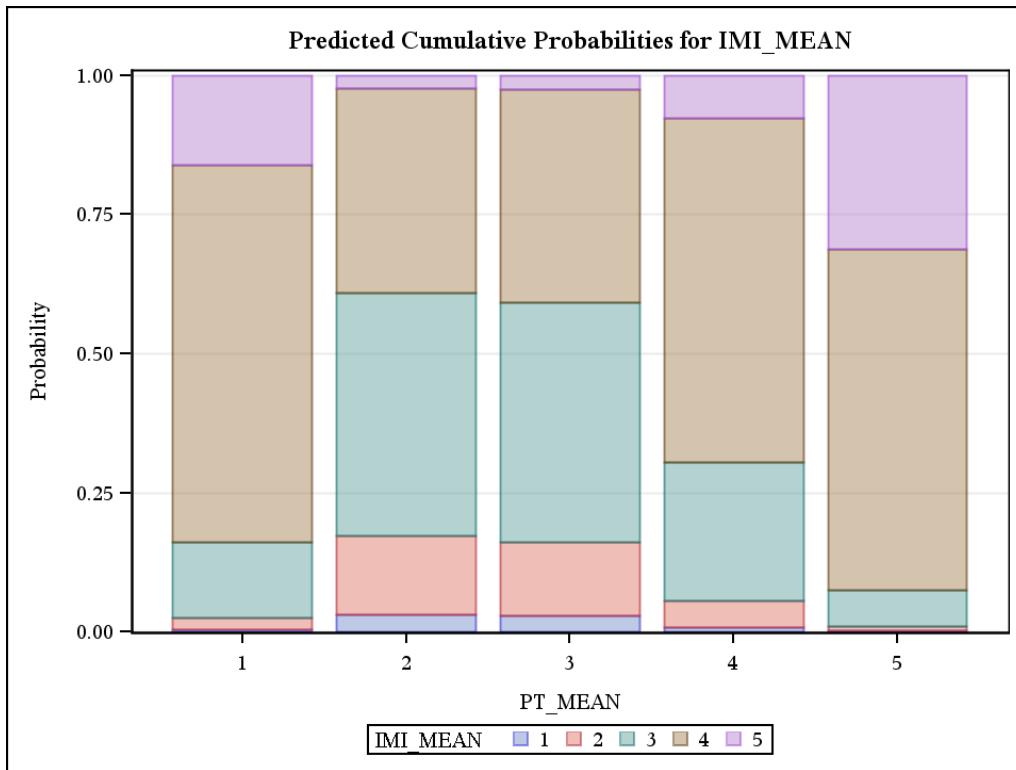
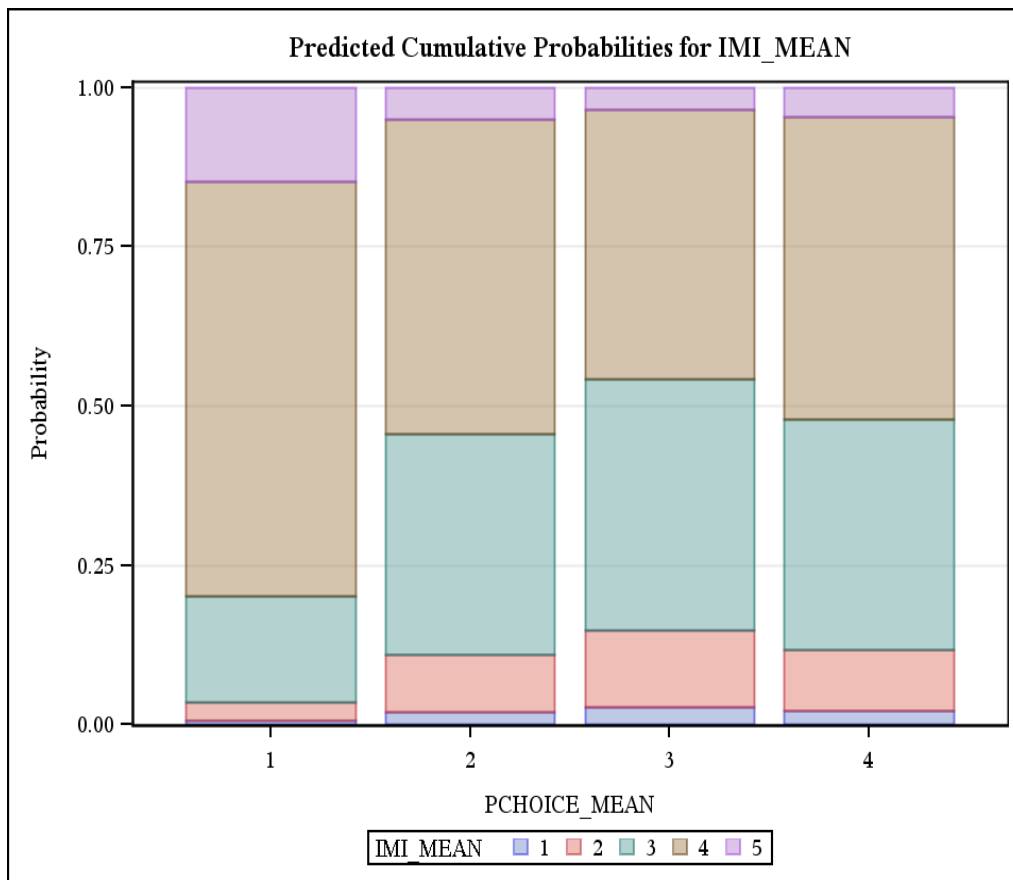


Figure 5.21 Predicted Cumulative probabilities for Intrinsic Motivation (Perceived Choice)



5.7 Intrinsic motivation inventory

Hunter's Intrinsic/ Extrinsic Theory

The Intrinsic Motivation Inventory (IMI) is a multidimensional measurement device intended to assess participants' subjective experience related to a target activity in laboratory experiments. Madeline Hunter, who is known mainly for her work in education, proposes a two-part system of motivation. The Intrinsic Motivation Inventory can be used to understand motivation; the two types of motivation are intrinsic and extrinsic motivation. Intrinsic motivation is explored in this study. The instrument assesses participants' interest/enjoyment, perceived competence, effort, effort/importance, felt pressure and tension, perceived choice, and relatedness which taps the experience of relatedness of employees among each other while performing a given activity. These subscales have different numbers of items and they concern different activities. Extrinsic motivation, according to Hunter, comprises five external factors that can be affected from the outside. These include level of concern, success, feedback, and interest and feeling tone.

5.7.1 Interest/enjoyment

These items seek to explore the interest that employees have regarding their work. The employees have to rate the items 1 – 5, with 1 being strongly disagree and 5 being strongly agree. The scale was then identified (low, average, and high). This was achieved through using the percentiles, 25% and less indicating respondents with low scale, and 75% and above indicating high scale. This section explores interest/enjoyment, which consists of 7 items. The mean between the responses was found to be 4.005 which indicates that the majority of the employees are on the average scale and above, which implies that the employees are motivated to an extended degree. The standard deviation among the responses is 1.52, indicating the low variation of the responses. Table 5.19 presents the levels of interest and enjoyment of the employees. It is clear from table 5.19 that there are no employees with a low level of interest and enjoyment. The findings indicate that the majority of employees (53%) have a high level of interest and enjoyment.

Table 5.19: Interest/Enjoyment

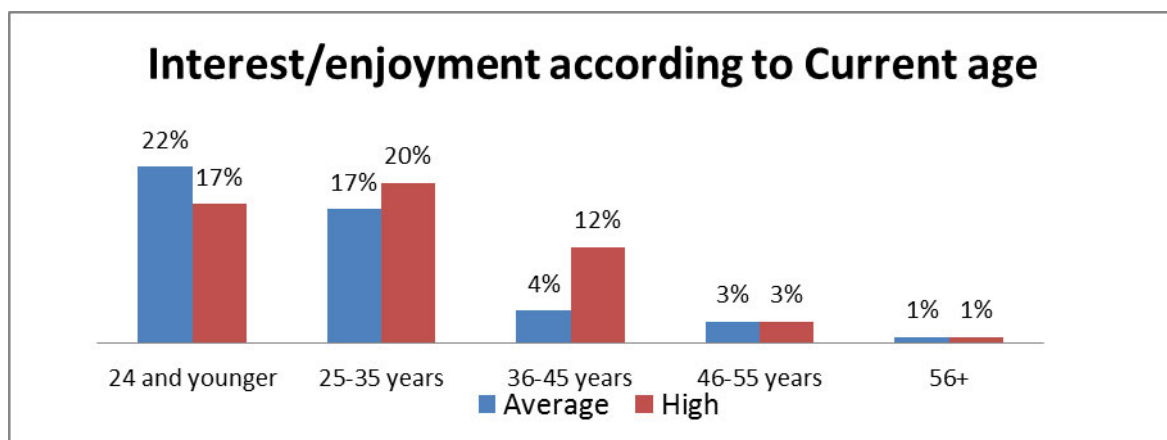
	Count	%
Average	70	46.36%
High	81	53.64%
Grand	151	100.00%
Total		

Demographic and work-related factors are explored to observe if there is statistical difference according to selected factors. Table 5.20 below presents the level of interest and enjoyment according to gender. It is clear from the table that the majority of female employees in the company (12.5%) are highly interested compared with 7.28% with an average level of interest in their job. Among the male employees, there is no statistical difference between those who are highly interested, with a higher number of males being highly interested (38.4% and 39.7%).

Table 5.20. Interest/Enjoyment and Gender					
	Average		High		Grand total
	Count	%	Count	%	
	70	46%	81	53%	
Female	11	7%	19	12%	30(100%)
Male	58	38%	60	39%	118(100%)
(blank)	1	0.6%	2	1%	3(100%)

The other factor to be explored is the current age of the employees. Figure 5.22 indicates the level of interest and enjoyment regarding the work. Among the employees younger than 24 years, the majority have an average level of interest. The majority of employees in the age-groups 25-35 and 36-45 have higher interest in their work than younger employees. It is observed that there is no statistical difference between the levels of interest and enjoyment for employees older than 46 years.

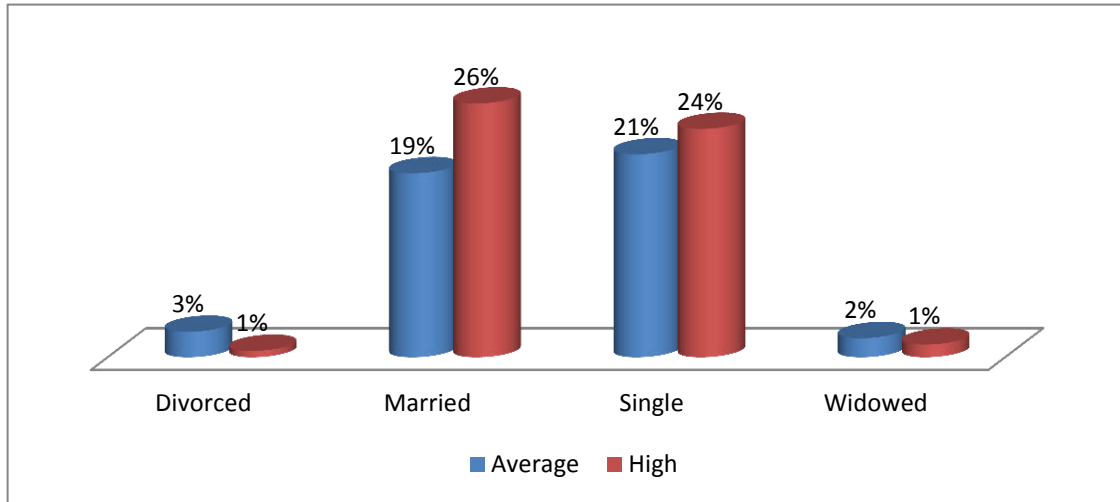
Figure 5.22: Interest/ Enjoyment and Current Age



As far as marital status is concerned, figure 5.23 below indicates that among married employees, majority have high interest. Among single employees, although the majority have

high interest, there is no statistical difference between those with average interest and high interest (21% and 24%)

Figure 5.23: Interest/ Enjoyment and Marital Status



The work-related factor to be explored for interest and enjoyment is tenure. This factor is associated with employees' years of experience in the company. Table 5.24 indicates that for each category of years of experience, except for those who have been in the company for 20 years and more, the more the years of experience employees have, the more interested they get. The findings also suggest that many employees did not respond regarding their tenure, and only about 11% responded.

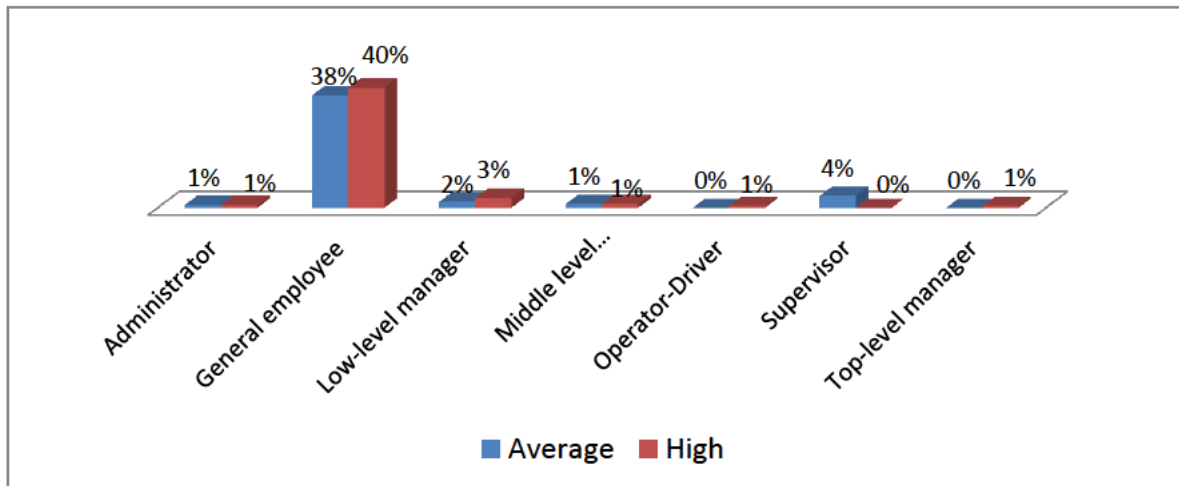
Table 5.24: Interest / Enjoyment and Tenure

Table 5.24. Interest/enjoyment and tenure					Grand total
	Average		High		
	Count	%	Count	%	
		70	46.36%	81	53.64%
Less than 5 years	55	36.42%	65	43.05%	120(100%)
6-10 years	3	1.99%	5	3.31%	8(100%)
11-20 years	1	0.66%	2	1.32%	3(100%)
20+	2	1.32%	1	0.66%	3(100%)
(blank)	9	5.96%	8	5.30%	17(100%)

Another factor of interest is educational attainment. The table below indicates that the majority of employees in this study have grade 10. Among employees with grade 10, the majority have average interest. However, among those with grade 12, the majority have high interest in their work. This pattern is also observed for employees with diploma and degree education qualifications. The findings suggest that the higher education employees have higher interest in their work (See Table 5.25 in Appendixes).

Exploring the level of interest according to the position employees hold in the company is explored and the findings are presented in figure 5.24 below. There is no statistical difference for all the positions in the company, with the exception of supervisors, who all have average interest and enjoyment.

Figure 5.24: Interest/ Enjoyment and Position



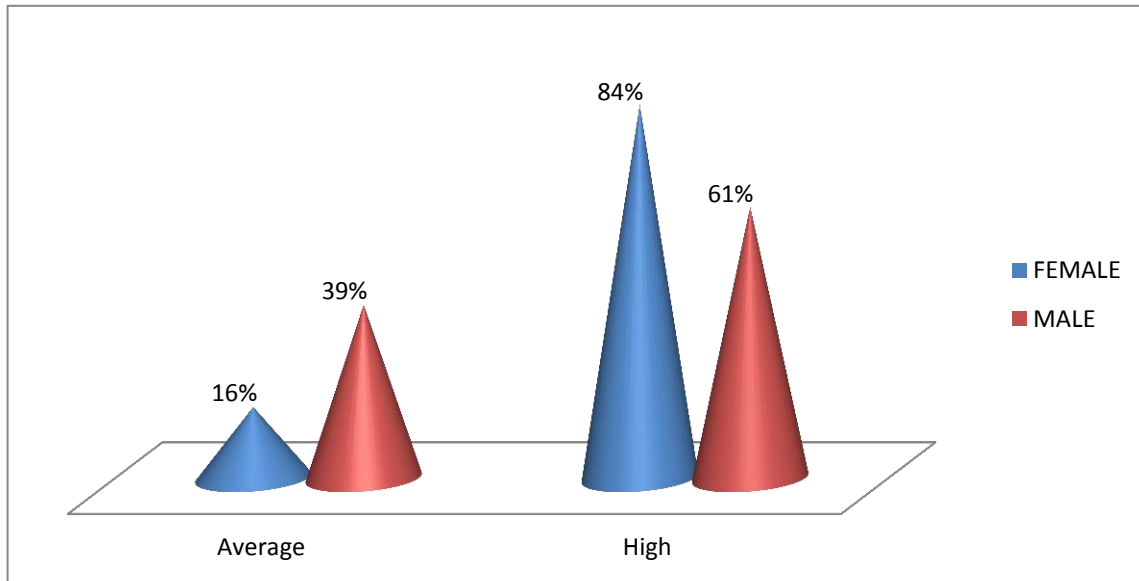
In the intrinsic motivation inventory, the next subscale to be explored is perceived competence.

5.7.2 Perceived Competence

The perceived competence concepts are theorized to be positive predictors of both self-report and behavioral measures of intrinsic motivation. In the study, perceived competence is explored and the mean between the responses is found to be 3.94 with a Standard Deviation of 1.3. Given that the highest score for each item is 5, the mean of this subscale indicates that the majority of respondents scored an average score and above. The Standard Deviation shows that the variation between the responses is low. There was a satisfactory response rate of 98%, meaning that only 3 employees did not respond to this subscale. The majority of employees perceive themselves to have high (66%) competence.

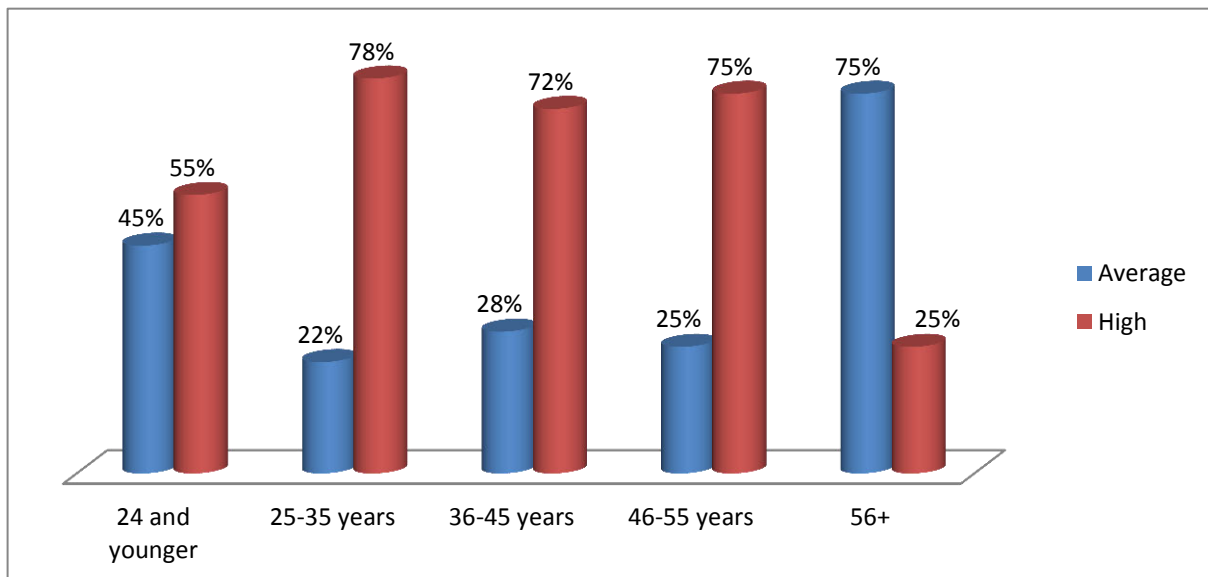
Perceived competence is assessed according to demographic and work-related factors. Figure 5.25 below presents perceived competence according to gender. It is clear that among females, the majority perceive their competence to be high. This pattern is also observed among male employees. However, female employees seem to perceive themselves as highly competent compared to their counterparts.

Figure 5.25: Perceived Competence and Gender



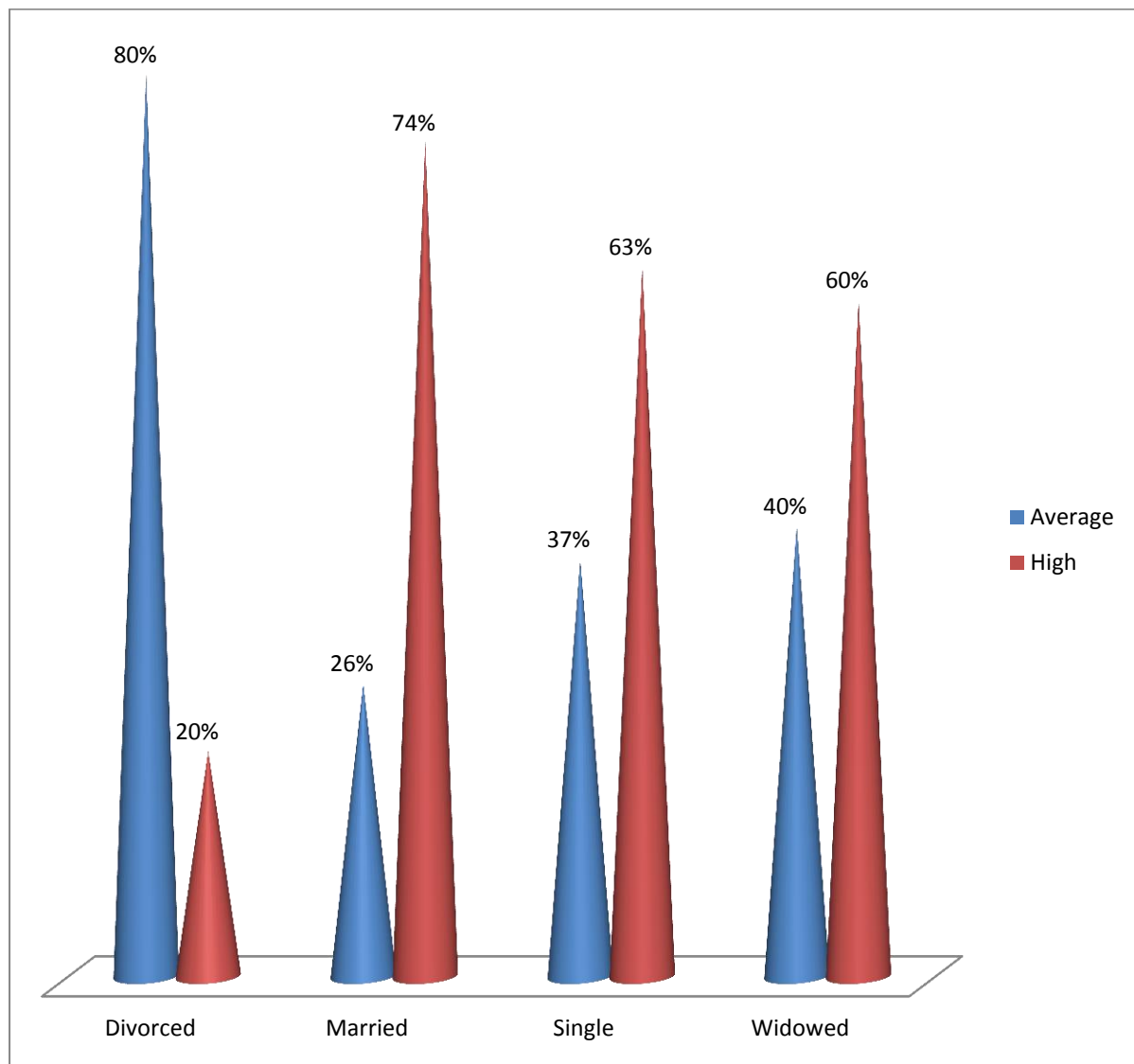
The current age of employees is assessed to find the influence it has on perceived competence. It is clear from the figure below that for each age group of the employees, except for those aged 56 and above, the majority of employees perceive themselves to be highly competent in their work.

Figure 5.26: Perceived Competence and Current Age



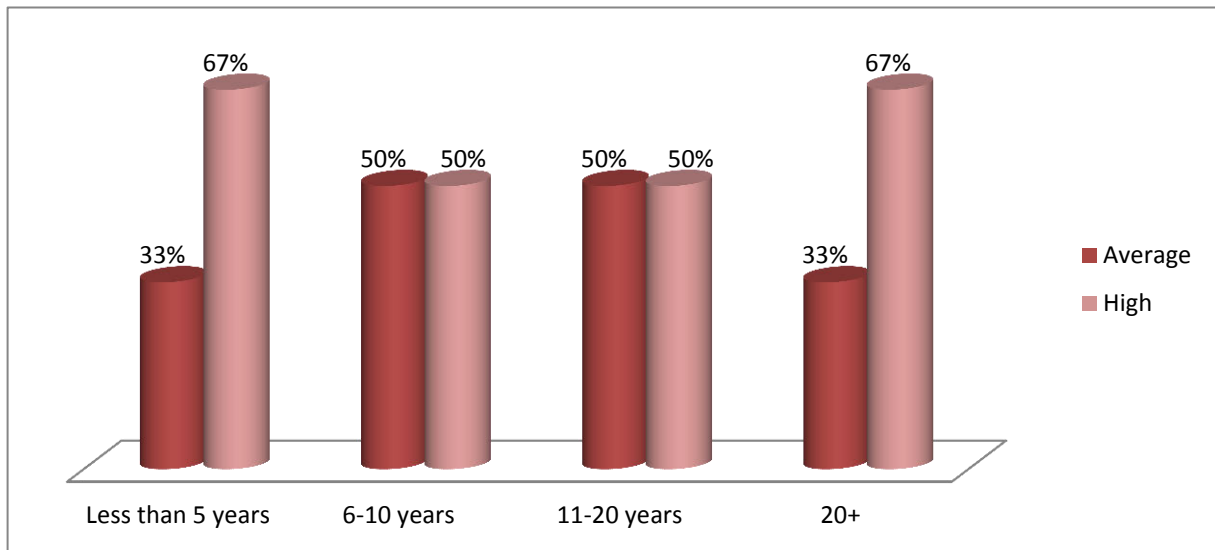
According to marital status, divorced employees perceived themselves to have average competence, but the married, single, and widowed employees perceive themselves as having high competence. It seems that being married plays a role in how employees perceive their competence.

Figure 5.27: Perceived Competence and Marital Status



The number of years of experience that employees have working for the company is assumed to have an influence on perceived competence. Figure 5.28 below presents the findings. While there is no statistical difference between the levels of perceived competence among employees with 6-10 years and 11-20 years of experience, those with fewer and those with many years seem to perceive themselves as having high levels of competence.

Figure 5.28: Perceived Competence and Tenure



As far as education attainment is concerned, the majority of all qualified employees perceive themselves as having higher competence than average (Table 5.26, Appendixes).

The work-related factor that is of interest is the position employees have in the company. Table 5.27 presents the findings. It is clear from the table that the majority of employees indicated that they have high competence. About 65% of general employees indicated that they have high competence, while 35% indicated that they have an average level of competence.

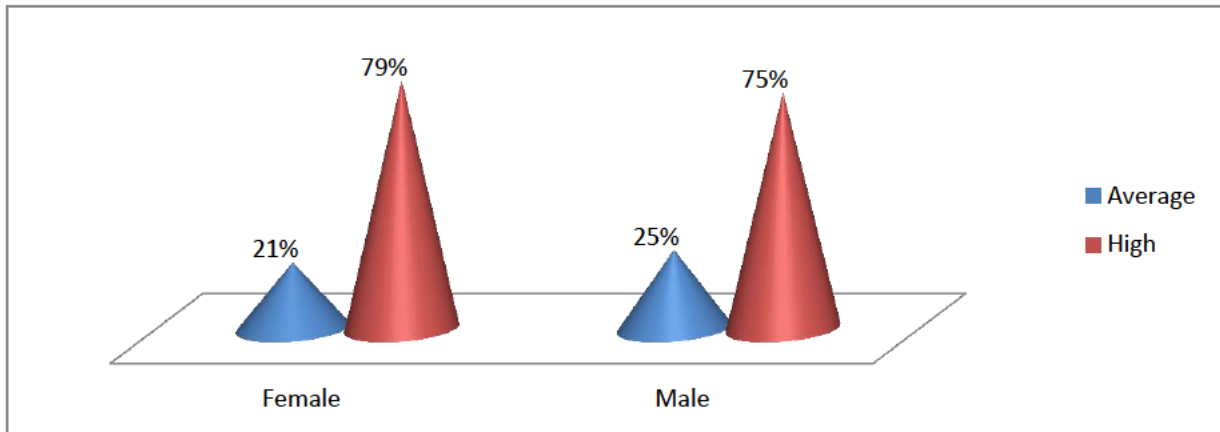
5.7.3 Effort and importance

Effort/Importance is the third subscale of the Intrinsic Motivation Inventory. This subscale measures the effort that employees put into their work and how important it was for employees to perform a task. Measuring effort/ importance is essential in that people internalize and become self-regulating with respect to activities that they experience as useful or valuable for themselves. The subscale has 5 items that are rated similarly to the rest of the subscales. The Mean was calculated to be 4.51 with a Standard Deviation of 1.39. The Mean value indicates that the majority of employees rated themselves to have average and high levels of effort and importance. The Standard Deviation indicates that the variation between the responses is relatively low. The response rate is satisfactory at 97%, meaning that only 4 employees did not respond to the all the items in this subscale. No employee indicated that they have a low level of effort and importance.

Effort and importance are explored according to gender. It is clear from the chart that both male and female employees have high levels of effort and importance. The findings suggest

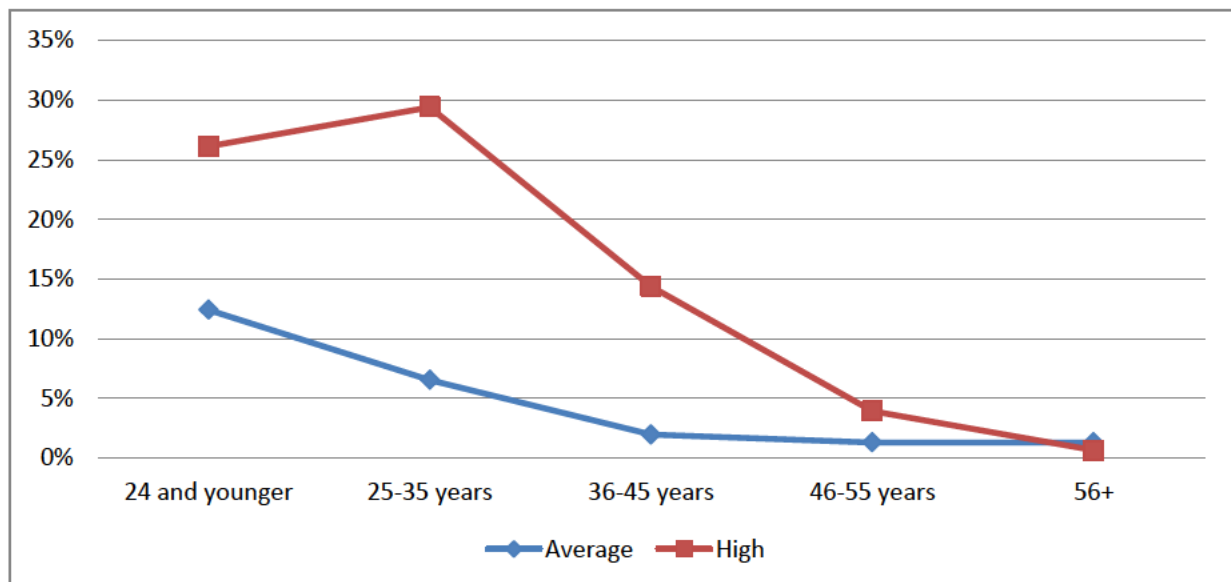
that being neither a male nor a female makes a statistical difference to the effort and importance regarding their work. It is interesting to observe that more female employees put high effort and importance into their work than male employees (79% and 75%) respectively.

Figure 5.29: Effort/ Importance and Gender



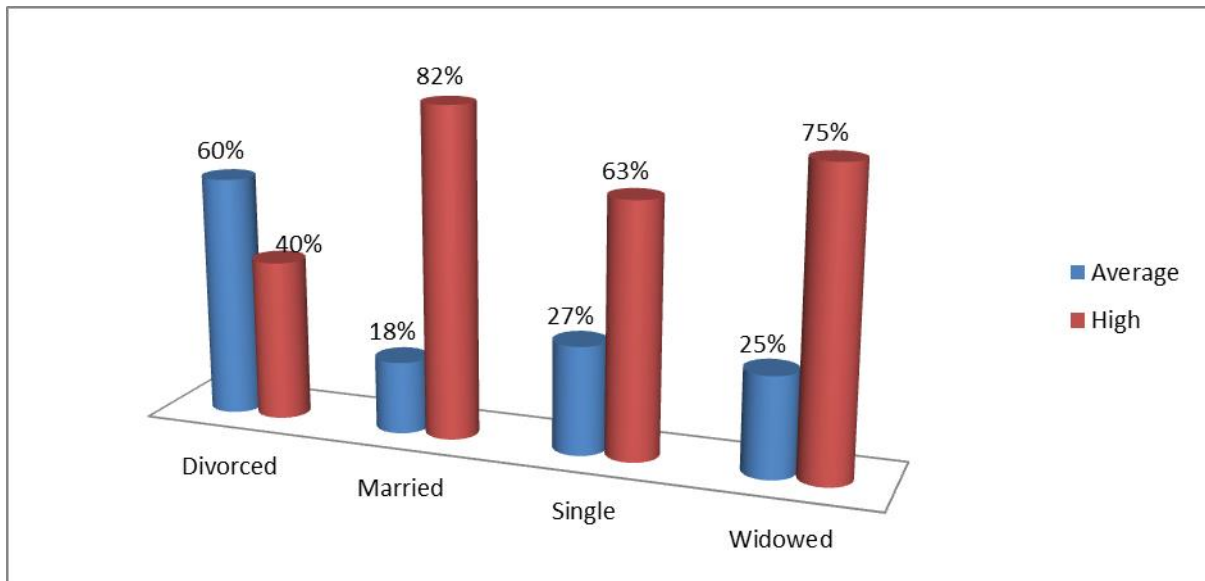
The findings for effort and importance regarding the work done by the employees is summarised and presented in figure 5.34 below. According to current age, for each age group employees show high effort, except for employees aged 56 and above. As shown in the graph among employees younger than 25 years, the majority have high levels of effort and importance. This pattern is observed for most of the age groups.

Figure 5.30: Effort /Importance and Current Age



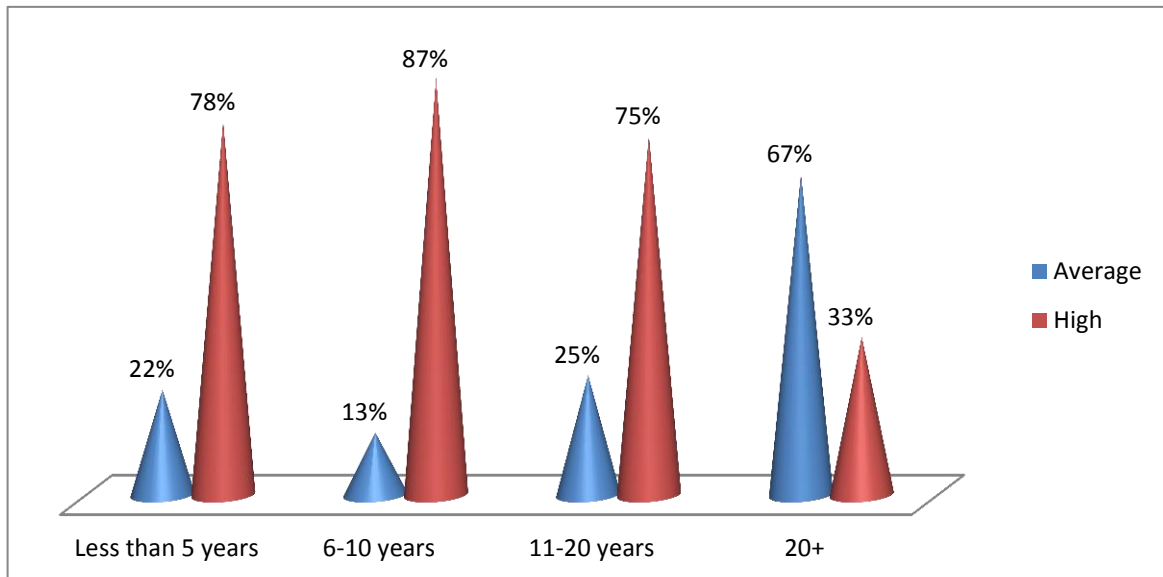
The employees' level of effort/importance is distributed according to marital status in the figure below. Except for divorced employees, the majority of married, single, and widowed have high levels of effort/importance with married employees being outstanding counterparts.

Figure 5.31: Effort/Importance and Marital Status



Tenure is also explored. The findings are presented in the table below. It seems that the majority in every age category of tenure have high levels of effort/importance regarding their work, except for employees with more than 20 years of working experience in this company.

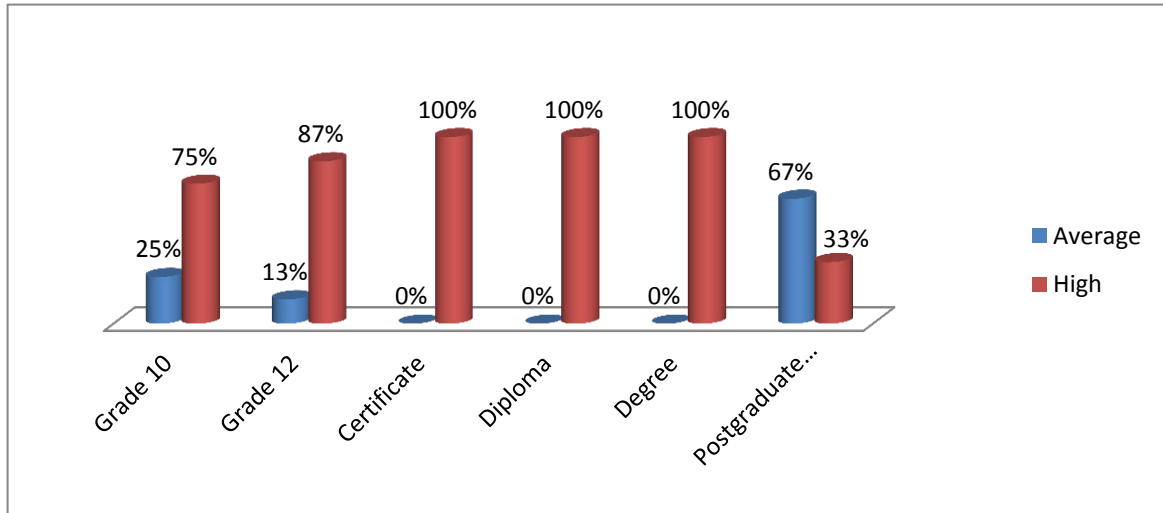
Figure 5.32: Effort/Importance Tenure



Educational attainment seems to play a significant role in levels of effort/importance. The higher the educational qualification attained by employees, the higher the levels of effort/importance. For employees with post-graduate educational qualifications, this pattern seems not to hold. There are 3 employees with post-graduate qualifications, 1 of whom

indicated a high level of effort/importance while the other 2 indicated an average level of effort/importance.

Figure 5.33: Effort/Importance and Education



The table below presents the effort/importance levels and the position of employees in the company. The majority of employees indicate a high level of effort/importance on all position levels.

Table 5.27: Effort/importance and position		
	Count	%
AVERAGE	38	24.84%
General employee	27	17.65%
Low level manager	1	0.65%
Middle level manager	1	0.65%
Supervisor	5	3.27%
(blank)	4	2.61%
HIGH	115	75.16%
Administrator	2	1.31%
General employee	93	60.78%
Low level manager	6	3.92%
Middle level manager	3	1.96%
Operator-Driver	1	0.65%
Supervisor	6	3.92%
Top-level manager	1	0.65%

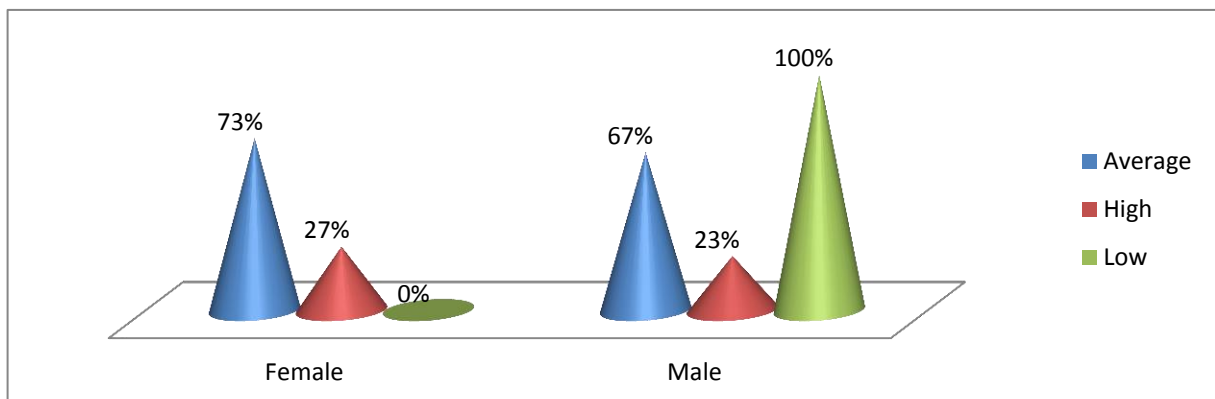
(blank)	3	1.96%
Grand Total	153	100.00%

5.7.4 Pressure and Tension

Pressure/tension is the fourth subscale of the Intrinsic Motivation Inventory. Pressure/tension is theorized to be a negative predictor of intrinsic motivation. The subscale has 5 items that are rated similarly to the rest of the subscales. The mean was calculated to be 3.845 with a Standard Deviation of 1.54. The mean value indicates that the majority of the employees rated themselves as having average and high levels of effort and importance. The Standard Deviation indicates that the variation between the responses is relatively low. The response rate is satisfactory at 97%, meaning that only 4 employees did not respond to all the items in this subscale. As indicated in figure 5.34 below, the majority of employees indicated that they have average levels of tension and pressure to perform activities at work. The findings suggest that about 46% of employees are highly pressured. Only 2 employees felt no pressure while performing their activities. This leads to the suggestion that the company under study needs to intervene to ensure that the employees do not feel pressure while working since this affects production negatively.

The same factors, such as demographic and work-related, are explored to assess if they influence the levels of tension/pressure. According to gender figure, 5.39 indicate that the majority of both males and females are averagely pressured. There are only 2 male employees. Both of them indicated that they experienced low levels of pressure while performing their activities. About quarter of the employees, 23% and 27% of females and males respectively, are highly pressured.

Figure 5.34: Tension/Pressure and Gender



It is interesting to assess the distribution of current age of employees to the tension/pressure. Table 5.28 (Appendixes) presents the findings. It can be observed that the majority of employees in each age category are averagely pressured at work. As far as marital status is concerned, the findings are presented in table 5.29 (Appendixes). The findings suggest that with each of the marital status categories, the majority of employees are averagely pressured.

The years of experience in the company and levels of tension/pressure are presented in figure 5.36 below. The majority of employees in each age-category of tenure indicate that they are averagely pressured while performing activities.

Figure 5.36: Tension/ Pressure and Tenure

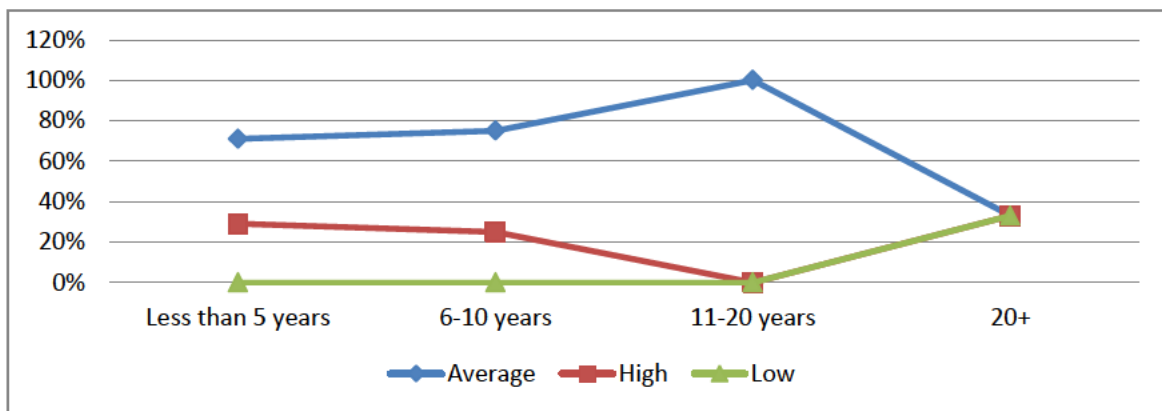


Table 5.30: Tension/pressure and education

	Count	%
Average	105	68.63%
Degree	4	2.61%
Diploma	7	4.58%
Grade 10	65	42.48%
Grade 12	20	13.07%
Postgraduate degree	1	0.65%
(blank)	8	5.23%
High	46	30.07%
Certificate	1	0.65%
Degree	1	0.65%
Grade 10	34	22.22%
Grade 12	3	1.96%
Postgraduate degree	2	1.31%
(blank)	5	3.27%
Low	2	1.31%
Diploma	1	0.65%
Grade 10	1	0.65%
Grand Total	153	100.00%

The table above presents the levels of tension/pressure among employees according to educational attainment. For each educational qualification level, the majority of employees indicated that they are averagely pressured. Table 5.31 (Appendixes) indicates the tension/pressure levels according to position employees hold in the company. It is interesting to observe that one of the top managers is averagely pressured at work. Out of the 11 supervisors in this study, 36% reported that they are highly pressured. This finding can be used to restructure the company and to share activities effectively and efficiently among the employees.

5.7.5 Perceived Choice

Perceived choice is the fifth subscale of the Intrinsic Motivation Inventory. Perceived choice measures whether it was the employee's choice to perform a particular task. Perceived

choices as well as perceived competence are theorized to be positive predictors of both self-report and behavioral measures of intrinsic motivation. The subscale has 7 items that are rated similarly to the rest of the subscales. The mean was calculated to be 4.79 with a Standard Deviation of 1.34. The mean value indicates that the majority of the employees rated themselves to have average and high levels of effort and importance. The Standard Deviation indicates that the variation between the responses is relatively low. The response rate is satisfactory at 95%, meaning that only 7 employees did not respond to all the items in this subscale.

According to gender, among female employees, the majority of females highly perceive that it is their choice to perform activities in the organisation. However, the majority of male employees rate average levels of perceived choice, meaning that for most of the activities performed, their choice are relatively small.

Perceived choice, according to tenure, is presented in figure 5.37 below. The findings suggest that all employees, except those with more than 20 years of experience, indicated an average level of perceived choice.

Figure 5.37: Perceived Choice and Gender

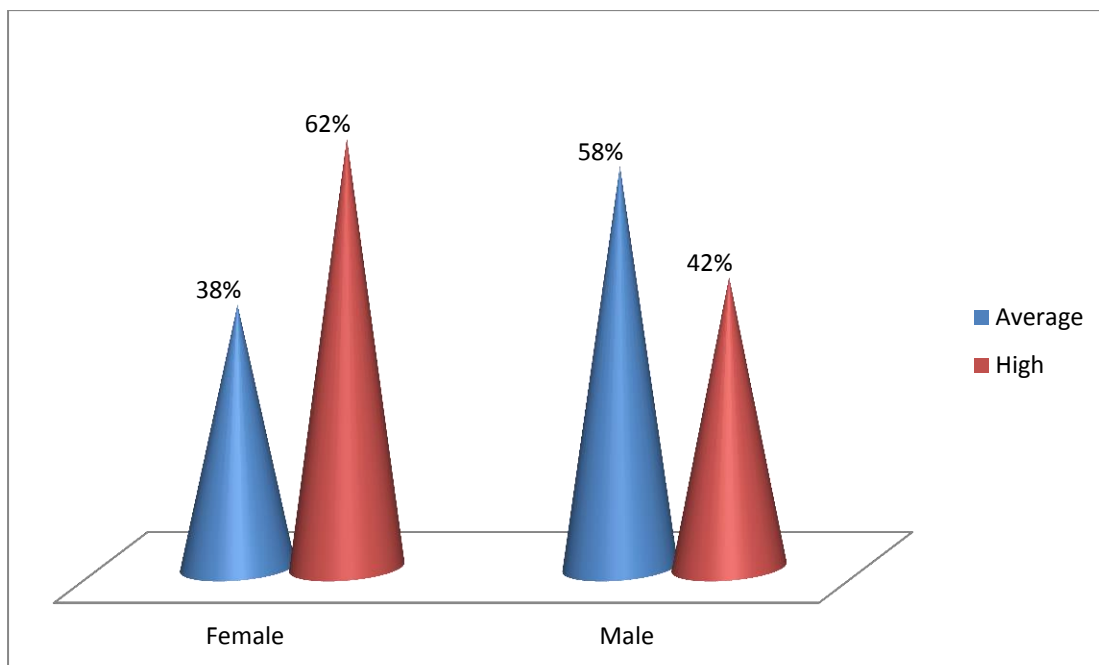


Figure 5.38: Perceived Choice and Tenure

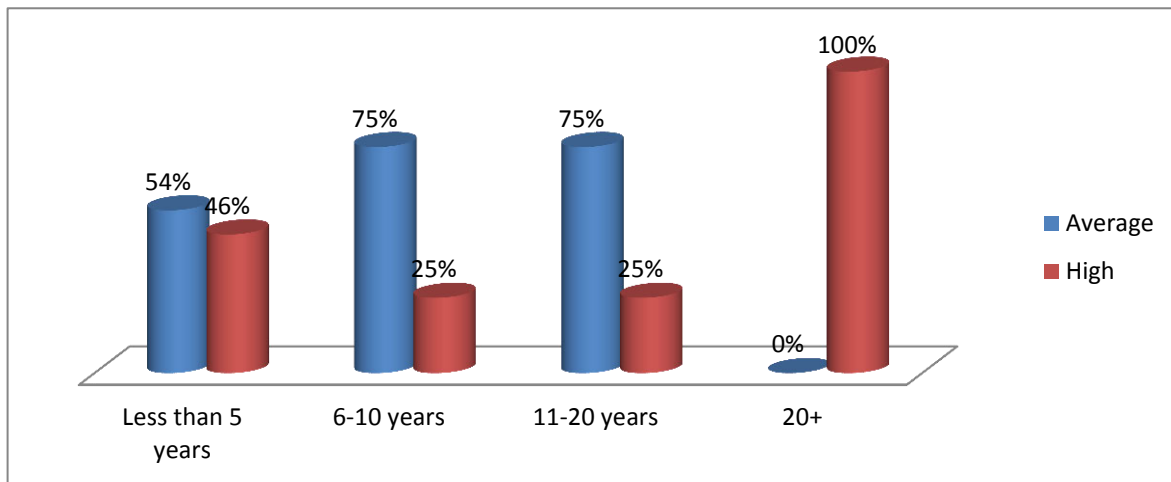


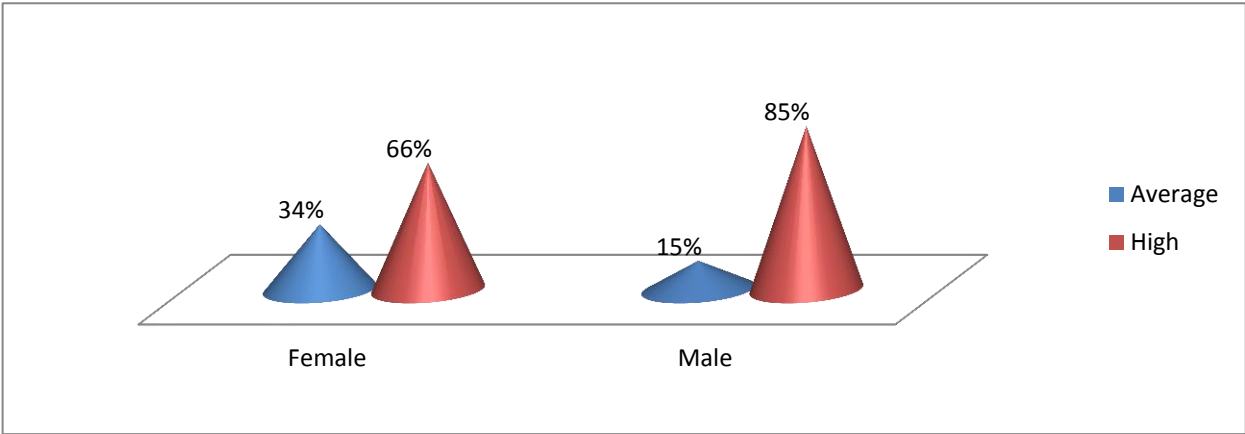
Table 5.31 (Appendixes) presents perceived choice levels according to educational attainment. The majority of respondents with Grade 10 have shown average levels of perceived choice. However, among employees with grade 12, the majority indicated high levels of perceived choice. There is no statistical difference among employees with diplomas. In table 5.32 (Appendixes), it is clear that the majority in all positions indicated an average level of perceived choice, indicating that employees in this company perform activities that they do not choose but which are reinforced by management.

5.7.6 Relatedness

Relatedness is the sixth subscale of the Intrinsic Motivation Inventory. Relatedness seeks to measure how related employees feel to each other. The relatedness subscale is used in studies having to do with interpersonal interactions, friendship formation, and so on. The subscale has 7 items that are rated similarly to the rest of the subscales. The mean was calculated to be 4.17 with a Standard Deviation of 1.46. The mean value indicates that the majority of the employees rated themselves to have average and high levels of effort and importance. The Standard Deviation indicates that the variation between the responses is relatively low. The response rate is satisfactory at 94%, meaning that only 8 employees did not respond to all the items in this subscale. There was no employee who indicated a low level of relatedness to their colleagues as 81% and 19% reported high and average respectively.

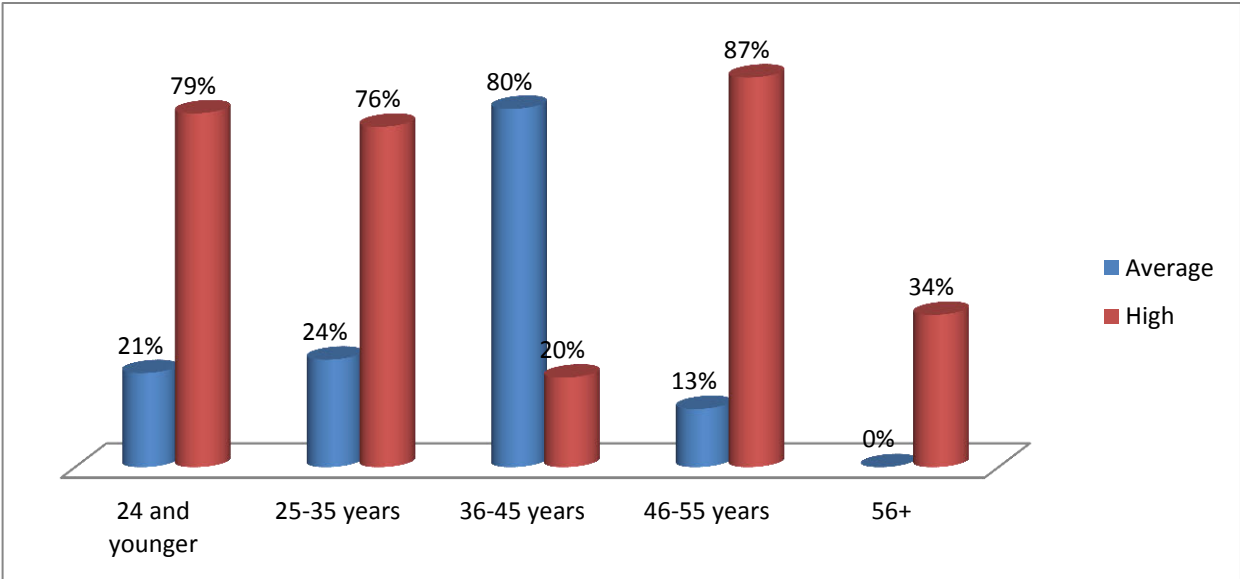
As far as gender is concerned, the findings are presented in figure 5.39 below. It is clear from the diagram that the majority of employees, regardless of their gender, have a high level of relatedness to one another. However, male employees are seen to be more related to other employees than female employees.

Figure 5.39: Relatedness and Gender



The current age of employees and relatedness levels are presented in figure 5.40 below. It is clear from the diagram that employees between the ages 36-45 years have moderate relationships with their colleagues. Otherwise, the majority of employees in other age groups have high levels of relatedness. Further research is recommended to investigate the possible factors contributing to moderate levels of relatedness among employees in the age category 36-45 years, in order to complement the findings in this report.

Figure 5.40: Relatedness and Age



Another factor of interest, as far as relatedness is concerned, is marital status and whether being married or single makes any difference to how employees relate to each other? This question is answered in figure 5.41 below. The findings suggest that the majority of employees, regardless of their marital status, have a high level of relatedness. About 80% in each marital status indicated that they have a high level of relatedness.

Figure 5.41: Relatedness and Marital Status

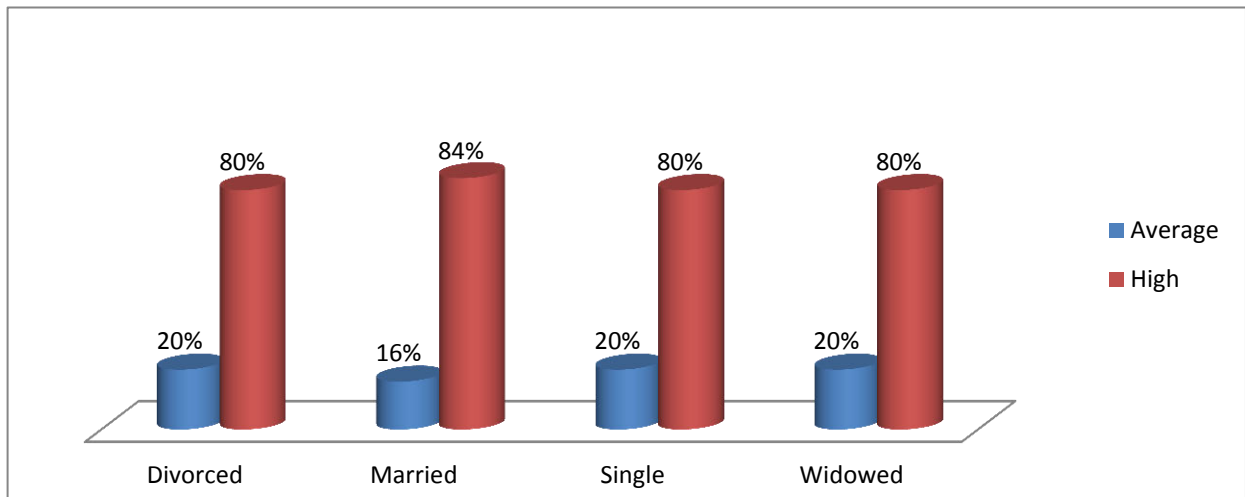
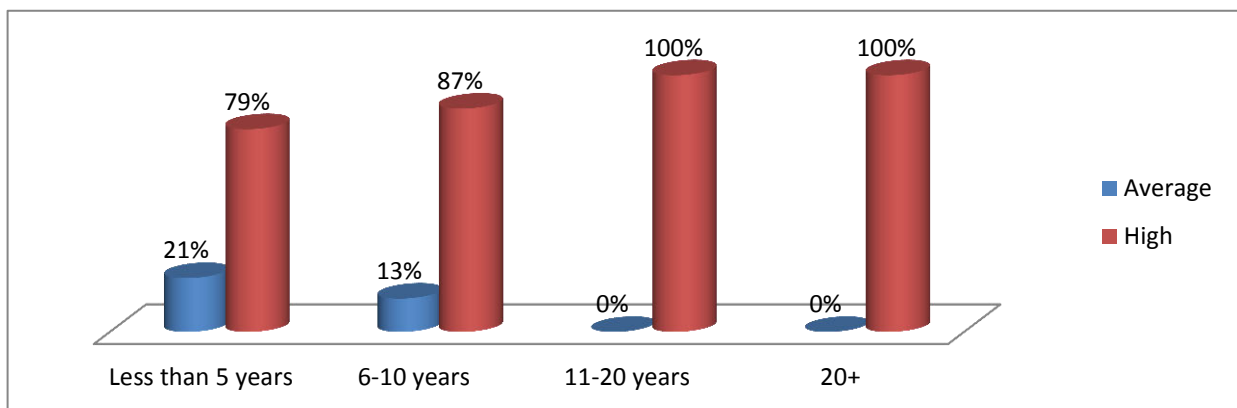


Figure 5.42 below presents the level of relatedness according to the employees' years of experience in the company. It is clear from the diagram that the majority of employees, regardless of their years of experience, indicate a high level of relatedness. The diagram also shows that the more years' employees have in the company, the more they are highly related to other colleagues.

Figure 5.42: Relatedness and Gender



Tables 5.33 and 5.34 (Appendixes) indicate the levels of relatedness among the employees according to educational attainment and position, respectively. The same pattern is observed in levels of relatedness according to marital status. Educational attainment and position does not play a significant role. Employees have high levels of relatedness in all educational attainment categories as well as for all positions.

5.8 Conclusion

This chapter explored the Work Engagement scale, Intrinsic Motivation Inventory and Job Satisfaction among employees in a diamond mining company in Zimbabwe. Work engagement consists of 17 items rated from 1-6, 1 being almost never and 6 being always. The mean of the scores was found to be 4.14 with a Standard Deviation of 1.59, showing low variation between the scores or responses. The findings indicated that about 51% of respondents are averagely engaged in their work, followed by 48% of employees who are highly engaged, and only 1% of employees have low levels of engagement. Demographic factors, such as gender, current age, marital status, and education attainments, were assessed to find the distribution of work engagement levels. Work-related factors that were explored are tenure, which indicates the number of years of experience employees have in the company, and the position that employees hold within the company. The three hypotheses in the study were tested. A significant relationship was found between job satisfaction and work engagement. Results also revealed a significant relationship between job satisfaction and intrinsic motivation. Furthermore, the tests revealed that intrinsic motivation and work engagement enhance job satisfaction.

The findings are consistent with existing literature in the field and suggest that there is no statistical difference according to gender, with males being highly involved with a small percentage difference. Moreover, the results obtained through factor analysis showed a fit to the data in terms of the measured instruments (i.e. UWES, IMS and MJS). Descriptive statistics, together with the Cronbach alpha reliabilities of measures, found the data to be normally distributed. The next chapter is a presentation of the qualitative findings of the study.

CHAPTER 6: WORK ENGAGEMENT, INTRINSIC MOTIVATION AND JOB SATISFACTION

QUALITATIVE ANALYSIS

6.1 Introduction

The objective of this study is to determine levels of work engagement, intrinsic motivation and job satisfaction among miners of a diamond mining company in Zimbabwe. As outlined earlier, this was a mixed method study whose research questions required both quantitative and qualitative approaches to be effectively answered. In the previous chapter, the quantitative results were presented and analysed. This chapter presents and analyses the qualitative component in light of the overall objective.

In the following pages, the results are presented and analysed according to the identified themes emerging from the discussion of each of the three main constructs of the study: work engagement, intrinsic motivation and job satisfaction.

6.2 Managers' perceptions of work engagement

Work engagement has been conceptualised in different ways. Managers were asked to give their perceptions of work engagement. Several perspectives in relation to work engagement have been given by the managers interviewed. They highlighted factors that they perceived to be contributing to work engagement levels of the employees in the company.

Work engagement entails harnessing of oneself fully when at work

Most managers revealed that work engagement encompasses employees' harnessing themselves fully to the job demands. For instance, participant P said that; "*Work engagement largely from an individual perspective entails the extent to which an employee is enthusiastic, involved in their work*". This was echoed by participant Q who said that; "*We are saying how involved the person in their work is. Do they fully apply themselves to their work?*" Participant R also supported this by outlining that; "*Basically, we are taking an individual, then we are saying looking at this individual or taking myself as an individual, to what extent am I wholly applying myself to the duties I am expected of in the company*".

The above was the general sentiment expressed by the majority of the managers in as far as work engagement is concerned. However, two of the participants had a different perspective, where work engagement is based on resource utilisation.

Participant S said that his understanding of work engagement is “*making use of all the available resources i.e. human resource. We are saying the available manpower in my department, am I utilizing that fully or am I making use of the skills available within the administration department*”. On the other hand, participant T’s view of work engagement was:

I understand work engagement from two dimensions i.e. firstly when an employee joins an organisation and secondly where we have got someone who is already in the field of work and has been with the organisation for a long time. From the first point of view, an employees’ level of engagement is measured when he or she is given a task to do with the supervisor’s assistance before doing it alone. Then on the second aspect, the person will familiarise his or herself with the demands of that particular task and then carry out that scope of project.

The above views show that managers perceive work engagement as the full utilisation of the available resources that an employee is presented with. More precisely, an employee is believed to be engaged in their work by judging their performance after full utilisation of the available resources. Considering the already existing conceptualisation or approaches to work engagement, it is difficult to safely classify the current findings of managers’ perceptions of work engagement according to these four approaches to work engagement.

However, when taking it holistically, by including responses to the other two constructs - intrinsic motivation and job satisfaction - it can be seen that managers’ perceptions can be closely linked to the satisfaction-engagement approach. This is because the satisfaction-engagement approach suggests that environmental, job resources and support are both important and necessary for an employee to complete their work (Shuck, 2010). Moreover, findings suggest that enthusiasm and involvement are some of the contributing factors to work engagement. This is the basis upon which the satisfaction –engagement approach is recommended in the company under study.

Having given their perceptions of the meaning of work engagement, the managers were asked to rank themselves in terms of their being engaged in their work.

Self-ranking of managers on the aspect of work engagement

Of the nine (9) managers interviewed, four of them gave themselves 4 out of 5 implying that they are highly engaged in their work. These managers cited several reasons why they think

they are highly engaged in their work but all spoke about their having great passion for their work. For instance, one manager stated that [he]; *“Feels can do more and I haven’t reached an optimum level. You see, I apply myself, but I still have more energy to use for the betterment of the company”*. The other manager said that; *“Because of liking the work hence doing it bestand you have to be responsible for the results”*. These sentiments make work engagement fit appropriately into the realm of Positive Organisational Behaviour (POB) because of the clear outline of the application of human resource strengths and psychological capacities in the workplace by the participants.

This is put succinctly by another manager who said;

It’s because of being fully engaged. I detach myself when I’m done with my daily activities. I look after this department but I have got other critical roles that are inherent with me and that have been seen by my superior and I also go and assist on some kind of issues. So, I’m always fully committed to my roles and all the time I don’t have time to rest. So, I can say in as far as engagement is concerned, the way I conduct my business from A-Z ,I think I’m fully engaged because for the meantime, I’m the one who does the reporting and coordination of everything.

The findings above reveal that engaged employees have a better in-role fit and extra-role performance (Bakker, Demerouti & Verbeke, 2004).

In addition to the above, two of the participants tagged themselves at 5 and, when all was summed up, it can be concluded that when one is fully engaged in their work, it is difficult to detach oneself. For instance, one participant revealed that *“I will always give myself a 5 because I’m sort of here 24/7. Even at night I’m kept being consulted, even if anything happens, they consult with me and we discuss. They give me feedback, I give them feedback. I’m telling you, I’m really attached to my work”*.

The other participant confided that;

I give myself a 5 because I like my work and being in this field of work, you need to be able to produce. You need to like your job and at the end of the day you need to be responsible for the results you produce. So, I like what I do and I like doing it best and I can even go an extra mile you know.

Thus, it can be seen that the managers in this company rank themselves highly in as far as work engagement is concerned. However, it is interesting to note that the bulk of the general

employees in the company are averagely engaged in their work, whereas the managers report being highly engaged. This can form the basis for further research to investigate the reasons behind such a state. However, from the current research, one possible reason could be some validity problems aligned with self-ranking as a measure of engagement among managers, even though a standardised questionnaire was used to measure employees' levels of work engagement. Other possibilities, such as the influence of incentives and access and availability of resources, cannot be ruled out as the causes of such differences in the levels of engagement. It is in light of the above that managers' perceptions of the role of work engagement in a work setting were explored.

6.2.1 Managers' perceptions of the role of work engagement in the workplace

Work engagement has been aligned with different roles. In the current study, it has been found that work engagement prevents and reduces several problems that most organisations face. For instance, one participant said that *"If a person does not apply himself wholly to their work roles, work will not be accomplished at the end of the day"*.

Thus, it can be seen that being engaged in one's work is very important in meeting the set targets in one's work and ultimately the overall organisation's goal. This was also echoed by participant X who put stated that *"If one engages with their work, the company will benefit"*.

However, one respondent was of the idea that work engagement is a must-have quality and has to be forced if one lacks it. This sentiment was echoed by another manager who stated that;

Everyone has to be engaged into their work because that's the reason why we are here. So, when you are not engaged, and then there is no result that you can produce and so what's the reason of being here.

All the above sentiments on the importance of work engagement for both the organisation as well as the individual employees of the company clearly show the effectiveness of work engagement in an organisation. Thus, such a proactive behaviour is important, especially when taking into consideration the present organisational dynamics within the diamond industry, which is characterised by fast changes through technology and reduced supervision (Sonnentag, 2003).

In addition, it is interesting to note that managers in this diamond mining company are aware of the important contribution of work engagement. This is essential, especially given the

contribution that diamond has for economic growth of most nations. As has been shown by the literature, diamond has become the booster of most nations' economic growth, especially in Africa. With South Africa and, recently, Zimbabwe being the major talk of Africa and the world over, there is a need for viable performance of organisations that are aligned with diamond manufacturing. This is so because through the proactive behaviour displayed by an employee, an organisation will be able to display flexibility, meet customers' demands and compete in the global economy (Crant, 2000, Frese et.al., 1996; Parker, 2000). Below are the findings on managers' perceptions of employees' levels of engagement.

6.2.2 Managers' perceptions of employees' levels of engagement

The managers interviewed had different perceptions of their employees' levels of engagement. The majority of the managers felt that their employees are highly engaged in their work. These managers gave reasons as to why they think this is so. For instance, one manager said that;

I can safely classify my employees into 2 categories. There are some whom I can say they are really involved in their work, individuals who when come to work, you can see that this person knows what he wants. Such employees are interested in seeing the work being done. Then there are some employees where you see that this person is merely interested in the remuneration. The work itself, the contribution to the work doesn't matter.

Supporting this view, the other manager revealed that his employees were;

highly engaged and one of the reasons that make me say so is because of the aspect of high unemployment in Zimbabwe such that a person will not want to lose this opportunity and get fired. In the diamond industry, particularly the benefits and remuneration given to employees in this company, these guys will not want to be fired. So, like I have said that as a result of high unemployment, when you get an opportunity to work, then you need to make sure that you are working.

However, one of the managers was disappointed by his employees' levels of engagement since he felt that these employees were engaged at a low level in their work.

I feel that the majority of my employees here are not engaged because they don't wholly apply themselves to their work. It's like they are being coerced you know. At the end of the day, you will just see that this person is just here for money reasons.

However, there are some contradictions between the findings from the managers and the results obtained from the questionnaires issued to the general employees. Although the majority of managers perceived their employees to be highly engaged in their work, the survey conducted on the general employees revealed that these employees are averagely engaged in their work.

One possible reason for such an outcome could be differences in the conceptualisation of work engagement. This is despite the fact that the researcher clearly outlined the working definition of work engagement. There is a possibility of generalisation of the overall performance of the company to positive behaviours towards work for instance in this case work engagement by managers. Given the above insights, managers were asked to give an account of what they do to enhance work engagement.

6.2.3 What do managers do to enhance work engagement?

- i. Use of a performance management system
- ii. Once employees are offered a job, they know what they are supposed to be doing
- iii. Negotiating for off days, organising accommodation on campus

The majority, if not all, of the managers interviewed in this company seemed to be aware of the aspect of work engagement. Given their perceptions of employees' levels of work engagement, these managers claimed that for their employees to engage in their work roles, they (managers) also play a role.

Results have indicated that for employees to engage in their work, basic necessities (according to Maslow) are important. For the present study, off days and accommodation were coined as the most essential needs to be met if employees are to engage in their work., For instance, one participant stated that;

You know these guys also need us for them to wholly apply themselves to the work they do. I always try to organise better things for them .For instance, they used not to have off days , but then I came in and I introduced that and I noticed a lot of positive change in their behaviour towards work. I do introduce a lot of things and I have noticed that doing so has led to a positive behaviour change amongst my employees”.

Another participant agreed, saying;

You know, we are human beings and in as much as we would like to bring our best, there is a lot that is to be done by the managers in achieving the best results. So, when looking at my subordinates in as far as engagement is concerned, I feel I have role to play and in fact that I have and have been playing especially through the use of performance management system and through such an interventions I'm telling you these guys have been improving in terms of performance i.e. engagement in their work.

Moreover, results show that in most technical jobs within the company, employees are given training and development. For instance, one participant said that employees in his department “need to be knowledgeable in their work. As I am speaking right now, we are working on a project to send some of the employees to South Africa for training”.

Thus, the managers’ claim to have a major role in the enhancement of work engagement was also found to be a critical drive to work engagement. For instance, research has found that the availability of opportunities to learn new skills and develop oneself is a major driver to work engagement (Roberts & Davenport, 2002). In support of this, the current research found that the involvement of employees in the decision-making of aspects that affect them, especially at department level, is another source of high levels of work engagement among employees in the company. This was evidenced by one participant who said that;

I'm so confident with my guys in this department because we work as a family. There is nothing done in this department that they don't know especially on those aspects that involves them. In other words I'm talking of their involvement in the decision making process of aspects that affect them. Doing so, makes us realise our goals as a department and I'm so proud of it.

Similar findings were found in one study, for example where the consideration of department goals as own was reported to be one of the key drivers to work engagement (Roberts & Davenport, 2002). Below is an account of the qualitative findings on intrinsic motivation.

6.3 Intrinsic Motivation

It can be noted from the findings that employees in this company are moderately intrinsically motivated. Of the factors that are used to measure individuals’ levels of intrinsic motivation (i.e. perceived competence, effort or importance, pressure or tension, relatedness and perceived choice), the participants under study scored averagely. Statistical findings on these

factors have been detailed in the previous chapter. It is worth noting, however, that the findings contradict the managers' perceptions that employees in this company are highly intrinsically motivated.

6.3.1 Managers' perceptions of intrinsic motivation

In trying to have a deeper understanding of intrinsic motivation among the employees, managers were asked to give their perceptions of their employees' intrinsic motivation levels.

The majority, if not all, of the managers seemed to be aware of what intrinsic motivation is. Although there were different perceptions on the concept, the major themes that emerged are as follows:

Self-driven actions have a positive contribution to overall performance within an organisation.

The findings reveal that although viewed in a different way, intrinsic motivation will ultimately result in a more positive contribution to both the organisational performance and individual employee performance. For instance, one participant stated that;

When you recruit people in an organisation, you need to recruit the right people and one of the ways is through determining one's level of intrinsic motivation though it is difficult for a first timer. But your ability as a manager to determine those things that makes one to go an extra mile when doing their work is very crucial because we will be talking of self-driven employees which in turn make work to be more interesting. You know, there are several benefits aligned with having intrinsically motivated employees.

It can be noted from the findings that self-driven actions have a major impact on ones' overall performance. Thus, although an employee has more power to determine whether to make use of the intrinsic motivation or not, the ability of management to find out whether one is intrinsically motivated or not will help in job designing so that room is created for an employee to fully apply himself to his work. It can be seen that intrinsic motivation influences recruitment decisions. Thus, by trying to find out what drives an employee to want to work and exert more energy and have the inner drive to do something, and then matching that with certain job specifics and requirements will help to deal with industrial issues like turnover and other performance-related matters.

An organisational resource (especially management's input) plays a role in making intrinsic motivation to take place

Five of the participants were of the opinion that for intrinsic motivation to be of benefit to an organisation, it has to first start with the managers.

You know, when you talk of intrinsic motivation, we are talking of an inner drive and there are several factors that influence one to make use of that inner driver within an organisation. Let me give you an example of an employee who is here not because of money but because of the interest or satisfaction they derive from the work they do...and that person is made to work under a manager who does not even care that there are things that should be aligned with the job to make it more interesting so as to enhance intrinsic motivation. Do you think performance will be the same? Obviously no. So, what I'm saying is, intrinsic motivation to a certain extent, is triggered by the manager. It starts with the manager you know.

Another participant also stated that managers play a greater role in ensuring that employees are intrinsically motivated.

Yes, we do understand that intrinsic motivation is an inner drive and self-driven to some extent, but as managers, there is a big role to be played if that extra effort is to be exerted in work by our employees. It starts from the work environment itself. If it is conducive for work and if resources are put in place, I'm telling you, it will be easier for an employee to go an extra mile in their work.

This was supported by another participant who said that intrinsic motivation starts with the leadership.

If you are leaders who respect employees, who have clear goals that are being displayed or put across to the employee, then that alone if it is in me, it gives me the zeal to work without looking at some other issues like monetary issues. Here, it's just the goal. Something that is on the horizon ...the vision. That can motivate someone.

Apart from a direct link of the influence that managements' role has on intrinsic motivation, other factors were also found to influence intrinsic motivation. For instance, one participant revealed that even though there may be other issues that come along with the job, one has to love the job "because without loving the job, then there is no reason of being at the company".

The above sentiments clearly reflect that an organisation, through management and other responsible authorities as well, has a great influence on intrinsic motivation. This supports the findings that the context in which learning (work) takes place also influences self-determined actions (LeBlanc, 2010). Such awareness is crucial, especially for efficiency and effectiveness of an organisation.

However, what is interesting in the findings is that more than 90% of the managers in this company are convinced that their employees are highly intrinsically motivated, which contradicts the actual findings on the individual employees of the company. Thus, the results show that employees in this company are moderately intrinsically motivated. Such a state is not very good from a business sense since it reflects that managers in this company are working with assumptions which could have detrimental effects on organisational relations and ultimately the performance of the organisation.

The findings also reveal that in the assessments of intrinsic motivation, there was a negative response on relatedness which encompassed the relationship between a manager (supervisor) and an employee. The results clearly indicated poor relations. However, past research has shown that employees should always be treated with respect and it is the company's obligation to see that individual managers do not abuse their power or mistreat their subordinates (Josephson, 2010). On the other hand, employees also have a moral obligation to the organisation, workmates and other organisational stakeholders. The moral obligations of an employee include loyalty, candour, caring and respect (Josephson, Heijbel, Voss Afredsson & Vingard, 2008). Given these two propositions by Josephson, a healthy relationship is developed.

However, it should be noted with care that poor relations in this company is not specifically as a result of lack of respect or of any of the factors cited by Josephson, even though they could be contributing factors to such an outcome. This deserves mention, considering that a substantial number of managers felt that a positive relationship exists between themselves and their employees, which was proved otherwise elsewhere in the findings of the same study.

In addition to the above, although the majority of managers perceived their employees to be intrinsically motivated, few reported their employees to be not intrinsically motivated. For instance, one of them stated;

I cannot say they are intrinsically motivated because of their actions. You can really tell by their actions that they are just here for money not for the job. You see...eeeh, for you to deal with such people, there is greater need for close supervision, which is right all the time.

This was echoed by the other participant who believed that some of the employees are driven only by external rewards, not the job itself:

“You can tell by the way a person does and undertake responsibility in their respective sections. There are some who just do things for the sake of doing them...to just get done with it, such that as the supervisor or head, you will have a relook at it, which is not good because in the end, it is that person who will be paid for doing such a task not me. I mean, i will be seen doing a double job, which will also affect my other responsibilities.”

The above views indicate managers’ awareness of the problems associated with lack of intrinsic motivation on the employees’ side. The majority, if not all, the managers who cited a lack of intrinsic motivation on their employees, could not really figure out the causes of such a state in their employees but were just aware of ‘some’ of the consequences of their employees not being intrinsically motivated.

6.3.2 What do managers do to enhance intrinsic motivation?

As evidenced in the above findings, intrinsic motivation is an important aspect within an organisation. It was the interest of the current research to find out managers’ perceptions on ways to enhance intrinsic motivation in the company.

Training is important to enhance intrinsic motivation

It appeared to be difficult for most managers to determine ways they could be helpful in the enhancement of intrinsic motivation. Most managers believed that intrinsic motivation is self-driven and that the organisation has limits as far as the enhancement of intrinsic motivation is concerned. However, they thought the most important was the provision of training to the employees. For instance, one participant declared that;

Learning is a very important thing especially in the technology driven world of today. Having employees who are willing to learn as well as being able to present them with learning facilities is one of the keys to survive in business. So, we always make sure that our employees are given room for that and training.

This was supported by another participant who said that intrinsic motivation is something which should be nurtured:

You see the ability of one to possess the needed skills so as to be able to meet the demands and challenges of work are very crucial. That is the reason why I always thrive to provide my subordinates with training”.

Another participant agreed with this:

You know, it’s always good to be surrounded by competent employees. Competency that comes inwardly, which is not driven by ‘external forces’ is permanent and is likely to yield more positive results. In this case, we are talking about intrinsic motivation .But for one to be able to bring out and utilise fully this inner drive, there is need to have adequate skills and resources should I say.

Thus, the idea that training enhances intrinsic motivation was raised by the managers. This supports the findings of past research that when feelings of competence are accompanied by feelings of autonomy, high levels of intrinsic motivation are experienced (Janssen & LeBlanc, 2010). However, when looking at employees’ responses on the measurement of competency, it is reflected that the majority are moderately competent.

This calls into question the claim of employees that getting training enables them to be intrinsically motivated. Taking it back to LeBlanc’s claim that there is a positive relationship between competence and autonomy, this then implies a positive relationship between competence and skills levels, since a person cannot have full authority if he lacks the needed skills. Therefore, contextualising this to the current research, one possible reason that could have led to an averagely competent workforce is inadequate skills.

Apart from the provision of training, the findings reveal that intrinsic motivation has to come from the individual and that the best way for it to be experienced is through liking what you are doing and believe in oneself. Such a finding is very interesting given the understanding that intrinsic motivation entails an inner drive to do something which comes from having an interest in something. Thus, self-efficacy was found to be important in the enhancement of intrinsic motivation. For instance, one participant revealed that:

For one to be intrinsically motivated, it should start with them. It should start with having a belief that one can make it and through your capabilities, you can achieve

the set goals. So, as the management, our ability to boost that within an employee will be the best driver to best performance from an employee.

Such findings support the idea that self-efficacy beliefs provide an individual with a sense of agency to motivate their participation or involvement in their work through the use of such self-regulatory processes as goal setting, self-monitoring, self-evaluation and strategy (Janssen & LeBlanc, 2010).

The best way for intrinsic motivation to be experienced is through liking what you are doing

Apart from training as an important contribution to intrinsic motivation enhancement, the findings also show that although there are some contributing factors to it, liking what one does is also enough for intrinsic motivation to take place. Managers of the company were asked to rank themselves so as to determine their perceptions of their levels of intrinsic motivation.

6.3.3 Self-ranking of managers on their levels of intrinsic motivation

In order to determine their levels of intrinsic motivation, managers were asked to rank themselves on a scale of 1 to 5, starting from (1) not engaged at all, engaged at a low (2), averagely engaged (3), engaged (4) and highly engaged (5). The findings suggest that six participants were averagely engaged in their work. Two of the participants reported being highly engaged in their work.

Work life is different everyday and it affects people's feelings towards work

Reasons have been put forward to explain why these managers think they are engaged and highly engaged in their work. Those that ranked themselves at 3 claimed that they are averagely engaged in their work because things are not always the same at work. For example, one participant stated that:

You know, we have got feelings and we get bored at times especially when looking at things around. You will just be put off such that you won't have that vibe to carry on doing the work at your best.

Another participant said:

An increase in workload affects me in being intrinsically motivated. You see, the amount of work we do differ on a daily basis. At times you may find that you are made to do a lot of work and I'm telling you, it makes one to be so drained especially if the

task is not your preference. But personally, if I was made to do that work that I enjoy most of the time, this feeling of being drained will be minimal.

Thus, the way work is structured greatly influences people's reactions, which then determines their like or dislike of work. It is important for the managers in the company under study to be able to detect each employee's work preferences so as to avoid frustration when they are at work. This will help to improve the organisation's performance through, for example, reduced accidents and turnover (loss of talented employees).

Socio-environmental factors influence intrinsic motivation.

It was also found that one of the contributing factors why employees in the company under study are averagely intrinsically motivated was as a result of the socio-environmental factors that prevail in the company.

For instance, one participant indicated the effect of socio-environmental factors, such as the location of the mine

This mine is in the rural areas and we seem to be living in our own world. Coupled with the fact that interaction is only amongst ourselves as workers, disassociates us from the community. That alone leaves me with a divided heart or mind should I say. I won't fully engage with my work because that drive will not be there since I will be having two minds when at work.

In line with that, another participant agreed:

We understand that we are at work, but if work is combined with fun, it will produce better results. What I'm trying to say is that we need some sporting activities to be seriously incorporated? Doing so not only makes me to look forwards to be at work, but it also builds team spirit and some inspiration which will then lead to one being self-driven to do work.

Rewards impact intrinsic motivation levels

The literature suggests that intrinsic factors are independent of extrinsic factors. However, it has been found that extrinsic factors specifically reward intrinsic motivation. For instance, one participant confided:

When you compare your colleagues' work and your work and then you say, ok, this is what is happening to me....Those guys will be getting more rewards than you get yet you will be doing the same amount of work". So you see, even if I have that self-drive

to do my work, seeing those things will make you withdraw your efforts. Then you develop a tendency of not liking what you are doing.

This was also echoed by another participant who contended that:

It is something expected for every leader to have high levels of intrinsic motivation. But it is not always especially given circumstances that could be prevailing in the company especially when talking of the rewarding system. Yes, within myself as an individual, I'm expected to have that self-drive, but remember we are human beings who are influenced by other factors for us to work.

Another participant agreed that external factors are also important:

Anyway, I'm still young, I have to work for my family and still have to develop other things which I'm doing out of work .So, I still need to work. That's why I'm putting myself on average.

Thus, the current research has shown that rewards contribute to the utilisation of intrinsic motivation when a person is at work. However, this contradicts some research which found that external rewards can reduce intrinsic motivation. For instance, Deci, Koestner and Ryan (1999) present a meta-analysis concluding that expected tangible rewards such as pay, rewards and prizes decrease intrinsic motivation. However, Eisenberger, Pierce and Cameron (1999) argue that reward can decrease, have no effect, or increase intrinsic motivation depending on its method of presentation. Thus, in this case, rewards have been found to enhance intrinsic motivation levels.

On the other hand, those that ranked themselves as highly engaged reported enjoying their work and being satisfied with what they are doing. It was also found that such employees have no ambitions to leave the company but see themselves being with the organisation for their entire working lives.

6.4 Self-ranking of employees on their job satisfaction levels

Managers were asked to rank themselves on a scale of 1-5 in order to determine their job satisfaction levels. The findings reveal that all the managers in the company are highly satisfied since they ranked themselves highly on the scale. Thus, 6 out of 9 of the managers gave themselves a 4 out of 5 rank whilst the remaining 3 gave themselves a score of 5. This was an interesting finding since the responses reflect that on the management side, things were all well in the performance of their duties.

As it is the interest of the study, managers were asked their perceptions of the contributing factors to job satisfaction, both for themselves and their subordinates. Although most managers (7 out of 9) were able to provide answers on the contributing factors to themselves, it is important to highlight that managers in this company could not provide answers to the specific factors they think contribute to their employees' job satisfaction levels. It was interesting to note that the factors they had highlighted as the contributing factors to work engagement (mostly) and intrinsic motivation (to a lesser extent) were also perceived to be the contributing factors to job satisfaction. Thus, it was difficult for the managers to distinguish contributing factors to the job satisfaction of their employees from the contributing factors to work engagement. However, more than half of the managers could give answers on what they thought were the contributing factors to job satisfaction levels. These findings are discussed below.

Two major themes emerged on what most managers perceive to be contributing factors to their job satisfaction levels.

Extrinsic factors to job satisfaction were considered to be most important in the determination of job satisfaction levels

Most, if not all, of the contributing factors to managers' job satisfaction levels were found to be extrinsic factors. However, of these extrinsic factors, salary was the major contributor to the managers' job satisfaction levels for all participants. Thus, it can safely be concluded that managers are happy with their salaries and, as a result, salary is the major contributor to high job satisfaction levels of the managers in the study.

Moreover, other working conditions, like availability of resources, were found to have a major impact on managers' job satisfaction levels. Thus, having the needed resources to perform a task was associated with higher levels of job satisfaction. In other words, the more available the resources are, the higher the job satisfaction levels will be. For instance, one participant suggested that:

There is nothing as interesting as knowing that you have all you need for you to perform a given task. I always feel happy when I'm assigned to do a task and I realise that I have all I need. Given my expertise, and coupled by the availability of resources, I'm telling you, I always do my best and ultimately, I will be happy with my work.

This was echoed by another participant:

One thing that makes me feel so happy with my work is that everything I need to perform my task is available to me. It frustrates to realise that you don't have the materials you need for you to perform a task despite the fact that you know the work best. So, for me, I'm so happy because such a problem does not exist and in the end, I achieve the best out of my work.

Considering the findings that job satisfaction is developed through the match between needs, motives, expectations and work situation (Bussing, Bissels, Fuchs & Perrar, 1999), the ability of the company under study to create a work situation which is appealing to its employees can lead to increased organisational commitment and overall excellence (Mosadeghrad et al., 2008).

In order to have a full view of work engagement, intrinsic motivation and job satisfaction levels of the employees in the company under study, workers' representatives gave their perceptions of their contribution to the enhancement of employees' welfare. Below are the findings.

6.5 Role of worker representatives in employees' perceptions of work engagement, intrinsic motivation and job satisfaction

In trying to understand the role that worker representatives play to protect and promote the interests of employees, the study established which specific tasks performed by worker representatives enhance the intrinsic motivation, work engagement and job satisfaction of employees in the company under study. The investigations revealed that these representatives perceive work engagement as a function of job satisfaction and intrinsic motivation. As a result, they said, their responses were going to be first centred on how they ensure that employees are satisfied in their work and, through their being intrinsically motivated, how they then engage in their work. Thus, the following was revealed in the findings:

Negotiate wages and working conditions terms

Wages have been seen as the major factor that brings disharmony among employees and employers. According to the labour representatives of the company under study, one of the major factors that ensure that employees are satisfied in their jobs is aligning their wages with the industry's rates. In the company under study, the labours representatives seem not to have major problems with the management as far as wages are concerned. However, they feel it is

the unions' role to make sure that employees are happy with their wages. For instance, one labour representative stated:

You know as the union's representatives, employees only have this perception that we are only resourceful when they are not happy with wages. We negotiate with the management on many aspects to do with the working conditions and these also include the wages aspect. On the wages part, we haven't had many problems. I guess the company under study is the tops in terms of salaries when compared to other players in the industry.

Another participant added that;

We also encourage employees to have a feeling or zeal of wanting to work by ensuring that workers have enough protective clothes i.e. anything that ensures safety and protection of employees when being at work.

Regulate relations between workers and the employer

In the company under study, the trade union representatives feel they are obliged to regulate relations between employees and their employer and to some extent among employees themselves. However, the findings revealed that very few reports have been presented to the union, although some complaints will be logged through the grapevine by the employees. In trying to deal with such a problem, the representatives suggested the use of suggestion boxes and an open door policy where the name of the complainant will be kept anonymous. However, based on the behaviour of most employees in the company, it is the representatives' opinion that the relationship between employees and the employer is a positive one.

Raise new demands on behalf of its members

At times it is difficult for employees to put across demands to the management for fear of the unknown. As a result, the union representing the workers will be tasked to speak on behalf of these employees. In the company under study, the union plays this role in order for the employees to be happy in their work. For instance, one participant recounted that:

Recently there has been the introduction of a loan facility programme and these loans have been made to be open to all employees. In addition, we also negotiated the issue of housing loans for the employees.

Help settle their grievances

Employee grievances in an organisation are inevitable. Although an organisation could have put inner structures put to deal with grievances, these structures may not be effective because of several problems, among these being victimisation. To deal with this, the trade union representatives of the employees in the company under study introduced some structures to be followed by an employee should a problem arise. According to one respondent of the union's representatives:

Usually, employees grievances are divided according to the functional departments of the company and within these departments are workers committee representatives to whom reports are made to. After these grievances have been presented, we then sit together with all representatives and we further make an investigation. We don't just take things at face value; we try to gather full information. We then sit together with Human Resources department and whatever outcome will further be presented to the workers council.

6.6 Conclusion

The chapter presented the qualitative findings on work engagement, intrinsic motivation and job satisfaction. Through an in-depth analysis of both the quantitative and qualitative findings, some contradictions between the two were noted. This helped in providing a better understanding of the results. Moreover, through qualitative analysis, the 'so what' question was answered through explanations of quantitative findings, making the obtained results more useful and easier to understand.

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

This is the last and concluding chapter of this study. The study objective was to explore levels of work engagement, intrinsic motivation and job satisfaction among mine workers within a diamond mining company in Zimbabwe. The results have been presented, discussed and analysed in the last two chapters, where some observations were made regarding challenges and factors that affect levels of satisfaction, engagement and motivation among the miners. In this chapter, concluding remarks are presented and suggestions are offered as to how the mining company can address the challenges. Recommendations for the organisation are submitted and areas for future research are identified.

7.2.1 Conclusions

Regarding work engagement, intrinsic motivation and job satisfaction, the conclusions that can be made will follow.

Although being a new aspect in psychology, falling under the positive psychology realm, work engagement has proved to be crucial for an organisation's survival. Tracing the history of most businesses' major concerns and the reasons behind the failure of organisations, it is indisputable that focusing on engagement levels of employees in their work is a way forward. Although focus has been put on the conceptualisation of work engagement, there is a feeling of injustice to the aspect by ignoring the understanding of the concept within the mining industry. The diamond industry and more specifically the Zimbabwean context need more attention.

Understanding work engagement within the diamond mining industry in Zimbabwe can go a long way in addressing the possible challenge of unhealthy employer-employee relations resulting from inadequate employee motivation and satisfaction, which contribute to employees' not fully applying themselves to work. This ultimately leads to organisational inefficiency and ineffectiveness, a situation which management does not hope for.

It has been observed that there is a disconnection between the positive correlation between [work engagement (59%) and intrinsic motivation (67%)], as opposed to [job satisfaction (74%) and work engagement (59%)], as well as job satisfaction (74%) and intrinsic motivation (67%)] which, by looking the percentages are not co-related. This could be a result of three things. It could be because of the use of a chi square test to determine the relationships between the variable and aggregation of individual responses on the same

variables. It could also be as a result of dishonesty of participants when responding differently to questions that required a consistent response. It could also be a result of the way questions were structured, which might have led respondents to be inconsistent in their responses. Given all three scenarios, it is possible that a study with a different methodology on the same sample may yield different results.

Be that as it may, the ability of an organisation to have a broader understanding of work engagement as a concept, the contributing factors to it as well as knowing the consequences aligned with work engagement, is the greatest asset an organisation can have, if major organisational resources (employees) are to be fully utilised. As has been shown in the results, miners are averagely engaged. This calls for management to look into ways in which the situation can be improved.

The testing of the three hypotheses in the study revealed a significant relationship between job satisfaction and work engagement as well as between job satisfaction and intrinsic motivation. Furthermore, the tests revealed that intrinsic motivation and work engagement can enhance job satisfaction. This implies a positive contribution of the three constructs to efficiency and effectiveness in an organisation

It has also been observed that managers seem to have insufficient or incorrect knowledge regarding levels of work engagement, job satisfaction and motivation among the miners because the former suggested that their subordinates were highly satisfied, engaged and motivated; a claim that was disputed by the latter. This reveals a knowledge gap that management has about low level employees, a fact which may be suggesting existence or non-existence in the company of a proper communication structure (and infrastructure) which allows employees to communicate with management. This may also point to the management approach adopted by the company which may be discouraging employees from communicating their feelings to management.

The 'false' impression which management has about employees may result in negative multiplier effects such as strikes, high rate of staff turnover, inefficiency and ultimately organisational failure. The organisation needs to be proactive in addressing this problem before it multiplies.

It is important, however, to note that it is difficult to understand work engagement in isolation when trying to understand an individual employee's behaviour in an organisation. The

manner in which job resources contribute to an individual's engagement levels has the same influence on intrinsic motivation and job satisfaction. Although this is the case, it remains imperative to understand intrinsic motivation and job satisfaction in isolation, given the examination of other specific matters measured by these aspects. As such, there is need for customised interventions to deal with the recurring factors that contribute to the enhancement of work engagement, intrinsic motivation and job satisfaction of the miners.

Recommendations for the organisation

Given the observations made to this point, the following are the recommendations that have been submitted to the organisation:

- i. It is important for the managers in the company to have an in-depth understanding of their employees, especially regarding employees' welfare. This comes after the realisation that most managers in the company under study are working with inaccurate assumptions of what they think their employees prefer when at work. As a result, it proved difficult for most employees to fully apply themselves when at work since there is no incorporation of their concerns or preferences when at work. Such a scenario is a threat to the human resources approach which advocates a balance between organisational objectives and employee objectives, which may result in organisational ineffectiveness.
- ii. It is crucial for management to design a flexible organisational structure which allows for an interactive communication style so as to enable shop floor employees to express their concerns to management. This will help in providing information on important aspects that an organisation may need to address. Thus, through having such structures in place, a platform to understand human resources-related problems will be created. Having knowledge of the business's internal, environmental human resources issues, allows the human resources managers of the company to deal amicably with any issues affecting the function.
- iii. Having a working environment which takes into account social structures that facilitate informal activities among employees is crucial for improved employee performance. Through these informal structures, a lot of employee-related matters can be resolved since it opens up a space for communication among employees. Considering that lack of social activities (informal activities) have been a worrying issue to the majority of employees in the company, this could explain why employees

in the company are averagely intrinsically motivated and engaged in their company. Hence, this calls for management to give a closer look at this issue.

- iv. Managers need to equip themselves with knowledge and skills of broader issues to understand individual employees in an organisation. Having a rich knowledge base will equip human resources managers with strategies and proper interventions to deal with any employee-related issues.

Points for further research:

- a. Considering that this is the first study on work engagement, intrinsic motivation and job satisfaction in a diamond mining industry in Zimbabwe, it will be important to investigate these aspects on a larger scale (to include other mining companies) so as to have an in-depth understanding of these constructs holistically. Doing so will allow generalisability of the findings to the mining industry as a whole, which is something which cannot be done with the current study.
- b. There is a lot of contestation and controversy surrounding mining of diamonds in Zimbabwe, particularly on the Marange fields. Firstly, there is embargo on global marketing and free selling of Marange diamonds in the world. Secondly, the volatile political situation currently obtaining in the country, where the Finance Ministry and the Mining Ministry are superintended by political rivals from two different political parties, is of concern. The former always accuses the latter of lacking transparency in the remission of diamond proceeds to treasury, and also for looting the diamonds. These are some of the tensions which the miners always hear. The implication of all this is an uncertainty for the future of diamond mining of Marange fields. These tensions may cause uncertainty for what the future holds for the miners in terms of job security. A study into how this psychologically affects the miners and what impact this may have on their levels of engagement, satisfaction and motivation will be useful.

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APPENDIXES

APPENDIX A

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Mary Beth Mitchell. "The effect of work role values on job satisfaction", Journal of Advanced Nursing, 11/1994

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paper text:

WORK ENGAGEMENT, INTRINSIC MOTIVATION AND JOB SATISFACTION AMONG EMPLOYEES OF A DIAMOND MINING COMPANY IN ZIMBABWE Polite Masvaure (207527495) ETHICAL CLEARANCE NUMBER HSS/0085/012M Supervisor: Dr. S. Ruggunan Mrs. Ashika Maharaj Full thesis submitted to the School of Management Information Technology and Governance, University of KwaZulu-Natal, Durban, in fulfilment of a Master of Administration degree in Human Resources Management November 2012 Declaration I declare that this thesis is my own unaided work. All citations, references and borrowed ideas have been acknowledged. This thesis is being submitted for the degree of Masters of Administration in the faculty of Law, Management, IT and Governance. None of the present work has been previously submitted for any degree or for examination at any other university. Date: iFor my grandfather, Ishe Sweet John Masvaure Even though you passed on during the course of the study, your support, love and words of wisdom throughout my academic life is priceless. You made me to be who I am today. ii Abstract Orientation: The mining industry has been one of the most struggling industries to deal with employee welfare matters. As a result, it has been difficult to maintain industrial peace and harmony in several workplaces, resulting in negative multiplier effects to the mining business particularly unsatisfactory working conditions faced by the lifeblood of any organisation (employees). In response to this, most organisations directed the bulk of their resources to the basics and tangible things such as salary and rewards needed by employees to perform their duties, but a

lot of unrest is still recorded. This thesis examined aspects of work engagement, intrinsic motivation and job satisfaction among employees in a diamond mining company in Zimbabwe in order to understand those aspects that drive employees to apply themselves wholly to their work roles. Research Purpose: The research aimed to quantitatively explore levels and interrelationship between three constructs: work engagement, intrinsic motivation and job satisfaction among mine workers in a diamond mining company in Zimbabwe. In addition the research qualitatively explored what managers' perceptions of these three constructs are. Research Design, Approach and Method: This was a mixed methods: quantitative and qualitative study that consisted of two phase of data collection. The first phase was 14a cross- sectional survey design consisting of a sample

APPENDIX B



LETTER OF CONFIRMATION–EDITING

January, 2013

Polite Masvaure

This is to confirm that the Masters dissertation of Polite Masvaure has been edited by me. This process is aimed at eliminating grammatical errors and errors of expression only. In no way was the content or structure of the dissertation addressed.

I did not see the dissertation again after final changes were made. However, I am satisfied that the editing was thoroughly done and that the student, in consultation with her supervisor, was able to rectify the errors that were identified.

B Soane (Dr)

APPENDIX C

Supervisor's Permission to submit for examination

Date: 16 January 2013

Student Name: Polite Masvaure

Student Number: 207527495

Dissertation Title: Work engagement, intrinsic motivation and job satisfaction among employees of a diamond mining company in Zimbabwe.

As the candidate's supervisor we agree to the submission of this dissertation for examination. To the best of our knowledge, the dissertation is primarily the student's own work and the student has acknowledged all reference sources. Anti-plagiarism software *turnitin* was used to guard against plagiarism.

The above student has also engaged the services of a professional language editor.

Name of Supervisors: Dr. Shaun Ruggunan

 Mrs Ashika Maharaj

Appendix D

Section 1: Biographical Data Sheet.

INSTRUCTIONS

Please answer the following questions by marking the appropriate boxes.

1. GENDER

Male Female

2. AGE GROUP

24 years and younger 25 – 35 years

36 – 45 years 46 – 55 years

56 years and older

3. RACE

African White

Indian Coloured

Other

4. MARITAL STATUS

Single Divorced

Widowed Married

5. YEARS OF TENURE

Less than 5 years 6 – 10 years

11 – 20 years More than 20 years

6. HIGHEST ATTAINED QUALIFICATION

Advanced level Diploma

Degree Postgraduate Degree

7. PLEASE INDICATE YOUR POSITION

Top level manager Middle level manager

Lower level manager Supervisor

Administrator general employee

Section Two: Work Engagement (UWES) Questionnaire

Instructions: Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 6 point scale supplied.

	Almost never	Rarely	Sometimes	Often	Very often	Always
1. At my work, I feel bursting with energy	1	2	3	4	5	6
2. I find the work that I do full of meaning and purpose	1	2	3	4	5	6
3. Time flies when I'm working	1	2	3	4	5	6
4. At my job, I feel strong and vigorous	1	2	3	4	5	6
5. I am enthusiastic about my job	1	2	3	4	5	6
6. When I am working, I forget everything else around me	1	2	3	4	5	6
7. My job inspires me	1	2	3	4	5	6
8. When I get up in the morning, I feel like going to work	1	2	3	4	5	6
9. I feel happy when I am working intensely	1	2	3	4	5	6
10. I am proud of the work that I do	1	2	3	4	5	6
11. I am immersed in my work	1	2	3	4	5	6
12. I can continue working for very long periods at a time	1	2	3	4	5	6
13. To me, my job is challenging	1	2	3	4	5	6
14. I get carried away when I'm working	1	2	3	4	5	6
15. At my job, I am very resilient, mentally	1	2	3	4	5	6
16. It's difficult to detach myself from my job	1	2	3	4	5	6

17. At my work I always persevere, even when things do not go well	1	2	3	4	5	6
--------------------------------------------------------------------	---	---	---	---	---	---

SECTION 3: Intrinsic motivation inventory (IMI)

Interest/enjoyment

Instructions: Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 7 point scale supplied.

	Not at all true			Somewhat true			Very true
1. I enjoyed doing this activity very much	1	2	3	4	5	6	7
2. This activity was fun to do	1	2	3	4	5	6	7
3. I thought this was a boring activity	1	2	3	4	5	6	7
4. This activity did not hold my attention at all	1	2	3	4	5	6	7
5. I would describe this activity as very interesting	1	2	3	4	5	6	7
6. I thought this activity was quite enjoyable	1	2	3	4	5	6	7
7. While I was doing this activity, I was thinking about how much I enjoyed it	1	2	3	4	5	6	7

SECTION 4: Perceived Competence

Instructions: *Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 7 point scale supplied.*

	Not at all			Somewhat true			Very true
1. I think im pretty good at this activity	1	2	3	4	5	6	7
2. I think I did pretty well at this activity, compared to other co-workers	1	2	3	4	5	6	7
3. After working at this activity for a while, I felt pretty competent	1	2	3	4	5	6	7
4. I am satisfied with my performance at this task	1	2	3	4	5	6	7
5. I was pretty skilled at this activity	1	2	3	4	5	6	7
6.This was an activity that I could not do very well	1	2	3	4	5	6	7

SECTION 5: Effort/ Importance

Instructions: *Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 7 point scale supplied.*

	Not at all true			Somewhat True			Very true
1. I put a lot of effort into this	1	2	3	4	5	6	7
2. I didn't try very hard to do well at this activity	1	2	3	4	5	6	7
3. I tried very hard on this activity	1	2	3	4	5	6	7
4. It was important to me to do well at this task	1	2	3	4	5	6	7
5. I didn't put much energy into this	1	2	3	4	5	6	7

SECTION 6: Pressure/tension

Instructions: *Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 7 point scale supplied.*

	Not at all true			Somewha t true			Very true
1. I did not feel nervous at all while doing this	1	2	3	4	5	6	7
2. I felt very tense while doing this activity	1	2	3	4	5	6	7
3. I was very relaxed in doing these	1	2	3	4	5	6	7
4. I felt pressured while doing these	1	2	3	4	5	6	7

SECTION 7: Perceived Choice

Instructions: *Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 7 point scale supplied.*

	Not at all true			Some what true			Very true
2. I felt like it was not my own choice to do this task	1	2	3	4	5	6	7
3. I didn't really have a choice about doing this task	1	2	3	4	5	6	7
4. I felt like I had to do this	1	2	3	4	5	6	7
5. I did this activity because I had no choice	1	2	3	4	5	6	7
6. I did this activity because I wanted to	1	2	3	4	5	6	7
7. I did this activity because I had to	1	2	3	4	5	6	7

SECTION 8: Relatedness

Instructions: Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 7 point scale supplied.

	Not at all true			Somehw at true			Very true
1. I felt really distant to this person	1	2	3	4	5	6	7
2. I really doubt that this person and I would ever be friends	1	2	3	4	5	6	7
3. I felt like I could really trust this person	1	2	3	4	5	6	7
4. I would like a chance to interact with this person more often	1	2	3	4	5	6	7
5. I would prefer not to interact with this person in future	1	2	3	4	5	6	7
6.I don't feel like I could really trust this person	1	2	3	4	5	6	7
7.It is likely that this person and I could become friends if we interact a lot	1	2	3	4	5	6	7

SECTION 9: Job satisfaction Questionnaire

Please rate the extent to which you feel (dis)satisfied with the following statements by circling the appropriate number on the 1 to 5 point scale supplied.

	Very dissatisfied	Dissatisfied	Neither	Satisfied	Satisfied
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1. Being able to keep busy all the time.	1	2	3	4	5
2. The chance to work alone on the job.	1	2	3	4	5
3. The chance to do different things from time to time.	1	2	3	4	5
4. The chance to be “somebody” in the community.	1	2	3	4	5
5. The way my boss handles his/her workers.	1	2	3	4	5
6. The competence of my supervisor in making decisions.	1	2	3	4	5
7. Being able to do things that don’t go against my conscience.	1	2	3	4	5
8. The way my job provides for steady employment.	1	2	3	4	5
9. The chance to do things for other people.	1	2	3	4	5
10. The chances to tell people what to do.	1	2	3	4	5
11. The chance to do something that makes use of my abilities.	1	2	3	4	5
12. The way company policies are put into practice.	1	2	3	4	5

13. My pay and the amount of the work I do.	1	2	3	4	5
14. The chances for advancement on this job.	1	2	3	4	5
15. The freedom to use my own judgement.	1	2	3	4	5
16. The chance to try my own methods of doing the job.	1	2	3	4	5
17. The working conditions.	1	2	3	4	5
18. The way my co-workers get along with each other.	1	2	3	4	5
19. The praise I get for doing a good job.	1	2	3	4	5
20. The feeling of accomplishment I get from my job.	1	2	3	4	5

APPENDIX E

INFORMED CONSENT



Introduction

My name is Polite Masvaure and I am currently completing my Master's degree at the University of KwaZulu Natal. A requirement of my degree is to complete a research study. My study examines work engagement, intrinsic motivation and job satisfaction among employees of a diamond mining company in Zimbabwe.

You are being invited to participate in this research because of your position as an employee. There will be no direct benefit to you if you participate in this research, but your participation is likely to help generate knowledge and greater understanding on work engagement, intrinsic motivation and job satisfaction amongst the mine's employees. Confidentiality will be ensured, the questionnaires will only be available to the researcher and her supervisor only. Anonymity will also be ensured by omitting any identifying characteristic, such as your name, or department.

Nothing included in the questionnaire will be shared with anybody outside the research team. If you have any queries please feel free to contact me (Polite Masvaure +2778 991 8479/207527495@ukzn.ac.za) or my supervisor (Dr S Ruggunun: +2731 2059 155/ruggununs@ukzn.ac.za).

Informed consent

I _____ have read the information about this study and understand the explanations of it given to me verbally. I have had my questions concerning the study answered and understand what will be required of me if I take part in this study.

Signature _____ Date _____

(Or mark)

APPENDIX F

INTERVIEW GUIDE

Work Engagement

1. What is your understanding of the term work engagement?
2. What do you do as a manager to enhance work engagement among your employees?
3. On a scale of 1-5 where do you put yourself in terms of being engaged in your work?

Intrinsic Motivation

1. What is your understanding of the term intrinsic motivation?
2. What do you do as a manager to enhance your employees' levels of intrinsic motivation?
3. On a scale of 1-5, where do you put yourself in terms of you being intrinsically motivated?

Job Satisfaction

1. What is your understanding of the term job satisfaction?
2. What do you do as a manager to enhance job satisfaction among your employees?
3. On a scale of 1-5, where do you put yourself in terms of you being satisfied with your job?

Worker Representatives

1. What role do you play as worker representatives in enhancing employees' work engagement, intrinsic motivation as well as job satisfaction levels?

APPENDIX G



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

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28 March 2012

Ms Polite Masvaure (207527495)
School of Human Resources Management

Dear Ms Masvaure

PROTOCOL REFERENCE NUMBER: HSS/0085/012M
PROJECT TITLE: Work engagement, Intrinsic motivation and Job satisfaction in a mining company in Zimbabwe.

In response to your application dated 20 March 2012, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.



.....
Professor Steven Comings (Chair)
Humanities & Social Science Research Ethics Committee

cc Supervisor Dr S Ruggunan
cc Mrs A Maharaj

 1910 - 2010 
100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

APPENDIX H

TABLES OF VALUES

Table 5.11: Work Engagement and Tenure

	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>78</u>	<u>50.65%</u>
<u><5 years</u>	<u>53</u>	<u>34.42%</u>
<u>6-10 years</u>	<u>5</u>	<u>3.25%</u>
<u>11-20 years</u>	<u>3</u>	<u>1.95%</u>
<u>20+</u>	<u>2</u>	<u>1.30%</u>
<u>(blank)</u>	<u>15</u>	<u>9.74%</u>
<hr/>		
<u>High</u>	<u>74</u>	<u>48.05%</u>
<u>< 5 years</u>	<u>66</u>	<u>42.86%</u>
<u>6-10 years</u>	<u>3</u>	<u>1.95%</u>
<u>11-20 years</u>	<u>1</u>	<u>0.65%</u>
<u>20+</u>	<u>1</u>	<u>0.65%</u>
<u>(blank)</u>	<u>3</u>	<u>1.95%</u>
<hr/>		
<u>low</u>	<u>2</u>	<u>1.30%</u>
<u>< 5 years</u>	<u>2</u>	<u>1.30%</u>
<u>Grand Total</u>	<u>154</u>	<u>100.00%</u>

Table 5.12: Work Engagement and Gender

<u>Row Labels</u>	<u>Count of Scale</u>	<u>Count of Scale</u>
Average	78	50.65%
FEMALE	16	10.39%
MALE	59	38.31%
(blank)	3	1.95%
High	74	48.05%
FEMALE	15	9.74%
MALE	59	38.31%
low	2	1.30%
MALE	2	1.30%
Grand Total	154	100.00%

Table 5.13: Work Engagement and age

<u>Row Labels</u>	<u>Count of Scale</u>	<u>Count of Scale</u>
Average	78	50.65%
24 and younger	30	19.48%
25-35 years	29	18.83%
36-45 years	12	7.79%
46-55 years	2	1.30%
56+	2	1.30%
(blank)	3	1.95%
High	74	48.05%
24 and younger	30	19.48%
25-35 years	25	16.23%
36-45 years	13	8.44%
46-55 years	6	3.90%
low	2	1.30%
24 and younger	1	0.65%
25-35 years	1	0.65%
Grand Total	154	100.00%

Table 5.14: Work Engagement and Marital Status

	<u>Count %</u>	
<u>Average</u>	<u>78</u>	<u>50.65%</u>
<u>Divorced</u>	<u>3</u>	<u>1.95%</u>
<u>Married</u>	<u>35</u>	<u>22.73%</u>
<u>Single</u>	<u>32</u>	<u>20.78%</u>
<u>Widowed</u>	<u>4</u>	<u>2.60%</u>
<u>(blank)</u>	<u>4</u>	<u>2.60%</u>
<u>High</u>	<u>74</u>	<u>48.05%</u>
<u>Divorced</u>	<u>2</u>	<u>1.30%</u>
<u>Married</u>	<u>33</u>	<u>21.43%</u>
<u>Single</u>	<u>38</u>	<u>24.68%</u>
<u>Widowed</u>	<u>1</u>	<u>0.65%</u>
<u>low</u>	<u>2</u>	<u>1.30%</u>
<u>Married</u>	<u>1</u>	<u>0.65%</u>
<u>Single</u>	<u>1</u>	<u>0.65%</u>
<u>Grand Total</u>	<u>154</u>	<u>100.00%</u>

Table 5.16: Work engagement and Education attainment

<u>Table 4.6: Education Attainment</u>		
	<u>Count %</u>	
<u>Average</u>	<u>78</u>	<u>50.65%</u>
<u>Grade 10</u>	<u>48</u>	<u>31.17%</u>
<u>Grade 12</u>	<u>9</u>	<u>5.84%</u>
<u>Certificate</u>	<u>1</u>	<u>0.65%</u>
<u>Diploma</u>	<u>4</u>	<u>2.60%</u>
<u>Degree</u>	<u>2</u>	<u>1.30%</u>
<u>Postgraduate degree</u>	<u>3</u>	<u>1.95%</u>
<u>(blank)</u>	<u>11</u>	<u>7.14%</u>
<u>High</u>	<u>74</u>	<u>48.05%</u>
<u>Grade 10</u>	<u>50</u>	<u>32.47%</u>
<u>Grade 12</u>	<u>15</u>	<u>9.74%</u>
<u>Diploma</u>	<u>4</u>	<u>2.60%</u>
<u>Degree</u>	<u>3</u>	<u>1.95%</u>
<u>(blank)</u>	<u>2</u>	<u>1.30%</u>
<u>Low</u>	<u>2</u>	<u>1.30%</u>
<u>Grade 10</u>	<u>2</u>	<u>1.30%</u>
<u>Grand Total</u>	<u>154</u>	<u>100.00%</u>

Table 5.17: Position and Level of Engagement

	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>78</u>	<u>50.65%</u>
<u>Administrator</u>	<u>3</u>	<u>1.95%</u>
<u>General employee</u>	<u>59</u>	<u>38.31%</u>
<u>Low-level manager</u>	<u>3</u>	<u>1.95%</u>
<u>Middle-level manager</u>	<u>1</u>	<u>0.65%</u>
<u>Operator-Driver</u>	<u>1</u>	<u>0.65%</u>
<u>Supervisor</u>	<u>5</u>	<u>3.25%</u>
<u>High</u>	<u>74</u>	<u>48.05%</u>
<u>General employee</u>	<u>59</u>	<u>38.31%</u>
<u>Low-level manager</u>	<u>5</u>	<u>3.25%</u>
<u>Middle-level manager</u>	<u>3</u>	<u>1.95%</u>
<u>Supervisor</u>	<u>6</u>	<u>3.90%</u>
<u>Top-level manager</u>	<u>1</u>	<u>0.65%</u>
<u>Low</u>	<u>2</u>	<u>1.30%</u>
<u>General employee</u>	<u>2</u>	<u>1.30%</u>
<u>Grand Total</u>	<u>154</u>	<u>100.00%</u>

Table 5.25: Interest / Enjoyment and Education Attainment

	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>70</u>	<u>46.36%</u>
<u>High</u>	<u>81</u>	<u>53.64%</u>
<u>Grand</u>		
<u>Total</u>	<u>151</u>	<u>100.00%</u>

Table 5.26: Perceived Competence and education attainment

	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>53</u>	<u>34.42%</u>
<u>Degree</u>	<u>1</u>	<u>0.65%</u>
<u>Grade 10</u>	<u>38</u>	<u>24.68%</u>
<u>Grade 12</u>	<u>7</u>	<u>4.55%</u>
<u>Postgraduate degree</u>	<u>1</u>	<u>0.65%</u>
<u>(blank)</u>	<u>6</u>	<u>3.90%</u>
<u>High</u>	<u>101</u>	<u>65.58%</u>

<u>Certificate</u>	<u>1</u>	<u>0.65%</u>
<u>Degree</u>	<u>4</u>	<u>2.60%</u>
<u>Diploma</u>	<u>8</u>	<u>5.19%</u>
<u>Grade 10</u>	<u>62</u>	<u>40.26%</u>
<u>Grade 12</u>	<u>16</u>	<u>10.39%</u>
<u>Postgraduate degree</u>	<u>2</u>	<u>1.30%</u>
<u>(blank)</u>	<u>8</u>	<u>5.19%</u>
<u>Grand Total</u>	<u>154</u>	<u>100.00%</u>

Table 5.27 Perceived Competence and position

<u>Row Labels</u>	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>53</u>	<u>34.42%</u>
<u>General employee</u>	<u>42</u>	<u>27.27%</u>
<u>Low level manager</u>	<u>3</u>	<u>1.95%</u>
<u>Supervisor</u>	<u>5</u>	<u>3.25%</u>
<u>(blank)</u>	<u>3</u>	<u>1.95%</u>
<u>High</u>	<u>101</u>	<u>65.58%</u>
<u>Administrator</u>	<u>2</u>	<u>1.30%</u>
<u>General employee</u>	<u>78</u>	<u>50.65%</u>
<u>Low level manager</u>	<u>5</u>	<u>3.25%</u>

<u>Middle level manager</u>	<u>4</u>	<u>2.60%</u>
<u>Operator-Driver</u>	<u>1</u>	<u>0.65%</u>
<u>Supervisor</u>	<u>6</u>	<u>3.90%</u>
<u>Top-level manager</u>	<u>1</u>	<u>0.65%</u>
<u>(blank)</u>	<u>4</u>	<u>2.60%</u>
<u>Grand Total</u>	<u>154</u>	<u>100.00%</u>

<u>Table 5.28: Tension/pressure and Current age</u>		
	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>105</u>	<u>68.63%</u>
<u>24 and younger</u>	<u>45</u>	<u>29.41%</u>
<u>25-35 years</u>	<u>38</u>	<u>24.84%</u>
<u>36-45 years</u>	<u>14</u>	<u>9.15%</u>
<u>46-55 years</u>	<u>4</u>	<u>2.61%</u>
<u>56+</u>	<u>2</u>	<u>1.31%</u>
<u>(blank)</u>	<u>2</u>	<u>1.31%</u>
<u>High</u>	<u>46</u>	<u>30.07%</u>
<u>24 and younger</u>	<u>16</u>	<u>10.46%</u>
<u>25-35 years</u>	<u>16</u>	<u>10.46%</u>
<u>36-45 years</u>	<u>11</u>	<u>7.19%</u>
<u>46-55 years</u>	<u>2</u>	<u>1.31%</u>

<u>(blank)</u>	<u>1</u>	<u>0.65%</u>
<u>Low</u>	<u>2</u>	<u>1.31%</u>
<u>25-35 years</u>	<u>1</u>	<u>0.65%</u>
<u>46-55 years</u>	<u>1</u>	<u>0.65%</u>
<u>Grand Total</u>	<u>153</u>	<u>100.00%</u>

<u>Table 5.31: Tension/pressure and Position</u>		
	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>105</u>	<u>68.63%</u>
<u>Administrator</u>	<u>3</u>	<u>1.96%</u>
<u>General employee</u>	<u>77</u>	<u>50.33%</u>
<u>Low-level manager</u>	<u>7</u>	<u>4.58%</u>
<u>Middle-level manager</u>	<u>3</u>	<u>1.96%</u>
<u>Operator-Driver</u>	<u>1</u>	<u>0.65%</u>
<u>Supervisor</u>	<u>7</u>	<u>4.58%</u>
<u>Top-level manager</u>	<u>1</u>	<u>0.65%</u>
<u>(blank)</u>	<u>6</u>	<u>3.92%</u>
<u>High</u>	<u>46</u>	<u>30.07%</u>
<u>General employee</u>	<u>40</u>	<u>26.14%</u>
<u>Middle-level</u>	<u>1</u>	<u>0.65%</u>

<u>manager</u>		
<u>Supervisor</u>	<u>4</u>	<u>2.61%</u>
<u>(blank)</u>	<u>1</u>	<u>0.65%</u>
<u>Low</u>	<u>2</u>	<u>1.31%</u>
<u>General employee</u>	<u>1</u>	<u>0.65%</u>
<u>Low-level manager</u>	<u>1</u>	<u>0.65%</u>
<u>Grand Total</u>	<u>153</u>	<u>100.00%</u>

Table 5.32: Perceived Choice and education attainment

	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>82</u>	<u>54.67%</u>
<u>Degree</u>	<u>2</u>	<u>1.33%</u>
<u>Diploma</u>	<u>4</u>	<u>2.67%</u>
<u>Grade 10</u>	<u>57</u>	<u>38.00%</u>
<u>Grade 12</u>	<u>10</u>	<u>6.67%</u>
<u>Postgraduate degree</u>	<u>1</u>	<u>0.67%</u>
<u>(blank)</u>	<u>8</u>	<u>5.33%</u>
<u>High</u>	<u>68</u>	<u>45.33%</u>
<u>Certificate</u>	<u>1</u>	<u>0.67%</u>
<u>Degree</u>	<u>3</u>	<u>2.00%</u>
<u>Diploma</u>	<u>4</u>	<u>2.67%</u>

<u>Grade 10</u>	<u>42</u>	<u>28.00%</u>
<u>Grade 12</u>	<u>13</u>	<u>8.67%</u>
<u>Postgraduate degree</u>	<u>1</u>	<u>0.67%</u>
<u>(blank)</u>	<u>4</u>	<u>2.67%</u>

<u>Grand Total</u>	<u>150</u>	<u>100.00%</u>
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Table 5.33: Perceived Choice and Position

	<u>Count</u>	<u>%</u>
<u>Average</u>	<u>82</u>	<u>54.67%</u>
<u>Administrator</u>	<u>2</u>	<u>1.33%</u>
<u>General employee</u>	<u>67</u>	<u>44.67%</u>
<u>Low level manager</u>	<u>2</u>	<u>1.33%</u>
<u>Supervisor</u>	<u>6</u>	<u>4.00%</u>
<u>(blank)</u>	<u>5</u>	<u>3.33%</u>
<u>High</u>	<u>68</u>	<u>45.33%</u>
<u>General employee</u>	<u>51</u>	<u>34.00%</u>
<u>Low level manager</u>	<u>6</u>	<u>4.00%</u>
<u>Middle level manager</u>	<u>3</u>	<u>2.00%</u>
<u>Operator-Driver</u>	<u>1</u>	<u>0.67%</u>
<u>Supervisor</u>	<u>5</u>	<u>3.33%</u>
<u>Top-level manager</u>	<u>1</u>	<u>0.67%</u>

Table 5.35: Relatedness and position

<u>Row Labels</u>	<u>Count of Scale</u>	<u>Count of Scale</u>
<u>Average</u>	<u>29</u>	<u>19.46%</u>
<u>Administrator</u>	<u>1</u>	<u>0.67%</u>
<u>General employee</u>	<u>96</u>	<u>64.43%</u>
<u>Low level manager</u>	<u>7</u>	<u>4.70%</u>
<u>Middle level manager</u>	<u>2</u>	<u>1.34%</u>
<u>Operator-Driver</u>	<u>1</u>	<u>0.67%</u>
<u>Supervisor</u>	<u>8</u>	<u>5.37%</u>
<u>Top-level manager</u>	<u>1</u>	<u>0.67%</u>
<u>Grand Total</u>	<u>149</u>	<u>100.00%</u>