

**Evaluating Job Satisfaction and Job Insecurity within an Engineering,
Procurement and Construction (EPC) Firm
in South Africa**

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DECLARATION

This mini-dissertation is submitted in partial fulfilment of the requirements for the degree Magister Technologiae in the discipline Business Administration, Faculty of Management Sciences at the Vaal University of Technology.

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We have it all in the palms of our hands; everything we need to make life a success by taking hold of it and believing in the abilities we have received from Him.

Listening is an essential skill, not only in business but also in life. I owe my deepest gratitude to my supervisor, Dr Lynn Raijmakers, whose inspiration, guidance and support enabled me to develop an understanding of the subject. Her insight and value throughout this journey is immeasurable.

Life is about making choices positively - I am grateful for enriched reassurance and encouragement.

DEDICATION

“Love is patient, love is kind. It does not envy, it does not boast, it is not proud. It does not dishonour others, it is not self-seeking, it is not easily angered, it keeps no record of wrongs. Love does not delight in evil but rejoices with the truth. It always protects, always trusts, always hopes, always perseveres” (1 Cor 13:4-7, NIV).

Thank you to my loving husband who always supports me to follow my dreams and reach my goals.

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CLARIFICATION OF TERMINOLOGY

Client:

The EPC organisation.

Construction industry:

The construction industry includes work falling within the engineering, procurement and construction (EPC) sector, including structural, mechanical, electrical, instrumentation, process, piping and civil engineering.

Employee:

A person who works for, or renders services to any another person is presumed to be an employee, regardless of the form of contract.

Employment status:

Permanent versus temporary employment; permanent employment includes employees directly employed by the EPC organisation, whereas temporary employment is a fixed-term agreement, for a specified period, and is also referred to as limited duration contract (LDC) employment.

EPC:

This is a company that provides engineering, procurement and construction services to industry, including civil, structural, piping, mechanical, electrical, instrumentation and process engineering.

Full-time employment:

An employment relationship where the employee works for at least 40 hours per week for the same employer.

Labour broker:

Also referred to as a temporary employment service (TES) agency, who assigns a specific number of workers, possessing specified skills, to a client (the EPC organisation) for a fixed period of time for a fee. While the labour broker is deemed to be the employer, the worker is subject to the client's control.

Limited duration contract (LDC):

Temporary employment obtained via labour brokers, (LDC). Employment is of a limited duration.

Part-time employment:

An employment relationship where the employee works for less than 40 hours per week for the same employer.

Permanent employment:

An employment relationship for an indefinite period of time until either party terminates it by giving notice to the other party.

Temporary employee:

A person who is employed by a labour broker or a temporary employment service (TES).

Temporary employment:

An employment relationship where the parties agree that the relationship will last for a fixed period of time or until the employee completes a specified task. Also referred to as "fixed-term" or "limited-duration contract".

LIST OF ABBREVIATIONS

EPC	Engineering, Procurement and Construction
JIQ	Job Insecurity Questionnaire
JSS	Job Satisfaction Scale
LDC	Limited Duration Contract
NIV	New International Version
NUMSA	National Union of Mine Workers in South Africa
SAPA	South African Press Association
SPSS	Statistical Package for Social Sciences
TES	Temporary Employment Services

ABSTRACT

Title: Evaluating job satisfaction and job insecurity within an engineering, procurement and construction (EPC) firm in South Africa

Keywords: Job satisfaction, job insecurity, permanent employment, temporary employment and labour brokers

The construction industry is an important player in the economy of South Africa and therefore job satisfaction and existence of job insecurity of employees in this sector needs to be researched (Thwala & Monese 2008:2). This study comprises a literature review and an empirical study on job satisfaction and job insecurity and its prevalence in an engineering, procurement and construction (EPC) company in South Africa. This study provides insight on whether employment status, that is, contract versus permanent, has any impact on levels of job satisfaction and job insecurity of construction employees. Quantitative research, using the survey method, was used for the empirical portion of the study. All employees of the EPC company were surveyed and included workers permanently employed as well as employees employed through labour brokers, that is those on contract. The EPC company in this study employs staff in various categories, such as section managers, engineers, project managers and site employees. The total population included 145 employees of whom 41 were permanent employees and 104 were employed through labour brokers. The response rate was 39 per cent.

Conclusions emanating from the research questions identified marginal differences in the reported levels of job satisfaction and job insecurity for both permanent and contract employees. Contract employees reported slightly higher job satisfaction and job insecurity levels when compared to permanently employed counterparts. The value of this study lies in the fact that no research has been conducted on job satisfaction and job insecurity and its prevalence in the EPC sector in South Africa. This study provided insight into whether employment status - contract versus permanent - had an impact on the reported levels of job satisfaction and job insecurity of employees at an EPC company.

CHAPTER 1

INTRODUCTION AND OVERVIEW OF THE STUDY

Keywords: Job satisfaction, job insecurity, permanent employment, temporary employment and labour brokers

1.1 INTRODUCTION AND BACKGROUND TO THE STUDY

The value of job satisfaction cannot be understated due to its high correlation with important job outcomes such as job involvement, stress, job insecurity and employee attendance (MacDonald & MacIntyre 1997:2). Fasang, Geerdes, Schomann and Siarov (2007:3) describe job satisfaction as a way to measure occupational well-being and hold that more satisfied workers tend to be more productive and flexible. According to Rondeau (2009:1), employees who enjoy their work and feel rewarded for their input will contribute to the success of the company through increased productivity. Roelen, Koopmans and Groothoff (2008:434) define job satisfaction as “the positive emotional reactions and attitudes individuals have towards their job.” Tosi, Rizzo and Carrol (1990:93) maintain that job satisfaction is a multidimensional concept encompassing numerous factors, which include physiological, security, social, self-esteem and self-actualisation needs that impact positively on employee attitudes towards work. These attitudes can be negative, positive or neutral.

Pii (2003:5) emphasises that job satisfaction remains central to any scope of employment as it impacts on productivity. Bassy (2002:23) reports that the level of job satisfaction experienced by employees has a major effect on their work, their social and family life, as well as their physical and emotional health. People’s needs constantly change, as do extrinsic factors such as the environment, economic, political and societal conditions (Pii 2003:7). These

changing factors affect employees' levels of job satisfaction which, in turn, affects their productivity. Considering the foregoing, it would appear that satisfied workers are key in enabling organisations to retain a committed, motivated and highly skilled workforce.

For the purpose of this study, job insecurity refers to uncertainty regarding employment or to employees' fear that they may lose their jobs (Green 2009:5; De Witte 1999:157). While Probst (2002:143) defines job security as "the perceived stability and continuance of one's job."

However, according to Green (2009:3), job insecurity leads to a decline in the well-being of employees, which impacts on job satisfaction. Job insecurity is experienced as a threat and implies uncertainty; it is a stressor, often associated with powerlessness, and negatively correlates with employee well-being (De Cuyper & De Witte 2005:81). De Witte (2005:4) affirms that workers who feel insecure are less satisfied with their jobs. While De Witte (2005:5) concurs with Burke's (1997:98) finding that low job insecurity is negatively related to job satisfaction, Buitenbach and De Witte (2005:28) reported that higher levels of job insecurity were associated with lower levels of extrinsic job satisfaction which include remuneration, working conditions and co-workers. They also contend that intrinsic job satisfaction, referring to job tasks, their variety, skill, autonomy and utilisation has no significant effect on job insecurity. Bassy (2002:3) maintains that if management adopt an easy-come-easy-go approach employees will most likely experience job insecurity.

The above-mentioned findings infer that job insecurity could be an important work stressor, negatively affecting employees' job satisfaction, their well-being, organisational attitudes and behaviours. Therefore, the significance of this study lies in investigating the levels of job insecurity and job satisfaction and the

impact that these two variables may have on the employees in an engineering, procurement and construction (EPC) firm in Gauteng, South Africa.

1.2 PROBLEM STATEMENT

Holm and Hovland (1999:157) report that as companies focus more on competition and profit margins, employees are confronted with threats of real and/or anticipated job loss, causing them to feel insecure about their careers and their future worklife. The problem identified in the EPC company, where the research was conducted, is that there is a need to determine the level of job satisfaction and job insecurity, as a nine (9) per cent staff turnover was reported for 2009 (Kentz 2009:2). Data indicates that the majority of the employees who resigned were employed through labour brokers (Temporary Employment Services). Research on job satisfaction and job insecurity in the EPC sector is limited. High levels of job insecurity and low levels of job satisfaction could cause organisations to suffer financially due to the associated costs of absenteeism and increased employee turnover. Furthermore, job dissatisfaction and job insecurity result in decreased worker productivity, as well as less commitment, employee engagement, loyalty and trust in employers (Green 2009:5 & De Witte 1999:157).

Chen, Chen and Chen (2010:249) stress that as a result of increased competition, companies are rapidly changing, particularly the high-technology industries which include engineering, procurement and construction industries. The construction industry covers work falling within the engineering, building, civil engineering and manufacturing sectors. Employees who feel insecure tend to look for employment in stable organisations which will enable them to predict their career advancement (Ongori, 2007:49). Ongori (2007:51) states that job insecurity contributes to the voluntary resignation of employees. As a result

organisations experience high organisational turnover costs, the loss of human capital investment and they incur increased recruitment costs. The recruitment process includes searching the labour market for a skilled candidate, the selection process, induction of the new employee, and training (formal and informal) to assist the new staff member to perform on a level equivalent to that of the employee who resigned. Productivity is also negatively affected (Sutherland 2007:713).

Bronkhorst (2010:1) states that large engineering projects in South Africa run for fixed periods of time. Temporary staff, particularly engineers and construction personnel are needed for the duration of these projects and engineering contracts. Large EPC organisations have various projects running simultaneously and therefore engineers and construction personnel are employed on fixed-term contracts - temporary employment - through labour brokers. However, as a result of economic instability and the risk of financial highs and lows, employers have tended to put projects on hold for indefinite periods of time. This is purely a financial business decision based on overhead expenditure. This impacts on employees employed through labour brokers as employment contracts can be ended with a 30-day notification.

The EPC company in this study sources suitably skilled individuals through labour brokers on a contract basis. The parties agree that the relationship will last for a fixed period of time or until the employee completes a specified task. This is also referred to as a "fixed-term" or a "limited-duration contract". As job insecurity impacts negatively on productivity, it is important to determine the levels of job satisfaction and job insecurity of employees. Therefore, it is important to conduct this study to determine if there is a relationship between the levels of job satisfaction and job insecurity between a labour brokered fixed term contract of limited duration and that of permanent employees.

1.3 PURPOSE OF THE STUDY

Based on the problem statement presented above, the purpose of this research is to evaluate levels of job satisfaction and job insecurity in an EPC environment in South Africa, taking employment status into account.

1.4 VALUE OF THE STUDY

Globally, the nature of changing employment practices utilised by organisations has gained considerable interest in the last decade (Cooper 2005:396). The purpose of this study is to evaluate job satisfaction and job insecurity levels of employees in an EPC environment. Engineering procurement and construction industries have changed their employment practices to adjust to increasing global competition by utilising labour brokers to recruit employees on fixed-term contracts.

The value of this study lies in the fact that no research of this nature has been conducted on job satisfaction and job insecurity and its prevalence in the EPC sector in South Africa. This study will provide insight into whether employment status, that is, contract versus permanent has an impact on the reported levels of job satisfaction and job insecurity of construction industry employees.

1.5 RESEARCH OBJECTIVES

1.5.1 Theoretical objectives

The theoretical objectives of the study are to

- conduct a literature review on job satisfaction,
- conduct a literature review on job insecurity, and

- conduct a literature review on labour brokers in the construction industry in South Africa.

1.5.2 Empirical Objectives

The empirical objectives of the study are to

- evaluate levels of job satisfaction of employees permanently employed and employees who are temporary employed on a fixed-term contract through labour brokers;
- evaluate levels of job insecurity of employees permanently employed and employees who are temporary employed on a fixed-term contract through labour brokers; and
- identify whether there is a significant difference in the levels of job satisfaction and job insecurity between permanently employed employees and employees employed on contract, through labour brokers.

Empirical research questions for this study are:

Research Question 1: What are the levels of job satisfaction of employees permanently employed and employees employed on contract through labour brokers?

Research Question 2: What are the levels of job insecurity of employees permanently employed and employees employed on contract through labour brokers?

Research Question 3: Are there any significant differences between the levels of job satisfaction of employees permanently employed and employees employed on contract through labour brokers?

Research Question 4: Are there any significant differences between job insecurity of employees permanently employed and employees employed on contract through labour brokers?

1.6 RESEARCH DESIGN AND METHODOLOGY

The study will comprise a literature review and an empirical study. Quantitative research, using the survey method will be used for the empirical portion of the study. Monette, Sullivan and De Jonge (2005:313) define a research design as “a detailed plan outlining how observations will be made.” This study can be classified as descriptive, explorative and explanative (Babbie & Mouton 2001:235).

1.6.1 Literature review

The literature review will include relevant textbooks, journal and newspaper articles, publications and the Internet. Welman and Kruger (2001:35) stress that the literature review should not consist of a mere compilation of separate, isolated outlined summaries of individual studies of previous researchers. The researcher ought to clearly identify how previous studies relate to one another and how the proposed research relates to these studies.

1.6.2 Empirical study

An empirical research design will be used.

1.6.2.1 Research population

Due to the relatively small size of the population, all employees of the EPC company will be surveyed and will include workers permanently employed as well as employees employed through labour brokers on contract. The survey method will be used to obtain relevant data and questionnaires will be personally administered by the researcher.

Chimanikire, Mutandwa, Gadzirayi, Muzondo and Mutandwa (2007:166) state that employment status, whether permanent or contract, is recognised as a factor that influences employees' job satisfaction and job insecurity. This variable will be included to establish whether there is a relationship between employment status and job satisfaction and job insecurity.

The EPC company in this study consists of various staff categories: section managers, engineers, project managers and site employees. The total population is 145 employees of whom 41 are permanent employees and 104 are employed through labour brokers.

1.6.2.2 Data collection and measuring instruments

An anonymous questionnaire, that consists of three sections, will be used. Section A contains biographical details including age, location, job title, employment status and tenure with the organisation, while Section B consists of

the job satisfaction scale (JSS), and Section C the job insecurity questionnaire (JIQ).

The following measuring instruments will be used for the study:

The Job Satisfaction Scale (MacDonald & MacIntyre 1997:16) and the Job Insecurity Questionnaire (JIQ) (De Witte 2000:4). These questionnaires have Cronbach alpha reliabilities of 0.77 and 0.90 (cognitive scale) and 0.85 (affective scale) respectively.

1.6.2.3 Statistical analysis

The data will be edited and coded. Descriptive statistics will be used to explore the data. The Statistical Package for Social Sciences (SPSS:2008) version 17.0 for Windows will be used to process the raw data obtained from the questionnaires.

1.7 DELIMITATION OF THE STUDY

This study will not include general workers and fortnightly paid employees.

1.8 ETHICAL CONSIDERATIONS

Cover letters, affixed to the questionnaire, explain the nature of the study, as well as assuring respondents of the confidentiality of any information received. Respondents are provided with detailed instructions by the researcher as to how the questionnaire is to be completed and returned.

The rationale behind providing clear instructions and assuring confidentiality of information is based on the fact that this significantly reduces the likelihood of obtaining biased responses (Berg 2005:867).

1.8.1 Permission

Permission was obtained from the EPC company to conduct this study. Based on the nine (9) per cent staff turnover and resultant loss of skilled employees, management recognised that there was a need to investigate levels of job satisfaction and job insecurity within the company.

1.8.2 Confidentiality

Data obtained from the questionnaires will be treated as confidential.

1.9 CLASSIFICATION OF CHAPTERS

Chapter 1: Introduction

Introduces the study, outlines the background of the study, the research problem, research design, research objectives and the rationale of the study.

Chapter 2: Literature review

Presents a summary of the literature review on job satisfaction, job insecurity and labour brokers in the EPC industry and serves as the theoretical framework.

Chapter 3: Research designs

Chapter 3 outlines the research design and describes the research methodology, including the population, the questionnaires, data collection and statistical analysis.

Chapter 4: Interpretation of results

A review and interpretation of the data will be presented, and the research questions will be tested.

Chapter 5: Conclusions and recommendations

Findings of the study will be summarised, discussed and interpreted and, where appropriate, recommendations made for further research.

1.10 SUMMARY

This chapter serves as an introduction to the study, defining the rationale and background of the study. The statement of the research problem, research questions and process detailing the design and methodology was presented. Chapter classification concluded the chapter.

Serving as the theoretical framework, Chapter 2 will discuss literature pertinent to the important key concepts of this study i.e. job satisfaction and job insecurity and labour brokers in the EPC industry.

CHAPTER 2

LITERATURE REVIEW

In addressing the study at hand, Chapter 2 will discuss literature pertinent to the important key concepts of this study of job satisfaction and job insecurity.

2.1 INTRODUCTION

Globalisation and the need to become more competitive is a challenge facing all organisations (Craig & Douglas 1996:6). Chipunza and Berry (2010:604) view one of the biggest challenges facing organisations as being the manner in which they deal with current business challenges, which include change, complexity and competition, by remaining responsive to local markets, while at the same time achieving global efficiency. Stated differently, of key importance is the need to integrate and coordinate operations across world markets while improving competitiveness (Melaine 2006:247).

With competition intensifying, globalisation impacts on the boundaries of competition and new sources of competition emerge (Craig & Douglas 1996:7). This implies that broad-based changes, economic uncertainty, downsizing and an increase in mergers and acquisitions have forced organisations to improve organisational effectiveness in response to changing conditions (Hartley, Jacobson, Klandermans & Van Vuuren 1991:12). Subsequently, many organisations have altered the employment contract to suit changing circumstances accompanied by large-scale workforce reductions, as well as a more flexible use of labour (Staufenbiel & König 2010:101).

McKeown (2003:169) states that one of the most striking features of the changing world of work is the increasing number of workers falling outside of the traditional view of employment as being full time, with a stable job of indefinite duration, as opposed to non-standard arrangements such as temporary employment. Consequent to organisational transitions and restructuring, an increasing number of employees experience feelings of insecurity regarding the nature of and future existence and/or duration of their employment (Hartley *et al.* 1991:12).

South African organisations cannot afford a decline in the levels of job satisfaction and increasing levels of job insecurity which have a negative impact on productivity and their ability to remain competitive (Van Wyk & Pienaar 2008:69).

2.2 JOB SATISFACTION

Job satisfaction is defined as being an emotionally positive reaction and attitude which an individual may have towards his/her job (Roelen *et al.* 2008:434). This concurs with Locke's (1976:1304) definition of job satisfaction: "...a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences."

Job satisfaction is further defined by Neumann, Reichel and Saad (1988:82) as "the pleasurable emotional state resulting from perception of one's job as fulfilling or allowing the fulfilment of one's important job values, providing these values are compatible with one's needs." This aspect, of emotions in relation to job satisfaction, has been amplified by Schermerhorn (1996:300) who contends that job satisfaction is the degree to which a person feels positive and/or negative about various aspects of the job. Equally, Tirmizi, Malik and Ul-Hasan

(2006:3) contend that job satisfaction represents an attitude rather than a behaviour.

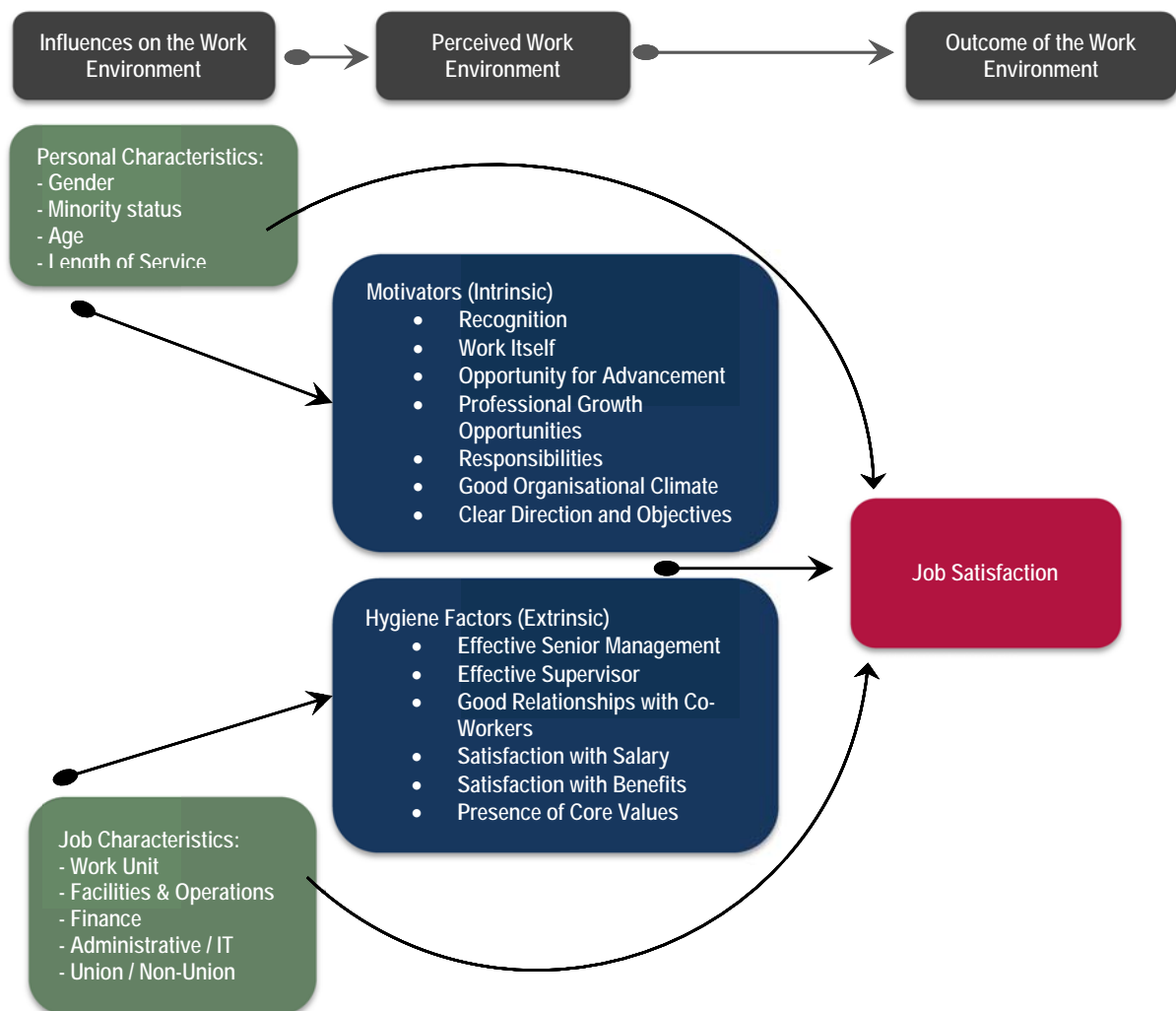
Based on the above, one can conclude that most researchers view job satisfaction as a multidimensional concept encompassing variable aspects regarding the different perspectives and emotions which employees experience towards their jobs, or towards specific aspects of the job.

Even though a plethora of recognized definitions exist, the aforementioned is considered suitable for the purposes of conceptual and empirical examination in this study.

2.2.1 Theories and components of job satisfaction

Since the 1950s, researchers have theorised on the nature of job satisfaction (Hirschfield 2000:255).

The conceptual model by Smerek and Peterson (2007), contains the major constructs of job satisfaction: personal characteristics, job characteristics, perceived work environment (intrinsic and extrinsic) (Figure 1).

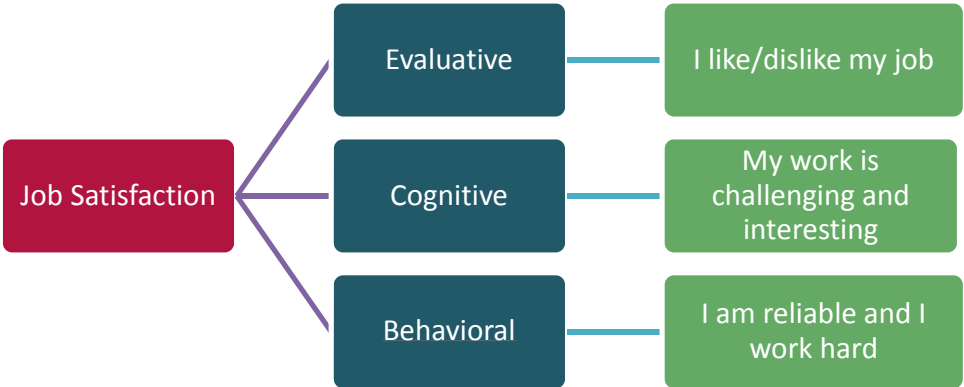


(Source: Smerek & Peterson, 2007)

Figure 1
Job satisfaction assessment model

Saari and Judge (2004:395) and Redmond (2010:1) report that a number of misleading notions exist around job satisfaction. One such mistaken belief is the adage “a happy employee is a productive employee.” Determining exactly what makes people feel satisfied about their work can become a multi-faceted issue as there are diverse factors that make people feel positive or negative about

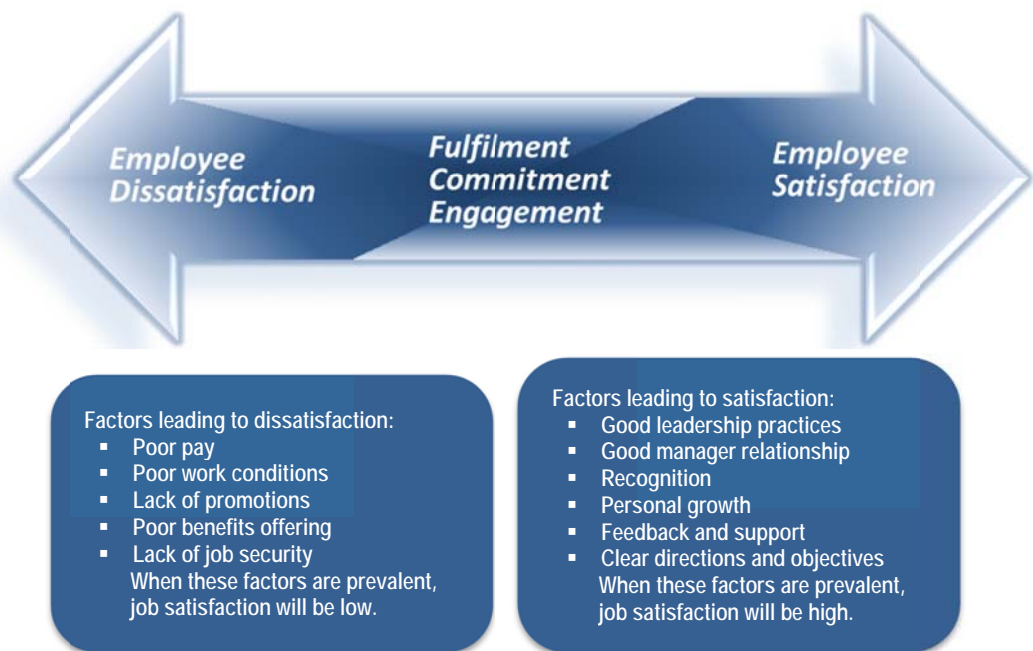
their job (Arnold & Feldman 1996:86). Redmond (2010:2) concluded that job satisfaction is very circumstantial and subjective in nature (see Figure 2).



(Source: Redmond, 2010)

Figure 2
Components of job satisfaction model

In examining job satisfaction, Field (2008:3) portrays factors contributing to employee dissatisfaction in comparison to factors leading to satisfaction. Where factors leading to job satisfaction, such as good leadership practices, recognition, advancement, and personal growth, are optimal, job satisfaction will be increased. In contrast, when factors leading to dissatisfaction are optimal, such as poor pay, poor communication, poor work conditions, lack of promotions, poor benefits and lack of job security, job satisfaction will decline. This is portrayed in the job satisfaction model (Field, 2008:3) in Figure 3.



(Source: Field, 2008)

Figure 3
Job Satisfaction Model

A study by Syptak, Marsland and Ulmer (1999:26) based on Herzberg's Motivation-Hygiene Theory, concluded that satisfied employees are more productive, creative and committed to their employers and their jobs. Singh and Surujlal (2006:128) emphasise the crucial role management plays in creating an environment in which employees experience increased job satisfaction and state that this promotes confidence, loyalty and increased productivity. This is supported by Ongori (2007:49) who states that due to the high costs of employee investment relative to training and development and retaining employees within the organisation, it is the task of managers to promote a healthy organisational climate which leads to job satisfaction.

2.3 JOB INSECURITY

One of the first formal definitions of job insecurity by Caplan, Cobb, French, Van Harrison and Pinneau (1975:812) was defined as a “general cognitive uncertainty about future job security.” This definition was expanded by Greenhalgh and Rosenblatt (1984:438) to a “perceived powerlessness to maintain desired continuity in a threatened job situation.” Stated differently, it is a feeling of helplessness in maintaining the desirable continuation of employment. This introduced both subjective and affective components to the concept of job insecurity.

Job insecurity as a psychological concept can be defined in various ways. Sverke, Hellgren and Näswell (2002:242) define it as “the subjectively perceived likelihood of involuntary job loss.” In more recent years, job insecurity is defined by Reisel, Chia, Maloles and Slocum (2007:106) as an employee’s perception that his or her job security may come to an end sooner than expected, whereas Jacobson (1991:23) earlier defined it as a concern about the future of one’s job and uncertainty of re-employment.

2.3.1 Nature of job insecurity

Job insecurity is an involuntary threat to the employment situation - permanent and temporary (Vetting 2010:4) - and is understood as a perceptive phenomenon influencing employee attitudes. While Van Wyk and Pienaar (2008:53) view job insecurity as the perception of job loss, Hartley *et al.* (1991:15) hypothesised that the fear of job loss would be significantly higher for those employees working within organisations undergoing change, where employee resource demand fluctuations are experienced as in the Engineering, Procurement and Construction sector. Furthermore, both Hartley *et al.*

(1991:15) and Van Wyk and Pienaar (2008:53) concluded that there were higher levels of job insecurity among workers employed in organisations which were in the process of undergoing radical changes in respect of restructuring and downsizing and utilising temporary employees.

De Witte and Näswell (2003:150) contend that there are two types of job insecurity: objective insecurity, in which the employment contract is temporary, casual or short term, and subjective or perceived job insecurity, in which workers are fearful of job loss or worry about the continuation of their job. Hesselink and Van Vuuren (1999:275) report that the majority of workers in temporary positions report insecurity about their job or career future, and in the context of restructuring, downsizing, and the shift to flexible labour, employees, even those whose jobs are not directly under threat, experienced heightened concerns about their job future.

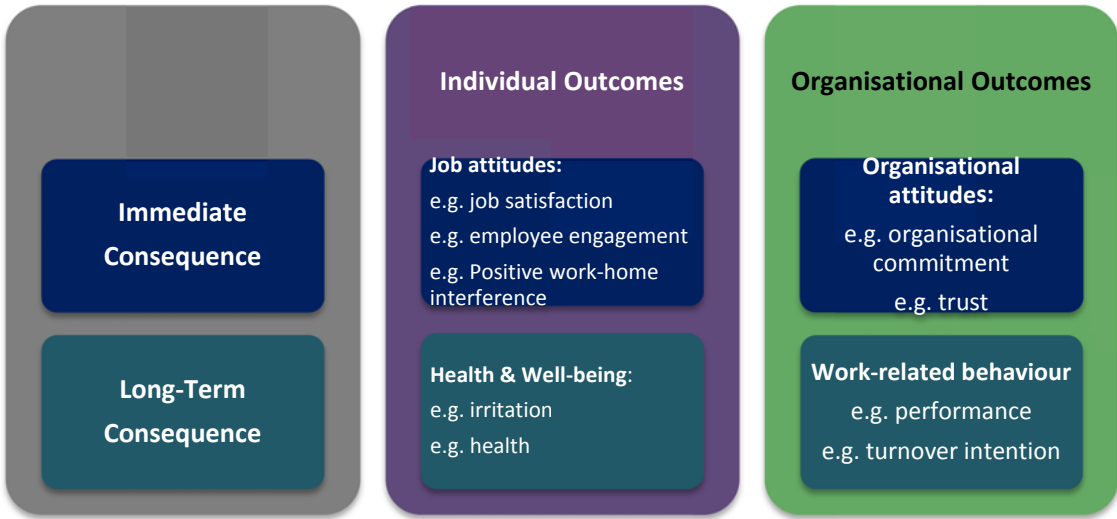
Van Wyk and Pienaar (2008:66) reported that all the participants in their study agreed that job insecurity relates to a feeling of uncertainty as it increases awareness of the possibility of being replaced. Employees were concerned about the continuity of their permanent jobs as well as insecurity concerning re-employment in the event of losing their current jobs.

Surujlal, Singh and Hollander (2004:105) identified organisational flexibility as a variable which contributes to job insecurity. During the last decennia, many organisations have been involved in large-scale restructuring processes, mergers, downsizing, plant closures and privatisations in an attempt to reduce cost and increase efficiency (De Witte, 2005:3). Interventions of this kind are most often associated with massive staff dismissals and increased employee turnover (Kozlowski, Chao, Smith & Hedlung, 1993:263). As a result of substantial corporate layoffs, as well as the downsizing, merges, acquisitions,

rightsizing and restructuring of organisations, many employees fear the loss of their jobs (Burke, 1998:40). This has resulted in increased levels of job insecurity. Apart from these major organisational changes having a negative effect on exiting employees, these changes also impact negatively on employees who remain within the organisation (Redman & Mathews 1998:65). These employees develop the perception that all workers have to become accustomed to more frequent job changes (Singh 2001:66).

2.3.2 Consequences of job insecurity

Job insecurity is interpreted as a work stressor with probable unfavourable consequences for employees, (Cheng, Chen, Chen & Chiang 2005:42). Outcomes of job insecurity that influence the employee and organisation on an immediate and long-term basis as can be noted in Figure 4 below (Sverke *et al.* 2002:260).



(Source: Sverke, Hellgren & Näswall, 2002)

Figure 4
The outcomes of job insecurity

Mauno and Kinnunen (2002:296) and Van Wyk and Pienaar (2008:54-55) conceptualise job insecurity as a stressor and state it can have harmful effects on employee productivity. Research on job insecurity conducted from the stress framework, supports the conviction that stressors relative to demands placed on an employee may produce feelings of job insecurity (Sverke *et al.* 2002:243). Probst's (2002:141) integrated model of job insecurity confirms the finding that job insecurity is a job stressor.

Increased temporary employment practices have been associated with less favourable job characteristics, the most prominent of which is job insecurity (De Cuyper & De Witte 2005:79). In fact, over the past two decades organisations in South Africa have increasingly sought to externalise the traditional permanent employer-employee relationship into a triangular labour broker relationship (Van Eck, 2010:108).

2.4 LABOUR BROKER PRACTICES IN THE EPC SECTOR

The construction industry is an important player in the economy of South Africa and therefore the importance of job satisfaction and presence of job insecurity of employees in this sector is an important factor which deserves scrutiny (Thwala & Monese, 2008:2).

The fast-track, complex nature of projects in the EPC sector offer some of the greatest challenges in the construction industry (Ballard & Howell 1997:14). Ballard and Howell (1997:14) state that it is imperative for construction companies to address these challenges and manage conditions of rapid change and uncertainty as these conditions are becoming the norm for all types of construction projects. Construction companies utilise labour brokers to recruit skilled employees in order to maximise profits. Labour brokers are responsible

for the employment contracts and layoffs once projects are completed (Clark 2005:2).

The EPC sector operates on a project basis - projects are awarded against successful tendering practices. Projects are awarded to the successful bidder (contractor), who remains responsible for the overall completion of the project.

Goldman (2003:1) states that employment in the construction industry has always been precarious and short-term for the duration of the project when compared to permanent employment. This is due to the fact that construction is project-based in nature, with the result that there are constant fluctuations in the demand for labour. Bamu and Godfrey (2009:7) report that in the past, the majority of workers employed in the industry were employed on a full-time, permanent basis and that the higher demand for short-term and contract employment, or temporary employment, is a present-day phenomenon. Construction companies have tried to retain highly skilled workers either as permanent workers or on limited duration contracts that are repeatedly renewed, resulting in long-term relationships (Bamu & Godfrey 2009:7).

The growing precariousness and job insecurity in the labour market within the construction sector is not only due to casualisation but is also largely ascribed to externalisation, which refers to outsourcing, subcontracting, telecommuting and the use of temporary employment services (TES) or labour brokers (Mdladlana 2003:1).

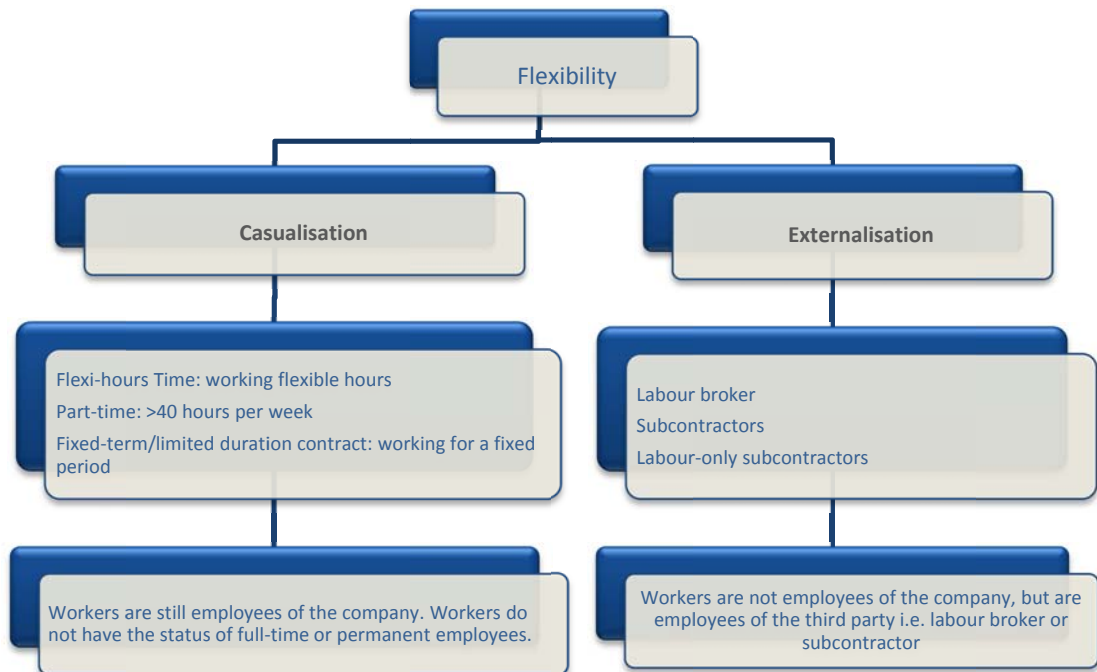
There are two main forms of flexible employment that have increased during the last decade in South Africa, namely casualisation and externalisation. Casualisation relates to a change in the assembly of an employer's workforce, and can have two possible outcomes, one being a reduction in the number of

permanent employees and a corresponding increase in the number of temporary employees, the other being more employees who work on a part-time or flexi-time basis. Externalisation, as a more radical approach, is supported by subcontracting or by labour broking. Subcontracting or outsourcing occurs when an employer dismisses employees and employs an external contractor, a labour broker, to recruit skilled workers in the jobs of the retrenched employees (Bamu & Godfrey 2009:7).

Labour broking involves the engagement of an intermediary who provides an agreed number of workers for an agreed period of time or for the completion of a specific project. Workers assigned by a labour broker remain the employees of the labour broker, despite the fact that they report directly to and are managed by the client contractor (Bamu & Godfrey 2009:8).

Theron (2007:4) and Roskam (2007:40) confirm that the labour broker and not the labour broker's client is the employer of the employee. This argument is established in Section 198 of the Labour Relations Act which regulates temporary employment services. This means that when a labour broker is involved in the employment relationship, it is no longer considered a standard employment relationship, but is commonly referred to as a triangular employment relationship. In a standard employment relationship employment is full time, the employee has one employer, the employment is ongoing and the employee has an employment contract (Theron 2007:4).

In brief, externalisation is a process of economic restructuring, in which employment regulated by a permanent employment contract is replaced by employment that is regulated by a commercial contract (Bamu & Godfrey 2009:8) as portrayed in Figure 5.



(Source: Bamu & Godfrey, 2009)

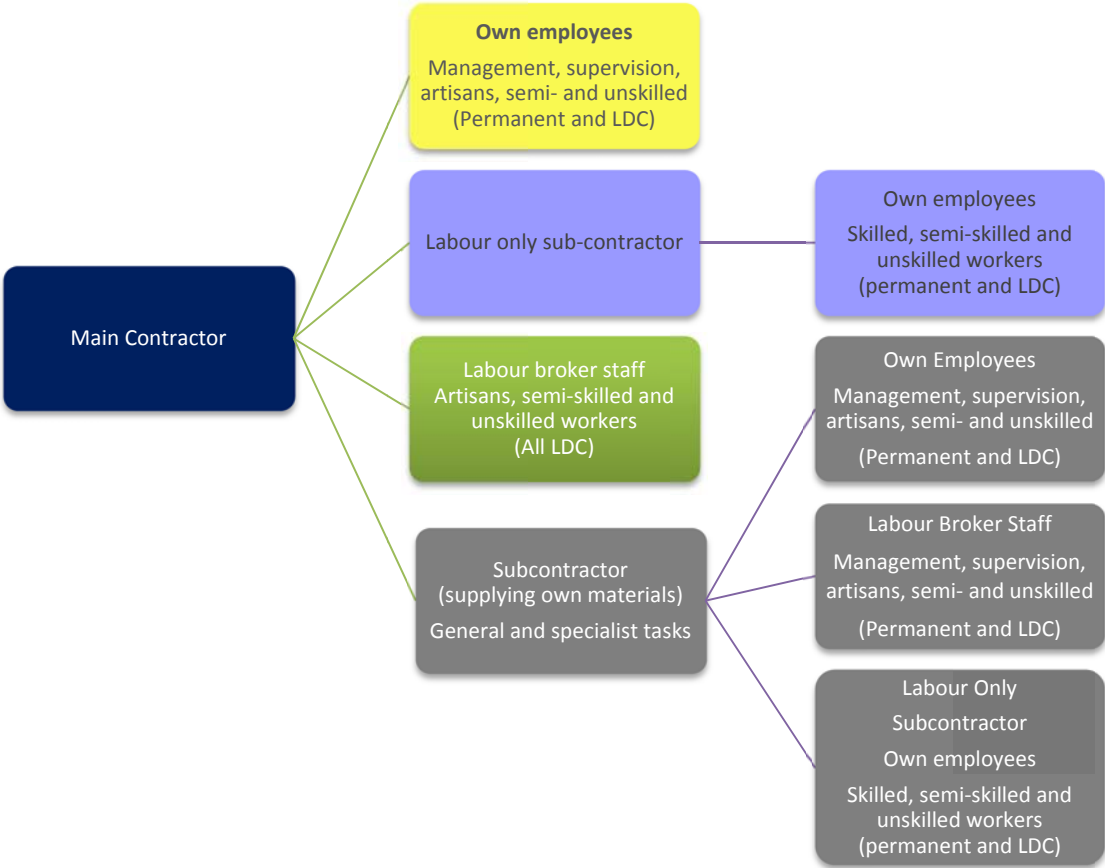
Figure 5

Flexible Work Arrangements Model: casualisation versus externalisation

Even though externalisation differs from casualisation in that it leads to a reduction in the number of workers directly employed by the core enterprise, the two processes are interlinked, as employees employed through labour brokers and subcontractors are usually employed on temporary contracts (Theron & Godfrey 2000:2).

Since this study is conducted in an EPC construction setting where the contractor approaches labour brokers to supply a stated number of employees possessing certain skills and qualifications, this study incorporates both casualisation and externalisation arrangements. With this in mind, employees are placed at the disposal of the contractor, who controls and supervises work for the client (project owner).

As reported by Bamu and Godfrey (2009:11), casualisation in the industry has largely taken the form of temporary employment, facilitated by fixed or short-term contracts. Employers are progressively using limited duration contracts (LDCs) in the construction industry, engaging workers on a project-to-project basis, thus avoiding having to remunerate employees when work is unavailable. This can be noted in the relationships portrayed in Figure 6 (Bamu & Godfrey, 2009:11). The duration of these contracts vary from a few months or weeks, or to a few years with some employees continually having their contracts renewed.



(Source: Bamu and Godfrey, 2009)

Figure 6
Flexible Work Arrangements Model in the construction sector

Factors shaping the changing nature of employment in South Africa are influenced by the drivers of transformation in the workforce, which are the changing structure of the economy, globalisation, technological change and the emergence of non-standard employment relationships (Mdladlana, 2003:2). Competitive pressures placed on organisations and how they have responded, by introducing temporary labour practices, has resulted in many workers becoming concerned about their employment (Mdladlana, 2003:2). As a result, these practices have left workers feeling insecure and less satisfied, as multinational organisations become stateless organisations. This has resulted in the perception that these organisations show little concern for employees and has resulted in the emergence of non-standard employment practices and the changing nature of employment in South Africa today (Mdladlana, 2003:3).

2.5 SUMMARY

Chapter 2 served as the theoretical framework of this study, provided insight into the theories and components of job satisfaction, the nature and consequences of job insecurity and discussed labour broking practices in South Africa.

Chapter 3 will outline the research design and methodology.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Research design can be defined as the plan or blueprint presenting how the study is planned and the rationale for results, whereas research methodology focuses on the processes, the measuring instruments and procedures adopted for data collection (Mouton 2005:55).

3.2 RESEARCH OBJECTIVES

3.2.1 General objective

Evaluate levels of job satisfaction and job insecurity of employees in an EPC environment also taking employment status, permanent employment versus temporary employment appointed through labour brokers, into consideration.

3.2.2 Specific objective

The specific theoretical objectives were to:

- conduct a literature review on job satisfaction,
- conduct a literature review on job insecurity, and
- review literature on labour brokers in the EPC industry in South Africa.

3.2.3 Research questions

Research questions for this study are:

Research question 1: What are the levels of job satisfaction of employees permanently employed and employees temporarily employed on contract through labour brokers?

Research question 2: What are the levels of job insecurity of employees permanently employed and employees employed on contract through labour brokers?

Research question 3: Are there any significant differences between the levels of job satisfaction of employees permanently employed and employees employed on contract through labour brokers?

Research Question 4: Are there any significant differences between job insecurity of employees permanently employed and employees employed on contract through labour brokers?

3.3 TARGET POPULATION

The target population for this study includes all staff members currently employed by the EPC organisation and includes workers employed permanently and those on contracts. Due to the relatively small size of the population, all employees were included. The survey method was used to obtain relevant data

and questionnaires were personally administered by the researcher to office and site-based employees.

The total population was 145 employees of whom 41 were permanent employees and 104 were contract employees employed through labour brokers.

Chimanikire *et al.* (2007:166) state that employment status, permanent or contract, is recognised as a factor that influences employees' job satisfaction and job insecurity.

3.4 EMPIRICAL STUDY

A quantitative empirical research design will be followed.

3.5 RESEARCH DESIGN

Monette *et al.* (2005:313) define research design as a detailed plan outlining how observations will be made addressing key issues, more specifically, participants of the study, sampling methods and data to be gathered.

The study comprised a literature review and an empirical study.

Quantitative research, using the survey method of self-administered questionnaires was used for the empirical portion of the study. Monette *et al.* (2005:313) define a research design as "a detailed plan outlining how observations will be made." This study can be classified as descriptive, explorative and explanative (Babbie & Mouton 2001:235).

3.6 MEASURING INSTRUMENTS

The anonymous questionnaire consists of three sections (Annexure A).

- Section A: a biographical questionnaire which includes age, location, position, permanently employed or contractually employed through a labour broker, and tenure with the organisation.
- Section B includes the job satisfaction scale.
- Section C is the job insecurity questionnaire.

3.6.1 Job Satisfaction Scale (JSS)

The Job Satisfaction Scale (JSS) (Macdonald & MacIntyre, 1997:16) was used to measure job satisfaction. The scale is comprised of 10 questions on a five-point Likert scale varying from 1 (strongly disagree) to 5 (strongly agree). The Cronbach alpha as reported by Macdonald and MacIntyre (1997:11) is 0,77. The sample used to develop this scale incorporated different occupational groups, as well as individuals who work shifts. The results of this study indicate that this combination of the various components and the general approach can be successful as the model of job satisfaction presented in Figure 2 focuses on the reaction to events rather than on the events themselves.

3.6.2 Job Insecurity Questionnaire (JIQ)

The Job Insecurity Questionnaire (JIQ) (De Witte 2000:1) was used to measure job insecurity. This questionnaire consists of 11 items that measure the perceived affective and cognitive dimensions of participants' job insecurity against a 5-point Likert-type scale with 1 (strongly agree) and 5 (strongly disagree). Five items measure the cognitive dimension of job insecurity (for example, "Chances are I will soon lose my job") while six items measure the

affective dimension ("I fear I will lose my job"). Buitendach, Rothman and De Witte (2005:1) reported a Cronbach alpha of 0,90 for the cognitive scale and a Cronbach alpha of 0,85 for the affective scale.

3.7 DATA ANALYSIS

The statistical analysis was conducted by means of the Statistical Package for Social Sciences (SPSS) version 17.0 (SPSS:2008). Descriptive statistics, including means, standard deviations, skewness and kurtosis were used to explore the data. The raw data received from the questionnaires was edited and coded, analysed and presented in table format.

3.8 SUMMARY

This chapter outlined the research design, the nature of the population, the procedure used to collect the data, addressed issues concerning confidentiality, and included the description of the measuring instruments used and statistical techniques employed in addressing research questions.

Chapter 4 presents an interpretation of the data and testing of the research questions.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 INTRODUCTION

In the previous chapters, literature on job satisfaction and job insecurity was reviewed and the research methodology presented. Reference was made to a number of authors' conclusions about job satisfaction and job insecurity, and perceptions, theories, components and factors, such as employment status, which influence job satisfaction and job insecurity.

This chapter deals with the analysis, presentation, and interpretation of the research results obtained from the empirical analyses conducted to test the research questions using data collected by the measuring instruments. The results are summarised by means of descriptive measures. The descriptive statistics generated are presented and discussed.

The analysis of data measured the current level of job satisfaction and job insecurity of permanent versus contract employees in an EPC environment in South Africa.

4.2 RESPONSE RATE OF SURVEY

Of the 145 questionnaires distributed, 57 completed questionnaires were received, resulting in a response rate of 39 per cent.

4.3 QUANTITATIVE ANALYSIS

In order to achieve the empirical objective of the study, the results were analysed and presented as they appear in the different sections of the questionnaire (Annexure A). The quantitative data was analysed by the Department of Statistics at North-West University.

A quantitative approach using a cross-sectional survey design was conducted. Neuman (2002:290) states that the survey method is the most widely used data gathering technique, in which researchers sample many respondents who answer the same questions. The researchers measure many variables, test multiple hypotheses and infer temporal order from questions about past behaviour, experiences or characteristics. In this study, self-administered questionnaires were used. Inter-relationship among variables within the population was assessed.

Hussey and Hussey (1997:189) state that a useful first step in the analysis of quantitative data is to examine the frequency distribution for each variable to establish the numerical value, which represents the total number of responses. Frequency distribution was undertaken throughout the analysis of the data.

4.4 RESULTS AND INTERPRETATION OF FINDINGS

A description of the participants with regard to appointment status, gender, tenure and age is reported in Table 1.

4.4.1 Target population

The results, which are descriptive in nature, are illustrated by means of frequency tables.

Table 1: Description of Participants

Item	Category	Frequency	Percentage
Appointment Status	Permanent Employee	17	29,8
	Labour Broker Employee (contract)	39	68,4
	Missing	1	1,8
Gender	Male	43	75,4
	Female	14	24,6
Tenure	Less than 18 months	12	21,1
	18 months - 3 years	22	38,6
	3 - 5 years	9	15,8
	5 - 10 years	13	22,8
	Missing	1	1,8
Location	Office Based Only	27	47,4
	Office and Site Based	27	47,4
	Missing	3	5,3
Age	18 – 21 years	3	5,3
	22 – 26 years	5	8,8
	27 – 32 years	20	35,1
	33 – 40 years	8	14,0
	41 – 50 years	11	19,3
	51 – 60 years	10	17,5
Position/Role	Section Manager	11	19,3
	Engineer	19	33,3
	Project Manager	6	10,5
	Quality Employees	1	1,8
	Administrative	13	22,8
	Other	6	10,5
	Missing	1	1,8

(N=57)

Of the 145 questionnaires personally distributed, 57 completed questionnaires were returned and the 57 responses or 39 per cent could be used in this study.

The biographical information section was regarded as essential to investigate the participants' particulars, so that the researcher could acquire a picture of the personal circumstances that each participant was operating under.

Statistics are based on all responses containing valid data. For this study all responses could be drawn on (n=57). The population under study consisted of 29,8 per cent participants permanently employed and 68,4 per cent of the participants employed on contract through labour brokers.

Male respondents accounted for 75,4 per cent, while female respondents accounted for 24,6 per cent of the population. The positions held by the respondents are: Managers (19,3%), Engineers (33,3%), Project Managers (10,5%), quality control and quality assurance personnel (1,8%), administrative personnel (22,8%), other (10,5%) and missing (1,8%).

4.4.2 Research questions

Research question 1: What are the levels of job satisfaction of employees permanently employed and employees employed on contract through labour brokers?

Table 2 presents the mean job satisfaction scores of respondents employed full-time, on a permanent basis, directly by the company, and employees employed on a fixed-term contract through labour brokers. Ten items were used to measure employees' perceived satisfaction with their jobs. On average the respondents are satisfied with their jobs (mean = 3,59, SD = 0,431). However, contract employed respondents have a slightly higher level of job satisfaction (mean = 3,73, SD = 0,573) than permanently employed respondents (mean = 3,59, SD = 0,431).

Table 2: Level of Job Satisfaction

Items	Permanent Employees (n = 17)		Temporary Employees (n = 39)	
	Mean	SD	Mean	SD
	I receive recognition for a job well done	3,18	1,185	3,41
I feel close to the people at work	3,82	0,529	3,72	0,999
I feel good about working at this company	4,06	0,748	4,26	0,715
I feel secure about my job	3,71	0,588	3,74	0,751
I believe management is concerned about me	3,24	0,970	3,31	1,055
On the whole, I believe work is good for my physical health	3,65	0,996	4,13	0,695
My wages are good	3,24	0,562	3,21	1,005
All my talents and skills are used at work	3,24	0,752	3,36	1,112
I get along with my supervisors	3,82	0,636	4,18	0,601
I feel good about my job	4,00	0,500	4,03	0,743
Total Mean	3,59	0,431	3,73	0,573

Range 1 – 5, 1 = Low, 5 = High

Out of the ten items, respondents employed permanently report a high level of job satisfaction with the following: feeling good about working at the company (mean = 4,06, SD = 0,748); feeling good about their job (mean = 4,00, SD = 0,500); feeling close to the people at work (mean = 3,82, SD = 0,529); getting along with supervisors (mean = 3,82, SD = 0,636); feeling secure about their jobs (mean = 3,71, SD = 0,588); and the belief that work is good for their physical health (mean = 3,65, SD = 0,996). The permanent employees also report moderate job satisfaction levels with the following items: receiving good wages (mean = 3,24, SD = 0,562) talents and skills being used at work (mean = 3,24, SD = 0,752); the management's perceived

concern about them (mean = 3,24, SD = 0,970); and receiving recognition for a job well done (mean = 3,18, SD = 1,185).

With regard to contract employees, the following items show high levels of job satisfaction: feeling good about working at the company (mean = 4,26, SD = 0,715); getting along with supervisors (mean = 4,18, SD = 0,601); belief that work is good for their physical health (mean = 4,13, SD = 0,695); feeling good about their job (mean = 4,03, SD = 0,743); feeling secure about their jobs (mean = 3,74, SD = 0,751); feeling close to the people at work (mean = 3,72, SD = 0,999); receiving recognition for a job well done (mean = 3,41, SD = 0,966); talents and skills being used at work (mean = 3,36, SD = 1,112); and the management's perceived concern (mean = 3,31, SD = 1,055). The contract employees were however, only moderately satisfied with the wages they receive (mean = 3,21, SD = 1,005).

Research question 2: What are the levels of job insecurity of employees permanently employed and employees employed on contract through labour brokers?

Table 3 presents descriptive statistics of the level of job insecurity reported by both permanently employed and contract employed respondents. Eleven items were used to measure job insecurity as perceived by employees.

Table 3: Levels of Job Insecurity

Level of Job Insecurity	Permanent Employees (n = 17)		Temporary Employees (n = 39)	
	Mean	SD	Mean	SD
I think that I will be able to continue working here.	1,88	0,781	1,82	0,823
There is only a small chance that I will become unemployed.	2,71	0,849	2,87	1,174
I am certain/sure of my job environment.	2,47	0,800	2,18	0,756
I am very sure that I will be able to keep my job.	2,24	0,752	2,23	0,777
It makes me anxious that I might become unemployed.	2,47	1,068	2,87	0,978
I feel uncertain about the future of my job.	2,41	0,870	2,41	0,993
I worry about the continuation of my career.	2,00	0,791	2,59	0,910
I fear that I might lose my job.	2,12	0,781	2,36	0,811
I fear that I might get fired.	1,76	0,664	2,18	0,854
There is a possibility that I might lose my job in the near future.	2,12	0,857	2,28	0,857
I think that I might be dismissed in the near future	1,88	0,697	2,05	0,826
Total Mean	2,19	0,532	2,35	0,609

Range 1 – 5, 1 = Low, 5 = High

As can be seen from the data in Table 3, the perceived level of job insecurity is generally low. However, contract employed respondents report a slightly higher level of perceived job insecurity (mean = 2,35, SD = 0,609) than the permanently employed respondents (mean = 2,19, SD = 0,532).

Respondents employed permanently report a low level of perceived job insecurity in all the eleven items. On the other hand, the contract employed

respondents report a moderate level of perceived job insecurity with regard to the following two items: anxiety that they may become unemployed (mean = 2,87, SD = 0,978), and there being only a small chance that they will become unemployed (mean = 2,87, SD = 1,174). The rest of the items had low job insecurity scores.

Research question 3: Are there any significant differences between the levels of job satisfaction of employees permanently employed and employees employed on contract through labour brokers?

A t-test for independent means was calculated to determine whether the difference in job satisfaction scores between the permanently employed and contract employed workers was statistically significant. Data is reported in Table 4 below.

Table 4: Independent Samples t-Test of Job Satisfaction Scores for Permanently Employed and Temporarily Employed Respondents

Variable	Group	Mean	SD	df	t-value	P-value 2 tailed
Job Satisfaction	Permanent Employees (n = 17)	3,5941	0,43080	54	-0,895	0,375
	Contract Employees (n = 39)	3,7333	0,57323			

The t-test revealed that there was no significant difference in scores for permanent employees (M=3,59, SD = 0,431) and contract employees [M = 3,73, SD = 0,573; t (54) = -0,895, p= 0,375]. The magnitude of the differences in the means was very small (eta squared = 0,015).

Research question 4: Are there any significant differences between job insecurity of employees permanently employed and employees employed on contract through labour brokers?

To ascertain whether the difference in the level of job insecurity between permanent employees and contract employees was significant, an independent samples t-test was conducted to compare the job insecurity scores for permanently employed and contract workers. The results are displayed in Table 5.

Table 5: Independent Samples t-Test of Job Insecurity Scores for Permanently Employed and Temporarily Employed Respondents

Variable	Group	Mean	SD	df	t-value	P-value 2 tailed
Job Insecurity	Permanent Employees (n = 17)	2,1872	0,53249	54	-0,952	0,345
	Temporary Employees (n = 39)	2,3497	0,60896			

There was no significant difference in scores for permanent employees ($M = 2,19$, $SD = 0,532$) and temporary employees [$M = 2,35$, $SD = 0,609$; $t(54) = -0,952$, $p = 0,345$]. The magnitude of the differences in the means was very small ($\eta^2 = 0,017$).

4.5 CONCLUSION

This chapter presented the research results in tabular form. Statistical differences between job satisfaction and job insecurity were investigated and discussed in detail.

Contract employment can no longer be regarded as entirely negative or having an association with labour market segmentation but should rather promote commitment and productive behaviour practices beneficial to all parties involved. As contract employment is associated with job insecurity, this leads to the expectation of adverse results among temporary workers (De Cuyper, De Witte & Van Emmerick 2011:105). However, this study did not succeed in establishing a firm relationship between the type of employment contract, job satisfaction and job insecurity.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Employment practices within the private and public sectors are constantly being challenged by increased global competition, advancing technology, the need for high quality services and optimal utilisation of a diverse workforce (Knights & Kennedy 2005:57).

Employees are a key asset to any organisation. Recruiting implies resources and money, and it is through successful management and skillful sustainability that the organisation can grow, thus successfully contributing to the economy of the country by developing employees and reducing unemployment (Thwala & Monese 2008:2). Consistent recruitment and dismissal practices are not common practice within the construction industry. Not only is labour broking under severe scrutiny, as it cannot be regulated, but has come under fire from unions as it is seen as human trafficking (SAPA 2012:1).

The Flexible Work Arrangement Model by Bamu and Godfrey (2009:15) predicts that employees will demonstrate a decrement in their behavior and attitudes as their job insecurity increases. Specifically, they will be less productive, resist change, and begin to seek alternative employment. These intermediate outcomes are hypothesized to affect organisational performance. Importantly, this nexus of effects also predicts a reciprocal effect. Surviving employees infer, on the basis of ongoing organisational decline, that their own jobs are less secure. Research shows that job-insecure employees behave less effectively than their job-secure counterparts (Van Wyk & Pienaar 2008:50).

5.2 OVERVIEW OF THE STUDY

This study evaluated the levels of job satisfaction and job insecurity in an engineering, procurement and construction (EPC) industry and compared permanent employees with contract employees.

The study was quantitative and reported on job satisfaction and job insecurity levels for a population which consisted of 17 permanent employees and 39 contract employees.

5.3 CONCLUSIONS AS PER RESEARCH QUESTIONS

In answer to research question 1 “What are the levels of job satisfaction of employees permanently employed and employees employed on contract through labour brokers?” it is evident from Table 2 that temporary employees report a slightly higher level of job satisfaction as they outscore the permanent employees with a mean value of 3,73 in comparison to 3,59. Conversely, permanent employees are more satisfied with their wages and feel closer to the people in their working environment. From responses received, data in Table 2 presents the assumption that temporary employees experience job satisfaction because they feel good about their work and receive recognition for a job well done.

In response to the second research question, “What are the levels of job insecurity of employees permanently employed and employees employed on contract through labour brokers?” the values reported in Table 3 indicate that permanent employees have a higher level of job security than temporary employees. On the contrary, temporarily employed employees scored higher in all aspects of the job insecurity questionnaire except for questions pertaining to long-term employment and certainty about employment.

The possibility exists that given the contractual nature of the construction industry, the population used in this study reported only moderate levels of job insecurity as they were already accustomed to being employed on contracts when compared to the employees employed permanently.

When asked about the future of their jobs, both permanent and temporarily employed employees scored the same. The assumption can be made that this was relative to the circumstances present at the workplace at the time the study was conducted.

Using a t-test to calculate the independent means for job satisfaction between permanent and contract employees for research question 3; “Are there any significant differences between the levels of job satisfaction of employees permanently employed and employees employed on contract through labour brokers”, it was found that there is no significant difference between the two values. Although the employees employed on contract via labour brokers scored a higher value the difference was only equal to 0,015.

In answer to research question 4, “Are there any significant differences between job insecurity of employees permanently employed and employees employed on contract through labour brokers?” an independent samples t-test was used to compare the level of job insecurity between permanent employees and employees employed on contract through labour brokers. It is evident that there is no significant difference between these two groups, with the permanent employees reporting slightly lower levels of job insecurity. The magnitude of the difference in the means was calculated to a value of 0.017 (squared).

5.4 VALUE OF THE STUDY

This study provided valuable insight when evaluating job satisfaction and job insecurity between permanent employees and employees employed on contract through labour brokers. The results of the study indicated that permanent employees report slightly lower job insecurity levels than employees employed on contract through labour brokers. This study further showed greater levels of job satisfaction of employees employed on contract through labour brokers when compared to permanently employed employees.

5.5 LIMITATIONS OF THE STUDY

The main limitation of this study is that the sample was small and the research focused on one EPC company. The research is therefore not representative of the broader EPC industry and only provides a snapshot of job satisfaction and job insecurity levels in a specific EPC firm.

5.6 FUTURE RESEARCH

EPC projects are undertaken and completed by highly qualified and skilled employees. Productivity of employees in the construction sector plays an important role in influencing the quality of construction projects by addressing project costs, budgets, time-frames and safe project execution. Limited research on job satisfaction and job insecurity in the construction industry has been conducted. A similar study in other industries could also add value.

Increased knowledge on job satisfaction and job insecurity can increase the understanding of stressors and factors which motivate construction employees and can provide support in improving productivity.

The levels of job satisfaction and job insecurity reported on should be researched and more narrowly defined so that they are specific to the various departments in the engineering, procurement and construction sector.

5.7 RECOMMENDATIONS

Green (2009:5) states that although the origin and consequences of perceptions relating to job insecurity have been extensively researched, there has been limited focus in research on the perceived lack of job security in the construction industry.

Prinsloo (2011:2) postulated that in order for South Africa to decrease the high level of joblessness that currently prevails, the labour broker industry and those using labour brokers should be regulated. Labour broking in the EPC industry must be examined in light of the ongoing national debate about the future of labour broking practices in South Africa.

5.8 CONCLUSION

Most notable from this study is that contract-employed respondents report a slightly higher level of job satisfaction than their permanently employed counterparts. Consequently this finding indicates that these contract employees do not consider temporary employment negatively. The perceived level of job insecurity is generally low. However, contract-employed respondents report a slightly higher level of perceived job insecurity than the permanently employed respondents. These contract employed respondents report a moderate level of perceived job insecurity with regards to firstly, anxiety that they may become unemployed, and secondly, there being only a small chance that they will become unemployed.

An independent t-test testing significant job satisfaction differences for permanently employed and temporarily employed respondents yielded no

significant differences. Similarly, the same test for job insecurity scores for permanent and temporarily employed respondents also presented no significant differences as the magnitude of the differences in the means were low.

Core arguments in employment status, predominantly existent in the EPC sector, impact negatively on job satisfaction and lead to increased feelings of job insecurity. De Cuyper, De Witte and Van Emmerik (2011:106) report that an equal number of studies did not find significant differences in job satisfaction between temporary and permanent workers, but rather found relatively higher job satisfaction among temporary workers. Findings in this study support those of De Cuyper *et al.* (2011:106).

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