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**FACTORS INFLUENCING CONSTRUCTION WORKER
JOB SATISFACTION IN THE GHANAIAN
CONSTRUCTION INDUSTRY**

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CONSTRUCTION
MANAGEMENT

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DECLARATION

I hereby declare that this work is the result of my own original research and this thesis has neither in whole nor in part been presented by another degree elsewhere. References to other people's work have been duly cited.

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DEDICATION

This work is dedicated to God almighty and my parents, Lt. Col. Edmund and Mrs Oduro-Owusu through whose immense support I have been able to reach this far in my education.



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I wish to express my profound gratitude to the almighty God for the guidance and help given me throughout this programme. A special appreciation also to my supervisors, Rev. Dr. F.D.K. Fugar and Dr. K.A. Manteau who guided me and helped greatly to make the completion of my thesis possible.

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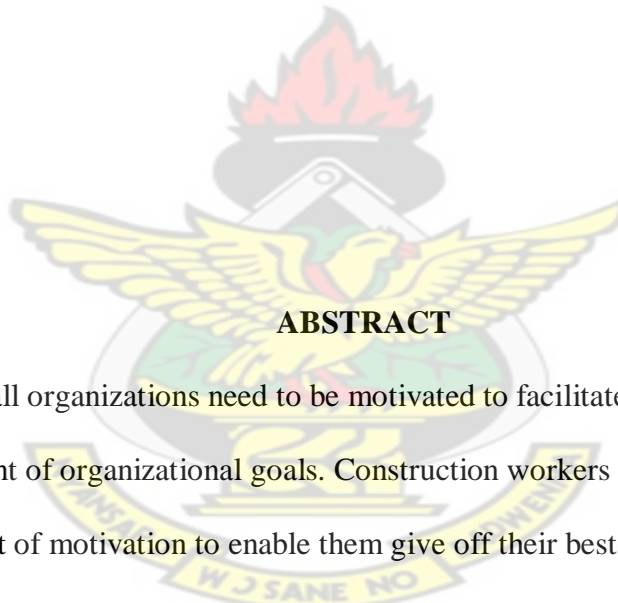
I also thank Miss Veronica Owusu Ansah for her spiritual support through prayers and encouragement that enabled me to keep on course. I will also not forget my brothers, Kwaku Anning and Kwame Oduro-Owusu for their financial support, advice and encouragement.

To my MSc class mates, I thank you all as you always boosted my morale to move on by checking on me regularly to find how I was faring with my work.

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May the almighty God richly bless all.

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ABSTRACT

Workers of all organizations need to be motivated to facilitate their input towards the attainment of organizational goals. Construction workers like all other workers need this sort of motivation to enable them give off their best. The purpose of this study was to find out factors affecting construction worker job satisfaction in the Ghanaian construction industry and to study the relationship between demographic variables and worker job satisfaction. The study focused on workers working with contractors classified as D1K1. In all 35 sites were visited. Workers answered questions from a questionnaire. Percentages, mean and chi-square test were used to analyze data. The results indicate that workers were generally satisfied with their job. A study of 25 job satisfaction items showed that factors

which influenced job satisfaction varied but predominantly among them was worker's own characteristics and supervision. The results also found no significant difference between workers level of job satisfaction and worker's site location, age, industrial experience, educational level and motivation to choose a career in the construction industry. However with respect to career choice there was a significant difference found. The study concludes that management of the various firms should sustain the current conditions and seek to improve areas of compensation to ensure continuous workforce availability.



TABLE OF CONTENTS

TITLE

PAGE

Declaration

ii

Dedication

iii

Acknowledgement

iv

Abstract

v

Table of Contents

vi

List of tables

x

List of figures

xi

KNUST



CHAPTER ONE: INTRODUCTION

1.1 Background

1

1.2 Problem Statement

2

1.3 Aim

4

1.4 Objectives

4

1.5 Research Questions

4

1.6 Research Hypothesis

5

1.7 Significance of the Study

5

1.7 Scope

6

KNUST

CHAPTER TWO : REVIEW OF RELEVANT LITERATURE

2.0 Introduction

7

2.1 What Is Job Satisfaction?

7

2.2 Job Satisfaction and Motivation

10

2.2.1 Herzberg's important motivation-hygiene Theory (1966)

11

2.2.2 Maslows Need Hierarchy Theory (1943, 1954)

12

2.2.3 Alderfer's ERG theory (1972)

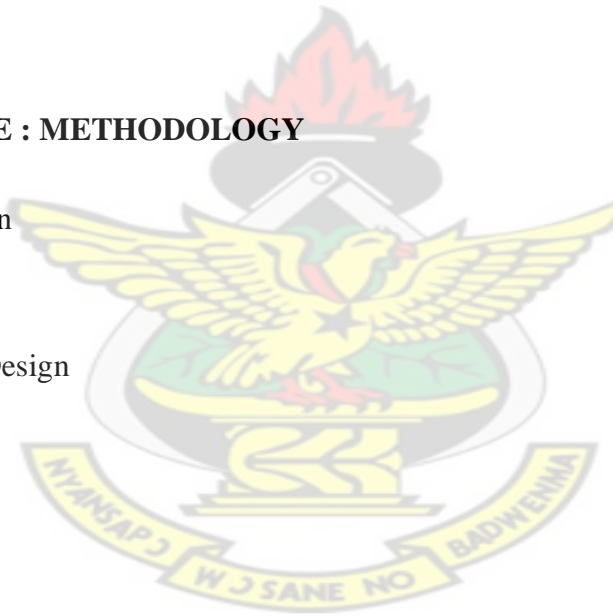
13

2.2.4	McClelland's Achievement Theory (1975)	14
2.2.5	Expectancy theory	15
2.2.6	Equity theory	17
2.2.7	Reinforcement theory	19
2.3	Causes of Job Satisfaction	20
2.3.1	Work Environment and Workplace Facilities	20
2.3.2	Workers' Own Characteristics	21
2.3.3	Human Relations and Worker Job Satisfaction.	26
2.3.4	Supervision and Job Satisfaction	28
2.4	Indicators of Job Satisfaction	29
2.4.1	Performance and Job Satisfaction.	30

2.4.2	Job satisfaction and commitment.	33
2.4.3	Job Satisfaction and Worker Retention	35
2.5	Overview of the Ghanaian Construction Industry	36
2.6	Summary	37

CHAPTER THREE : METHODOLOGY

3.1	Introduction	40
3.2	Research Design	40
3.3	Survey	41
3.4	Population	41
3.5	Sample and Sampling Procedure	41
3.6	Research Instrument	43



3.7 Data Collection Procedure

45

3.8 Data Analysis Procedure

46

3.8.1 Frequencies

46

3.8.2 Percentages

46

3.8.3 Measure of central tendency and dispersion

46

3.8.4 Index

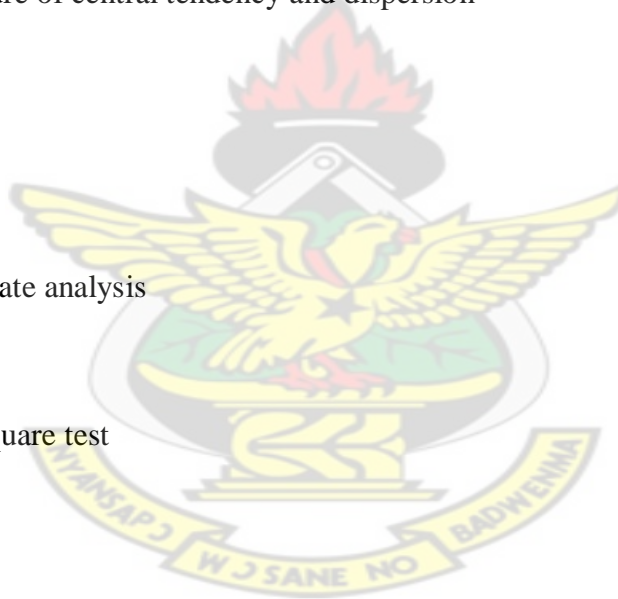
47

3.8.5 Bivariate analysis

47

3.8.6 Chi square test

48



CHAPTER FOUR : PRESENTATION AND ANALYSIS OF DATA

4.1 Particulars of Respondents

49

4.2 Level of job satisfaction in the industry

53

4.2.1	Bivariate analysis of feelings of Job Satisfaction based on aspects of the job	64
4.3	Factors influencing worker job satisfaction in the industry	66
4.4	Effects of feelings worker job satisfaction on other areas of work.	80
4.5	Relationship Between Worker Job Satisfaction and Demographic Variables	86
4.5.1	Location of Site and Level of Worker Job Satisfaction	86
4.5.2	Age and Level of Worker Job Satisfaction	89
4.5.3	Industrial Experience and Level of Worker Job Satisfaction	90
4.5.4	Educational Level and Level of Worker Job Satisfaction	93
4.5.5	Career Choice and Level of Worker Job Satisfaction	94
4.5.6	Motivation to Choose a Career and Level of Worker Job Satisfaction	96

CHAPTER FIVE : SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

98

5.2 Summary of Research Procedure

98

5.3 Summary of Research Findings

99

5.3.1 Level of Construction Worker Job Satisfaction in the Industry

99

5.3.2 Factors influencing worker job satisfaction in the industry

100

5.3.3 How feelings of job satisfaction affect other areas of work

101

5.3.4 How demographic variables affect feelings of satisfaction

101

5.4 Conclusion

103

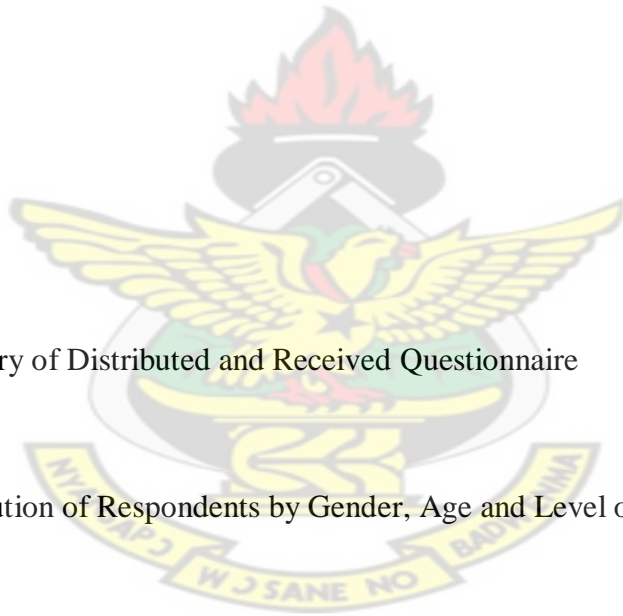
5.5 Recommendations to stakeholders in the Ghanaian Construction Industry

104

5.6 Recommendations for future research

105

KNUST



LIST OF TABLES

Table 3.1	Summary of Distributed and Received Questionnaire
43	
Table 4.1	Distribution of Respondents by Gender, Age and Level of Education
49	
Table 4.2	Distribution of Respondents according to their experience
51	
Table 4.3	Distribution of Respondents according to Career Choice
52	
Table 4.4a	Worker responses on their level of job satisfaction concerning worker

and work related factors

54

Table 4.4b Worker responses on their level of job satisfaction concerning worker
perception of human relations of stakeholders

57

Table 4.4c Worker responses on their level of job satisfaction concerning financial
related and organisational factors

59

Table 4.5 Measuring the central tendency and dispersion of feelings of Job
Satisfaction of job aspects

62

Table 4.6 The correlation matrix of the feelings of Job Satisfaction based on aspects
of the job.

65

Table 4.7 Worker response on their desire to be in the industry

67

Table 4.8 Worker response to work environment and worker job satisfaction

70

Table 4.9 Worker characteristics and job satisfaction

72

Table 4.10 Human Relations and Worker Job Satisfaction

74

Table 4.11	Worker response to supervision and job satisfaction	77
Table 4.12	Worker response on performance and job satisfaction	80
Table 4.13	Worker response to commitment and job satisfaction	82
Table 4.14	Worker Response to Retention and Job Satisfaction	85
Table 4.15	Location of site and their level of job satisfaction	86
Table 4.16	Age and worker's level of job satisfaction	89
Table 4.17	Industrial Experience and Worker's level of job satisfaction	91
Table 4.18	Educational Level and Workers level of job satisfaction	93
Table 4.19	Career choice and Workers level of job satisfaction	95
Table 4.20	Motivation to Choose a Career and Workers level of job satisfaction	96

LIST OF FIGURES

Figure 1 Aggregate response to satisfaction Levels

61

Figure 2 Rating workers feelings of Job Satisfaction based on the aspects of the job
on a scale of 5

63

Figure 3 Relative importance of feelings of Job Satisfaction based on aspects of the job

64



CHAPTER ONE

1. INTRODUCTION

1.1 Background

Over a decade ago Roznowski and Hulin (1992) commented that once an individual has joined an organisation, a valid measure of his or her overall job satisfaction should be the single most important information a human resource manager must have about that person. This assertion has so far gone unchallenged because researchers and practitioners turn to associate job satisfaction with motivation and productivity (Montana and Charnov, 2000; Agyenim-Boateng *et.al*; 2000; Laurie, 2005). Indeed, because of the perception that job satisfaction affects the bottom line of organisations it is one of the most studied concepts in organisational sciences (Judge *et al.*, 1995). Many large organisations conduct attitude surveys so that data collected can inform human resource management decisions.

Construction in developing countries is mostly labour intensive using basic hand tools and equipment. For example, about a decade and half ago, it was found that labour costs on construction projects in the Gaza Strip were between 30 and 50% of the overall project cost (Guhanthakurta and Yates 1993). It therefore stands to reason that a low level of performance resulting from job dissatisfaction could therefore be costly to the construction industry.

The antecedents of job satisfaction or job dissatisfaction have been established by a number of researchers. Laurie (2005) suggests that the nature of the work environment

and workplace facilities affect job satisfaction. This is supported by Handy (1997) who argues that an inspired workplace will result in inspired workers. He finds a correlation between the atmosphere quality and style of building offices to work performance. Lambert *et al.* (2001) also states that work environment is more important in shaping worker job satisfaction than are demographic characteristics.

A productive job creates a high job satisfaction and substantially decreases negative job attitudes such as absenteeism, tardiness, grievances, and incidence of withdrawal behaviour, while a non productive job produces dissatisfaction at all levels of management / worker chain (Montana and Charnov, 2000; Wright and Noe, 1996; Borcharding and Oglesby 1974).

1.2 Problem Statement

Job satisfaction has been the subject of inquiry by many researchers. Most of these various research works on workers job satisfaction were done in various industries with very few pertaining to the construction industry. A study by Simons and Enz (1995) however shows that there are significant differences in terms of what employees want from their work in different industries. These previous studies on job satisfaction pertaining to those industries cannot therefore be related to the construction industry.

The labour front in Ghana is often characterized by industrial strikes in demand for improved working conditions. If workers in the construction industry lay down their tools, it is likely to cause reduction in productivity and time overruns which in effect will

increase construction cost because most of construction projects have deadlines to meet with cost penalties attached for non completion in time. Again material and labour cost may also increase when there are delays due to labour strikes.

Studies by Borcharding and Oglesby (1974) had found out that in the construction industry workers have expectations and they are satisfied when these expectations are met. Yet still Cotton *et al.*, (2005) found out that improved worker satisfaction is key to sustainable productivity in the industry. There is therefore the need to find out the factors that influence job satisfaction in relation to the construction industry and make use of them to improve job satisfaction among workers. This research therefore sets out to achieve this in the Ghanaian construction industry.

1.3 Aim

The aim of the study is to find out the factors that influence feelings of job satisfaction in the construction industry and to study the relationship between demographic variables and job satisfaction in the Ghanaian construction industry.

1.4 Objectives

In order to help reduce cost, reduce time delays and generally improve productivity on a type of construction project in Ghana due to job dissatisfaction, the research is focused on the following objectives:

- i. Finding out the level of job satisfaction in the industry
- ii. Identifying factors influencing feelings of job satisfaction in the industry
- iii. Finding out how feelings of job satisfaction affect other areas of work.
- iv. Studying the relationship between demographic variables and job satisfaction in the industry.

1.5 Research Questions

The following questions have been formulated to help undertake the research in the Ghanaian construction industry.

- i. What is the level of job satisfaction in the industry?
- ii. What factors influence job satisfaction in the industry?
- iii. How do feelings of job satisfaction affect other areas of work?
- iv. How do demographic variables affect job satisfaction in the industry?

1.6 Research Hypothesis

To help in the study of the relationship between demographic variables and job satisfaction of construction workers, the following null-hypotheses have been formulated.

Null-hypothesis

1. Workers opinions about their level of job satisfaction do not depend on the area of location of site.
2. Workers opinions about their level of job satisfaction do not depend on the age of the worker.

3. Workers opinions about their level of job satisfaction do not depend on a worker's experience in the industry.
4. Workers opinions about their level of job satisfaction do not depend on a worker's level of education.
5. Workers opinions about their level of job satisfaction do not depend on a worker's choice of career.
6. Workers opinions about their level of job satisfaction do not depend on what motivated a worker to choose a career.

1.7 Significance of the Study

The study would contribute to literature on factors influencing construction worker job satisfaction. It will again serve as a basis for all stakeholders in the construction industry, including the Ministry of Water Resources, Works and Housing, Association of Building and Civil Engineering Contractors in Ghana, Directors of construction companies, project managers and site supervisors to help contribute their best towards performing certain activities in a manner that will motivate workers in the industry so as to create in the workers a certain amount of satisfaction.

1.8 Scope

The scope of this work is limited to workers in the construction industry classified as skilled labour. This is because these workers have learnt a trade pertaining to the construction industry, and are likely to be affected by feelings of job satisfaction than

those classified as unskilled labour who can drift into other sectors easily and professionals who are usually at the management or supervisory level.

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CHAPTER TWO

REVIEW OF RELEVANT LITERATURE

2.0 Introduction

In this chapter relevant literature is reviewed to serve as a framework for the study. The literature is further used to support or refute findings made in this research at the analysis stage of this write-up. The aspects to be reviewed here include:

- what is job satisfaction?
- motivation and job satisfaction
- causes of job satisfaction and
- indicators of worker job satisfaction
- Overview of the Ghanaian Construction Industry

2.1 What Is Job Satisfaction?

Job satisfaction is more of a multifaceted concept, which can mean different things to different people. It is more of an attitude, an internal state. It could for example, be associated with a personal feeling of achieving, either quantitative or qualitative (Mullins 2005).

According to Noe, Hollenbeck, Wright and Garhart (1996), job satisfaction is a pleasurable feeling that results from the perception that one's job fulfils or allows the fulfilment of one's own job values. They continue by saying that job satisfaction has to do with what a person consciously or unconsciously desires to obtain. Bowen et al;

(2007) in citing Locke (1976) agree with this definition of job satisfaction when they write that job satisfaction may be viewed as the pleasurable or positive emotional experience resulting from the appraisal of one's job or job experience. Fogarty (1994) is of the view that job satisfaction refers to the extent to which persons gain enjoyment or satisfaction from their efforts at work.

Writing on the feature of the conceptualization of career satisfaction and the role that need fulfillment plays in satisfaction, Dinham and Scott (1998), citing Maslow (1970) and Alderfer (1972) explain job satisfaction as an indicator of the degree of need fulfillment experienced by an individual.

March and Simon as cited by Avi-Itzhak (1988) however give a different definition of job satisfaction by explaining job satisfaction in terms of the willingness of a worker to stay within an organisation despite inducement to leave. This definition is also adopted by Vroom cited in Avi-Itzhak (1988).

Robbins, Water-Marsh, Cacioppe and Millet (1994) explain job satisfaction as the degree to which people like their jobs. They maintain that it is a general attitude towards the job, the difference between the amount of rewards employees receive and the amount they believe they should receive. According to them, a person with a high level of job satisfaction holds positive attitudes towards the job, while a person who is not satisfied with his or her job holds negative attitudes about the job. This idea is also supported by Bowen et al; (2008) as they state that positive attitude towards one's job are associated with high level of job satisfaction. Wilson and Rosenfield (1990) believe that

the converse is also true. On his part Spector (1997) sees job satisfaction as one factor that is important for business effectiveness, good company reputation and low turnover. Begley and Czapka (1993) see job satisfaction as an indicator of emotional well being or psychological health.

There is some doubt whether job satisfaction consist of a single dimension or a number of separate dimensions (Mullins, 2005). He further stressed that some workers may be satisfied with certain aspects of their work and dissatisfied with other aspects with a positive correlation between satisfaction in different areas of work. Brunetto and Farr-Wharton (2002) are also of the view that job satisfaction is clearly multidimensional, comprising constructs such as the work itself, salary level, conditions of service, performance appraisal procedures, opportunities for advancement, the nature and extent of supervision, and relationships with co-workers. Grunberg (1979) suggest however that there seems that there is no one, general, comprehensive theory which explains job satisfaction.

To sum up, job satisfaction is seen as the inner feeling that makes people like their work and remain in the work even though certain measures might be put in place by other to entice them to other areas.

2.2 Job Satisfaction and Motivation

The concepts of job satisfaction and motivation are clearly linked and invariably used interchangeably in practice Bowen et al; (2008). They further explain that job satisfaction describes or measures the extent of a person's contentment in his or her job while motivation explains the driving force(s) behind the pursuit or execution of particular activities or a job. Herzberg as cited in Dinham and Scott (1998), explains that both phenomena are linked through the influence each has on the other. He continues to give examples by saying that lower order needs otherwise known as hygiene factors and higher order needs also known as motivators are also concerning satisfaction and dissatisfaction flowing from these and the need to engender long term career satisfaction. Mullins (2005) is however of the view that job satisfaction is linked to motivation but the nature of this relationship is not clear and in the view of Michaelowa (2002) job satisfaction is not the same as motivation. She argues that these two terms are related but may not be used as synonyms.

Motivation is essential to labour, as it gives site workers satisfaction such as achievement, sense of responsibility and pleasure of the work itself (A. Enshassi et al; 2007). In supporting a similar view, Chase (1993) (cited by Mohajed, 2005) is of the view that a combination of training, orientation for new employees, provision of a safe and clean environment, encouragement of two-way communication, employee participation in planning or decision making, and individual / team recognition may be utilised to achieve employee satisfaction. Herzberg argues that all too often management fails in its attempt

to motivate employees because it puts all of the emphasis on removing dissatisfiers and neglects satisfiers that create motivation (Oglesby et al., (1989) cited by Mohajed , 2005)

2.2.1 Herzberg's important motivation-hygiene Theory (1966)

Herzberg's theory differs from that of Maslow and Alderfer because it does not suggest that people change their needs over time. Herzberg proposed that employees are primarily motivated by growth and esteem needs such as recognition, responsibility, achievement, advancement and personal growth. These factors are referred to as motivators because employees experience job satisfaction when they are received and are therefore motivated to obtain them. In contrast, factors extrinsic to the work, called hygienes affect the extent that employees feel job dissatisfaction. Hygiene factors include job security, working conditions, company policies, co-workers relations and supervisor relation. When hygienes are improved, job dissatisfaction will reduce but they will almost have no effect on job satisfaction or employee motivation. The motivator-hygiene theory does not view job satisfaction and dissatisfaction as opposites. Job satisfaction is produced by growth fulfillment and other work content outcomes, whereas job dissatisfaction is produced by the work context. Herzberg differs from Maslow and Alderfer by suggesting that growth needs represent the only source of motivation

The view on the link between satisfaction and motivation is shared by Avi-Itzahak (1988) when he writes that the study of job satisfaction in educational settings has indeed been linked to motivation based on needs. On their part, Kreitner and Kinicki (2001) support the view on the link between satisfaction and motivation by saying that there is a

significant relationship between motivation and job satisfaction. They continue that satisfaction with supervision is also significantly correlated with motivation and because of this managers should consider how their behaviour affects employee satisfaction.

Sharing the same view Gunn and Holdaway (1996) explain that major job satisfaction theories were developed from the theories of work motivation and that the work motivation theories were in turn based on theories of motivation. They cite the instrumentality-valence theory of Vroom, the model of work motivation of Porter and Lawler (1968) and Herzberg's (1966) important motivation-hygiene theory to support this view.

2.2.2 Maslows Need Hierarchy Theory (1943, 1954)

Most contemporary theories recognised that motivation begins with individual needs. Needs are deficiencies that energize or trigger behaviours to satisfy those needs.

Maslow cited in Mcshane and Glinow (2000) identifies five basic categories of human needs and placed them in a hierarchy. At the bottom of this hierarchy is physiological needs, which includes the need to satisfy biological requirements for food, air and shelter. Next is safety needs, the need for a secure and stable environment and the absence of pain, threat, or illness. Belongingness which includes the need for love, affection and interaction with other people follow. The fourth category is the need for esteem which includes self-esteem, through personal achievement as well as social esteem through recognition and respect from others. At the top of the hierarchy is self-actualisation which

represents the need for self-fulfillment or a sense that the person's potentials has been realised.

An employees behaviour according to this theory is motivated simultaneously by several need levels but Maslow agrees that behavior is primarily motivated by the lowest unsatisfied need at a time. As the person satisfies a lower level need, the next higher need in the hierarchy becomes the primary motivator. This is called the satisfaction-progression process. Even if the person does not satisfy a higher need, he or she will be motivated by it until it is eventually satisfied.

2.2.3 Alderfer's ERG theory (1972)

This theory groups human needs into three broad categories, existence, relatedness, and growth. Thus it takes its name from the first letter of each need. Existence needs correspond to Maslow's psychological and safety needs, relatedness needs refer mainly to Maslow's belongingness needs and growth needs match with Maslow's esteem and self-actualisation needs.

Existence needs include a person's physiological needs and physically related safety needs such as the need for food, shelter, and safe working conditions. Relatedness needs include a person's need to interact with other people, receive public recognition, and feel secure around people (interpersonal safety). Growth needs consists of a persons self-esteem through personal achievement as well as concept of self-actualization.

Alderfer's theory states that an employee's behaviour is motivated simultaneously by more than one need level. One might try to satisfy growth needs by serving clients exceptionally well even though one's relatedness needs are not completely satisfied. The theory applies the satisfaction progression process described in Maslow's needs hierarchy model, and as a result one level will dominate a person's motivation more than others. For example, as existence needs are satisfied, relatedness needs become more important.

Unlike Maslow's model, ERG theory includes a frustration regression process so that those who are not able to satisfy a higher need become frustrated and regress back to the next lower need level. If existence and relatedness needs, for example, have been satisfied but growth need fulfillment has been blocked, the individual will become frustrated and relatedness needs will again emerge as the dominant sources of motivation. Human needs are believed to be clustered around the three categories proposed by Alderfer.

2.2.4 McClelland's Achievement Theory (1975)

David McClelland cited in McShane and Glinow (2000) mentions three secondary needs as being important sources of motivation. These three sources are need for achievement, need for affiliation, and need for power. According to him, people with high need for achievement want to accomplish reasonably challenging goals through their own efforts. They prefer working alone rather than in teams because of their strong need to assume personal responsibility for tasks. High needs for achievement people are also likely to be successful in competitive situations and have a strong need for unambiguous feedback regarding their success. These people are therefore most satisfied when their jobs offer

challenge, feedback and recognition. High need for achievement people are mainly motivated by expectation of satisfying their need for achievement. Money is relatively weak motivator for them, except that it provides feedback and provides recognition for their success. Employees with low need for achievement put in their work better when money is used as a financial incentive.

2.2.5 Expectancy theory

According to McShane and Glinow (2000) this theory is a process theory of motivation based on the belief that people will direct work efforts to behaviours they believe will lead to desired outcomes. That is, people develop expectations about whether they can achieve various job performance levels. They again develop expectations about whether performance and work behaviors lead to particular outcomes. People finally direct their effort towards outcomes that help them fulfill their need. Lawler explains that an individual effort level depends on three factors, effort to performance (E-P) expectancy, performance to outcome (P-O) expectancy and outcome to valence (V). Employees' motivation is influenced by all the three components of the expectancy theory model.

The effort to performance (E-P) expectancy refers to the perception of the individual that his or her effort will result in a particular level of performance. Expectancy is seen as a probability which ranges from 0.0-1.0. An employee may believe that he or she can accomplish the task unquestionably (probability of 1.0). In another situation he or she expect that even the highest level of effort will not result in the desired performance level (probability of 0.0). The E-P expectancy most of the time falls somewhere between the

two extremes. To increase the belief that employees are capable of performing job successfully

- select people with the required skills and knowledge
- Provide training and clarify job requirement
- provide sufficient time and resources
- assign simpler and fewer task until employees can successfully perform task.
- provide counseling and coaching to employees who lack self confidence.

The performance to outcome (P-O) expectancy is the perceived probability that specific behaviour or performance level will lead to specific outcomes. The probability is developed from previous learning. Employees in extreme case may believe that when they accomplish a particular task (performance) it will definitely result in a particular outcome, or may believe that the outcome will definitely not result from successful performance. People normally think of outcomes of interest to them at a particular time. At one time a person's motivation to complete a task may be based more on P-O expectancy of promotion or pay increase and at another time it may not. To increase the belief that good performance will result in certain outcomes,

- measure job performance accurately
- clearly explain the outcomes that will result from successful performance
- describe how the employee's rewards were based on the past performance
- provide examples of other employees whose good performance has resulted in higher rewards.

The outcome valence refers to the anticipated satisfaction or dissatisfaction that an individual feels toward an outcome. It ranges from negative to positive. The outcome

valence is determined by the strength of a person's basic needs that are associated with the outcome. Outcomes have positive valence when they directly or indirectly satisfy the person's needs and have a negative valence when they inhibit the person's need fulfillment. If one has strong social need for example, then the outcome that likely fulfills that need will have a strong positive valence for him or her. Outcomes that move one further away from fulfilling his or her social need will have a strong negative valence.

To increase the expected value of outcomes resulting from performance,

- distribute reward that employees value
- individualise rewards
- minimise the presence of contravalent outcomes.

2.2.6 Equity theory

McShane and Glinow citing the equity theory explain how people develop perceptions of fairness in the distribution and exchange of resources. It explains what employees are motivated to do when they feel inequitably treated. There are four main elements of equity theory, outcome/input ratio, comparison other, equity evaluation and consequences of inequity.

Inputs include skills, effort, experience, amount of time worked, performance, results that an employee is likely to contribute to an organisation, while outcomes are the things employees receive from the organisation in exchange for the inputs such as pay, promotion, recognition or an office with a window. According to McShane and Glinow inputs and outcomes are weighted by their importance to the individual and that the

weight varies from one person to the next. Some people feel that seniority is a valuable input that deserves more organisational outcomes in return. Others consider job performance as the most important contribution in the exchange relationship.

The equity theory as cited by Mcshane and Glinow recognises that people value outcome differently because they have different needs. It accepts that some employees require time off with pay whereas others consider this a relatively insignificant reward for job performance.

The theory also states that we compare our situation with comparison other. The comparison other may be another person, group of people or even oneself in the past. It may be somebody in the same organisation. That is, people tend to compare themselves with others who are nearly in similar positions and with similar backgrounds. It is however easier to get information about co-workers than from people working elsewhere. The comparison other varies from one person to the next and is not easily identifiable.

Equity evaluation is formed after one identifies his or her outcome/input ratio and comparing with the comparison others ratio. When one believes that he or she has contributed more time, effort, knowledge, resources and other inputs than the comparison other in a job then he or she feels that there is under reward inequity. The reverse produces over reward inequity. The equity theory states that equity occurs when the amount of inputs and outcomes are proportional. It does not necessarily have to be the

same amount. One feels equitably treated when he or she works harder than the comparison other and receive proportionally higher rewards as a result.

According to Mcshane and Glinow (2000) the consequences of inequity are numerous. They explain that under rewarded workers tend to reduce their effort and performance if these outcomes do not affect their pay cheque. Workers who are over rewarded sometimes but not very often increase their inputs by working harder and producing more.

People with under reward equity might ask for more desirable outcome such as pay increase and if this does not work, they are motivated to join labour union and demand these changes at the bargaining table. Others misuse sick leave or may even steal company property or misuse facilities. Some employees may ask for transfer or leave the job all together.

2.2.7 Reinforcement theory

Kreitner and Kinicki (2001) report that this theory proposed that behaviour is controlled by its consequences and not by the result of hypothetical internal state such as instincts, drives or needs. It explained that people repeat behaviours followed by favourable consequences and avoid behaviours resulting in unfavorable consequences. In other words, past experiences teach people to operate in the environment so that they receive desired consequences from that environment. If the behavior is followed by an unpleasant experience or by no response

To sum up, it is evident from the review that there is a close relationship between job satisfaction and motivation even though the two concepts are not seen as synonymous.

2.3 Causes of Job Satisfaction

Different people including Michealowa (2002), Bacarach and Bamberger (1990), Camp (1987) and Rebore (2001) have cited many factors as the causes of job satisfaction. For the purpose of this study the areas to be considered are the work environment and work facilities, workers own characteristics, human relations and worker supervision.

Acoording to Lum, Kervin, Clark, Reid, Sirola, (1998), Job satisfaction has a number of facets such as satisfaction with: work, pay, supervision, quality of work life, participation, organizational commitment, and organizational climate. Kavanaugh (2006) is of the view that while these facets are correlated, each is an independent construct. Satisfaction with one facet does not guarantee satisfaction with all other satisfaction facets. In spite of this independence, few studies have identified how demographic variables vary in their relationships with the various satisfaction facets. However, this is an important consideration since studies have shown that demographics in terms of age, education, tenure, and experience significantly influence job satisfaction. While it is true that other factors discussed in the literature review can account for more of the variance in job satisfaction, the significance of demographic factors is undeniable.

2.3.1 Work Environment and Workplace Facilities

An increasing important issue affecting job satisfaction and efficiency is the nature of the work environment and workplace facilities (Mullins, 2005). Handy (1997) argues that when a workplace is inspired, the resultant is that workers are inspired and they draw attention to the importance of the atmosphere quality, style of buildings and offices for work performance. The opposite can also be true in that a survey by the Chartered Management Institute (2003) and Myerson (2003) revealed that people were willing to relinquish one week's annual leave for better offices while some were willing to forgo £ 1,000 in salary or private medical care to for a significantly upgraded workspace. Some workers were contemplating changing companies for an improved environment.

McKenna (1994) for example is of the view that in human terms any situation that is seen as burdensome, threatening, ambiguous or boring is likely to induce stress. This explains Thomas et al.'s (2003) findings that on civil engineering projects overcrowded conditions were demotivating, with feeling of constriction and frustration felt frequently.

Work environment and workplace facilities are therefore very essential in dealing with job satisfaction. That is why in the study of South African Quantity Surveyors' job satisfaction, Bowen et al (2008) found that a secure working environment (safety needs) was deemed important by majority of respondents although they claimed they were working in an environment that was continuously not safe.

2.3.2 Workers' Own Characteristics

Heller, Judge, Watson, (2002) suggest that one's disposition contributes to job satisfaction in that individuals are disposed to be satisfied or not satisfied with their jobs. They contend that while research has identified that dispositions may play a role in predicting job satisfaction, the specific study of the big five (the five personality dimensions of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) and job satisfaction is very limited. They also found that the big five partially contributed to job satisfaction in that when you control the big five, the relationship between job and life satisfaction is reduced.

A study by Zembylas and Papanastsiou (2004) supports the supposition that one's disposition is related to job satisfaction. The study is also consistent with prior work that shows neuroticism, conscientiousness and extraversion to be correlated with self-assessments of job satisfaction. However, this study extends over other work in the investigation of the relationships of the facets of job satisfaction with personality traits. For example, this research shows that emotional stability is related to several facets of job satisfaction, namely promotion, contingent rewards and nature of work. Buss (1992) found neuroticism to be related to job satisfaction and to someone's intention to leave an organization. Thus, emotionally stable individuals are less likely to leave the organization and have higher job satisfaction that would be desirable in a hospitality employee.

Several studies including those by Al-Aimi (2001), Okpara (1996) and Rogers, (1991), Bilgic (1998), Sokoya, (2000) have found positive relationships between education levels

and job satisfaction. Findings of Bilgic (1998) as well as Okpara, J. O (2004) indicated that employees with more education may not have many complaints about work-related issues but they may, however, be concerned with the quality of their work performance and productivity.

In his study of the relationships of personal characteristics and job satisfaction of Turkish workers, Bilgic (1998) indicated that the contribution of experience to good feelings toward one's job is positive. He concluded by stating that people with more work experience have more respect for their jobs and can apply their experience to their job. They are more likely to experience greater job satisfaction.

Spear, Gould and Lee (2000) in a study on who would be a teacher found out that female teachers have higher overall job satisfaction than their male colleagues. Again they found that the former were more satisfied with the curriculum and the recognition they receive for their efforts. Male teachers were however found to be more satisfied than women were with their influence over school policies and practices.

Gender differences in job satisfaction have also been extensively researched, but found no conclusive evidence has been presented with regard to the levels of satisfaction among men and women. Results of the studies conducted by Bilgic (1998), Oshagbemi (2000) and Hulin and Smith (1976) concerning satisfaction showed that there is a correlation between gender and job satisfaction. For instance, Hulin and Smith (1976) surveyed 295 male workers and 163 female workers drawn from different manufacturing plants to examine gender differences in job satisfaction. The findings of their research show that there is a relationship between male and female job satisfaction. They also found that

female workers were less satisfied than their male counterparts. In a similar study, Bilgic (1998) found that gender was a significant predictor of job satisfaction. The study of Singaporean accountants indicated that gender affects job satisfaction. Thus, on the whole, these studies have demonstrated that there is some association between gender and job satisfaction. Okpara, J. O (2004) found differences in job satisfaction between male and female.

The main finding of this study was that job satisfaction could be predicted from personal variables, but not all variables contributed to the same degree of satisfaction. As in earlier studies Bilgic, (1998), Brief and Aldag (1975) and Weaver (1977) the findings of Okpara, J. O (2004) did not reveal clear gender differences in overall job satisfaction. However, gender was an important predictor variable. Contrary to the findings of the earlier studies conducted in the west, the results of the present study show that there were significant gender differences related to satisfaction with pay, promotion, and supervision. This finding may be attributed to the higher educational level of women in the technology sector and their raised expectations because of their status. In addition, women who are IT managers may expect to earn more money in exchange for the cost of abandoning their traditional roles. It was found that gender differences prevailed even after the effect of education and experience were controlled. Another reason for the observed gender pay gap might be attributed to the cultural context of the country, which accords traditional homemaker status to women.

According to Linz (2003) older workers exhibited a higher level of job satisfaction than younger worker. Okpara (1996) indicated that research investigating the form and

magnitude of the relationship between age and job satisfaction has produced mixed and generally inconclusive results and that potential explanations for such results relate to the largely theoretical nature of research in this area as well as the inconsistent application of proper statistical and methodological controls. Finally, an extensive literature review by Rhodes (1983) generally supported a positive relationship between age and overall job satisfaction. Rhodes's (1983) conclusion was based on an analysis of the results of eight different studies conducted on the relationship between age and job satisfaction. Okpara, J. O (2004) using the empirical and anecdotal evidence that indicate a positive relationship between age and job satisfaction therefore proposed that age will have a significant positive effect on IT managers' job satisfaction in Nigeria.

As found out by Chen and Francesco (2000), Mathieu and Zajac (1990) and Salancik, (1977) demographic variables such as years in organisation, age, level of education and the duration of leadership can have significant impact on organisational commitment. Chen and Francesco (2000) sampled 333 employees in the People's Republic of China and concluded that position is positively correlated with employee commitment while all other demographic variables, including age and tenure, are not. It is anticipated that length of employment in the organisation, age, educational level and duration of leadership are positively associated with commitment in an organisation.

Okpara, J. O (2004) found that age affected the level of job satisfaction. Similar findings were made by Al-Aimi (2001), Etuk (1980) Kuostelios (1991) and Sokoya (2000). Bilgic, however, had a different finding on the same issue. A logical explanation for this might be that the turnover rate among younger managers may be high. The tendency is for

younger managers to consider themselves more mobile and to seek greener pastures, perhaps in other countries, since IT managers are of great demand. The fact that older managers and those with longer tenure in the work place have higher levels of job satisfaction than younger workers and those with shorter tenure may also suggest that the latter groups are more susceptible to the economic turmoil that the country has recently been experiencing. It stands to reason that in times of economic downturn and uncertainty, the first casualties in the workforce will be those recently hired, who tend to be the younger employees. Low levels of job satisfaction among this group may also be explained more in terms of the job context than the personal characteristics. However, more cross-cultural research is also needed to clarify this issue.

2.3.3 Human Relations and Worker Job Satisfaction.

In explaining the humanitarian perspective to job satisfaction, Spector (1997) sees job satisfaction as identifying how people deserve to be treated fairly and with respect. According to him, the facets of job satisfaction like equitable rewards and supportive working conditions and fellow employees are related to being treated fairly and with respect. Spector again explains the utilitarian perspective to job satisfaction by asserting that job satisfaction can lead to behaviours that can have either positive or negative effect on organisational functioning. Perhaps it is as a result of this effects that Wolfson (1998) is of the view that workplace boredom and frustration is as a result of an employee's lack of involvement with the company's goals and a feeling that their ideas are not wanted or listened to. Subsequently there is going to be increase in staff turnover for the employer as employees would walk out of door for more interesting jobs.

Mullins (2005) view that organizations should harness the talents and commitment of all their employees and get the best out of people in an attempt to improve job satisfaction demand a spirit of teamwork and co-operation, and allowing people a greater say in decisions that affect them at work all buttress Spector's point that the facets of job satisfaction are related to people being treated fairly.

Pickard (1993) on the other hand is of the view that empowerment appear to have a radical effect on the way people work. As an example, He describes improved job satisfaction and changing attitude of staff arising from the introduction of empowerment at Harvard restaurants. Jamison (1999) also shares his view and states that empowerment programs will result in motivated staff, quality customer services and improved profits.

In Reviewing issues and debate about empowerment, Wilkinson (1999) reports that all the theories share a common assumption that workers are untapped resource with knowledge and experience and an interest in becoming involved and employees need to provide opportunities and structures for their involvement. It is also assumed that participative decision making is likely to lead to job satisfaction and better quality decisions and that gains are available both to employees (increased efficiency) and workers (job satisfaction), in short an everyone-wins scenario.

Cordery (1991) also linked job satisfaction to workers being grouped, and the group having autonomy. Thus according to him in a self managed group, although effectiveness

does not appear to be all positive, individual members of the group however do have higher levels of job satisfaction. This is because the group assumes greater autonomy and responsibility for effective performance of work but the individual members decide on the best means by which these goals are to be achieved. This same view is shared by Borcharding (1974). On his part he expressed that good working relationships with and within a crew as well as good social work relations contribute to job satisfaction.

Bowen et al., (2008) however found various facets of human relations such as being part of a team and participating in decision making; undertaking challenging and creative work as well as receiving recognition for achievements over and above normal responsibilities all influenced job satisfaction.

2.3.4 Supervision and Job Satisfaction.

According to Scarpello and Vandenberg (1987) supervision involves technical knowledge, human relations skills and co-ordination of work activities. Effective supervision is therefore necessary for job satisfaction and high level of performance. That is why Bassett (1994) believes that a kindly and thoughtful leader generates high worker satisfaction. Hence supervisors who adopt considerate approach of leadership towards workers turn to have the more highly satisfied work groups. In the study of job satisfaction among quantity surveyors, Bowen et al., (2008) found this to be true as they stated that that a low degree of supervision and being encouraged to take initiative among quantity surveyors contributed to job satisfaction.

According to Bacharach, Bauer and Conley (1989) supervision of workers activities seems critical in examination their dissatisfaction. They explain that supervision takes two aspects, positive and negative. According to them when applying the positive supervision, supervisors show appreciation for workers activities and solicit inputs from them. On the other hand, supervisors applying negative supervision maintain a critical orientation towards workers and their work by criticising their work, refusing to help, or being generally unavailable. They continue that these types of supervisory behaviour can be expected to lead to dissatisfaction. Crow and Hartman (1999) therefore suggest that instead of trying to improve employee satisfaction, it may be time to consider leadership approaches and management programs that reduce employee dissatisfaction.

Schnake (1987) on his part argues that, the climate of the work group is likely to be influenced by the chosen motivation strategies of the supervisor. An emphasis upon extrinsic rewards, intrinsic or some combination of rewards will each produce a different climate. When extrinsic rewards are emphasized, employees often feel controlled. Extrinsic reward tends to 'push' employees to perform and intrinsic rewards 'pull' employees to put forth effort. Both types of rewards are important to most employees.

Shani and Lau (2000) support this view by stating that “ rewards actually received from performance affect both satisfaction and subsequent performance; intrinsic rewards and extrinsic rewards. Of course rewards can be negative as well as positive.”

2.4 Indicators of Job Satisfaction

People like Mcshane and Glinow (2000), Kreitner and Kinicki (2001) and Gerhart (1990) among others have written on how people are likely to act when they are satisfied with their job. For the purpose of this study, the following areas are considered namely; performance and job satisfaction, job satisfaction and commitment, and job satisfaction and worker retention.

2.4.1 Performance and Job Satisfaction.

The relationship between job satisfaction and performance is an issue of continuing debate and controversy. Some are of the view that satisfaction leads to performance while others also believe that the reverse is also true. Luthans (1995) however believes that there is no strong linkage between satisfaction and productivity. Bowling (2007) found in his study that a cause and effect relationship does not exist between job satisfaction and performance. Instead, the two are related because both satisfaction and performance are the result of employee personality characteristics, such as self-esteem, emotional stability, extroversion and conscientiousness. Bassett (1994) also has a view that research studies have found only a limited relationship between satisfaction and work output and offer scant comfort to those seeking to confirm that a satisfied worker is a productive worker. He continues to propose that, it is primarily in the realm of job design that opportunity for constructive improvement of worker satisfaction appear high. He believes that the long-presumed link between satisfaction and work out put cannot be supported by the evidence of human relations research alone as worker satisfaction is a complex matter that deserves careful thought and consideration in any management

systems design decision. The satisfied worker is a productive worker paradigm does not work as it is much more complicated than that.

Heller (1999) support this idea and states that in the human relations model, there is an assumed causal relationship through which job satisfaction is thought to cause higher productivity, although available research is unreliable. Human resources model is by comparison more fact based and refers to a relation between participation, a better use of competence leading to superior performance and as a consequence improve job satisfaction.

Other researchers including Tait et al., (1989) and Judge et al., (2001) found job satisfaction to be related to job performance, workplace turnover and life satisfaction. Morrison (1997) found a strong relationship between job satisfaction and performance while Iaffaldano and Muchinsky, (1985) found a weak relationship between the two.

On his part, Borcharding (1974) in the study of construction productivity and job satisfaction discovered that a productive job created high job satisfaction while a non – productive job (one which fall behind schedule produce dissatisfaction at all levels of the management / the worker chain. This relationship he found to be the inverse of what pertains in office or factory setting where high job satisfaction leads to grater productivity. The inverse relationship he believes was due to the very nature of construction where a worker through his own efforts, produces a highly visible , physical structure in which great satisfaction comes from it's completion. Bowen et al, (2008) in studying South African quantity surveyors however confirmed that accomplishment

influenced job satisfaction. The situation pertaining in the construction industry being the inverse of what pertains in other areas may be explained by Simon and Enz (1995) when they found that there is a significant difference in terms of what employees want in their work in different industries. Responses from the hospitality industries, they said showed a marked difference from those of the manufacturing industries.

Mcshane and Glinow (2000) state that organisational behaviour research consistently reports an insignificant or modest association between job satisfaction and task performance. They explain that popular opinion may prove more accurate than research in this issue and cite one scholar as admitting recently that he suspects a consistent significant job satisfaction-task performance relationship is out there to be found. They give one reason for which organisational behaviour research reports a modest association between job satisfaction and task performance as general attitudes do not predict specific behaviours very well and that people have unique values and experiences so they react differently to the same job satisfaction. One dissatisfied employee may decide to put in less work effort, whereas another maintains the same level of effort while looking for employment elsewhere.(Mcshane and Glinow) They give the second explanation that Job performance leads to job satisfaction (rather than vice versa) but only when performance is linked to value rewards. Higher performers receive more reward and consequently are more satisfied than low performing employees who receive fewer rewards. The third reason they give is that job satisfaction and performance may occur because satisfied employees engage in more organisational citizenship behaviour but not higher levels of traditional job performance. They maintain that satisfied employees are

less likely to quit their job. Kreitner and Kinicki (2001) support this view by saying that one of the biggest controversies within organisational research centres on the relationship between satisfaction and job performance. According to them, some of the people such as Herzberg argue that satisfaction leads to higher performance while others contend that higher performance leads to satisfaction. They however maintain it appears managers can positively affect performance by increasing job satisfaction. They again identify other effects of satisfaction as job involvement and organisational citizenship behaviour.

2.4.2 Job satisfaction and commitment.

A lot of researchers have extensively studied the relationship between commitment and job satisfaction. Whilst others think there is a relationship, a few others think otherwise. Kreitner and Kinicki (2001) for example revealed that a meta-analysis of 68 studies and 35282 individuals uncovered a significant and strong relationship between organisational commitment and satisfaction. Linz (2003) intimates that the greater the degree of organizational commitment, the greater the probability that a high level of job satisfaction will be expressed. Kreitner and Kinicki (2001) thus continued by advising managers to increase job satisfaction in order to elicit higher levels of commitment since higher commitment can facilitate higher productivity.

Mcshane and Glinow (2002) agree on the relationship between job satisfaction and commitment by reporting that research has found that employees with higher levels of affective commitment to be less likely to quit their jobs and be absent from work. They continue that employees with effective commitment tend to have higher work motivation

and organisational citizenship. Job satisfaction is part of what we call human resource maintenance, which is related to organisational commitment and job commitment.

While Firth et al., (2004) agree that job satisfaction and organizational commitment are interrelated as the more satisfied one is, the more committed they are, researchers like Rahim and Psenicka (1996), Morrison, (1997) and Lum, et al., (1998) are of the view that job satisfaction and organizational commitment are related to a person's intention to quit a job.

Raju and Srivastava (1994) does not share the views of those above as they are of the view that predictability of commitment by job satisfaction is proved to be ill-founded, they cite Weiner and Vardi as stating that 'job satisfaction is concerned with the immediate and temporary situational fluctuations whereas commitment is a more stable state of the person.

Mowday et al., (1979) explain organizational commitment as the strength of one's identification and involvement with their respective organization. DeCotis and Summers (1987) intimate that research shows that social involvement predicts organizational commitment where the more involved the individual, the more committed they are.

According to Shore and Martin (1989) organizational commitment is related to a person's intention to leave and turnover as well as theoretically to job performance. This view is also shared by Tett and Meyer (1993). Essentially, committed individuals are expected to extend greater efforts on the job, having a direct impact on job performance.

Mowday et al., (1982) relate that organizational commitment and job satisfaction have been found to be significantly related to one another with the basic proposition that job satisfaction is an antecedent of organizational commitment since commitment takes longer to form and only after one is satisfied with their job.

According to Roe et al., (2000) it should also be noted that involvement and commitment play the central mediating role assumed in the initial model. They affect effort and satisfaction, as well as performance and tendency to leave. They again intimate that the opportunities to satisfy needs play a much stronger role in the prediction of outcomes, but remarkable enough they have little relationship with organisational commitment as expected opportunity for growth relates to both meaningful and responsibility as well as to satisfaction. But unexpectedly it is also related to effort which suggests that a greater possibility for growth makes people work harder.

Meshane and Glinow (2002) agree on the relationship between job satisfaction and commitment by reporting that research has found that employees with higher levels of affective commitment to be less likely to quit their jobs and be absent from work. They continue that employees with effective commitment tend to have higher work motivation and organisational citizenship. Job satisfaction is part of what we call human resource maintenance, which is related to organisational commitment and job commitment.

2.4.3 Job Satisfaction and Worker Retention.

Studies have been relatively consistent in establishing a strong relationship between job satisfaction and retention. Edelwich and Brodsky (1980) found in a study that, employees who are dissatisfied in their job become less committed or give up the profession altogether. Gerhart (1990) suggested in an investigation of the effects of unemployment that job dissatisfaction is more strongly related with high turnovers during periods when the rate of unemployment was lower.

Okpara, J. O (2004) attributed the continuous exodus of managers to the west primarily to the differences in the level of income. Many of these managers are willing to leave the country for riskier but potentially more financially rewarding employment in the west. The impending shortage of managerial personnel in the IT sector does not bode well for the long term economic growth and sustainable development of the country.

In the view of Farkas and Tetrick, (1989) total years of experience also affects the areas of job satisfaction and overall job satisfaction. The longer the time spent in the organization, the more satisfied the managers were with their jobs. This may be an indication that once the process of acculturation is over, managers settle into their jobs, have an increased organizational commitment, and seem to like their jobs. On the other hand, this may be an indication of complacency, suggesting that the longer the time spent in the organization, the more managers tend to be satisfied with the status quo. If the latter is the case, then a satisfied manager is not necessarily a productive manager.

2.5 Overview of the Ghanaian Construction Industry

The construction industry is defined by Lange and Mills (1979) as a group of firms with closely related activities involved in the construction of real estate, buildings, private and public infrastructure. Eyiah (2004) is of the view that the industry is important in Ghana because infrastructure facilities required for improved living conditions are relatively under supplied.

The industry accounts for a significant share of GDP and is currently the third largest economic sector after agriculture and government services and has a big potential to help accelerate economic growth in Ghana (Anaman and Osei-Amponsah, 2007).

The Ministry of works and Housing and Water Resources classify construction firms based on their level of output and financial capabilities. According to Eyiah and Cook (2003), the large firms are mainly foreign firms while the small firms are mostly Ghanaian businesses.

2.6 Summary

In summary, job satisfaction is a pleasurable feeling which results when one perceives that his or her job is fulfilling or allows the fulfilment of his or her important job values. It also indicates the degree at which an individual's experiences need fulfilment and the willingness to stay with an organisation in spite of enticement to leave. Job satisfaction is again, a factor that is important for the effectiveness of business, good organisational reputation and low turnover.

Job satisfaction and motivation are two related concepts, which are sometimes confused. The two are linked through the influence each has on the other. Major theories of job satisfaction were developed from theories of work motivation, which were in turn based on theories of motivation. The two terms are seen as being related but must not be used as synonyms. Thus, while job satisfaction indicates the well-being of workers induced by the job, motivation is seen as the willingness, drive and desire to engage in good working.

The review has again helped to identify that work environment can greatly affect worker job satisfaction and there is therefore the need for managers to improve workplace in order to enhance job satisfaction among workers. Additionally, worker's own characteristics such as knowledge of the job, competence, gender, age, experience, future expectation can all have either a positive or negative effect on worker job satisfaction.

From the literature it is also realised that relationship among workers as well as with their supervisors can strongly influence their sense of job satisfaction within the organisation. Supervision is seen as one of the factors, which can greatly influence worker job satisfaction. Supervision can either positively or negatively affect worker job satisfaction depending on how it is handled. When a supervisor shows appreciation for workers' work activities and solicits inputs from them, they are satisfied. On the other hand, criticising workers' work and refusing to help and being generally unavailable lead to dissatisfaction.

One effect of worker job satisfaction is that, it leads to performance. However, research has reported an insignificant or modest association between job satisfaction and task performance. According to the literature one employee who is dissatisfied may decide to put in less work effort whereas another will maintain the same level of effort while looking elsewhere for employment. There is also a significant relationship between organisational commitment and job satisfaction. Employees with higher levels of effective commitment are less likely to quit their job and tend to have higher work motivation. Lastly, there is a significant relationship between job satisfaction and worker retention. Dissatisfied workers give up their profession easily than satisfied workers. In other words, job dissatisfaction is strongly related with high turnover.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter the researcher provides details of the method for conducting the study.

Areas considered are the research design, the survey, the population, the sample and the technique for its selection, the research instrument, data collection procedure and data analysis procedure.

3.2 Research Design

Researchers are interested in accurately measuring job satisfaction and understanding its consequences for people at work. On daily basis, managers must be able to infer job satisfaction of others by careful observation and interpretation of what they say and do going about their jobs. This is most frequently done through formal interviews or questionnaire surveys. The researcher therefore uses as a research design, the descriptive survey.

Descriptive research can be either quantitative or qualitative. It can involve collections of quantitative information that can be tabulated along a continuum in numerical form.

Descriptive studies are aimed at finding out "what is," so observational and survey methods are frequently used to collect descriptive data (Borg & Gall, 1989).

Descriptive data are usually gathered through questionnaire survey, interviews or observation but conclusion cannot be drawn if the response rate is low (Mojaheed, 2005).

3.3 Survey

A thorough review of literature was undertaken to identify the various definitions of job satisfaction and how related they were to each other. Factors affecting job satisfaction were then looked at and their relationships compared. Effects of job satisfaction were also reviewed. This review covered materials such as text books, internet search, journals and other relevant materials. A survey was then conducted on skilled labour in the Ghanaian construction industry to enable the aim of the research to be achieved.

3.4 Population

The survey covered construction firms registered with the Association of Building and Civil Engineering Contractors in Ghana. This is because the first source for the list of contractors which should have been the Ministry of Water Resources, Works and Housing which registers contractors did not have a general list as at March 2009. The second source available therefore was the Association of Building and Civil Engineering Contractors in Ghana. This is the biggest association to which Building and Civil Engineering contractors in Ghana belong to. It is organised at the regional level with regional chairmen and then to the national level with a national chairman.

3.5 Sample and Sampling Procedure

This study focused on workers working with construction companies classified as DIK1. This class of contractors is the large scale civil and general building contractors in the highest financial class according to the classification by the Ministry of Water Resources,

Works and Housing. These companies undertake large volumes of works and employ a large number of workers. Furthermore, these contractors have relatively more organized managed labour force.

As at March 2009, the total number of D1K1 firms registered with the Association of Building and Civil Engineering Contractors in Ghana was forty (40) as obtained from the association's office. These forty (40) firms with their contact numbers and contact addresses were obtained from the association. Two (2) regions (Northern and Upper East) did not have registered contractors among the list. Subsequently attempts were made to contact the forty (40) firms to seek permission to visit some of their sites. Three (3) firms explained that they did not have work as at that time, two (2) firms were not willing to allow access to their sites and yet still four (4) firms could not be located. Because of economic reasons and time constraints, three (3) regions (Volta, Western and Eastern) to which there was only one (1) firm each that can be accessed were eliminated from the population. This brought the number of construction firms whose sites could be visited to twenty eight (28). A total of thirty five (35) sites were visited. These sites were scattered in four (4) of the regions of Ghana namely Greater Accra (Accra and Tema), Ashanti Region (Kumasi and Kwamo), Central Region (Cape Coast) and Brong Ahafo Region (Nsuatere and Jinijini).

Accidental sampling was used to select respondents.

The table 3.1 gives a summary of the distribution of the questionnaire distributed and response received.

Table 3.1 Summary of Distributed and Received Questionnaire

Region	No. Firms visited	No. Sites Visited	No. of Questionnaires Distributed	No. of Questionnaires Received
Greater Accra	15	20	83	49
Ashanti	8	10	54	43
Brong Ahafo	2	2	9	8
Central	3	3	14	13
Total	28	35	160	113

3.6 Research Instrument

The instrument used in collecting data was the questionnaire which made it possible for respondents to supply the needed data on the study. The anticipated difficulties involved in this type of research include ensuring that the questions are clear and not ambiguous, getting respondents to answer questions thoughtfully and honestly and getting sufficient number of questionnaires completed and returned so that there can be meaningful analysis of data collected. The researcher however adopted the necessary measures to bring down the difficulties to a minimal which includes:

- Explaining to respondents that their answers will not get back to management and that it was purely for academic purposes hence they should try as much as possible to honestly answer questions.

- On sites where permission was granted he sat together with respondents, explained questions to them one after the other whilst respondents answered questions.

The questionnaire contained 61 items majority of which were in the form of the Likert - type rating scale. Other questions were asked for factual information such as years spent in present organisation, educational qualification, career, working experience, age and sex.

The questionnaire were in four parts with the first part describing selected demographic variables of respondents, the second part was based on level of worker job satisfaction, the third part was based on causes of job satisfaction with four (4) subsections , and the final part was on the indicators of worker job satisfaction with three (3) subsections. The questionnaire used was based on the Short Form of the Minnesota Satisfaction Questionnaire (MSQ) which is designed to measure an employee's satisfaction with his or her job which was adopted without modification. The validity of the MSQ is its reliability on the Hoyt reliability coefficient used to test internal consistency. The reliability coefficients obtained were high. Generally, the coefficients varied from 0.87 to 0.92. Its median reliability coefficient was 0.9. Again a questionnaire developed by Bennett et al., (2000) used in their study on job satisfaction of Agriculture teachers in Georgia was adopted and adapted , thus modified to suit the construction employees.

This questionnaire contained 44 items with Cronbach's Coefficient Alpha reliability estimate for the 44 job satisfaction items being 0.95. Eighteen statements (indicators)

were retained with wording modified to suit construction workers, Four (4) number of two (2) items were each combined due to their similarity and restated as one (1) item. Again three (3) items were combined and a further two (2) number of five (5) items were each combined due to their similarity and restated as one (1) item. five (5) items were discarded because they were found to be non relevant to the construction industry and nine (9) additional items were introduced. The modified form included thirty four (34) items. Participants were asked to indicate their level of agreement with the thirty four (34) items using a 5-point Likert-type rating scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain or No Opinion, 4 = Agree, or 5 = Strongly Agree. These thirty four (34) questions were further grouped under Eight (8) headings namely:

- i. desire to be in the industry
- ii. work environment and job satisfaction
- iii. worker's own characteristics and job satisfaction
- iv. human relations and worker job satisfaction
- v. supervision and worker job satisfaction
- vi. performance and worker job satisfaction
- vii. commitment and worker job satisfaction and
- viii. retention and worker job satisfaction.

Cronbach's Coefficient Alpha reliability estimate for the 34 job satisfaction items was 0.84.

3.7 Data Collection Procedure

The researcher collected an introductory letter from the Department of Building Technology in K.N.U.S.T and presented it to management of firms to gain access to the sites on which construction works were undertaken for questionnaire to be administered to allow the researcher to carry out the research with minimum difficulty. The researcher administered the questionnaire himself by hand after he had explained to the respondents that the research is purely for academic purpose and for that matter responses were to be treated confidential. The researcher again explained items to most workers as they answered the questionnaires. The rest of respondents were then allowed a period of two weeks to respond to items after which the questionnaires were retrieved by the researcher. A total number of 160 questionnaires were administered on 35 sites and there were 113 respondents representing 70.63% response rate.

3.8 Data Analysis Procedure

The researcher analysed the data by these analytical tools in analysing the responses from the survey; namely frequencies, percentages, indexing, measure of central tendency and dispersion, bivariate analysis and the chi square test.

3.8.1 Frequencies

For all four parts of the questionnaire frequencies were generated for the various responses and this was facilitated by STATA computerised statistical software.

3.8.2 Percentages

Also for all four parts of the questionnaire percentages were generated for the various responses and this was facilitated by STATA computerised statistical software.

3.8.3 Measure of central tendency and dispersion

The measure of central tendency of the questionnaire responses on the levels of worker job satisfaction were used in order to get an overview of the typical value for each variable by calculating the mean, median and mode. The measure of dispersion was used to assess the homogenous or heterogeneous nature of the collected data by calculating the variance and the standard deviation (Bernard, 2000 and Othman, 2004). These were facilitated by means of Microsoft Excel Spreadsheet.

3.8.4 Index

The numerical scores from the questionnaire responses provided an indication of the varying degree of influence that each job aspect has on satisfaction levels. Since not all of these job aspects have the same influence on satisfaction level, the relative importance index was used to differentiate between job aspects (Olomolaiye et. al., 1987, Shash, 1993 and Othman, 2004). The relative importance index (RII) was used to rank the job aspects according to worker's relative degree of satisfaction with them. This was calculated using the following formula: **Relative Importance Index (RII) = $\Sigma wf / AN$** with the aid of Microsoft Excel spreadsheet. Where w = weighting given to each factor by the respondents and range from 1 to 5 where 1= highly unsatisfied and 5 = highly satisfied; A = highest weight (5 in our case); f is the frequency of occurrence of the

particular weight and N = total number of sample (Kometa and Olomolaiye, 1997 and Othman, 2004).

3.8.5 Bivariate analysis

In order to investigate the correlation between aspects of work to which workers satisfaction levels were considered, Bivariate analysis was carried out to establish the linear relationship using the most common measure of correlation, Pearson's r (Clarke and Cooke, 1992). Bivariate analysis is used to reveal the relationship between two variables and to what extent the variation in one variable coincides with the variation in another. Bivariate analysis with the aid of Microsoft Excel spreadsheet computer software was used to generate the correlation matrix, an extract of which is shown in table (4.6). The chief feature of using Pearson's r is that the correlation coefficient will almost certainly lie between 0 (no relationship between the two factors) and 1 (a perfect relationship). The closer the coefficient is to 1, the stronger the relationship, the closer it is to zero, the weaker the relationship. The coefficient will be either positive or negative; this indicates the direction of a relationship (Bryman, 2001). While negative coefficient indicates inverse relationship, positive coefficient indicates a direct relationship.

3.8.6 Chi square test

This was used to test Hypothesis 1 to 6 in order to find out the dependence of workers' opinions on their job satisfaction on site location, their age, industrial experience, level of education, career choice and motivation to choose a career respectively. The researcher computed the data by using STATA computerised statistical software.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 Particulars of Respondents

The researcher found it necessary to determine the personal particulars of the respondents, all of whom were construction workers. This would enable the researcher to find out the relationship between different categories of construction workers and their responses on factors influencing their level of job satisfaction. Tables 4.1, 4.2, and 4.3 provide the particulars of respondents. The following abbreviation NVTI, CTC, and HND as used in the research stands for National Vocational Institute, Construction Technician Course and Higher National Diploma respectively.

Table 4.1 Distribution of Respondents by Gender, Age and Level of Education

	FREQUENCY					
	Gender		Age		Level of Education	
	f	%	f	%	f	%
Male	113	100				
Female	0	0				
Less than 20 years			9	7.96		
21-30			46	40.71		
31-40			46	40.71		
41-50			5	4.42		
51-60			7	6.19		
Junior Secondary School					46	40.71
Senior Secondary School					12	10.62
Middle School					28	24.78
NVTI					14	12.39
CTC					4	3.54
Polytechnic (HND)					5	4.42
Uneducated/Never went to school					4	3.54
Total	113	100	113	100	113	100

Table 4.1 shows that all the respondents are males and confirms the fact that the industry is male dominated.

The age distribution of respondents as shown in table 4.1 indicates that majority of respondents 92(81.42%) out of a total of 113 are aged between 21-40. Those below 20 years and those above 40 years make up the remaining which is 18.58%.

Contrary to the U.S Department of Labour (DOL) and Employment and Training Administration (ETA) report of December 2004 that the construction industry has difficulty in recruiting the youth due to lack of awareness of job opportunities for them and the poor industry image, the situation in the Ghanaian construction industry seem different as respondents who were aged between 21-40 years were in the majority being 92 (81.42%)

Table 4.1 again shows that 46 respondents representing 40.71% of respondents are Junior Secondary school graduates, 28 (24.78%) are middle school graduates, 14 (12.39%) are NVTI graduates whilst 12 (10.62%) are senior secondary school graduates. 5 (4.42%) respondents are polytechnic graduates while those who are either CTC graduates or uneducated or never went to school have 4 (3.54%) respondents each.

Table 4.2 Distribution of Respondents according to their experience

	FREQUENCY			
	Experience in the Industry		Experience in Present Organization	
	f	%	f	%
Below 6 years	41	36.28	70	61.95
6-10 year	35	30.97	26	23.01
11-15 years	24	21.24	14	12.39
More than 15 years	13	11.50	3	2.65
Total	113	100	113	100

Table 4.2 shows that quite a number of respondents that is 41 (36.28%) have less than 6 years experience in the industry while 35 (30.97%) have an industry experience of 6-10 years. It again shows that 24 (21.24%) of respondents have served in the industry for 11-15 years and only 13 (11.5%) have served in the industry for more than 15 years.

Going down the table one would find that the number of respondents become smaller as the industry experience increases from 6 to 15 years. This confirms the Construction Industry Today's assertion that experienced construction workers leave their job each year and a further many potential workers also prefer to work in environments that are less strenuous and has more comfortable working conditions leading to shortage of workforce in the industry. Tucker et. al. (1999) also sees this as a challenge to the construction industry and attributes it to the poor image of the industry, the relatively deteriorating wages the industry offers and the lack of clear career path.

Table 4.2 again shows that majority of respondents 70 (61.95%) have spent less than 6 years in their present organisation. The number of respondents who have spent 6-10 years, 11-15 years and more than 15 years in their present organisation are 26 (23.01%),

14 (12.39%) and 3 (2.65%) respectively.

Table 4.3
Distribution of Respondents according to Career Choice

	FREQUENCY			
	Career / Occupation		Factors influencing career choice	
	f	%	f	%
Mason	38	33.63		
Carpenter	33	29.20		
Steel bender	13	11.50		
Plumber	8	7.08		
Electrician	4	3.54		
Operator	13	11.50		
Tiller	1	0.88		
Painter	2	1.77		
Welder	1	0.88		
Status of profession			37	32.74
Family / Tradition			12	10.62
Salary			13	11.50
Security			39	34.51
None (Drifted into career)			12	10.62
Total	113	100.00	113	100.00

Table 4.3 shows the career choice of the respondents. 38 (33.63%) are masons, 33 (29.2%) are carpenters, 13 (11.5%) are steel benders, 8 (7.08%) are plumbers, 4 (3.54%) are electricians, 13 (11.5%) are operators, 1 (0.88%) is a tiller, 2 (1.77%) is a painter and 1 (0.88%) is a welder.

Table 4.3 also shows respondents distribution as to factors that influenced their career choice. These factors were status of profession, family or tradition, salary, security and

those drifted into the career. The responses were 37 (32.74%), 12(10.62%), 13 (11.5%), 39(34.51%) and 12 (10.62%) respectively.

Nearly two-thirds of workers (67.26%) were motivated to choose their carrier due to status of the profession and security indicating there is a good image for construction industry in Ghana as opposed to the perceived poor image of the industry (Thornton 2004) at other areas.

4.2 Level of job satisfaction in the industry

The researcher found it necessary to determine the level of job satisfaction in the Ghanaian construction industry. This would enable the researcher to find out the aspects of the job which workers have high job satisfaction and those they do not.

Tables 4.4a, 4.4b and 4.4c provide data on the level of job satisfaction in the Ghanaian construction industry.

The levels of satisfaction of with the various statements are indicated by the numerals 5, 4, 3, 2, and 1 for highly satisfied, satisfied, not sure, unsatisfied and highly unsatisfied respectively. Tables 4.4a, 4.4b and 4.4c present the frequency and percentage distribution.

Table 4.4a. Worker responses on their level of job satisfaction concerning worker and work related factors.

	Frequency												TOTAL
	5		4		3		2		1				
	f	%	f	%	f	%	f	%	f	%	f	%	
Being able to keep busy all the time (Activity)	58	51.33	33	29.20	10	8.85	5	4.42	7	6.19	113	100	
The chance to do work alone on the job (Independence)	34	30.09	38	33.63	17	15.04	16	14.16	8	7.08	113	100	
The chance to do different things from time to time (Variety)	48	42.48	34	30.09	16	14.16	11	9.73	4	3.54	113	100	
Being able to do things that do not go against my conscience (Moral Values)	35	30.97	33	29.20	21	18.58	7	6.19	17	15.04	113	100	
The chance to tell others what to do (Authority)	37	32.74	48	42.48	15	13.27	10	8.85	3	2.65	113	100	
The chance to do something that makes use of my abilities (Ability Utilization)	50	44.25	41	36.28	9	7.96	9	7.96	4	3.54	113	100	
The freedom to use my own judgment (responsibility)	41	36.28	24	21.24	26	23.01	12	10.62	10	8.85	113	100	
The chance to try my own methods of doing the job (Creativity)	39	34.51	34	30.09	15	13.27	10	8.85	15	13.27	113	100	
The feeling of accomplishment I get from the job (Accomplishment)	70	61.95	27	23.89	8	7.08	4	3.54	4	3.54	113	100	

Table 4.4a shows that workers who are either satisfied or highly satisfied with work activity outnumber those who are either unsatisfied or highly unsatisfied with same. Those who are either satisfied or highly satisfied number 91 (80.53or %) out of a total of 113 while those who are either unsatisfied or highly unsatisfied number 12 (or 10.62%). 10 (8.85%) of them are not sure.

Table 4.4a again indicates that a greater number of workers, 82 (or 72.57 %) out of a total of 113 workers are either satisfied or highly satisfied with variety of work compared to workers who are either unsatisfied or highly unsatisfied with the same issue 15 (or 13.27%). 16 or (or 14.16%) of the workers were not sure.

Concerning authority in working, workers who are either satisfied or highly satisfied outnumber those who are either unsatisfied or highly unsatisfied. Workers who are either satisfied or highly satisfied number 85 (or 75.22%) while those who are either unsatisfied or highly unsatisfied number 13 (or 11.5%). Workers who are not sure number 15 (or 13.27%).

With worker satisfaction on ability utilization, respondents who are either satisfied or highly satisfied outnumber those who are either unsatisfied or highly unsatisfied.

Workers who are either satisfied or highly satisfied number 91 (or 80.53%) out of a total of 113 workers while those who are either unsatisfied or highly unsatisfied number 13 (or 11.5%). 9 (or 7.96%) of the workers are not sure.

Again Table 4.4a shows that workers who are either satisfied or highly satisfied with creativity in doing work outnumber those who are either unsatisfied or highly unsatisfied with same. Those who are either satisfied or highly satisfied number 73 (or 64.6%) out of a total of 113 while those who are either unsatisfied or highly unsatisfied number 25 (or 22.12%). 15 (13.27%) of the are not sure.

Table 4.4a again indicates that a greater number of workers, 72 (or 63.72%) out of a total of 113 workers are either satisfied or highly satisfied with their independence in the work compared to workers who are either unsatisfied or highly unsatisfied with the same issue 24 (or 21.24%). 17 (or 15.04%) of the workers were not sure.

Also concerning moral values, workers who are either satisfied or highly satisfied outnumber those who are either unsatisfied or highly unsatisfied. Workers who are either satisfied or highly satisfied number 68 (or 60.18%) while those who are either unsatisfied or highly unsatisfied number 24 (or 21.24%). Workers who are not sure number 21 (or 18.58%), forming the minority.

With worker satisfaction on feelings of accomplishment, respondents who are either satisfied or highly satisfied outnumber those who are either unsatisfied or highly unsatisfied. Workers who are either satisfied or highly satisfied number 97 (or 85.84%) out of a total of 113 workers while those who are either unsatisfied or highly unsatisfied number 8 (or 7.08%). 8 (or 7.08%) of the workers are not sure.

On workers satisfaction with work responsibility, respondents who are either satisfied or highly satisfied outnumber those who are either unsatisfied or highly unsatisfied.

Workers who are either satisfied or highly satisfied number 65 (or 57.52%) out of a total of 113 workers while those who are either unsatisfied or highly unsatisfied number 22 (or 19.47%). 26 (or 23.01%) of the workers are not sure.

Table 4.4b. Worker responses on their level of job satisfaction concerning worker perception of human relations of stakeholders

	Frequency											
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
The chance to be recognized in the community (Social Status)	58	51.33	28	24.78	15	13.27	12	10.62	0	0.00	113	100
The way my boss handles his or her workers (Supervision relating to human relations)	36	31.86	32	28.32	15	13.27	10	8.85	20	17.70	113	100
The chance to do things for other people (Social Service)	47	41.59	31	27.43	16	14.16	11	9.73	8	7.08	113	100
The way my co-workers get along with each other (co-workers)	40	35.40	45	39.82	15	13.27	9	7.96	4	3.54	113	100
The praise I get for doing a good job (recognition)	50	44.25	28	24.78	13	11.50	8	7.08	14	12.39	113	100

Table 4.4b shows that workers who are either satisfied or highly satisfied with their social status outnumber those who are either unsatisfied or highly unsatisfied with same. Those

who are either satisfied or highly satisfied number 86 (or 76.11%) out of a total of 113 while those who are either unsatisfied or highly unsatisfied number 12 (or 10.61%). 15 (13.27%) of them are not sure.

Table 4.4b again indicates that a greater number of workers, 68 (or 60.18%) out of a total of 113 workers are either satisfied or highly satisfied with Supervision relating to human relations compared to workers who are either unsatisfied or highly unsatisfied with the same issue 30 (or 26.55%). 15 or (or 13.27%) of the workers were not sure.

With regards to social service, workers who are either satisfied or highly satisfied outnumber those who are either unsatisfied or highly unsatisfied. Workers who are either satisfied or highly satisfied number 78 (or 69.03%) while those who are either unsatisfied or highly unsatisfied number 19 (or 16.81%). Workers who are not sure number 16 (or 14.16%).

On worker satisfaction with co-workers relationship, respondents who are either satisfied or highly satisfied outnumber those who are either unsatisfied or highly unsatisfied.

Workers who are either satisfied or highly satisfied number 85 (or 75.22%) out of a total of 113 workers while those who are either unsatisfied or highly unsatisfied number 13 (or 11.5%). 15 (or 13.27%) of the workers are not sure.

Again Table 4.4b shows that workers who are either satisfied or highly satisfied with recognition of good work done outnumber those who are either unsatisfied or highly

unsatisfied with same. Those who are either satisfied or highly satisfied number 78 (or 69.03%) out of a total of 113 while those who are either unsatisfied or highly unsatisfied number 22 (or 19.47%).13 (11.5%) of the are not sure.

Table 4.4c. Worker responses on their level of job satisfaction concerning financial related and organisational factors

	Frequency											
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
The competence of my supervisor in making decisions (supervision relating to technical competence)	49	43.36	39	34.51	11	9.73	7	6.19	7	6.19	113	100
The way my job provides for steady employment (Security)	58	51.33	27	23.89	10	8.85	10	8.85	8	7.08	113	100
The way company policies are put into practice (company policies)	27	23.89	29	25.66	14	12.39	22	19.47	21	18.58	113	100
My pay relative to the amount of work I do (compensation)	20	17.70	28	24.78	8	7.08	20	17.70	37	32.74	113	100
The chance for advancement on my job (advancement)	35	30.97	24	21.24	13	11.50	15	13.27	26	23.01	113	100
The working conditions	25	22.12	33	29.20	13	11.50	22	19.47	20	17.70	113	100

Table 4.4c shows that workers who are either satisfied or highly satisfied with supervision relating to technical competence outnumber those who are either unsatisfied or highly unsatisfied with same. Those who are either satisfied or highly satisfied number

88 (or 77.88%) out of a total of 113 while those who are either unsatisfied or highly unsatisfied number 14 (or 12.39%). 11 (9.73%) of them are not sure.

Table 4.4c again indicates that a greater number of workers, 85 (or 75.22%) out of a total of 113 workers are either satisfied or highly satisfied with job security compared to workers who are either unsatisfied or highly unsatisfied with the same issue 18 (or 15.93%). 10 (or 8.85%) of the workers were not sure.

On issues relating to company policies, workers who are either satisfied or highly satisfied outnumber those who are either unsatisfied or highly unsatisfied. Workers who are either satisfied or highly satisfied number 56 (or 49.56%) while those who are either unsatisfied or highly unsatisfied number 43 (or 38.05%). Workers who are not sure number 14 (or 12.39%).

On worker satisfaction with compensation, respondents who are either unsatisfied or highly unsatisfied outnumber those who are either satisfied or highly satisfied. Workers who are either unsatisfied or highly unsatisfied number 57 (or 50.44%) out of a total of 113 workers while those who are either satisfied or highly satisfied number 48 (or 42.48%). 8 (or 7.08%) of the workers are not sure.

Again Table 4.4c shows that workers who are either satisfied or highly satisfied with advancement in the work outnumber those who are either unsatisfied or highly unsatisfied with same. Those who are either satisfied or highly satisfied number 59

(or 52.21%) out of a total of 113 while those who are either unsatisfied or highly unsatisfied number 41 (or 36.28%).13 (11.5%) of the are not sure.

Table 4.4c again indicates that a greater number of workers, 58 (or 51.33%) out of a total of 113 workers are either satisfied or highly satisfied with the working conditions compared to workers who are either unsatisfied or highly unsatisfied with the same issue 42 (or 37.17%). 13 or (or 11.5%) of the workers were not sure.

Figure 1 shows that on the whole, satisfaction levels are skewed towards highly satisfied and satisfied.

AGGREGATE RESPONSES TO SATISFACTION LEVELS

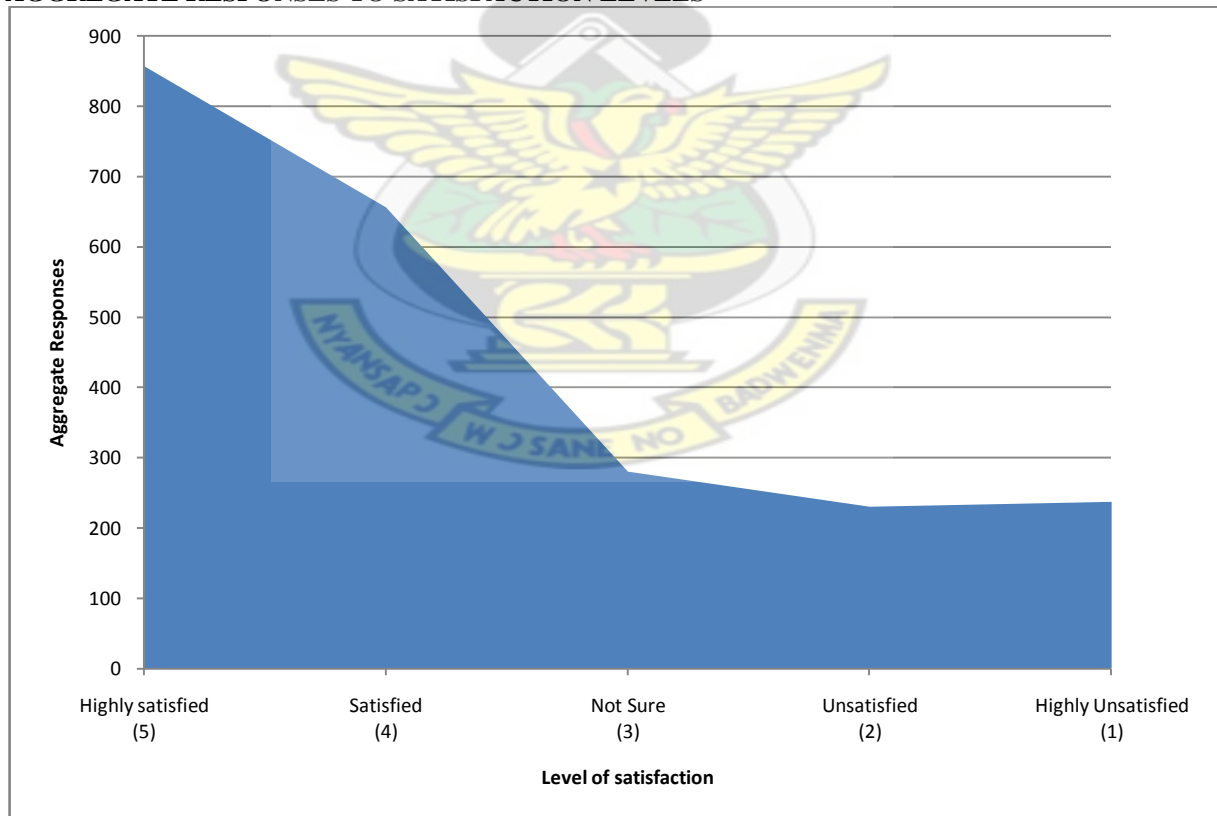


Figure 1

Table 4.5. Measuring the central tendency and dispersion of feelings of Job Satisfaction of job aspects

Factor	Mode	Median	Mean	Standard Deviation	Variance
Activity	5	5	4.15	1.15	1.33
Independence	4	4	3.65	1.24	1.55
Variety	5	4	3.98	1.13	1.29
Social Status	5	5	4.17	1.03	1.03
Supervision relating to human relations	5	4	3.47	1.46	2.14
Supervision relating to technical competence	5	4	4.05	1.22	1.48
Moral values	5	4	3.55	1.38	1.91
Security	5	5	4.04	1.27	1.61
Social service	5	4	3.87	1.26	1.58
Authority	4	4	3.94	1.03	1.06
Ability utilization	5	4	4.10	1.07	1.16
Company policies	4	3	3.17	1.46	2.14
Compensation	1	2	2.77	1.55	2.41
Advancement	5	4	3.24	1.57	2.47
Responsibility	5	4	3.65	1.31	1.71
Creativity	5	4	3.64	1.38	1.91
Working conditions	4	4	3.91	1.44	2.06
Co – workers	4	4	3.96	1.06	1.13
Recognition	5	4	3.81	1.39	1.94
Accomplishment	5	5	4.37	1.01	1.02

The analysis of the collected data showed the close values of means, medians and modes that tend to typical central values and showed also the lower values of variances and standard deviation. This ensures the quality and the homogeneity of the collected data as well as the low degree of dispersion of these data, which will result in reliable recommendations for employers in the construction industry. Again Cronbach's Coefficient Alpha reliability estimate for the 20 items was 0.78. Figure (2) rated the satisfaction of workers level of satisfaction on these aspects of the job according to their

means with the aid of clustered columns chart using the relative importance index (RII) of greater or lesser satisfaction on a scale of 5.

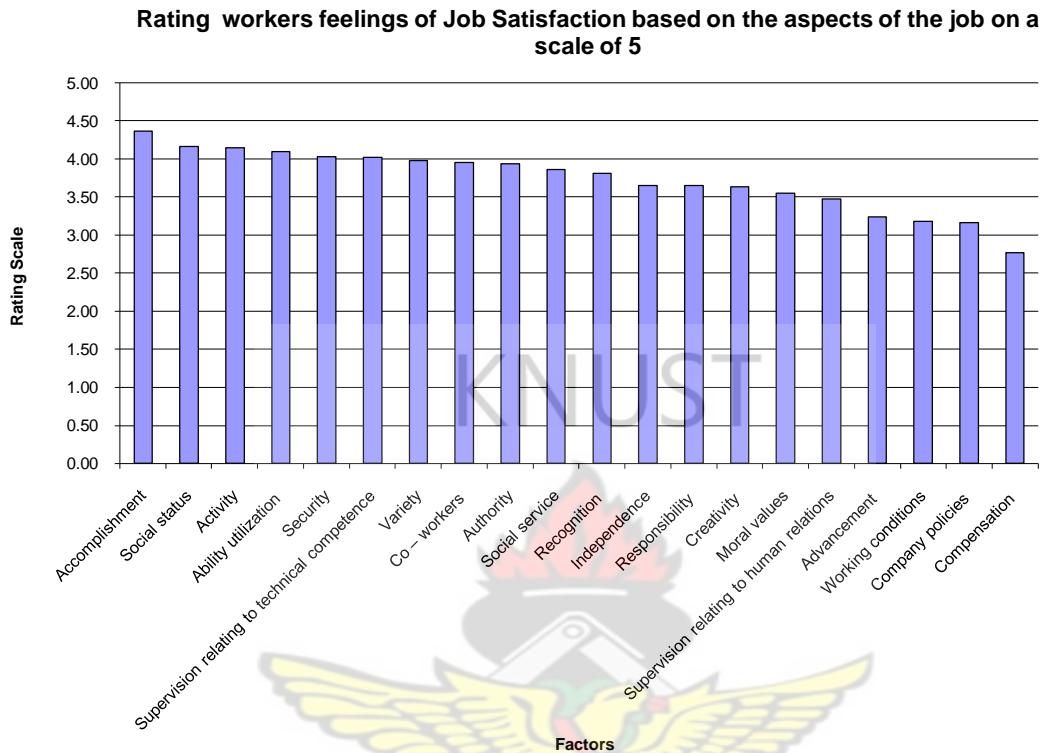


Figure 2

As would be expected, whilst the feeling of satisfaction for some factors are very high others are not. Figure (3) shows that the feeling of job satisfaction based on these aspects of the job could be classified into three categories: Firstly, the aspects of the job with which workers have very high satisfaction with RII above 0.800, being accomplishment, social status, activity, ability utilization, security, supervision relating to technical competence and variety, secondly, the aspects of the job with which workers have average to high satisfaction being co-workers, authority, social service, recognition, independence, responsibility, creativity, moral values, supervision relating to human relations, advancement, working conditions and company policies, with RIIs lying

between 0.600 and 0.800, and finally, the aspects of the job with which workers have very low to low satisfaction being compensation with RIIs less than 0.600.

Relative importance of feelings of Job Satisfaction based on aspects of the job

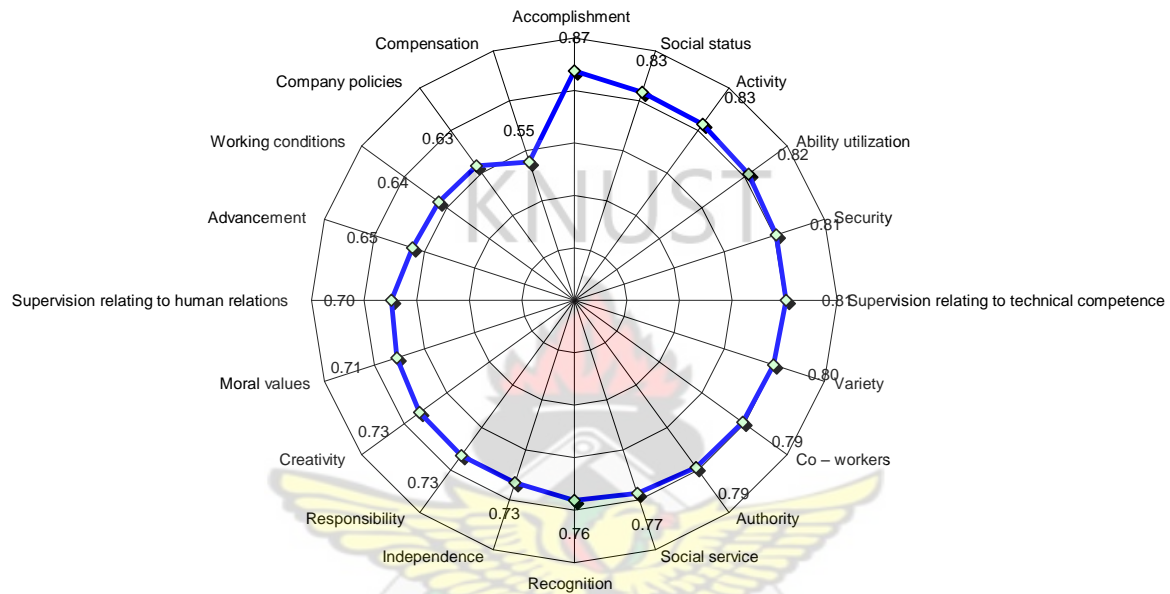


Figure 3

4.2.1 Bivariate analysis of feelings of Job Satisfaction based on aspects of the job

The matrix shows no perfect positive relationship, with an $r = +1$ or a perfect negative relationship, with an $r = -1$ between any two aspects of the job. Hence no two aspects of the job have a relationship such that the feeling of satisfaction of one aspect affect or depend on another. With the exception of aspects 5 & 17, 11 & 15 and 12 & 15 which have a moderate correlation relationship all the rest have a low and very low correlation relationship indicating weak relationships.

Table 4.6. The correlation matrix of the feelings of Job Satisfaction based on aspects of the job.

Factors Influencing Feelings of Job Satisfaction	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20
Activity (F 1)	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Independence (F 2)	0.18	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Variety (F 3)	0.17	0.10	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Social status (F 4)	0.02	0.14	0.25	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Supervision relating to human relations (F 5)	0.12	-0.04	-0.05	-0.04	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Supervision relating to technical competence (F 6)	-0.04	-0.09	0.03	0.04	0.16	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Moral values (F 7)	0.07	0.22	0.19	0.04	0.22	0.16	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.
Security (F 8)	0.32	0.11	0.24	0.32	0.13	0.15	0.16	1.00	.	.	.	.	.	.	.	.	.	.	.	.
Social service (F 9)	0.11	0.07	0.25	0.25	0.02	0.03	0.16	0.31	1.00	.	.	.	.	.	.	.	.	.	.	.
Authority (10)	0.08	0.02	0.27	0.11	0.04	0.08	0.14	0.18	0.17	1.00	.	.	.	.	.	.	.	.	.	.
Ability utilization (F11)	0.24	0.03	0.12	0.12	0.13	0.13	0.11	0.21	0.13	0.15	1.00	.	.	.	.	.	.	.	.	.
Company policies (F12)	0.30	0.11	0.18	0.06	0.38	0.22	0.20	0.17	0.08	0.05	0.34	1.00	.	.	.	.	.	.	.	.
Compensation (F13)	0.18	0.09	0.02	0.03	0.40	0.13	0.17	0.04	-0.09	-0.08	-0.06	0.34	1.00	.	.	.	.	.	.	.
Advancement (F14)	0.28	0.01	0.13	0.06	0.21	0.19	0.12	0.31	0.10	0.14	0.15	0.24	0.19	.	.	.	.	.	.	.
Responsibility (F15)	0.37	0.16	0.16	0.04	0.23	0.14	0.20	0.35	0.16	0.12	0.44	0.41	0.15	0.35	1.00	.	.	.	.	.
Creativity (F16)	0.14	0.18	0.22	0.13	0.07	0.16	0.13	0.28	0.13	0.12	0.24	0.33	0.14	0.36	0.37	1.00	.	.	.	.
Working conditions (F17)	0.26	0.01	-0.01	0.03	0.44	0.15	0.13	0.25	-0.02	0.06	0.17	0.33	0.38	0.26	0.19	-0.02	1.00	.	.	.
Co – workers (F18)	0.13	0.02	0.21	0.13	0.04	0.04	0.11	0.10	0.20	0.15	0.08	0.04	0.09	-0.03	0.15	0.11	0.16	1.00	.	.
Recognition (F19)	0.15	-0.01	0.13	0.12	0.14	0.13	0.04	0.26	-0.07	0.10	0.10	0.18	0.28	0.38	0.18	0.17	0.27	-0.02	1.00	.
Accomplishment (F20)	0.01	0.09	0.09	0.09	0.22	0.21	0.23	0.30	0.17	0.07	0.13	0.18	0.04	0.34	0.15	0.18	0.15	0.04	0.20	1.00

4.3 Factors influencing worker job satisfaction in the industry

The researcher found it necessary to find out the causes of worker job satisfaction in the industry. Analysis of these factors will help to find material on factors that influence worker job satisfaction in the industry. Aspects that make workers satisfied considered include:

- (a) Desire to be in the construction industry
- (b) Work environment and worker job satisfaction
- (c) Worker characteristics and job satisfaction
- (d) Human relations and job satisfaction and
- (e) Supervision and job satisfaction

Tables 4.7, 4.8, 4.9, 4.10 and 4.11 provide data on causes of worker job satisfaction.

The responses of workers on the various items are indicated by the numerals 5, 4, 3, 2, and 1 respectively for strongly agree, agree, uncertain, disagree and strongly disagree.

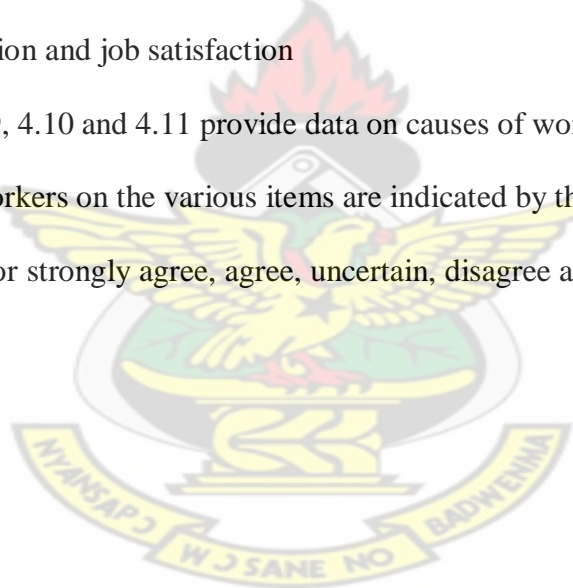


Table 4.7 Worker response on their desire to be in the industry

	Frequency											
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
I like construction work	63	55.75	34	30.09	2	1.77	6	5.31	8	7.08	113	100
Adequate challenges exist in this organization	47	41.59	27	23.89	22	19.47	6	5.31	11	9.73	113	100
Working in this organization gives me a great deal of personal satisfaction.	40	35.40	33	29.20	17	15.04	12	10.62	11	9.73	113	100
I am rarely bored with construction work	49	43.36	28	24.78	15	13.27	9	7.96	12	10.62	113	100
Adequate promotional opportunities exist in this organization	30	26.55	25	22.12	22	19.47	18	15.93	18	15.93	113	100

Table 4.7 shows that a high percentage of workers either agree or strongly agree that they like construction work compared to those who either disagree or strongly disagree with the same issue. Workers who either agree or strongly agree number 97 (or 85.84%) out of a total of 113 respondents while those who either disagree or

strongly disagree with the same issue number 14 (or 12.39%) of the total respondents. Workers who are not sure with this issue represent the remaining percentage.

Table 4.7 again indicates that a large percentage of respondents either agree or strongly agree that adequate challenges exist in their organization compared to those who either disagree or strongly disagree with the same issue. Workers who either agree or strongly agree with this issue number 74 (or 65.49%) out of the total of 113 respondents. Those who either disagree or strongly disagree with the issue number 17 (or 15.04%) out of the total. The rest of the respondents were not sure.

Additionally, table 4.7 shows that a high number of the respondents either agree or strongly agree that working in their present organization give them a great deal of personal satisfaction. Workers who either agree or strongly agree number 73 (or 64.6%) out of a total of 113 respondents. Their counterparts who either disagree or strongly disagree with the same issue number 23 (or 20.35%). The rest of the respondents were not sure.

Table 4.7 further indicates that respondents who either agree or strongly agree that they are rarely bored with construction work outnumber those who either disagree or strongly disagree with the same issue. Workers who either agree or strongly agree with this issue number 77 (or 68.14%) out of the total of 113 respondents. Those who either disagree or strongly disagree with the issue number 21 (or 18.58%) out of the total. The rest of the respondents were not sure.

Table 4.7 also shows that respondents who either agree or strongly agree that adequate promotional opportunities exist in their organization outnumber those who either disagree or strongly disagree with the same issue. Workers who either agree or strongly agree with this issue number 55 (or 48.67%) out of the total of 113 respondents. Those who either disagree or strongly disagree with the issue number 36 (or 31.86%) out of the total. The rest of the respondents were not sure.

Only about 10.62% of respondents were drifted into their career and this may explain why majority of them like construction work. This is in support of Reeves (2001) assertion that people become happy when they do work they enjoy.

When workers feel challenged they tend to be more satisfied. The Training and Learning Consultancy Limited in Bristol (cited by Mullins 2005) is of the view that the challenge arises as a result of meaningful targets which do not overstretch employees.

All these buttress the point made by Herzberg that motivators bring about job satisfaction.

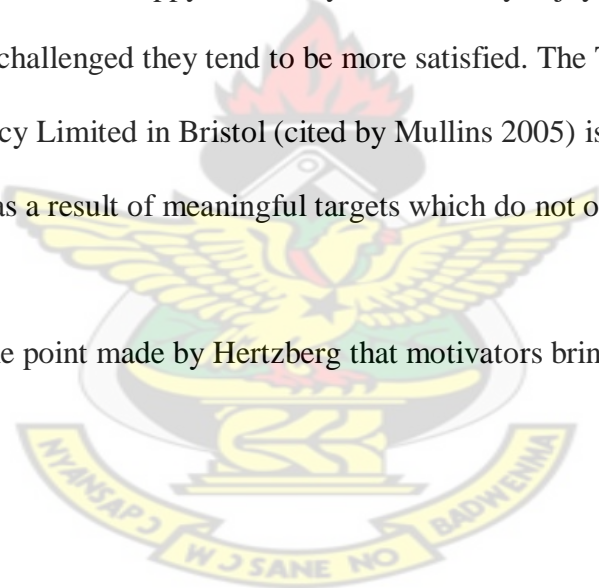


Table 4.8 Worker response to work environment and worker job satisfaction

Frequency												
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
Many of our rules and procedures make doing a good job difficult.	38	33.63	29	25.66	10	8.85	15	13.27	21	18.58	113	100
I feel appreciated by members in my gang for my work	70	61.95	32	28.32	8	7.08	3	2.65	0	0.00	113	100
The number of workers on my gang is appropriate	31	27.43	45	39.82	15	13.27	13	11.50	9	7.96	113	100
I am satisfied with the site layout of my work place.	50	44.25	34	30.09	11	9.73	11	9.73	7	6.19	113	100

Table 4.8 shows that majority of workers either agree or strongly agree that many of the rules and procedures which they work with make doing a good job difficult. Workers who either agree or strongly agree with this issue number 67 (or 59.29%) out of a total of 113 respondents while those who either disagree or strongly disagree with the same issue number 36 (or 31.86%) out the total. The rest of the respondents are not sure.

On whether workers feel appreciated by members in their gang for the work they do or not, table 4.8 shows that majority of workers either agree or strongly agree that members in their gang appreciate their work. Workers in the majority group number 102 (or 90.27%) out of a total of 113 respondents. workers who feel that members in their gang do not appreciate their work number 3 (or 2.65%) of the total population. The rest of the workers are not sure.

Table 4.8 further indicates that workers who either agree or strongly agree that the number of workers in their gang is appropriate outnumber their counterparts who either disagree or strongly disagree with this statement. Workers in the first category number 76 (or 67.26%) out of a total of 113 workers while their counterparts in the second category number 22 (or 19.47%) out of the total. The rest of the workers are not sure.

On whether workers were satisfied with the site layout at their work place or not table 4.8 indicates that majority of the respondents either agree or strongly agree that they are satisfied with the site layout at their work place. The number of workers who either agree or strongly agree that they are satisfied with the site lay out number 84 (or 74.34%) out of a total of 113 respondents while their colleagues who either disagree or strongly disagree with this statement number 18 (or 15.93%) of the total respondents. Workers who are not sure of their view on this statement form the remaining percentage.

When workers are given an environment which is cool and free from all distractions to work in, they tend to be satisfied with their job. Handy (1997) is of the view that an

inspired workplace result in inspired workers. This may be in sharp contrast to that of Herzberg who maintains that they only bring about dissatisfaction or no satisfaction. It again explains the belief of Arnold and Robertson (1998) that these environmental factors can lead to tension and frustration resulting in stress.

Table 4.9 Worker characteristics and job satisfaction

Frequency												
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
I feel competent working in my profession	98	86.73	11	9.73	3	2.65	0	0.00	1	0.88	113	100
I am assigned appropriate amount of work activities	29	25.66	51	45.13	12	10.62	12	10.62	9	7.96	113	100
I am an effective worker	87	76.99	18	15.93	5	4.42	1	0.88	2	1.77	113	100
All in all I am satisfied with my job as a construction worker	63	55.75	29	25.66	7	6.19	7	6.19	7	6.19	113	100

Table 4.9 shows that the number of workers who either agree or strongly agree that they feel competent working in their profession outnumber those who either disagree or strongly disagree with the same view. Workers in the first category number 109 (or 96.46%) out of a total of 113 respondents while those in the second category number 1 (or 0.88%) out of the same total. 3 workers are not sure of this issue.

On whether or not workers agree or disagree that they are assigned appropriate amount of work activities, table 4.9 shows that majority of the workers, 80 (or 70.8%)

out of a total of 113 respondents either agree or strongly agree. Workers who either disagree or strongly disagree with the same issue number 21 (or 18.58%) out of the same total. The rest to the workers are not sure.

Additionally, table 4.9 shows that majority of workers either agree or strongly agree that they are effective workers. This group of workers number 105 (or 92.92%) out of a total of 113 respondents while workers who either disagree or strongly disagree with the same issue number 3 (or 2.65%) of the total. The rest of the workers indicated that they were not sure.

Table 4.9 furthermore shows that workers who either agree or strongly agree that all in all they are satisfied with their job as construction workers outnumber their counterparts who felt otherwise. Workers in the former group number 92 (or 81.42%) out of a total of 113 respondents while those in the latter group number 14 (or 12.39%) out of the same total. The remaining percentage of workers represents those who are not sure.

People who feel that they are effective in their work tend to be satisfied with their job. This is in line with what Heller et al., (2002) as well as Zembylas and Papanastsiou (2004) suggested that one's disposition contributes to job satisfaction in that individuals are disposed to be satisfied or not satisfied with their jobs.

Table 4.10 Human Relations and Worker Job Satisfaction

	Frequency											
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
I am appreciated by my boss for my work.	68	60.18	27	23.89	9	7.96	7	6.19	2	1.77	113	100
I rarely feel that other workers are more satisfied than I am.	26	23.01	44	38.94	20	17.70	13	11.50	10	8.85	113	100
I seldom feel isolated as a worker	37	32.74	36	31.86	17	15.04	10	8.85	13	11.50	113	100
I feel appreciated by co-workers for my work.	70	61.95	24	21.24	10	8.85	9	7.96	0	0.00	113	100
My community appreciates my work as a construction worker.	61	53.98	35	30.97	12	10.62	3	2.65	2	1.77	113	100
I am satisfied with the criticisms of my supervisor because they are constructive.	66	58.41	34	30.09	11	9.73	0	0.00	2	1.77	113	100

Table 4.10 shows that workers who either agree or strongly agree that they are appreciated by their bosses outnumber their counterparts who either disagree or strongly disagree with the same issue. Workers in first group number 95 (or 84.07%) out of a total of 113 respondents while those in the second group number 9 (or 7.96%)

out of the same total. The remaining percentage of workers indicated that they were not sure of this issue.

Also, table 4.10 indicates that majority of the respondents either agree or strongly agree that they rarely feel that other workers were highly satisfied with their job than they were. Workers who either agree or strongly agree with the issue number 70 (or 61.95%) out of a total of 113 respondents while their counterparts who either disagree or strongly disagree with the issue number 23 (or 20.35%) out of the same total. The rest of the respondents are not sure.

Again, table 4.10 shows that workers who either agree or strongly agree that they seldom feel isolated as workers outnumber those who either disagree or strongly disagree with the same issue. Workers in the former group number 73 (or 64.6%) while those in the latter group number 23 (or 20.35%). The remaining percentage of worker represents those who are not sure.

Additionally, table 4.10 shows that workers who either agree or strongly agree that they feel appreciated by co-workers for their work greatly outnumber those who either disagree or strongly disagree with the same issue. Workers in the first category mentioned number 94 (or 83.19%) out of a total of 113 respondents while their counterparts in the second category number 9 (or 7.96 %) out of the same total. As shown in the table 9, 8.85 % of the respondents are not sure.

Table 4.10 further shows that workers who either agree or strongly agree that they feel appreciated by their communities as construction workers greatly outnumber those

who either disagree or strongly disagree with the same issue. Workers who either agree or strongly agree with the issue number 96 (or 84.96%) out of a total of 113 respondents while their counterparts who either disagree or strongly disagree with the same issue number 5 (or 4.42%) out of the total. 12 (or 1.06%) workers are not sure as shown in table 13.

Lastly table 4.10 shows that workers who either agree or strongly agree that they are satisfied with the criticisms of their supervisors greatly outnumber their counterparts who either disagree or strongly disagree with the same issue. Workers in that first group number 100 (or 88.5%) out of a total of 113 respondents while those in the second group number 2 (or 1.77%) out of the same total.

Employers and other stake holders seem to be showing appreciation for workers and as a result workers feel their contribution to the construction industry is recognized.

Spector (1997) agrees with this when he states that he sees job satisfaction as identifying how people deserve to be treated fairly and with respect.

Table 4.11 Worker response to supervision and job satisfaction

Frequency												
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
My supervisor is quite competent in doing his / her job	79	69.91	26	23.01	5	4.42	2	1.77	1	0.88	113	100
My supervisor is unfair to me	19	16.81	29	25.66	19	16.81	20	17.70	26	23.01	113	100
My supervisor shows too little interest in the feelings of subordinates	37	32.74	20	17.70	14	12.39	18	15.93	24	21.24	113	100
I feel encouraged by my supervisor	57	50.44	31	27.43	16	14.16	4	3.54	5	4.42	113	100
I am provided adequate support from my supervisor.	61	53.98	29	25.66	7	6.19	11	9.73	5	4.42	113	100
I am involved in decision-making at my workplace	51	45.13	28	24.78	10	8.85	12	10.62	12	10.62	113	100

Table 4.11 shows that the number of workers who either agree or strongly agree that their supervisor is quite competent in doing his / her job greatly outnumber their counterparts who either disagree or strongly disagree with the same issue. Workers in the first category number 105 (or 92.92%) out of a total of 113 respondents while

their counterparts in the second category number 3 (or 2.65%) out of the same total. The remaining respondents are not sure.

On whether respondents felt their supervisor is unfair to them or not, table 4.11 shows that workers who either agree or strongly agree slightly outnumber those who either disagree or strongly disagree that their supervisor is unfair to them. Workers in the first group number 48 (or 42.48%) out of a total of 113 respondents while those in the second group number 46 (or 40.71%) out of the same total. 16.81% of the respondents are not sure as indicated in the table.

Table 4.11 additionally shows that workers who either agree or strongly agree that their supervisor shows too little interest in the feelings of subordinates outnumber their colleagues who either disagree or strongly disagree with the same issue. Workers in the former group number 57 (or 50.44%) out of a total of 113 respondents while their counterparts in the latter group number 42 (or 37.17%) out of the same total. The remaining percentages of workers are not sure of this issue.

Furthermore, table 4.11 indicates that majority of the respondents either agree or strongly agree that they feel encouraged by their supervisors. Workers in this category number 88 (or 77.88%) out of a total of 113 respondents while their colleagues who either disagree or strongly disagree with the same issue number 9 (or 7.96%) out of the same total number of respondents. 14.16% of the respondents are not sure of the issues as shown in table 10.

Table 4.11 also indicates that majority of the respondents either agree or strongly agree that they are provided adequate support by their supervisors. Workers in this category number 90 (or 79.65%) out of a total of 113 respondents while their colleagues who either disagree or strongly disagree with the same issue number 16 (or 14.16%) out of the same total number of respondents. 6.19% of the respondents are not sure of the issues as shown in table 4.11.

Finally table 4.11 shows that workers who either agree or strongly agree that they are involved in decision-making in their work place outnumber their counterparts who either disagree or strongly disagree with the same issue. Workers in the first category number 79 (or 69.91%) out of a total of 113 respondents while those in the second category number 24 (or 21.24%) of the same total number of respondents.

Job satisfaction tends to be associated with supervisors who are friendly, supportive and allow workers to be involved in decision making. These supervisors tend to give workers encouragement and guidance whenever the need arises. These findings are consistent of a similar one by Bassett (1994) that a kindly and thoughtful leader generates high worker satisfaction. Scarpello and Vandenberg (1987) support this view when they state that effective supervision is necessary for job satisfaction and high level of performance. Bacharach et al., (1989) also states that supervision of workers activities seems critical in examining their dissatisfaction in that negative supervisory behaviour can to lead to dissatisfaction.

The finding is also consistent with that of Bowen et al., (2008), Wilkinson (1999) and Mullins's (2005) findings that participative decision making is likely to lead to job satisfaction.

4.4 Effects of feelings worker job satisfaction on other areas of work.

The researcher found it necessary to find out indicators of worker job satisfaction to help in determining how workers behave as a result of their satisfaction or otherwise with their job. Information obtained would help to determine effects of worker job satisfaction on worker performance, worker commitment and worker retention.

Tables 4.12, 4.13, and 4.14 provide information on indicators of worker job satisfaction.

The responses of workers to the various items are indicated by the numerals 5, 4, 3, 2 and 1 respectively for strongly agree, agree, uncertain, disagree and strongly disagree.

Table 4.12 Worker response on performance and job satisfaction

ITEM	Frequency									
	5		4		3		2		1	
	f	%	f	%	f	%	f	%	f	%
My satisfaction with my work helps me to perform well.	90	79.65	19	16.81	2	1.77	1	0.88	1	0.88
Seeing the final outcome of my work standing out well makes me feel satisfied	87	76.99	21	18.58	4	3.54	0	0.00	1	0.88
TOTAL	113	100	113	100	113	100	113	100	113	100

Table 4.12 shows that workers who either agree or strongly agree that their satisfaction with their job helps them to perform well highly outnumber those who either disagree or strongly disagree with the same issue. Workers in the first group number 109 (or 96.46%) out of a total of 113 respondents while those in the second category number 2 (or 1.77%) out of the same total number of respondents. The rest of the respondents are not sure of this issue.

Table 4.12 again shows that workers who either agree or strongly agree that seeing the final outcome of their work standing out well makes them feel satisfied highly outnumber those who either disagree or strongly disagree with the same issue. Workers in the first group number 108 (or 95.58%) out of a total of 113 respondents while those in the second category number 1 (or 0.88%) out of the same total number of respondents. The rest of the respondents are not sure of this issue.

The findings are consistent with Tait et al., (1989), Judge et al., (2001) and Morrison (1997) when they found a relationship between job satisfaction and performance. It also partially support the findings of Borchering (1974) and Bowen et al, (2008) that accomplishment influenced job satisfaction

Table 4.13 Worker response to commitment and job satisfaction

	Frequency											
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
I seldom feel a sense of burnout.	31	27.43	30	26.55	22	19.47	19	16.81	11	9.73	113	100
I will recommend a good friend to apply for a job like mine with my employer.	49	43.36	38	33.63	7	6.19	8	7.08	11	9.73	113	100
From what I know, I will take up my job as a career if I have to decide all over again.	46	40.71	29	25.66	8	7.08	6	5.31	24	21.24	113	100
I feel my job really compares with my ideal job (one that I would most likely have)	40	35.40	38	33.63	13	11.50	10	8.85	12	10.62	113	100
In general I feel my job measure up to the sort of job wanted when I first took it.	38	33.63	29	25.66	12	10.62	19	16.81	15	13.27	113	100

Table 4.13 shows that workers who either agree or strongly agree that they seldom feel a sense of burnout outnumber their colleagues who either disagree or strongly

disagree with the same issue. Workers in the first category number 61 (or 53.98%) out of a total of 113 respondents while their counterparts in the second category number 30 (or 26.55%) out of the same number of respondents. 19.47% of the respondents are not sure of this issue as shown in table 4.13.

Table 4.13 again indicates that workers who either agree or strongly agree that they would recommend working in their organization to a good friend of theirs who tells them that he or she is interested in working there outnumber those who either disagree or strongly disagree with the same issue. Workers in the first group number 87 (or 76.99%) out of a total of 113 respondents while their counterparts in the second category number 19 (or 16.81%) out of the same total number of respondents. Workers who are not sure form the remaining percentage of respondents.

Also Table 4.13 shows that workers who either agree or strongly agree that they would take up their job as a career if they have to decide all over again from what they know so far in the industry outnumber those who either disagree or strongly disagree with the same issue. Workers in the first group number 75 (or 66.37%) out of a total of 113 respondents while their counterparts in the second category number 30 (or 26.55%) out of the same total number of respondents. Workers who are not sure number 8 (or 7.07%).

Furthermore the table shows that workers who either agree or strongly agree that their current job compares with their ideal job outnumber those who either disagree or strongly disagree with the same issue. Workers in the first group number 78 (or 69.03%) out of a total of 113 respondents while their counterparts in the second

category number 22 (or 19.47%) out of the same total number of respondents. Workers who are not sure number 13 (or 11.5%).

Lastly Table 4.13 indicates that workers who either agree or strongly agree that they feel their job measure up to the sort of job wanted when they first took it are in the majority while their colleagues who either disagree or strongly disagree with the same issue are in the minority. Workers in the first category number 67 (or 59.29%) out of a total of 113 respondents while their counterparts in the second category number 24 (or 21.23%) out of the same number of respondents. 10.62% of the respondents are not sure of this issue as shown in table 4.13.

People who are satisfied with their job tend to make good remarks about their job and are also likely to recommend their job to friends and relations who would want to take up similar jobs. It is also likely that some workers will make uncomplimentary remarks about their job and in effect discourage others who would want to take up such jobs in the future.

Table 4.14 Worker Response to Retention and Job Satisfaction

Frequency												
	5		4		3		2		1		TOTAL	
	f	%	f	%	f	%	f	%	f	%	f	%
My long term goal is to continue as a construction worker.	47	41.6	21	18.6	5	4.42	10	8.85	30	26.5	113	100
Even if I am offered a higher salary in another job, I will remain a construction worker.	39	34.5	12	10.6	9	7.96	6	5.31	47	41.6	113	100

Table 4.14 shows that most of the respondents numbering 68 representing 60.2% of the total number either agree or strongly agree that their long term goal is to continue working as a construction worker while 40 number representing 35.4% either disagree or strongly disagree with the same issue . On whether or not they will remain construction workers when offered a job with higher salary elsewhere, the number of respondents who either disagree or strongly disagree with the issue number 53 (or 46.91%) which slightly outnumber those who either agree or strongly agree on the issue numbering 51 (or 45.1).

When workers stay longer in an organization they tend to become more satisfied but workers can easily be attracted to other areas when offered higher salaries. The study supports that of Farkas and Tetrick, (1989) in saying that the longer the time spent in the organization, the more satisfied the workers were with their jobs because of acculturation. It is also consistent with the findings of Okpara (2004) who attributed

the continuous exodus of workers to other areas because of the differences in the level of income.

4.5 Relationship Between Worker Job Satisfaction and Demographic Variables

4.5.1 Location of Site and Level of Worker Job Satisfaction

The researcher wanted to verify the Null Hypothesis that workers opinions about their level of job satisfaction is the same in all four Regions and Table 4.15 gives a summary of the findings obtained.

Table 4.15. Location of site and their level of job satisfaction

	df	X ²	X ² _(0.05,df)	Remarks
General	12	11.8131	21.0261	Accept
Activity	12	29.98986	21.0261	Fail to Accept
Independence	12	18.72192	21.0261	Accept
Variety	12	15.50808	21.0261	Accept
Social Status	9	15.64550	16.9190	Accept
Supervision relating to human relations	12	8.06033	21.0261	Accept
Supervision relating to technical competence	12	15.06044	21.0261	Accept
Moral values	12	16.22596	21.0261	Accept
Security	12	16.76489	21.0261	Accept
Social service	12	22.56171	21.0261	Fail to Accept
Authority	12	12.86832	21.0261	Accept
Ability utilization	12	13.96304	21.0261	Accept
Company policies	12	19.81004	21.0261	Accept
Compensation	12	25.10259	21.0261	Fail to Accept
Advancement	12	12.13460	21.0261	Accept
Responsibility	12	27.43469	21.0261	Fail to Accept
Creativity	12	15.68004	21.0261	Accept
Working conditions	12	23.20666	21.0261	Fail to Accept
Co – workers	12	6.27907	21.0261	Accept
Recognition	12	13.35649	21.0261	Accept
Accomplishment	12	7.63925	21.0261	Accept

Table 4.15 shows that generally employees opinions of feelings of satisfaction does not depend on where the site is located since the Null hypothesis cannot be accepted. When other aspects of the job were investigated, issues relating to independence, variety, social status, supervision, moral values, security, authority, ability utilization, company policies, advancement, creativity, co – workers, recognition and accomplishment also conformed to the general finding, since there is no evidence of relationship between their opinions in all four populations.

Although working conditions in the various regions are different, workers may be giving their independence, the authority to instruct other workers, allowed to use their ability and be creative, given the necessary social status and recognition at work and they are expected to have same opinions on feelings of accomplishment. Due to the fact that the various companies are of the same category of registration and that they all join one association, there may be guidelines as to the type of trained supervisors to use, ways that bosses have to treat personnel, opportunity for advancement, and company policies hence the opinions of feelings of satisfaction seems to be the same. Also due to the training of workers and the nature of construction, workers are allowed variety in work hence their opinions of satisfaction seem to be the same. On issues of job security, the construction industry uses transient labour force hence their opinions on feelings of satisfaction of co – workers and security seem to be the same.

However with issues relating to work activity, social service, compensation, responsibility and working conditions, the Null hypothesis cannot be accepted and the conclusion is that employee's opinion about their level of job satisfaction is not the

same in all four populations. Hence their opinion of their level of job satisfaction depends on where the site is cited.

Since the respondents are in four different regions of Ghana, the standard of living in all these areas would be different hence feelings of level of compensation would be different. Again working conditions would vary and respondents may not get the same chance to provide social services. Also feelings of satisfaction are different probably due to the fact that works in some regions are more challenging than others.

Furthermore there may be close supervision in certain regions hence not much responsibility may be given to workers hence the different in opinions of feelings on responsibility.



4.5.2 Age and Level of Worker Job Satisfaction

The researcher wanted to verify the Null Hypothesis that worker's opinions about their level of job satisfaction does not depend on their age and Table 4.16 gives a summary of the findings obtained.

Table 4.16. Age and worker's level of job satisfaction

	df	X ²	X ² _(0.05,df)	Remarks
General	16	12.5051	26.2962	Accept
Activity	16	33.27820	26.2962	Fail to Accept
Independence	16	37.84540	26.2962	Fail to Accept
Variety	16	24.33480	26.2962	Accept
Social Status	12	14.14260	21.0261	Accept
Supervision relating to human relations	16	10.44780	26.2962	Accept
Supervision relating to technical competence	16	12.59370	26.2962	Accept
Moral values	16	12.53790	26.2962	Accept
Security	16	24.41570	26.2962	Accept
Social service	16	17.40340	26.2962	Accept
Authority	16	11.98070	26.2962	Accept
Ability utilization	16	17.42080	26.2962	Accept
Company policies	16	19.40450	26.2962	Accept
Compensation	16	26.67430	26.2962	Fail to Accept
Advancement	16	39.88970	26.2962	Fail to Accept
Responsibility	16	29.22870	26.2962	Fail to Accept
Creativity	16	17.13430	26.2962	Accept
Working conditions	16	25.84550	26.2962	Accept
Co – workers	16	11.61450	26.2962	Accept
Recognition	16	18.25730	26.2962	Accept
Accomplishment	16	8.53680	26.2962	Fail to Accept

Table 4.16 shows that generally the Null hypothesis is accepted and that there is no relationship age and satisfaction. Other aspects of the job also investigated such as issues relating to variety, social status, supervision, moral values, security, social service, authority, ability utilization, company policies, creativity, working condition,

co – workers and recognition also shows that there is no evidence of relationship between employee's age and their level of job satisfaction with these issues and that they do not depend on each other. These findings agree with that of Bilgic (1998) which found no relationship between age and job satisfaction.

Table 4.16 however shows that with issues relating to work activity, independence, compensation, advancement, responsibility and accomplishment, the Null hypothesis cannot be accepted. The conclusion is that there is a relationship between employee's age and their level of job satisfaction with these issues and that they depend on each other. These findings agrees with the findings of Okpara (2004), Linz (2003), Al-Aimi (2001), Sokoya (2000), Kuositelios (1991), Rhodes (1983) and Etuk (1980) which all found out that age affected the level of job satisfaction.

Although the general finding was that there was no relationship between age and satisfaction, findings on other aspect of the job shows that whilst age has a relationship with some factors on the feelings of job satisfaction others do not. This agrees with Okpara (1996) who indicated that research investigating the form and magnitude of the relationship between age and job satisfaction has produced mixed and generally inconclusive results.

4.5.3 Industrial Experience and Level of Worker Job Satisfaction

The researcher wanted to verify the Null Hypothesis that worker's opinions about their level of job satisfaction does not depend on their industrial Experience and Table 4.17 gives a summary of the findings obtained.

Table 4.17. Industrial Experience and Worker's level of job satisfaction

	df	X ²	X ² _(0.05,df)	Remarks
General	12	11.7019	21.0261	Accept
Activity	12	10.50240	21.0261	Accept
Independence	12	13.20790	21.0261	Accept
Variety	12	7.05300	21.0261	Accept
Social Status	9	11.13800	16.9190	Accept
Supervision relating to human relations	12	9.85920	21.0261	Accept
Supervision relating to technical competence	12	8.65320	21.0261	Accept
Moral values	12	15.10680	21.0261	Accept
Security	12	8.67890	21.0261	Accept
Social service	12	9.73810	21.0261	Accept
Authority	12	24.32990	21.0261	Fail to Accept
Ability utilization	12	13.26910	21.0261	Accept
Company policies	12	13.78240	21.0261	Accept
Compensation	12	10.23840	21.0261	Accept
Advancement	12	9.62310	21.0261	Accept
Responsibility	12	8.87640	21.0261	Accept
Creativity	12	8.07080	21.0261	Accept
Working conditions	12	8.99420	21.0261	Accept
Co – workers	12	12.69800	21.0261	Accept
Recognition	12	12.53840	21.0261	Accept
Accomplishment	12	30.11320	21.0261	Accept

Table 4.17 shows that generally there is no relationship between an employee's industrial experience and satisfaction and that the Null hypothesis is accepted. Other issues relating to the job investigated are also in support of this. These are issues relating to Work activity, independence, variety, social status, supervision, moral values, security, social service, ability utilization, company policies, compensation, advancement, responsibility, creativity, working condition, co – workers, recognition and accomplishment for which the Null hypothesis is accepted and hence there is no

evidence of relationship between employee's industrial experience and their level of job satisfaction with these issues and that they do not depend on each other.

The only issue for which the Null hypothesis cannot be accepted is authority. The conclusion is that there is a relationship between employee's industrial experience and their level of job satisfaction with this issue and that they depend on each other.

The findings generally disagrees with the findings of Bibgic (1998) which revealed that people with more work experience are more likely to experience greater satisfaction.

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4.5.4 Educational Level and Level of Worker Job Satisfaction

The researcher wanted to verify the Null Hypothesis that worker's opinions about their level of job satisfaction does not depend on their Educational Level and Table 4.18 gives a summary of the findings obtained.

Table 4.18. Educational Level and Workers level of job satisfaction

	df	X ²	X ² _(0.05,df)	Remarks
General	20	9.0698	31.4104	Accept
Activity	24	18.14220	36.72610	Accept
Independence	24	18.15360	36.72610	Accept
Variety	24	19.47340	36.72610	Accept
Social Status	18	20.45660	28.86930	Accept
Supervision relating to human relations	24	32.12840	36.72610	Accept
Supervision relating to technical competence	24	27.48330	36.72610	Accept
Moral values	24	29.74310	36.72610	Accept
Security	24	27.54010	36.72610	Accept
Social service	24	21.65810	36.72610	Accept
Authority	24	13.54780	36.72610	Accept
Ability utilization	24	14.81320	36.72610	Accept
Company policies	24	22.34270	36.72610	Accept
Compensation	24	24.61100	36.72610	Accept
Advancement	24	28.32670	36.72610	Accept
Responsibility	24	13.66500	36.72610	Accept
Creativity	24	31.29010	36.72610	Accept
Working conditions	24	26.26430	36.72610	Accept
Co – workers	24	27.32250	36.72610	Accept
Recognition	24	31.40170	36.72610	Accept
Accomplishment	24	20.22240	36.72610	Fail to Accept

Again Table 4.18 shows that generally, employee's educational level has no relationship with job satisfaction as the Null hypothesis is accepted. These issues relating to the job such as Work activity, independence, variety, social status,

supervision, moral values, security, social service, authority, ability utilization, company policies, compensation, advancement, responsibility , creativity, working condition, co – workers and recognition are also in support of the general findings and accepts the Null hypothesis that there is no evidence of relationship between employee's educational level and their level of job satisfaction with these issues and that they do not depend on each other.

Table 4.18 also shows that the only issue for which the Null hypothesis cannot be accepted is accomplishment. The conclusion is that there is a relationship between employee's educational level and their level of job satisfaction with this issue and that they depend on each other.

The findings of Bilgic (1998), Rogers (1991) and Sokoya (2000) all revealed that there was a positive relationship between education and job satisfaction which greatly does not agree with the findings of this research.

4.5.5 Career Choice and Level of Worker Job Satisfaction

The researcher wanted to verify the Null Hypothesis that worker's opinions about their level of job satisfaction does not depend on their Career Choice and Table 4.19 gives a summary of the findings obtained.

Table 4.19. Career choice and Workers level of job satisfaction

	df	X ²	X ² _(0.05,df)	Remarks
General	32	47.6284	46.1700	Fail to Accept
Activity	32	18.6874	46.1700	Accept
Independence	32	18.6874	46.1700	Accept
Variety	32	23.8711	46.1700	Accept
Social Status	24	33.2179	36.7261	Accept
Supervision relating to human relations	32	46.5198	46.1700	Fail to Accept
Supervision relating to technical competence	32	25.4086	46.1700	Accept
Moral values	32	37.1794	46.1700	Accept
Security	32	33.7446	46.1700	Accept
Social service	32	46.2808	46.1700	Fail to Accept
Authority	32	19.9653	46.1700	Accept
Ability utilization	32	34.2655	46.1700	Accept
Company policies	32	33.5406	46.1700	Accept
Compensation	32	42.2767	46.1700	Accept
Advancement	32	18.5544	46.1700	Accept
Responsibility	32	26.1982	46.1700	Accept
Creativity	32	29.8885	46.1700	Accept
Working conditions	32	39.0833	46.1700	Accept
Co – workers	32	40.4331	46.1700	Accept
Recognition	32	29.4092	46.1700	Accept
Accomplishment	32	47.4818	46.1700	Fail to Accept

Generally the Null hypothesis cannot be accepted and that the research shows that there is a relationship between an employee's career choice and job satisfaction.

Aspects of the job such as supervision relating to human relations, social service and accomplishment are also in support of this general finding.

Several other aspects of the job such as Work activity, independence, variety, social status, supervision relating to technical competence, moral values, security, authority, ability utilization, company policies, compensation, advancement, responsibility ,

creativity, working condition, co – workers and recognition were however found to contradict the general finding and shows no relationship with job satisfaction. In all these aspects of the job the Null hypothesis is accepted.

4.5.6 Motivation to Choose a Career and Level of Worker Job Satisfaction

The researcher wanted to verify the Null Hypothesis that worker's opinions about their level of job satisfaction does not depend on what influenced them to choose a career and Table 4.20 gives a summary of the findings obtained.

Table 4.20. Motivation to Choose a Career and Workers level of job satisfaction

	df	X ²	X ² _(0.05,df)	Remarks
General	16	9.3909	26.2962	Accept
Activity	16	13.0536	26.2962	Accept
Independence	16	20.8095	26.2962	Accept
Variety	16	27.8635	26.2962	Fail to Accept
Social Status	12	7.7561	21.0261	Accept
Supervision relating to human relations	16	14.7689	26.2962	Accept
Supervision relating to technical competence	16	24.3443	26.2962	Accept
Moral values	16	17.4843	26.2962	Accept
Security	16	14.6043	26.2962	Accept
Social service	16	14.3929	26.2962	Accept
Authority	16	10.9898	26.2962	Accept
Ability utilization	16	12.9617	26.2962	Accept
Company policies	16	13.1123	26.2962	Accept
Compensation	16	9.7758	26.2962	Accept
Advancement	16	13.2548	26.2962	Accept
Responsibility	16	10.8325	26.2962	Accept
Creativity	16	22.0965	26.2962	Accept
Working conditions	16	8.7579	26.2962	Accept
Co – workers	16	22.7789	26.2962	Accept
Recognition	16	25.7272	26.2962	Accept
Accomplishment	16	28.0070	26.2962	Fail to Accept

Table 4.20 shows that generally job satisfaction does not depend on what influenced an employee to choose a career. This is widely supported by most aspects of the job which was also researched and in all instances the Null hypothesis is accepted. These aspects of the job are work activity, independence, social status, supervision, moral values, security, social service, authority, ability utilization, company policies, compensation, advancement, responsibility, creativity, working condition, co-workers and recognition.

On issues relating to the job such as variety and accomplishment however the Null hypothesis is accepted indicating that there is a relationship between motivation to choose a career and these aspects of the job.



CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

In this chapter, the researcher gives a brief summary of the entire research and makes recommendations.

Success in construction projects relies on completion of projects within the budget and on or ahead of time and meeting certain standards of quality which all involve workmen. B.L. Whyte (1960) [cited by the Business Round Table, 1989] found that low job satisfaction resulted in high absence from work and high turnover. It is therefore vital for employers to orchestrate effective control of productivity by ensuring that employees are satisfied with their work.

The aim of the research was to identify the factors that influence construction worker job satisfaction in the Ghanaian construction industry and to study the relationship between age and worker job satisfaction, the relationship between experience and worker job satisfaction and the relationship between experience and worker job satisfaction.

5.2 Summary of Research Procedure

The study covered construction firms registered with the Association of Building and Civil Engineering Contractors in Ghana with classification D1K1. The number of construction firms studied was twenty eight (28). A total of thirty five (35) sites were visited. These sites were scattered in four (4) of the regions of Ghana namely Greater Accra (Accra and Tema), Ashanti Region (Kumasi and Kwamo), Central Region (Cape Coast) and Brong Ahafo Region (Nsuatere and Jinijini).

Accidental sampling together with snow balling were used to select respondents.

A questionnaire was used to collect data for the study. The Short Form of the Minnesota Satisfaction Questionnaire (MSQ) which is designed to measure an employee's satisfaction with his or her job was adopted together with one developed by Bennett et al., (2000) used in their study on job satisfaction of Agriculture teachers in Georgia which was adopted and adapted.

The questionnaire contained 61 items majority of which were in the Likert-type rating scale form. Other questions were asked for factual information such as years spent in present organisation, educational qualification, career, working experience, age and sex.

Simple percentages and frequencies were generated for the various responses from the questionnaire to identify the factors that influence construction worker job satisfaction. Indexing and bivariate analysis was used to find out the level of satisfaction from the industry.

The relationship between demographic variables and construction worker job satisfaction was analysed with a chi-square test.

5.3 Summary of Research Findings

5.3.1 Level of Construction Worker Job Satisfaction in the Industry

The research has revealed that satisfaction levels are skewed towards highly satisfied and satisfied and that there is a varying degree of workers level of feelings of satisfaction for the various aspects of the job studied. These feeling of job satisfaction based on the aspects of the job studied could be classified according to their relative degree of satisfaction into three categories:

- firstly, the influencing factors with very high satisfaction, being accomplishment, social status, activity, ability utilization, security, supervision relating to technical competence and variety.
- secondly, the influencing factors with average to high satisfaction being co-workers, authority, social service, recognition, independence, responsibility, creativity, moral values, supervision relating to human relations, advancement, working conditions and company policies, and
- finally, the influencing factors with very low to low satisfaction being compensation.

5.3.2 Factors influencing worker job satisfaction in the industry

By examining the responses of twenty five (25) items which causes worker job satisfaction grouped under workers desire to be in the construction industry, work environment, worker's own characteristics, human relations and supervision the findings indicate that the five items workers in the construction industry agreed with most are:

- "I feel competent working in my profession" (96.5%),
- "I am an effective worker" (92.9%),
- "My supervisor is quite competent in doing his / her job" (92.9%),
- "I feel appreciated by members in my gang for my work" (90.3%), and
- "I am satisfied with the criticisms of my supervisor because they are constructive" (88.5%).

The first two are items relating to worker's own characteristics, while the third, fourth and fifth are items relating to supervision, work environment and human relations respectively.

The five items which workers were in least agreement with were:

- “My supervisor is unfair to me” (42.2%),
- “Adequate promotional opportunities exist in this organization” (48.6%),
- “My supervisor shows too little interest in the feelings of subordinates” (50.4%),
- “Many of our rules and procedures make doing a good job difficult” (59.3%), and
- “I rarely feel that other workers are more satisfied than I am” (61.9%).

The first and the third are items relating to supervision, while the second, fourth and fifth are items relating to desire to be in the industry, work environment and human relations respectively.

5.3.3 How feelings of job satisfaction affect other areas of work

The study revealed workers feel satisfied when they see that the final outcome of their work stands out well and that satisfaction also helps them to perform well.

Workers were also seen to be committed to their work as they were willing to recommend their good friends to take up jobs like theirs with their employer.

Inasmuch as majority of workers had as their long term goal to be in the industry, about two percent more than those who thought otherwise were sure to leave to other industries if they were offered a high salary in those industries.

5.3.4 How demographic variables affect feelings of satisfaction

The relationship between selected demographic variables and worker job satisfaction were examined by means of a chi-square test to verify the null’s hypothesis that there is no significant difference between workers perception of their level of job

satisfaction and the location of site, age, industrial experience, educational level, career choice and motivation to choose a career. The study generally revealed that there is no relationship between satisfaction and the following demographic variables being: age, industrial experience and education.

However issues of work activity, independence, variety, social status, supervision, moral values, security, social service, authority, ability utilization, company policies, compensation, advancement, responsibility, creativity, working condition, co – workers, recognition and accomplishment were studied under these demographic variables in relationship to job satisfaction and the following was revealed; with respect to age, significant differences existed between workers perceptions of their level of satisfaction and issues of activity, independence, compensation, advancement, responsibility and accomplishment hence job satisfaction depended on them. With industrial experience and education, significant differences existed between workers perceptions of their level of satisfaction and issues of authority and accomplishment respectively hence job satisfaction depended on them.

Whilst generally there was no significant difference between motivation to choose a career a job satisfaction, career choice on the other hand was found to have a significant difference existing between it and job satisfaction and hence its dependence on it.

Although motivation to choose a career was found to have no general relationship with job satisfaction, issues relating to variety and accomplishment studied under it were found to depend on job satisfaction.

Career choice was found to generally depend on job satisfaction and issues relating to social service, accomplishment and supervision relating to human relationship studied under it were found to support the general findings. However issues such as work activity, independence, variety, social status, supervision relating to technical competence, moral values, security, authority, ability utilization, company policies, compensation, advancement, responsibility , creativity, working condition, co – workers and recognition studied under career choice were found not to support the general finding and as such did not depend on job satisfaction.

5.4 Conclusion

Workers of all organisations need to be motivated to facilitate their input towards the attainment of organisational goals. Construction workers like all other worker need this sort of motivation to enable them give off their best. Based on the findings from the study the following conclusions have been drawn:

- a) The construction industry in Ghana has a good image and recruitment of workforce seems to be very easy compared to other countries since the industry is already dominated by the youth whose age ranges from 21-40years.
- b) The fact that workers are satisfied with their job and majority are willing to recommend their good friends to join them with their present employer means that the industry will continue to have the required and necessary workforce.
- c) The degree of workers satisfaction with compensation was low compared to the others. This coupled with the fact that the number of respondents who agreed that they would leave the industry to other areas if they were offered a higher salary there slightly outnumbering those who thought otherwise means

that if compensation issues are not looked at, the industry may lose experienced workforce in the near future if other industries become attractive.

5.5 Recommendations to stakeholders in the Ghanaian Construction Industry

Due to the fact that workers in the industry are satisfied with their job, the various stakeholders involved in the construction industry are encouraged to sustain the current conditions that prevail. However they should seek to improve on the following:

- employers of construction workers are to look into the pay structure of workers relative to the amount of work they do as this was a serious concern of workers concerning their satisfaction. Aside these they are to develop various incentive schemes such as the best worker award and Christmas bonuses. These incentive schemes should be attractive and not meagre. This will go a long way to help prevent the exodus of construction workers to other areas because of attractive salaries there.
- again employers are to streamline the rules and procedures with which workers work with to ensure that workers are able to provide their best and do a good work always.
- also there is the need for employers to provide an improved working condition for their employees to motivate them to do good work and in the long run give them satisfaction.
- employers are also encouraged to grade workers and ensure that workers are promoted to the next level when they deserve it.

- site supervisors with whom workers come into contact with most of the day are to ensure their continuous encouragement to workers, provide support and involve workers in decision making at the workplace.
- they should show interest in the feelings of their subordinates and treat them fairly. This would improve human relations and make workers feel that they are part of their respective organisations.

5.6 Recommendations for future research

The goal of this study was to find out the factors that influence feelings of job satisfaction in the Ghanaian construction industry and to study the relationship between demographic variables and job satisfaction in the Ghanaian construction industry.

However this study covered a particular scope hence the need for a further research into other areas in the industry concerning factors influencing job satisfaction. The following recommendations are suggested for future research:

- 1) The sample population for this study was D1K1 construction companies registered with the Association of Building and Civil Engineering Contractors in Ghana. Future studies may conduct a survey on D1K1 construction companies not registered with the association and compare the findings with this one.
- 2) Because this study was conducted on workers working with D1K1 construction companies being the highest financial classification in terms of general building and civil works by the Ministry of Water Resources, Works and Housing, working conditions may differ from other classifications such as

D2K2, D3K3 and others. A further research on this topic should take into consideration workers working with other financially classed construction companies.

- 3) The scope of this research was limited to workers who could be classified as skilled labour only. Future research may utilize similar methods and procedures to conduct research on other workers in the industry such as unskilled labour and also on construction professionals.



APPENDIX A

**KWAME NKRUMAH UNIVERSITY OF SCIENCE
AND TECHNOLOGY**

COLLEGE OF ARCHITECTURE AND PLANNING

**FACULTY OF ARCHITECTURE AND BUILDING
TECHNOLOGY**

DEPARTMENT OF BUILDING TECHNOLOGY

QUESTIONNAIRE

The research is being undertaken by Mr. Kofi Ntim Oduro-Owusu, a second year student in MSc. Construction Management.

This study is being undertaken to identify the factors influencing construction worker job satisfaction in the Ghanaian Construction Industry. You are kindly requested to participate by completing the questionnaire. The information you provide will be used together with other information to come out with finding, suggestions and recommendations on construction worker job satisfaction.

It is hoped that you will complete the questionnaire as frankly and honestly as possible. Please be assured that your responses will be treated as confidential and used only for the purpose of this study.

Thank you.

Please answer the questions as frankly as possible by ticking (✓) as appropriate.

Part A: Personal and work related characteristics.

1. Gender

a. Male ()

b. Female ()

2. Age in years

- a. Less than 20 ()
- b. 21-30 ()
- c. 31-40 ()
- d. 41-50 ()
- e. 50-60 ()

3. Level of Education:

- a. Junior Secondary School ()
- b. Senior Secondary School ()
- c. Polytechnic ()
- d. University ()
- e. Any other specify.....

4. Experience in Construction Industry:

- a. Below 6 years ()
- b. 6-10 years ()
- c. 11-15 years ()
- d. More than 15 years ()

5. Experience in Present organization:

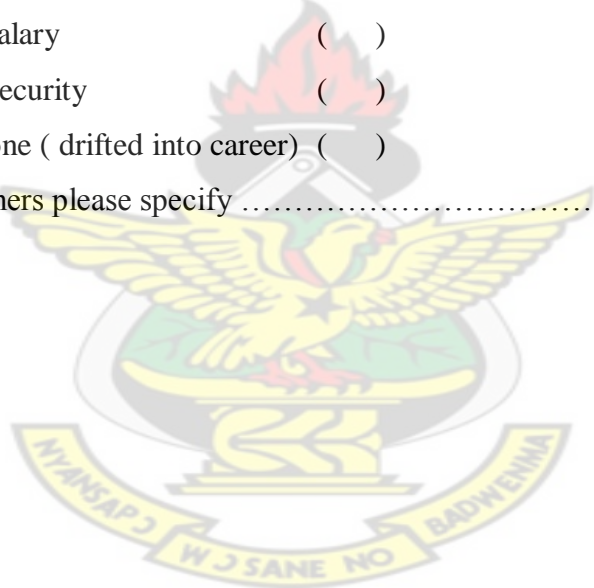
- a. Below 6 years ()
- b. 6-10 years ()
- c. 11-15 years ()
- d. More than 15 years ()

6. Career / Occupation

- a. Mason ()
- b. Carpenter ()
- c. Steel bender ()
- d. Plumber ()
- e. Any other specify.....

7. What influenced your career choice?

- a. Status of profession ()
- b. Family / Tradition ()
- c. Salary ()
- d. Security ()
- e. None (drifted into career) ()
- f. Others please specify



PART B: Level of worker job satisfaction

Please indicate your level of satisfaction with the items listed in the table by ticking

(√) 5, 4, 3, 2, or 1 for highly satisfied, satisfied, not sure, unsatisfied, and highly unsatisfied respectively.

	5	4	3	2	1
Being able to keep busy all the time					
The chance to do work alone on the job					
The chance to do different things from time to time					
The chance to be recognized in the community					
The way my boss handles his or her workers					
The competence of my supervisor in making decisions					
Being able to do things that do not go against my conscience					
The way my job provides for steady employment					
The chance to things for other people					
The chance to tell others what to do					
The chance to do something that make use of my abilities					
The way company policies are put into practice					
My pay and the amount of work I do					
The chance for advancement on my job					
The freedom to use my own judgment					
The chance to try my own methods of doing the job					
The working conditions					
The way my co-workers get along with each other					
The praise I get for doing a good job					
The feeling of accomplishment I get from the job					

PART C: CAUSES OF JOB SATISFACTION

Please indicate whether you strongly agree, agree, are uncertain, disagree or strongly disagree with the statements that follow by ticking (✓) 5, 4, 3, 2 or 1 as appropriate

KEY

5-Strongly Agree, 4-Agree, 3- Uncertain, 2-Disagree and 1-Strongly disagree.

Motivation and job satisfaction

	5	4	3	2	1
I like construction work					
Adequate challenges exist in this organization					
Working in this organization gives me a great deal of personal satisfaction.					
I am rarely bored with construction work					
Adequate promotional opportunities exist in this organization					

Work environment and job satisfaction

	5	4	3	2	1
Many of our rules and procedures make doing a good job difficult.					
I feel appreciated by members in my gang for my work					
The number of workers on my gang is appropriate					
I am satisfied with the site layout of my work place.					

Worker's own characteristics and Job Satisfaction

	5	4	3	2	1
I feel competent working in my profession					
I am assigned appropriate amount of work activities					
I am an effective worker					
All in all I am satisfied with my job as a construction worker					

Human Relations and Worker Job Satisfaction

	5	4	3	2	1
I am appreciated by my boss for my work.					
I rarely feel that other workers are more satisfied than I am.					
I seldom feel isolated as a worker					
I feel appreciated by co-workers for my work.					
My community appreciate my work as a construction worker.					
I am satisfied with the criticisms of my supervisor because they are constructive.					

Supervision and Worker job satisfaction

ITEM	5	4	3	2	1
My supervisor is quite competent in doing his / her job					
My supervisor is unfair to me					
My supervisor shows too little interest in the feelings of subordinates					
I feel encouraged by my supervisor					
I am provided adequate support from my supervisor.					
I am involved in decision-making at my workplace					

PART D: INDICATORS OF WORKER JOB SATISFACTION

Please indicate whether you strongly Agree, Agree, Uncertain, Disagree, or Strongly

Disagree with the statement that follow by ticking 5, 4, 3, 2 and 1 respectively.

Performance and Worker Job Satisfaction

ITEM	5	4	3	2	1
My satisfaction with my work helps me to perform well.					
Seeing the final outcome of my work standing out well makes me feel satisfied					

Commitment and Worker Job Satisfaction

ITEM	5	4	3	2	1
I seldom feel a sense of burnout.					
I will recommend a good friend to apply for a job like mine with my employer.					
From what I know, I will take up my job as a career if I have to decide all over again.					
I feel my job really compares with my ideal job (one that I would most likely have)					
In general I feel my job measure up to the sort of job wanted when I first took it.					

Retention and Worker Job Satisfaction

ITEM	5	4	3	2	1
My long term goal is to continue as a construction worker.					
Even if I am offered a higher salary in another job, I will remain a construction worker.					

Thank You.

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