THE IMPACT OF COMPENSATION ON PUBLIC SECTOR CONSTRUCTION WORKERS IN JIGAWA STATE OF NIGERIA

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Declaration

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Date: …………………………………..
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Dedication

This thesis is dedicated to God Almighty, my parents, wife and beloved children, who gave me hope and inspiration in various ways in my life.
Abstract

Compensation is the remuneration which workers receive for their services or contributions to the organisation. The literature reviewed showed that compensation packages have relationship with workers’ motivation, job satisfaction, attraction and retention. On this basis, this study established a conceptual framework based on equity theory and used it to examine how compensation might be influencing workers’ motivation, job satisfaction, attraction and retention in the Ministry of Works and Transport of Jigawa State of Nigeria. The dependent variables considered in this study are limited to salary, allowance, gratuity, and pension as independent variables while the corresponding motivation, job satisfaction, attraction and retention are the dependent variables. The Positivist paradigm guided this empirical research; which holds the principle that knowledge is arrived at through the gathering of facts that provide the basis of laws. Thus, a quantitative research design was employed. A questionnaire was developed, pilot-tested and administered to gather data on workers’ motivation, job satisfaction, attraction and retention regarding four job compensable aspects, namely: salary, allowances, gratuity and pension. A total of 265 questionnaires were administered and 260 were collected through the early and late response technique. This represents a response rate of 98%. The respondents were selected using the stratified random sampling technique. The data collected was analysed using both descriptive statistics and structural equation modelling. The findings revealed that gratuity and allowance do positively and significantly influence workers’ motivation whereas salary and pension have no impact on workers’ motivation. Likewise, gratuity and pension do positively and significantly influence workers’ job satisfaction while salary and allowance have no impact on the job satisfaction of workers. Further, gratuity and pension do positively and significantly influence workers’ retention while salary and allowance have no impact on the retention of workers. Moreover, salary, gratuity and pension do positively and significantly influence workers’ attraction while allowance has no influence on the attraction of public construction workers in Jigawa state of Nigeria. Consequently, a framework was developed to reflect the factors that emerged for improving the motivation, job satisfaction, attraction and retention of the and equally address the pay disparity in Jigawa state. 67 respondents who participated in the main study were administered a second questionnaire to validate the framework. The subsequent findings revealed that the framework was relevant and could serve as a guide towards enhancing compensation practices and policies in the Ministry of Works and Transport. Thus, this study and its framework offer important policy recommendation to the Jigawa state government such as introducing new or improving the existing compensation packages of their workers.
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<td>Average Variance Extracted</td>
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<tr>
<td>CB-SEM</td>
<td>Covariance-Based Structural Equation Modelling</td>
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<tr>
<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
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<td>CIPD</td>
<td>Chartered Institute of Personnel Development</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GOF</td>
<td>Goodness of Fit</td>
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<td>GSCA</td>
<td>Generalised Structured Component Analysis</td>
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<td>CR</td>
<td>Composite/Construct Reliability</td>
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<td>HRM</td>
<td>Human Resource Management</td>
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<td>JDI</td>
<td>Job Description Index</td>
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<td>NIC</td>
<td>Newly Industrialized Country</td>
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<td>PFP</td>
<td>Person-Focused Pay</td>
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<td>Partial Least Squares</td>
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<td>SEM</td>
<td>Structural Equation Modelling</td>
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<td>UK</td>
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CHAPTER ONE: INTRODUCTION TO THE RESEARCH

1.1 Introduction to Chapter 1

In conducting any study, it is obligatory at the beginning to establish the need for such a research and to clarify its intentions. By so doing, a point of reference is provided against which the outcomes of the research could be measured. In this regard this chapter covers the background; rationale of the study, statement of the research problem, aim and objectives are also clearly defined. A brief discussion on the scope and the operational definition of terms are presented. Finally, an outline of the way the thesis is structured is provided in this chapter.

1.2 Background of the Research

The construction industry is considered as the engine that moves the overall economy of a country (Halpin and Senior, 2012; Ikediashi et al., 2012). Construction has been identified as one of the most significant sectors that contribute immensely toward socio-economic growth especially in developing countries like Nigeria (Hussin and Memon, 2013). Thus, it is a large contributor to the gross domestic product (GDP), and it is often the highest employer of a nation’s workforce (Hussin and Memon, 2013).

The Nigerian construction industry is heavily labour-intensive, which requires mutual management and man's relation to thrive (Fagbenle et al., 2004). The sector employs human resources with various skills, which include operatives, skilled craftsmen, technicians, and professionals such as civil engineers and surveyors. Workers cannot put in effort without expecting a return for their labour; and according to economic theory, the return for labour is reward (Ciarniene and Vienazindiene, 2010). Workers in any industry (including the construction sector) therefore dispense their labour for compensation (Rubel and Kee, 2015).

Total compensation is divided into two categories, namely intrinsic and extrinsic rewards. Intrinsic reward relates to the psychological mind-set that is experienced by workers at work. The factors of intrinsic reward involves achievement, recognition, responsibility, advancement/growth (on the job), and challenging task whereas the extrinsic reward covers pay and benefits which workers enjoy as a result of their contribution to the organisation. Extrinsic and intrinsic compensation can be used to motivate, retain, attract, and satisfy workers to improve productivity in any given setting (Anuj and Anita 2015, Chatzopoulou et al., 2015). This study was conducted specifically on extrinsic compensation in Jigawa state of Nigeria.
In today’s economic time, compensation remains the major factor that causes workers to perform well (Nagabhaskar, 2014). Compensation is considered a basic component of organisational strategy because of its impact on overall performance by motivating workers’ effort, and attracting and retaining high-quality employees (Larkin et. al., 2012).

Compensation has been defined by many authors as the remuneration received by an employee in return for his or her contribution to the organisation (Bhattacharya and Sengupta, 2009). Similarly, Anuj and Anita (2015) stated that rewards/compensation were the employer’s entire available tool that could be used to attract, retain, motivate and satisfy workers. Rubel and Kee (2015) defined compensation as the remunerations which workers obtain from their contributions (of time, effort and knowledge) to the organisation. Compensating workers is one of the human resources management (HRM) practices, which involves pay and benefits (Anuj and Anita, 2015). These elements are defined as follows:

Accordingly, this research defined extrinsic compensation as the packages of pay (salary and allowances) and benefits (gratuity and pension) which public construction workers receive for rendering services to the ministry of Works and Transport, Jigawa State.

Salary can be defined as the payment that a public organisation gives to its workers. Based on the Nigerian Labour Standards Act, Article 2, (Lai, 2011) explained the terms salary allowance, gratuity and pension. Salary is considered a reward for the workers’ labour or for the contributions made to the organisation. An allowance is a monetary benefit other than their salary, which is offered to workers for a specific purpose. Gratuity is a lump sum payment offered to workers who have worked for at least 5-9 years. Pension is a monthly payment made to a former worker after their retirement but only individuals who have paid into a pension fund for ten years are entitled to it.

Compensation schemes are vital in this modern era. In both the private and public sectors, remunerations are the main tools for workers’ motivation (Ajmal et. al., 2015). Despite the difference between public and private sector workers with regards to job features or factors that motivate them, there exists uniformity between them in terms of compensation (Chatzopoulou et. al., 2015). The compensation scheme is a technique used to motivate workers to change their work attitude for the benefit of an organisation (Nagabhaskar, 2014). Carefully designed compensation schemes can thus be used to motivate workers (Safiullah, 2015). Compensation is a significant determinant of job satisfaction. Sarker and Afroze (2014) stated that inadequate remuneration is the major cause of dissatisfaction. Also according to Ajmal et. al. (2015), there is a strong positive relationship between compensation
packages and job satisfaction. In general, compensation practices are a vital tool for any organisation that intends to attract workers to apply for jobs. Rose and Gordon (2010) noted that financial gains have a strong influence on attracting workers. There are various Human resource practices used by organisations to improve workers’ retention (Khan et al., 2014). Compensation plays a significant role in retaining workers (Ajmal et al., 2015; Haider et al., 2015; Nagabhaskar, 2014).

In a nutshell, compensation could be used to gauge workers’ attraction, motivation, retention and satisfaction (Hutchings et al., 2011; Tan and Waheed, 2011; Armache, 2012; Marzuki et al., 2012; Onukwube, 2012; Sinha and Sinha, 2012; Jarkas and Radosavljevic, 2013; Cerasoli et al., 2014; Smith, 2015; Yousaf, et al., 2015).

Extrinsic compensation is a situation when workers receive returns for their labour through financial rewards whereas intrinsic is a situation where workers’ attitudes are geared towards the satisfaction of innate psychological needs rather than to get monetary remunerations (Chatzopoulou et al., 2015). Intrinsic compensation was not considered in this study because extrinsic compensation is the backbone of any employment relationship more especially in an industry like construction, which requires human effort to achieve its objectives (Smith, 2015). Additionally, the efforts and contribution of workers in the Ministry of Works and Transport of Jigawa State are mainly remunerated through extrinsic compensation. Other factors of intrinsic compensation are equally remunerated through extrinsic packages such as recognition and advancement.

Hence, this research focuses on two separate forms of extrinsic compensation of public construction workers in the Jigawa state of Nigeria, which are pay (salary and allowance) and benefits (pension and gratuity).

1.3 Why the Study is Centred on the Construction Industry

Construction involves the engineering of public and private housing, hospitals, schools, industrial buildings, and infrastructure such as roads, bridges, dams, drainages, airports, seaports and power plants (Whelton et al., 2002). Equally, construction activities include the repairs, maintenance and, refurbishment of existing facilities as well as providing services like power and ventilation in new and existing buildings. Construction plays a vital role in the actualisation and realisation of the short- and long-term rural and urban development projects of a given nation (Koskela, 2000; Whelton et al., 2002). The peculiar characteristics of
construction are: the product has to be erected on the client’s suitable location, the valuable assets of the construction industry such as labour, equipment and machinery are movable and not static and its contract transactions with other parties take months or sometimes years to complete.

The construction industry comprises all kinds of firms that engage in the design and construction of buildings, civil engineering and infrastructural projects work (Whelton et al., 2002). The relationship between economic growth and the construction sector is highly significant because economic growth determines the nature of construction works in any nation (Moavenzadeh and Rossow, 1975).

Oluwakiyesi (2011) and World Bank (2010) reveal that between 1979 and 1999, China accrued large economic growth of 6.6% in construction and 3.8% in GDP. In the UK, the UKCG (2012) report signifies the contribution of construction to economic growth. The report clearly shows that construction contributed significantly to the UK GDP (7.4% in 2011) and further stated that one pound spent on construction yielded a total sum of two pounds eighty-four pence in the transactions involved, which subsequently result in an increase in GDP. The UK construction sector, which involves approximately 350,000 companies, employs over 3.1 million people, representing 10.5% of the UK overall employment workforce, despite the highest redundancy in the sector between the 2008-2009 recession periods (UKCG, 2012). The analysis above has tried to reveal the significance of the construction industry to economic growth. Since the construction sector requires people’s effort to achieve its objectives, this research becomes imminent to find out the nature of renumeration that befits construction workers in order to optimise their effort.

1.4 Justifications / Rationale of the Research

Many studies, including Igalens and Roussel (1999); Davidson et al., (2010); Nawab and Bhatti (2011); Anis (2011); Singh and Masugu (2013); and Ahsana et al. (2013) have been carried out on workers’ compensation. These studies have used different factors to evaluate the impact of compensation, i.e. career prospects, training and development, effective supervision, job autonomy, work life policies and varieties of skills, effective organisational commitment, motivation, performance linked pay, intrinsic compensation factors, job satisfaction, working conditions, training, generational change and retention. These previous investigations also differ in the geographical regions and time frame in which they were carried out. The table 1.1 depicts the most relevant studies undertaken by scholars on compensation.
Table 1.1: A Compilation of various Studies on Compensation

<table>
<thead>
<tr>
<th>RESEARCHER/S &amp; COUNTRY OR SECTOR OF STUDY</th>
<th>FACTORS CONSIDERED</th>
<th>FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branham (1957) USA - Civil Engineering</td>
<td>Salary and wages scales, training, promotion and transfers.</td>
<td>Wage and salary schedules, training, promotion, transfers, working hours, holidays, annual leave or vacation, and Other methods cause satisfaction and retention.</td>
</tr>
<tr>
<td>Smith et al. (1969) USA - Public Sector</td>
<td>Reward, supervision, peers, opportunity for advancement, work itself, satisfaction and retention of workers.</td>
<td>To retain employees, reward, good supervision, peers, Opportunity for advancement, and work itself must be given by an organisation.</td>
</tr>
<tr>
<td>Chan and Morrison (2000) Singapore- Health</td>
<td>Shortage of manpower, inequitable reward, intention to leave, retention in an organisation.</td>
<td>Shortage of manpower and inequitable reward are the main factors that influence workers’ intention to retention.</td>
</tr>
<tr>
<td>Fabgbenle et al. (2004) Nigeria Private Construction Sector</td>
<td>Non-financial incentive and Motivation.</td>
<td>There is a positive correlation between worker retention and occupational pension plans.</td>
</tr>
<tr>
<td>Lemieux et al. (2009) USA</td>
<td>Reward in performance-based pay and workers performance.</td>
<td>Reward in performance-based pay jobs is more related or directly linked to individual workers’ performance than a reward system in non-merit pay-based jobs.</td>
</tr>
<tr>
<td>Barzoki et al. (2012) Australia- Corporation</td>
<td>Compensation, job security and effective supervision,</td>
<td>The findings revealed that compensation, job security</td>
</tr>
<tr>
<td>Study Authors</td>
<td>Industry/Region</td>
<td>Factors</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------</td>
<td>---------</td>
</tr>
<tr>
<td>Davidson et al. (2010)</td>
<td>Australia – Tourism Industry</td>
<td>Equitable compensation, working conditions, training, career advancement, generational change.</td>
</tr>
<tr>
<td>Lai (2011)</td>
<td>Taiwan- Fusing Industrial Co.</td>
<td>Compensation management, operation performance and organisational climate.</td>
</tr>
<tr>
<td>Nawab and Bhatti (2011)</td>
<td>Pakistan-Educational Sector</td>
<td>Workers’ compensation, job satisfaction, commitments with regard to organisation, workers’ commitment, retention.</td>
</tr>
<tr>
<td>Zwick (2012).</td>
<td>German-Private Organisations</td>
<td>Compensation, age and sex.</td>
</tr>
<tr>
<td>Ahsana et al. (2013)</td>
<td>Malaysia -knowledge Workers</td>
<td>Compensation, career prospects, training and development, effective supervision, job autonomy, work life policies and skill varieties, affective organisational commitment, retention.</td>
</tr>
<tr>
<td>Sarker and Afroze (2014)</td>
<td>Bangladesh.Textile Industry</td>
<td>Compensation and job satisfaction</td>
</tr>
<tr>
<td>Belias et al. (2014),</td>
<td>Greece - Banks and Credit Institutions</td>
<td>Compensation, organisation, work itself, and promotion and job satisfaction</td>
</tr>
<tr>
<td>Haider et al. (2015)-</td>
<td></td>
<td>Training and development,</td>
</tr>
</tbody>
</table>
Pakistan Telecom Sector. | compensation and culture. | have a positive impact on retention.
---|---|---
Ajmal et al.(2015) Pakistan- Private Organisations | Compensation, job satisfaction, organizational commitment and perceived organizational support. | The result showed that both intrinsic and extrinsic rewards have a positive impact on these variables under study.

The literature summarised in Table 1.1 shows that there is no known study, which has combined and measured the impact of compensation on the four constructs of workers’ motivation, job satisfaction, attraction and retention in the construction sector. Moreover, previous studies have not addressed the plight of construction workers with regards to compensation in developing countries such as Nigeria. Thus, this identified knowledge gap was another reason which necessitated the carrying out of this investigation, more precisely in the public construction sector of Jigawa state in Nigeria.

Further, literature has recorded more critical knowledge gaps which this study has addressed. i.e.:

- There is no known reported study, which has measured the impact of extrinsic compensation on the four constructs of workers’ motivation, job satisfaction, attraction and retention in the construction sector of Nigeria. The most recent study of reward in the Nigerian construction sector was undertaken by Fagbenle et al. (2004). Their study concerned the impacts of non-financial incentives (intrinsic) on bricklayers’ productivity in private sector firms. The respondents for their research were bricklayers on site. The present study is different as it was carried out in the Nigerian public construction sub-sector and on extrinsic aspects of compensation.

- A study on the impact of compensation on the motivation and job satisfaction of private sector employees using exempt and non-exempt workers was undertaken in France fourteen years ago (Igalens and Roussel, 1999). That study employed only two variables which are motivation and job satisfaction. Although that investigation was satisfactory 14 years ago, it equally identified other factors which could be influenced by workers’ compensation (attraction and retention), their findings need augmenting. Consequently, based on what has been discovered from literature, the four constructs (of motivation, job satisfaction, attraction and retention) are reported to be influenced by compensation. Hence, these four variables were selected to be studied in depth.
Therefore, this present research aims to bridge this gap in knowledge by conducting a study of the impact of compensation on the four constructs of motivation, job satisfaction, attraction and retention in the construction sector.

**The Geographical Location of the Study**

**Nigeria**

This research chooses Nigeria as for it has been categorised as a Newly Industrialised Country (NIC). Countries in this category are being projected to experience good prospects in the construction sector (Crosthwaite, 2000). Furthermore, Nigeria has been identified as one of the countries with a high potential for economic growth as well as a specific boost in the construction sector. The Statistic figures by the Nigerian National Planning commission has shows that the building and construction sector recorded a growth rate of 13.5% in 2012, which is attributed to an increase in activities pertaining to building, civil engineering and development of infrastructure undertaken both by government and private sector organisations (National Planning commission, 2012).

Adelekan (2013) lamented that the construction sector in Nigeria is a fast-growing segment of the economy with an estimated growth rate of more than 20% between 2006 and 2007. Nations that are having the fastest growth rate need considerable spending on infrastructure (Jin *et al.* 2007). Thus, construction workers in Nigeria could be utilised in achieving any infrastructural developments projects if they are equitably rewarded.

This research is undertaken within the area or field of compensation management in Jigawa state of Nigeria because organisations and Human Resource managers are persistently seeking for ways to compensate their workforce, which would enhance performance and productivity. Reward is the most effective communicator between organisations and their workers because its effectiveness or shortcomings had remarkable impacts in all organisational success (Schuster and Zingheim, 1993).

This research is carried out in Nigeria, a highly populated African country. Nigeria has a population of approximately 162 million people in 2011 (World Bank, 2011). Compensation (pay and benefits) has a great impact on workers’ productivity when it is based on what employees really want and need (Noe *et al.*, 2004). In Nigeria, construction project and capital projects have been earmarked more than 50% of the nation’s budget in 2016. This amount given is capable of generating employment for many people in Nigeria. Hence, it is worthy to undertake a research in a sector with a substantive percentage of the country’s budget as well as workforce.
Nigeria has 36 states which are shown in Figure 1.1 with Jigawa state highlighted.

Source: Google Maps

Figure 1.1: Location of Jigawa State in Nigeria

JIGAWA STATE

Jigawa State lies between Latitudes 11.00°N to 13.00°N and Longitudes 8.00°E to 10.15°E. The public service in Jigawa state is made up of 12 ministries including Works and Transport, Health, Education, Justice, Agriculture, Economic Empowerment, Finance, Women Affairs, Information, Special Duties, Local Government, and Commerce.

This research is conducted within Jigawa State’s Ministry of Works and Transport which has given capital projects priority through massive renovation schemes, construction of new roads and other types of construction works. Furthermore, construction projects took the largest portion of Jigawa state’s budget amounting to billions of naira, which is statistically more than 50% of its budget for several years (See Appendix J). Several studies have indicated that the construction sector in developing countries like Nigeria is labour-intensive and of course, the return for workers’ labour is reward. Labour management could be defined as the employment of management techniques to labour issues such as planning, controlling and monitoring to achieve organisational objectives. It is thus concerned with both the efficiency and effectiveness of labour. According to Olateju (1992), the main aim of management in a
construction organisation is to ensure that all resources available such as manpower, machinery, materials and money were utilised effectively to achieve a given task. The factors that account for growth rate are: high demand for construction products (e.g. buildings) in all sectors operating in the country, well-articulated government policies for construction activities and above all the focus on infrastructural development by the state and federal governments (Trade Invest Nigeria, 2012). Thus, this study examines the link between reward/compensation and construction workers’ motivation, job satisfaction, attraction and retention in order to find ways of improving efficiency and effectiveness in the performance of public construction workers.

1.5 Statement of the Problem

The Ministry of Works and Transport, Jigawa State is made up of 1,500 staff across six departments: 230 electrical Staff; 365 mechanical; 55 transports (road traffic); 530 building; and 320 civil engineering (Pay roll of the ministry). It is the second largest ministry in terms of total number of staff. Some of the workers are engaged in the state ministry secretariat while others are domiciled at various construction sites in the State.

Construction workers in the area under study are not paid with the same compensation scale as the workers in the other ministries like health, environment, justice and education (See Appendixes E, F, and G). This pay differential adversely affects construction workers’ motivation, job satisfaction, attraction and retention. The development of reward inequality may be mainly a crude estimation in the case of workers at the beginning of their career (Hoon and Parent, 2013). This payment disparity is clearly shown on tables of different salary scales applicable to ministries in Jigawa state (See Appendixes E, F, and G). Hence, a high turnover of workers is recorded because they are not satisfied or motivated and the job is sometimes unattractive due to inequitable compensation.

In Jigawa state the skills and competencies of public construction workers are under-utilised because most works are given to private companies which compensate their workers more. This imbalanced reward generates low motivation, increase in turnover rate, making the sector unattractive (Fagbenle et al., 2010). Furthermore, Fagbenle et al. (2010) suggested that the few workers that remained in the public segment of the construction industry needs to be properly managed to improve productivity.

Relatively, the public construction workers in Jigawa state suffer the same unfair reward as they are not paid on the same salary scale as their counterparts in other ministries mentioned
earlier. The pay disparity in Nigeria seems to permeate the whole country and in particular construction workers in Jigawa state (Since salary scales and the retirement period of public workers is similar across government ministries in Nigeria). Consequently, public construction workers in Jigawa state becomes demotivated, unsatisfied, and unstable, thus their job becomes unattractive.

The current research therefore is conducted to address the above mentioned problems of construction specifically in Jigawa state, with regards to payment and benefits of public construction workers.

1.6 Aim and Objectives of the Research

The aim of this research is to investigate the impacts of compensation on the motivation, job satisfaction, job attraction and retention of public sector construction workers of Jigawa state of Nigeria.

The following are the specific objectives of this research:

1. to review the relevant literature in-depth on compensation management, in order to evaluate its methods, features, impacts on public construction workers’ motivation, job satisfaction, job attraction and retention, and to make a comparison between the UK and Nigerian systems towards identifying disparities and especially identifying areas where the later can benefit from the former;

2. to develop a conceptual framework based on the findings from the literature review in order to establish the relevant research variables and methods that will guide this study;

3. to evaluate various methodological paradigms, approaches and methods in order to establish specifics to collect relevant data from public sector construction workers in Jigawa state of Nigeria in relation to the impacts of compensations on their motivation, job satisfaction, job attraction and retention;

4. to analyse the data using appropriate statistical techniques to find out the relationships between the impacts of compensation on the motivation, job satisfaction, job attraction and retention of the workers studied;

5. to extend the conceptual framework (from objective No.2) into developing and validating a compensation framework applicable to public sector construction workers of Jigawa state, Nigeria on the basis of the findings of objective No.4; and

6. to draw conclusions and make recommendations on various issues to be factored and
considered when implementing a revised compensation package and framework for public sector construction workers in Jigawa state, Nigeria.

1.7 Beneficiaries of the Study

This research is of great significance because it is undertaken to address the pressing needs of public construction workers in Jigawa state of Nigeria. The research outcome or framework to be developed could be used by any other state in Nigeria with similar problems. Similarly, the results obtained were hoped to represent the responses of the construction workers for effective compensation in Africa. Additionally, the developed framework would hopefully address the pay disparity and enhance workers’ motivation, job satisfaction, attraction and retention in other ministries in Jigawa state.

This research would also be beneficial to both academics, especially those who want to build upon it. Furthermore, it is also hoped that the reporting of the results observed in this research would ignite similar study in another context, time and the topic.

1.8 Scope of the Study

The study focussed on the impacts of compensation on motivation, attraction, and retention and job satisfaction of public construction workers in the Jigawa state of Nigeria. Therefore, this research is undertaken on public construction workers’ extrinsic compensation in the form of pay (salary and other allowances) and workers’ benefits (pension and gratuity). This study is limited to the departments of building and civil engineering only.

1.9 Research Methodology in brief

Compensation is the available tool that could be used to attract, retain, motivate and satisfy workers. Many studies have been carried out and found that compensation packages have an influence on workers’ motivation, attraction, job satisfaction and retention. However, there is no reported study on the impact of compensation on workers’ motivation, job satisfaction, attraction and retention in construction sector. Also the previous studies of the subject matter did not address the plight of construction workers in developing countries like Nigeria.

In order to investigate the relationship between compensation and workers’ motivation, job satisfaction, attraction and retention, the research adopted a quantitative approach being the most appropriate approach with regard to this study. Prior to the research survey, ethical approval is sought and obtained from the University of Wolverhampton’s Faculty of Science and Engineering Ethics Committee. The essence of granting this approval is to ensure that the
research conforms to all ethical issues.

The literature review is undertaken using electronic databases, searching national and international journals, bibliographies of relevant papers, citation search, inter-library loan facilities for relevant materials, textbooks and published Ph.D. theses, with the aim of establishing the current body of knowledge on the potential areas of interaction between compensation and workers’ motivation, job satisfaction, attraction and retention for the development of a conceptual framework. Appropriate information secured through the literature search on compensation impacts resulted in the development of the conceptual framework. The data was collected through survey instrument and were analysed using both descriptive statistics and structural equation modelling. Therefore based on the findings from the literature review and quantitative study, an integrated framework is developed and validated with 54 respondents who have participated in the main survey. The developed framework would serve as a guide to the Jigawa state Government on matters relating to compensation policies. Conclusions and recommendations have been stated at the end of this study.

1.10 Summary of Findings, Conclusions and Recommendations

Briefly, the findings in this research revealed that gratuity and allowance do positively and significantly influence workers’ motivation while salary and pension have no impact on workers’ motivation. Further, gratuity and pension do positively and significantly influence workers’ job satisfaction whereas salary and allowance have no impact on the job satisfaction of workers. Likewise, salary, gratuity and pension do positively and significantly influence workers’ attraction whereas allowance has no influence on the attraction of workers. Moreover, gratuity and pension do positively and significantly influence workers’ retention while salary and allowance have no impact on the retention of public construction workers in the ministry of Works and Transport Jigawa state of Nigeria.

Conclusively, this research revealed that gratuity is the main package of compensation which has a significant influence on all the concepts studied (motivation, job satisfaction, attraction and retention). This is due to the fact that the gratuity which is paid upon retirement helps workers to solve long term pressing needs (Section 9.3).

Finally, the current study recommends that remuneration packages such as salary, allowances, gratuity and pension should be increased through a compensation review (at least in every four years) in order to address the pay differential that existed in the state civil service (See
Section 9.5.1).

1.11 Definitions of Operational Terms

The operational terms of this study are as follows:

Attraction: means the process of getting the right people with certain human attributes such as skills and competencies to join the organisation.

Compensation: refers to a pay and benefits packages workers receive for the services rendered to an organisation.

Job satisfaction: refers to the attitude and feelings that people have about their work.

Motivation: could be defined as the driving force which inspires workers (physiologically and psychologically) to undertake one or more actions towards accomplishment of a desired organisational objectives.

Public construction: could be described as a project undertaken by government for the purpose of growth, development and welfare of its citizens, such as road construction, building, bridge, drainages.

Retention: is defined as the continuation of an employment relationship between workers and their organisation because of the provision of welfare packages.

1.12 Organisation of the Thesis

The thesis is structured into nine chapters and illustrated in Figure 1.2 as;

Chapter one contains the general introduction, research background, rationale, statement of problem, the aim and objectives of the research, beneficiaries and scope of the study.

Chapter two is literature review and covers the concept of compensation management, both intrinsic and extrinsic but the focus of this study is the latter, employee pay involving seniority, performance, person-focussed and incentive. Benefits cover gratuity and pension. The chapter compares pay and benefits in the United Kingdom and Nigeria.

Chapter three also covers the critical review on employee motivation, job satisfaction, attraction and retention. The chapter examines the link of compensation with motivation, job satisfaction, attraction and retention.

Chapter four involves the definition of framework, the difference between conceptual and theoretical frameworks, and development of a conceptual framework of the research and its influences on methodology. Lastly, the research hypotheses were developed in this chapter.

Chapter five describes the research methodology employed. The research paradigms and or philosophy, research design, population and sampling, methods of data collection used and
data analysis techniques. The validity, reliability, generalisability as well as ethical issues were also deliberated in this chapter.

Chapter six contains the analysis, results and interpretations/discussions of data collected from public construction workers pertaining to their motivation, job satisfaction, attraction and retention.

Chapter seven covers the integrated framework developed from both literature reviewed and the research findings.

Chapter eight concerns the research external and internal validation as well as improvement of framework due to validation.

Chapter nine covers the summary, conclusions and recommendations of the study, contributions to knowledge. The limitations of the research were also discussed in this chapter.

This structure of the thesis is illustrated with aid of diagram below:
1.13 Summary of Chapter 1

This chapter outlined the general introduction, background, justifications, problem statement, the element of construction industry in Jigawa state, aim and objectives, beneficiaries, scope of the study. The chapter clearly presented the summary of the research outcomes, conclusions and recommendations as well as the methodology employed. Finally, the organisation of this thesis is presented.
2.0 CHAPTER TWO: LITERATURE REVIEW ON COMPENSATION MANAGEMENT

2.1 Introduction to Chapter 2

The current study involves in reviewing literature through various sources such as journal publications, books, thesis and other relevant sources. Therefore, the first objective is to review the relevant literature in-depth on compensation management, in order to evaluate its methods, features, impacts on public construction workers’ motivation, job satisfaction, job attraction and retention, and to make a comparison between the UK and Nigerian systems towards identifying disparities and especially identifying areas where the later can benefits from the former. Thus, this objective is discussed in chapter 2 and 3. Therefore, this chapter focusses on the concept of compensation. This chapter begins with discussions on the compensation management concept involving its features, methods or classifications. Lastly, the pay and benefits of United Kingdom and Nigerian workers were compared.

2.2 Total Compensation

Compensation management is one of the key concepts used in an organisation to achieve effective human resource management (White and Drucker, 2000). Compensation management has a vital role within human resource theory because reward is a key issue in respect of financial and cost management. Furthermore, reward decisions and negotiations bring the human resources aspect into the main organisational function (White and Drucker, 2000).

According to Charles and Gerard (1997) compensation management has been the most sensitive issue of organisational performance since the 1930. Thus, since that time, compensation was considered by organisations as vital in modifying their tradition or culture, and in enhancing employee’s commitment towards achieving high productivity (Needle, 2004). Compensation involved intrinsic and extrinsic rewards, which were combined to make up the organisational total reward system (Martocchio, 2011).

![Figure 2.1: Total compensation](source: (Developed from this Study))
2.2.1 Intrinsic Compensation

Intrinsic compensation reflects workers psychological mind-set that emanates at work. Thus, job characteristic theory highlightened these critical psychological states based on the view that workers’ experiences are influenced when their jobs are placed on five core job dimensions (Hackman and Oldham, 1976):

1. the extent to which employees need to undertake various tasks using a variety of skills, abilities and talents (Skill variety);
2. the extent to which a job could be completed by the employee from start to finish (Task identity);
3. the extent to which a job had an influence on the life of other individual’s activity (Task significance);
4. the degree of discretion and initiative possessed by an employee in deciding on how to conduct his/her various tasks (Autonomy); and
5. the extent of the activity that the employer provided to a worker which includes concise information about job and its performance (Feedback).

A vital study on reward in the Nigerian construction sector was undertaken by Fagbenle *et al.* (2004). Their study looked at the impact of non-financial incentives on bricklayers’ productivity in private firms. The respondents for their research were on-site bricklayers. Thus, the context of the research was intrinsic reward impact on private firm employees. Hence, it is of great importance to study extrinsic reward in the construction sector. Therefore, unlike the research above, this research focused on extrinsic compensation of public construction workers which include salary, allowance, pension and gratuity.

2.2.2 Extrinsic Compensation

Bhattacharya and Senguta (2009) defined compensation as all forms of financial gain, tangible services and benefits, which workers earned for their contribution to an organisation. The compensation scheme played a significant role not only in retaining workers but equally for converting them to be more productive in a given setting.

Ciarniene and Vienazindiene (2010) defined compensation as all the forms of financial or monetary pay, services and benefits that workers get for their contribution to an organisation. Reward could be paid to workers directly in the form of cash (wages, incentives, cost of living adjustments) or indirectly through benefits and services (pensions, health insurance, paid time off).
Pfeffer (1998) concurred with the general notion that workers engage their labour in an organisation for economic gain or reward. Certainly, reward is at the core of any employment exchange, and it serves as the milestone or the most vital factor in any employment relationship (Ciarniene and Vienazindiene, 2010). Extrinsic or financial payments are rewards that directly or indirectly improve workers’ financial well-being (Decenzo et al, 2007). Dessler (2008) defined direct financial reward as the payment given to workers which when received directly improves the workers’ financial position. Direct financial rewards involve wages, salaries, incentives, commissions and bonuses (Dessler, 2008). Bowen (2000) also stated that financial payments referred to those direct and indirect rewards that improve workers’ well-being; they make them financially viable so that they can fulfil their material needs.

There are two main classes of direct financial rewards: base/basic pay and contingent pay. Dessler (2008) stated that financial payments are determined based on equity i.e. fair treatment of employees. This might be internal equity where employees are paid according to the relative importance of their jobs within the same organisation, or external equity where organisations’ workers are paid comparably to workers who are engage in similar jobs in other organisations. Monetary compensation is a reward a worker earns based on their job performance or for acquiring job-related knowledge/skills. This is sometimes called core compensation.

Indirect financial payments are sometimes called employee benefits (Ciarniene and Vienazindiene, 2010). Compensation involves two core elements, namely fixed pay and variable pay, as viewed by (Madhani, 2010):

1. fixed pay - this type of reward is fixed generally, and does not change according to performance or outputs accomplished. Fixed pay reward was typically influenced by the firm’s general pay philosophy and remuneration policies formation; and
2. variable pay - This is sometimes called pay at risk, which varies directly with the level of output produced or accomplished. Variable reward is a one-time income that must be re-established and re-earned each time a worker achieved a pre-determined task.

However, this research found out that compensation is not pay alone but involved benefits, which contrasts with Mahdani’s (2010) compensation classifications.

The concept of exchange is the back bone of any employment relationship. The employment relationships of workers and organisations rests on two issues: pay and benefit bargaining (how much the worker should be rewarded), and performance bargaining (how much work should be performed to earn a reward). Thus, workers are expecting their reward to be equivalent to
contributions made on their job while organisation sees reward as a price for the job done (White, 2000). Nevertheless, financial compensation remained the main reward for the work done to most workers in the form of pay and benefits (Heery, 2000).

Figure 2.2: Extrinsic Compensation

Source: (Developed from this Study)

Workers’ compensation involved pays and benefit packages (Guest and Conway, 1998; White, 2000; White and Drucker, 2000). The pay and benefits are divided into four: salary, allowance, gratuity and pension (Drucker, 2000). An organisation could reward its workers in different ways and at times it could employ more than one method for its workers concurrently (Milkovich, 2008). This is the reason for measuring workers’ motivation, job satisfaction, attraction and retention. Moreover, pay increments depend on the organisational policy, length of time spent and additional qualifications obtained by the worker (Drucker, 2000).

The UK government maintains that compensation has a direct influence on public sector workers (White and Drucker, 2000). Nevertheless, the effectiveness of compensation depends on the context, nature of work, sector and the economic trend of a given country such as its inflation rate. Hence, compensation could have a positive impact on the public sector workers in the UK but could be ineffective among Nigerian public sector workers. The survey conducted by CIPD in the UK in 2003 revealed that reward policies were more effective in the private sector than the public. However, Larkin et al. (2012) argued that a compensation scheme which is more effective would be used most frequently by organisations. Thus, any compensation scheme could be effective in any sector be it private or public as long as it is designed and fitted well to the setting of implementation. Moreover, no compensation policy could be effective for more than five years without review, as stated by Wright (2004). This statement was made based on the UK or European context, but in African countries like
Nigeria the reward increment is not based on the rate of inflation. Sridevi (2010) stated that many theories of management have shown that when workers were paid well, they tend to put more effort into their work.

Workers are paid based on some certain elements called compensable factors (Waters and Cox, 2011; Martocchio, 2011):

1- skills - this covered experience, training, education and ability as evaluated by the job performance criteria;
2- effort - the degree of mental or physical efforts used in performing a given task;
3- responsibility - this describes the extent of accountability needed for the job performed by a worker; and
4- working conditions - these included the physical environment, risk and danger involved in the job like heat, cold, suffocation and vibration.

Despite the fact that there are numerous compensation packages available for organisations or employers, this research specifically looked at the most frequently used reward packages in public construction organisations in Jigawa state of Nigeria. These compensation packages involved basic pay (salary); contingent pay (allowances); and benefits in the form of gratuity and pension (Martocchio, 2008).

2.3 Compensation of Public Construction Workers

Compensation had a strong impact on employees’ performance or productivity (Markos and Sridevi, 2010). Consequently, workers are primarily working for monetary gain in any organisation (Pfeffer, 1999). Wages and salaries are most frequently used interchangeably even though the terms have a slightly different meaning in common usage. Wages normally mean hourly rate pay, in which pay is calculated according to the number of hours worked. Wages are usually used for production and maintenance of workers i.e. blue-collar workers, particularly in developing countries. On the other hand, salaries are calculated on a weekly, monthly or annual basis, which is designed to pay white-collar workers, or professional and executive employees. Thus, salary is also called basic pay and allowances. In the subsequent analysis, wages and salary might be used to denote compensation. Benefits are supplementary compensation packages for workers beside the basic salary as a result of certain circumstances like retirement; health; and transfer. These workers’ benefits are remunerated both in the developed and the developing countries such as the UK and Nigeria respectively.
The significance of the subject matter of compensation emanates basically from the fact that it provides income to workers and constitutes an important cost item for employers. Therefore, workers’ remuneration serves as a tool for satisfying wants and needs in a given setting.

2.4 The Goals of Compensation

The compensation scheme is designed to achieve certain goals:

1- compensation is designed to attract, motivate and retain workers. However, organisational remuneration packages are the major attracting factor to potential workers or recruits. Therefore, it serves the function of allocating people among organisations based on the perceived attractiveness of jobs expresses by compensation packages (Torrington et al., 2009);

2- labour cost could be controlled with a sound compensation scheme, which involved job evaluation, salary scales, and workers’ classification procedures (Amrstrong, 2002);

3- compensation is used to build workers’ loyalty and commitment to the employer. Therefore, it increases some factors such as job satisfaction and at the same time reduces rate of turnover, absenteeism, complaint and grievances, which could arise when pay levels are not competitive or adequate. Reward served as a satisfier in this context because of its ability to satisfy various workers’ needs (Armstrong, 2002); and

4- finally, wages and salaries are offered to enhance the morale of workers to improve their productivity. Based on this objective, compensation is viewed as a motivator by organisations (Ajmal et al., 2015).

2.4.1 Methods Used to Determine the Compensation of Employees

Gomez et al. (2012) stated that workers’ compensation is the single most essential cost in most organisations because in some manufacturing organisations it engulfed 60% of the total cost. However, this was even higher in some public organisations and means that the effectiveness with which compensation was allocated could made a considerable difference in winning or losing competitive advantage. In the same vein, Dessler (2008) stressed that formulating a good employee compensation plan is vital to both employers and employees. He continued by stating that an ineffective compensation plan may result in a wage rate being too high. Hence it is capable of creating unnecessary costs whereas paying less may warrant inferior worker quality and many workers leaving the organisation. Thus, internally inequitable compensation rates lower workers’ morale and cause persistent complaints from workers.

The most vital part of any compensation plan has to do with the relationship that exists between the reward and the worker (Nelson and Spitzer, 2003). For that reason, the
formulation of compensation in any place of work involves devising a cost-effective pay structure which would attract, motivate and retain workers (Decenzo et al., 2007). Armstrong (2008) opined that the priority of compensation or reward is to motivate workers to secure their commitment and engagement to an organisation.

Dessler (2008) revealed that there are numerous factors that influence the design of any compensation plan. These consist of legal considerations; union influences; company policies; and competitive strategic objective, internal and external equity. To fully understand how any organisation determines its workers’ compensation plan, there is a need to look at how workers’ compensation plans are classified, and the factors used to determine the compensation plans. Similarly, the process of building the compensation plans must be evaluated.

### 2.5 The Major Determinants of Workers’ Compensation

Numerous factors influence base pay. These comprise legal factors (government regulations); union (staff labour relations); company policy (company strategic aims); and equity (internal and external/market comparisons) (Dessler, 2004). Chruden and Sherman (1980) indicated that other additional factors include worth of the job and individual bargaining power.

National minimum wage was introduced in the UK in April 1999. Its function is to set minimum hourly pay rates for workers. The minimum rate is considered a ‘safety-net level’ and there is no differentiation on the basis of region, sector, workers’ hours or pattern. Metcalf (1999) articulated that national minimum pay rates are relative to the country of operation. Ingram et al. (1999) viewed that reward determination is more relative to external factors. This assertion was supported by CBI data, which revealed that external factors such as rate of inflation and comparability with others influence reward determination in a given setting. Workers’ reward could be determined through collective bargain or government statutory control of people’s income.

According to classical labour market theory, in a competitive environment, neither the workers nor the organisation have control over reward but the labour market. The relative worth of each job or worker depends on certain external influences such as market value or social value (White, 2000). However, based on the Nigerian context, Ojo (1998) stated that the major factors that determine compensation in both private and public sectors include: labour market; going rate; ability to pay; cost of living; government; productivity; and labour union. Therefore, this study discussed them one by one as follows:
The labour market

The interplay of demand and supply of labour is the major determinant of compensation. This simply means that labour market conditions still have a significant impact on the levels of compensation under certain situations. Moreover, due to imperfections in the market caused by institutional, administrative, political and socio-cultural factors, the role of the price mechanism is minimized, especially in developing countries such as Nigeria. Thus, during labour shortages, it might be necessary to boost certain pay rates to attract and retain workers.

Going rate

The standard rate or comparable could be referred as wages and salaries paid for comparable work by other institutions in the labour market or in the same industry. As viewed by Rigors and Myers (1965), salary/wage paid by other organisations in the same labour market are the major factor in determining the fixed rate of an organisation’s compensation level.

Ability to pay

The ability to pay or financial condition of an organisation determines whether it could pay above the standard rate or not.

Cost of living

The cost of living index or changes in the consumer price index measures changes in the monetary cost of a given list of goods and services consumed. The cost of living is a major factor in the adjustment of wages; labour unions commonly used it while employers normally accept high inflation trends as a factor in a wage review. In many developed and developing nations, many organisations have adopted some systematic procedures for adjusting wages (Long, 1984).

Government

Worldwide, the invisible hands of government have a profound impact on compensation determination. The government as the employer of labour and as a ‘protector’ of society through legislation control and influences workers’ compensation.
**Productivity**

Labour productivity is one of the most important variables in determining workers’ compensation. Whenever salaries/wages are based on piece rate, then labour productivity becomes the sole determinant of pay adjustment.

**Labour unions**

Today, trade unions influence workers’ compensation by securing a compensation increase and other working conditions through collective bargaining (Fajana, 1986; Ojo, 1983). However, in Jigawa state public sector, the in collaboration with labour unions determines workers’ compensation.

### 2.6 Compensation plans

The literature review in this research reveals that there are five main compensation plans or scheme available for organisation or employers. These are: seniority; performance; person-focused; and incentives and benefits. These packages are offered to workers depending on the sector, organisation, situation, context and nature of the work. Organisations pay workers based on the number of years spent in service, based on performance or achieving a desired objective, based on skills and other competencies acquired, and achieving a specific target. Furthermore, organisation pay workers benefits such as pension in order to maintain efficiency and effectiveness. This study in this regard focused on seniority based pay and workers’ benefits being the most relevant plans or schemes in the Ministry of Works and Transport, Jigawa State. These plans were throughly examined in this chapter (See Section 2.8.1.1).

#### 2.6.1 Factors Determining a Compensation Plan

Whether employers used a job-based or skill-based compensation plan, the main purpose of the plan is to facilitate how an organisation realises its strategic objectives of attracting, motivating and retaining competent workers (Decenzo et al., 2007; Gomez et al., 2012). It is for these reasons that the plan is designed to fit the organisation’s unique features and setting (Gomez et al., 2012). They further stated that the main factors to be given more emphasis when determining a compensation plan by employers are internal versus external equity. This referred to the perception of the plan to be fair within the organisation and relative to what other organisations are paying (internal and external equity). Another is the flexibility of the pay; this describes whether the reward is fixed or varied or whether the employee’s performance is taken into consideration. Another factor is whether the plan rewards for doing the task or for membership value placed on the job versus individual skill or whether workers
are differentiated or whether they are all treated equally (egalitarianism) or not (elitism). The motivation method is another factor which describes whether the plan is motivated with financial inducement or not. Equally, adequate communications to the workers about the compensated policies are another factor for compensation scheme determination. Lastly, the decision-making process in the organisation is vital in determining reward be it centralised or decentralised.

2.6.2 The Determination Process of a Compensation Plan

Determination of effective worker’s compensation plan consists of five stages namely: salary survey, job evaluation, grouping similar jobs into pay grades, pricing each pay grades and fine-tuning pay rates (Armstrong, 2008). Salary survey has to do with undertaking a survey to observe what other organisations pay for comparable jobs; this helps to ensure that there is external equity in workers’ pay and benefit (Dessler, 2008). This is also called benchmarking and is the act of knowing the rates of pay in the labour market for comparable jobs. This facilitates decisions on the level of reward to be given by employers (Armstrong, 2008). A sound salary survey offers specific wage rates for specific jobs and a salary survey could be undertaken formally (written questionnaire) or informally through phone calls, internet check or newspaper adverts. Salary surveys published by consulting firms, professional associations or government agents help organisations in implementing a compensation scheme.

Job evaluation is a systematic process of defining the relative value(worth)or size of jobs within an organisation in order to create internal relativities and provide the basis for developing an equitable grade structure, managing job and pay relativities (Armstrong, 2008). The process engages comparing the effort needed, responsibility and skills, and this helps to ensure internal equity. The process ultimately leads to a wage or salary hierarchy as the jobs that need greater qualifications, more responsibilities and more complex jobs are paid more than jobs with lesser requirements (Dessler, 2008). Job evaluation does not determine the level of workers’ remuneration directly and was based on the analysis of jobs or roles which subsequently leads to the development of job descriptions or role profiles in an organisation (Armstrong, 2008).

Job-grouping entails grouping same jobs into pay grades; it is the act of turning job evaluation results to pay grades. A pay grade consists of or refers to the allocation of rewards in accordance to the established grades provided by job evaluation (Dessler, 2008).
Pricing each grade could be described as the process of designing a wage curve. A wage curve depicts the relationship between the value of a job and the reward offered for the job (Dessler, 2008). Fine-tuning pay rates involved designing pay ranges and correcting out-of-line rates (Dessler, 2008). Pay ranges are series of steps or levels within a pay grade, normally based on years spent by workers in service. This pay range has been observed in Jigawa state public sector.

Armstrong (2008) viewed pay grades and pay structures as vital aspects of a compensation plan; when effectively developed and maintained, they offer a logically designed framework within which an organisation’s reward policy. They help the organisation to determine where jobs should be allocated in a hierarchy, define pay levels and the scope for pay progression, and they come up with the basis upon which relativities could be managed, pay equality actualised, and show how the process of monitoring and controlling the implementation of a reward scheme could take place. A grade structure could also be used as a tool to the organisation for communicating the career and pay opportunities available to its workers.

The Jigawa state public service is not private, therefore it does not consider any salary survey or pricing of jobs. The job evaluation is clearly stated in Jigawa state’s condition of service but is not a priority as far as promotion is concerned.

Therefore this research was undertaken on a compensation scheme which involved pay grades and pay structures because in the public sector all jobs are categorised in their hierarchies and the scope for progression. The ways through which reward can be monitored and controlled is also being provided by the state. The rewards were given in Jigawa state public service based on the grade level and the scope of progression to the next grade level through promotion.

The following section gives this study a vivid description of pay structure and its types in any compensation policy formation.

2.6.2.1 Pay Structure

Pay structure refers to pay levels, ranges, scales or grades designed for work or roles that should be treated equally (Wright, 2004). Pay structures and systems of pay are socially determined and influenced by the context and cultures of the area in which they operate.
Hence, they could change over time (White and Drucker, 2000). The following are recognised pay structures:

**Spot rate or rate for the job:** The research conducted by Chartered Institute of Personnel Development (2003) showed that individualised salary rates is the most applicable pay scheme used to remunerate senior managers and manual workers who have no additional pay apart from their basic pay unless in the event of a general pay increase.

**Graded pay structure:** This is the structure which demonstrates that grades of similar jobs involving common worth are placed in the same pay range. Traditionally, UK civil servants are paid by grades. Thus, organisations whose policies focus on hierarchy and status tend to employ a graded structure into their main compensation structure. This grade system is not common among profit-making organisations (CIPD, 2003).

In reality, various graded structures are generally having a narrow span than more flexible ranges, with maximum pay for each grade such as 20% above minimum. The pay grades system gives room for pay progression based on service years or performance achieved. The graded pay structure allows organisations to control cost and it is transparent. The problems of graded pay structure are: it provides little control in coping with special salary market pressures and can lead to ‘top of scale problems’ (up grading claims).

**Pay Spines:** This involved a series of incremental points, ranging from the highest paid to the lowest paid worker. This also is commonly used in the public sector and sometimes voluntary organisations. It is used in local governments in the UK as an example. The structure is employed in the harmonised pay systems for the NHS under the agenda for change agreement.

**Broad-banded pay:** This is employed by the organisations when flexibility is needed. Thus, in such arrangements, range pay in a band is markedly wider than a traditional graded system. This type of structure is set in relation to salary market assessments. In fact, it is applicable to white collar, senior and middle line managers.

**Job family structure:** This involved separate pay arrangements for occupational grouping or families. Normally, organisations set a distinct structure for occupations which are paid higher salary in the labour market due to competition with regards to attracting workers into
their organisations. This pay accounts for 60-70% of the total reward of workers (Wright, 2004).

This study focused on the pay structure which is not common among profit-making organisations and more applicable in Nigerian public sector popularly known as graded pay. This type of pay grade is suitable in the sector whose policies focuses on hierarchy and status like the Jigawa state public sector where pay progression is based on time spent not performance. The element of pay spines have been observed in Jigawa state public sector because pay is increased yearly. This is similar to what is obtainable in the UK public sector.

2.7 Features of Compensation

Worldatwork (2007) stated the following features of compensation that must be followed by any organisations which intend to motivate and retain workers. These are:

1- internal equity - the degree of how organisation regards each job in relation to another;
2- external competitiveness - the degree of pay structure in the organisation when compared to what other organisations or competitors are offering to their workers.
3- affordability: the extent of how compensation costs relate to the organisation so that pay could be viable;
4- legal defensibility - the compensation programme must strictly comply with laws governing reward and should be based on equity;
5- understandable/saleable - this stated that it must be communicated clearly to parties involved;
6- efficient to administer - the programme should be simple to maintain and simple to execute. The distinction should be made between what was best programme and what is efficient, effective and easiest to implement;
7- safe guide organisational resources - the programme should compensate employees’ performance with equity and the programme should reflect both individual and company performance;
8- flexibility - pay programme was what an organisation used as a competitive weapon in the labour market, hence it must be capable of changing to suit the situation without demanding redesign; and
9- meets organisation’s unique needs - to some extent, each organisation was unique within the industry of operation or geographical location in a way that the unique features of an organisation must be taken into consideration when developing compensation programmes, especially pay structures.

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This study observed that features such as internal equity, external competitiveness, flexibility, organisation unique need and understandability are not employed in Jigawa state public organisation. The Jigawa state condition of service did not captures these factors because the sector is mainly established not to make profit. Infact these mentioned factors are attributed to profit making industry. This chapter noted that extrinsic compensation involved pay and benefits. Thus, the next section discussed pay and its classifications.

### 2.8 Basic pay

Base or basic pay of workers is one of the main aspects of workers compensation due to its importance in sustaining workers in a given setting. Workers normally engaged in any employment relationship with expectation of getting pay. Base/basic pay, also known as membership-based reward, could be defined as the pay rate which is offered to workers relative to the job grades or based on necessary skills required on the job (Armstrong, 2008). Further, Armstrong (2008) revealed that basic pay is usually expressed in the form of a normal rate and allowances. The normal rate could be hourly, weekly, monthly or annually while the allowances may be overtime, shift working or increased costs of living adjustment. DeNisi and Griffin (2008) referred to salary as an income paid to workers monthly based on performance or post held while wages could be defined as hourly reward paid to operating workers based on the time worked. However, the current study defined basic pay as monthly stipend given to workers for the contribution made or work done.

Basic pays are components of compensation in which their absence de-motivates workers and their presence might not necessarily create motivation as they expect to get it from the work done, time worked or for their efforts put in place. However, it is vital to recognise that base pay facilitates the achievement of the internal and external equity to avoid de-motivation (Dessler, 2008). Drafke (2002) concurred that money could improve performance but this was usually limited to short-term increases in performance only. DeNisi and Griffin (2008) opined that normally higher levels of pay and more attractive benefits lead to greater satisfaction. He further stated that when workers are not satisfied with their pay, they tend to lower their performance and morale. Clegg and Birch (2002) also agreed with saying that pay peanuts and you would get monkeys. They also indicated that if you demonstrated the fact that you value people by paying a reasonable wage then they in turn would reciprocate the same gesture by putting more efforts to achieve high performance.
The emphasis of this study is placed on salary and allowances which are paid monthly in the Jigawa state public sector.

2.8.1 Types of pay
Workers’ efforts or contributions are remunerated or paid based on seniority, performance, person focused, and incentive.

![Diagram of Compensation Forms]

Figure 2.3: Forms of compensation

Source: (Developed from this Study)

2.8.1.1 Seniority Pay
Seniority pay compensates workers according to the time spent in service, in that pay increases with the number of years of service. This payment plan is based on the assumption that workers become more productive to the organisation with time, and might likely quit if their pay was not increased over a given period of time. This idea was initiated in human capital theory with an assumption that workers could be rewarded for learning certain skills or based on their experiences (Becker, 1975). Thus, seniority pay could be used to compensate workers for learning new skills or desired behaviour which would help them to be more productive.

Cayer (2003) stated that the following features are observed in any organisation that uses seniority payment as a collective-bargaining agreement, which determines the kind of seniority pay system adopted in the workplace. Seniority pay is the yardstick of payment in almost all jobs that involved variables such as: scheduling; transfer; termination of appointment; reward and promotion policies. Seniority might tend to be a major determining factor in the choice of one worker over the other when it comes to issues like transfer and promotion. The seniority pay comes as a result of political pressure, especially public sector seniority pay (Cayer, 2003). The pay increase is automatic in seniority-based pay. Performance assessment applied under this seniority-based pay is more subjective rather than objective. It is difficult to measure job performance accurately in this type of pay system since some aspects are automatic like salary increase. A good example of this type of pay subsists in Jigawa state of Nigeria.
Nowadays, the majority of unionised private and public organisations still base their salary on seniority, for instance period spent in service. Seniority pay system depended on the length of time spent by workers in service (Thompson, 2000). Therefore, level of progression in the public sector is based on the length of time spent. Thus, when workers’ skills and potential outgrow the limit of the grade, usually there is an opportunity for promotion to a higher or next grade (Thompson, 2000).

**Effectiveness of the seniority pay system**

No empirical research has shown that this plan is effective or not (Martocchio, 2008). Workers may regard seniority pay as fair and equitable because pay increase is based on seniority, grade level attained through service years spent in an organisation. Therefore, this mode of pay enhances a greater cooperation among workers. Employers are not likely to favour any employee since the pay increase is automatic and based on the time spent in service. Organisations also benefit from seniority pay because it enhances the administration of a pay programme since it is characterised as having too many bureaucratic bottlenecks or favouritism (Worldatwork, 2007). However, many studies have recommended that the individual wage increase should be split into two classes: 1- the seniority aspect, and 2- the match quality or experience aspects. Hence, those workers who are well suited to the job normally retain their employment longer within an organisation (Topel 1991; Dustmann and Pereira 2008).

**Design of seniority pay**

The workers start up with a particular designed pay rate, and subsequently enjoy pay increments at regular intervals. Jigawa state civil service experienced a pay graded structure where salaries are increased annually. The increase in payment is normally added to the present pay levels. Hence, with time, workers would reach the maximum pay step if not promoted to the next grade level and subsequently will no longer enjoy this kind of reward. The organisations that advocated this type of pay assumed that most workers would get promotion into the next grade as when due. In the Nigerian public sector context, this type of pay is applicable in federal, states and local governments. However, Hoon and Parent (2013) indicated that in any organisation that adopts seniority pay, to a certain extent give up the idea of designing reward to productivity or performance. Two related motives have been observed for this assertion. The first is that the cost of executing a pay-for-performance-based scheme might be prohibitive. Secondly, the underlying allocations of workers’ performances are not
distributed to start with, so the benefits of separating the workers outcomes are moderately constrained.

**Fitting seniority pay with competitive strategies**
Seniority pay has no space in the competitive strategies of companies because workers on the same pay band earn the same amount irrespective of their contributions and performances. The essence of skill improvement is lacking in applying this plan. So companies that want to withstand competition would automatically abandon seniority practice. These human resource issues require organisations to adopt a new compensation strategy. In fact, these influence organisations to form a compensation system that rewards workers for learning the related skills or based on their contributions. Hence, seniority pay does not meet these mentioned requirements.

Numerous scholars have tried to investigate the postulation that remunerations should be increased with time spent as against productivity (Zwick, 2012). He further stated that pay increment in seniority compensation scheme in Germany is relative to the organisation’s discretion (voluntary decisions).

However, one reason is apparent that the seniority plan suffers a blow in profit-making organisations because of stiff market competition, rapid technological advancements and shortage of skills. Therefore, the seniority-based system is more applicable in the public sector, which exists and functions to provide services to the people rather than profit-making. Thus, there is a strong indication that organisations with a strong seniority philosophy could hire the service of another ministry’s workforce because of their working experience (Zwich, 2012).

This study focused on the compensation system employed by Jigawa state to its workforce which was popularly known as compensation based on seniority. The seniority system is more applicable in the public sector which is established to provide services to the people rather than profit making. Therefore, this research chose to study seniority pay being an applicable plan used in the area understudy (Jigawa state) to compensate workers’ labour or contributions.

2.8.1.2 **Performance Pay**
Vroom’s (1964) expectancy theory, in Uen and Chien (2004) viewed that there is a strong relationship between compensation scheme and workers’ performance or productivity. This means an effective compensation scheme motivates hard work so that good performance could be done for workers to earn lucrative rewards in return. Compensation could be employed to
motivate workers and to enhance performances in the organisation. Performance-related pay is one of the main features of the British compensation system (Thompson, 2000). In fact, the period when employees are paid the same rate for the work done with little or no performance considerations has gone (DTI, 1996).

Performance pay is a form of compensation scheme which covered bonus pay, commissions and piece rates. Lemieux et al. (2009) reported a study, using the Panel Study of Income Dynamics (PSID) data and found that reward in performance-based jobs were more related or directly linked to individual workers’ performance than a reward system in non-merit pay-based organisations.

Pio (2007) concurred that performance-related rewards are more equitable than traditional seniority-based systems. The literature of performance pay is very wide. Government New Earning Survey (GNES) defined performance pay as ‘pay by results (PBR). Those output-related schemes are not being used nowadays unlike in the 1970’s when the term was coined. Currently, only few organisations consider their bonus and performance pay as PBR. Thus, various performance-based pay schemes used a mixture of criteria, hence complicating the picture more. Brown and Armstrong (1996) defined the term contribution-based pay as an umbrella term, covering all types of performance and competency-based pay. Hoon and Parent (2013) defined performance pay as one in which pay for output produced is earned at any time when a worker achieved a predetermined standard at work.

The major differences in all literature are relative to schemes that offer one or two of the following:

1. an incentive given by the organisation based on the promise that whenever performance reaches a certain increase rate; and
2. a payment for the previous performance which may not have been agreed in advance.

Incentive scheme generally offer bonus payment in return for certain increase in output, profit and other performance-related targets. Performance based pay typically expresses workers’ performance payments that are consolidated into basic salary or sometimes paid as a one-off payment or payment based on the past performance appraisal.

Lazear (1986) observed that the motive behind using performance pay is because at the point of employment both the employees and employer could objectively measure capability. This
can lead to a mis-match between what the employee is capable of performing and the expectations of the employer. Linking compensation to performance could reduce this mis-match and raise overall performance. Nevertheless, it is very costly and difficult to initiate effective performance-pay scheme into an organisation. Thus, an organisation faced a trade-off between the cost of initiating such a scheme, and it is significant with regard to the improved match quality.

There is a remarkable usage of performance pay jobs nowadays as argued by Lemieux et al. (2009). They further stated that in a fixed-wage job, a minimum level of contribution is contractible while in a performance pay job, the organisation can apply correct output measure. This is an indication of the employees’ capability through executing or employing a costly evaluation plan. Parent (1999), Lazear (2000), Paarsh and Shearer (2000) stated that pay performance schemes have been identified as a method of improving workers’ morale. Brown and Session (2003) supported this by stating that workers choose organisations where productivity is rewarded in such a way that it increases workers’ morale. Gomez et al. (2012) believed that for an organisation to attract, retain and motivate workers, it must reward workers based on their performance.

Performance pay programmes view that workers’ reward in a given period should be determined at least in part by the performance differences achieved on the job (Peck, 1984). Performance pay plans is used more frequently in the private (profit-making) sector than the public sector. Hence, workers are constantly rewarded based on their performances. Moreover, when pay is increased based on performance, it leads to desirable outcomes like motivating future performance and retention of workers (Kessler, 1994). Pay by result (PBR) motivates workers and at times this form of pay is applied on workers incentive/variable pay (Drucker, 2000).

Williams (1998) and Thompson (2000) stated that organisations normally adapt two techniques in measuring workers’ performance. The first measures workers’ outputs or units produced (the ‘what’ of performance). The second measures workers’ behaviour at their place of works (the how of performance). Organisations depend on both objective and subjective indicators of performance to arrive at what the employee would earn as a performance pay increment. As a principle of merit pay, supervisor offer performance based pay increase to employees on a subjective appraisal basis. These measure the employees’ performance through observation and performance appraisals respectively (Latham and Waxley, 1982). According to compensation
professionals, the effectiveness of such measurement on workers is that the organisation should offer a high reward for achieving higher performance (Mottocio, 2007).

The success of a performance pay programme depends on workers’ understanding of what to contribute to earn a pay increase (Coyle-Shapiro and Conway, 2004). Despite the fact that it is a popular system of pay, although it is not applicable to all private firms, it is applicable in some part of public sector (Beadle et al., 1995).

**Incidence of individual salary-based performance pay**

The individual performance-related pay (PRP) became popular in the 1980s because it placed more emphasis on individual, unitarist relations (Lewis, 1991). Wood (1996) argued that despite criticism of performance pay practice, some organisations still adopted the scheme up to the 1990s and yet no evidence has been reported that the scheme is no longer relevant (Randle, 1997; IPD, 1999). The survey conducted by IPD (1999) on public and private sector revealed that 43% of organisations in the UK make use of individual performance pay. Other surveys argued that the IPD survey was biased in sampling because managers who receive individual performance pay as their pay package were included. A well-organised survey was undertaken by Workplace Employee Relations Survey (WERS) and discovered that only 11% of organisations in the UK used individual performance pay for non-managerial staff (Cully et al., 1998). This conclusion was supported by Camerer et al. (2004). He further stated that based on the observations, few organisations used individual pay for performance. Despite strong empirical evidence, it was still found out that performance pay had an influence on workers’ efforts (Paarsch and Shearer, 2000).

**Categories of Performance Pay**

The performance pay has different forms as follows:

**Salary-based (consolidated):**

1. individual PRP, possibly related to appraisal or competencies; and,

2. some skill-based pay systems might be included in the definition of PRP.

**Additional to basic pay/salary:**

1. Bonus - based on output only.

**Piecework, measured day-work, Productivity bonuses:**

1. Bonuses – based on a mix of indicators, e.g. output and/or profit/group performance, quality indicators.
Some executive bonuses, divisional performance bonuses, team bonuses, sales commission/bonuses, quality bonuses are in this category:

1. profit sharing – cash-based, not share-based scheme, e.g. all employee end of the profit bonuses, executive bonuses related to simple profit-based calculations; and,
2. gain-sharing- must include strong employee involvement (Wright, 2004).

Mixed views on performance pay
Performance pay is a complex phenomenon. Line managers argued that PRP is an equitable and effective method of pay (Harris, 2001). Furthermore, Cannell and Wood (1992) conducted a survey and found that personnel managers believed in performance pay despite the fact that there is no evidence of its effectiveness. Thus, managers and reward professionals considered PRP a vital tool for motivating workers. In the same manner, they also used individual performance pay in building performance scheme. IPD (1999) conducted a survey and discovered that personnel practitioners still believed in the effectiveness of performance pay more specifically in the private sector. Public sector workers were less supportive of PRP than their private sector counterparts. Brown et al. (1999) stated that the problem of PRP is not only conceptual weaknesses but also poor management because some scheme objectives are not clear, but are badly designed and poorly implemented in the organisations. Towers (1997) survey found that individual performance is presumed to be the most crucial factor that managers used to determine pay increase in workplaces.

Possible limitations of performance pay
The performance pay system has some limitations which make it less credible to employees such as the inability to differentiate among performers, poor performance measures, supervisors’ biases towards assessing the job performance of workers. Others are: lack of open communication between management and workers, undesirable social structure, factors other than rewards packages which are more appropriate than performance pay. Undesirable competition and little motivational value is another factor because of different opinions between workers and the organisation on what is large enough.

Social comparison theory reveals a considerable shortcoming related to the application of individual pay-for-performance systems with regards to its postulations that individuals estimate or measure their own abilities and opinions in comparison to others. Psychologists for a long period of time proposed that individuals have an in-built desire for ‘self-evaluation’ by measuring their abilities and views/opinions (Festinger, 1954 in Larkin et al., 2012). However,
in reality, non-social standards were generally lacking for such measurement; hence individuals normally compare themselves with others as a standard. Commonly, people seek and are influenced by social comparisons with individuals who are similar to them with regards to their own work (Larkin et al., 2012). Larkin et al. (2012) further argued that psychological factors bring out the pitfalls of using pay for performance, therefore, organisations should employ team-based, seniority-based and flatter reward scheme as a substitute. A good example is the hourly rate pay or salary of workers.

This type of compensation is more applicable in the private (profit-making) than the public sector as mentioned earlier. The focused of this research was on the public sector rather than the private. Hence, performance pay was not a suitable or appropriate area of investigation in this study.

2.8.1.3 Person-Focused Pay
Effective organisational task achievement depended on individual performance. This supported the notion that rewards should be given to a worker, rather than to the work done or performed (White and Drucker, 2000). Person-Focussed Pay (PFP) mainly compensates workers for procession of job-related competencies such as knowledge or skills rather than required job performance. Heery (1994) stated that this new pay plan is being employed by organisations to reward competencies (specific skill and knowledge) unlike the old pay package where production or job-related aspects were given more emphasis (performance pay). The effective person–focussed pay programme relies on well-planned training programmes. Consequently, organisations incur additional training costs, and it takes time before benefiting from such training investment. Organisational inability to precisely measure the monetary value of skill and knowledge acquired by workers is another setback of the plan.

Landsberg (2012) categorises person-based pay system as competency and skill based. These are:

1. competency plan - this compensated managerial service or professional workers for learning a particular knowledge. Moreover, competency-based pay is a system of reward which compensates workers for acquiring job competencies and qualifications (Hastings, 2000); and

2. Skill-based pay - this is a skill-based reward which is offered to a worker for acquiring job-related skills. Sometimes it is called a payment given to change behaviour which is likely going to help workers in adapting to new desirable work attitudes (White and Drucker, 2000). For example, when a contractor hires the services of carpenters and
reward them based on skills, the carpenters receive the pay increase because they have mastered a new or updated skills.

Competency and skill-based payments motivate workers to improve their knowledge and skills. They are more appropriate in traditional job evaluated plans due to their focus on organisational hierarchy and rigidity (Wright, 2004). Moreover, in skill and knowledge-based payments, workers are remunerated based on the range, depth and kind of skill or knowledge they can offer to increase productivity at work. Therefore, workers’ performance is difficult to evaluate or measure based on observing their behaviour (Wright, 2004).

Person-focused based pay has been employed by organisations in the UK around 1980s and 1990s (Kessler, 1994). Person-based compensation is more appropriate and suitable than job-based pay in modern knowledge organisations (Lawler, 1995). Sometimes companies used both competency-based pay programmes with the traditional performance pay plans by increasing workers’ pay due to the way they demonstrate competencies effectively. Contrary to that, in the UK the PFP reward could be earned upon completion of a task or gaining additional job related skills. However, competencies are not only yard sticks for pay progression as argued by Drucker (2000). In the UK, PFP has been used to reward workers based on the survey conducted by CBI/Hay (1995). PFP is said to be applicable in the UK, but on the contrary, some researchers argued that it is used not in totality but partially because some of its features are lacking (Drucker, 2000). Person-focused pay has some benefits to organisation such as:

a) person focussed pay communicates and focuses more on inputs/labour in the determination of pay; and

b) it reduces the magnitude of the task or performance emphasised with regards to reward policy (Drucker, 2000).

Other functions of PFP are; it improves learning, remunerating workers for accepting organisational change, it offers reward for good attitude or behaviour and it encourages team work (Cross, 1992). In theory, PFP motivates workers to respond to a new change on the job and sometimes improves organisational commitments (Armstrong and Murlis, 1998). On the contrary, the shortcomings of competency-based pay are: it encourages wage-drift; and pay bill inflation (Drucker, 2000). One of the main problems with this pay package is that it brings about the pay differential in the organisation in which some workers more especially at the bottom stratum might feel a sense of inequity. It might lead to an increase in hourly labour
cost, training cost and other costs. Workers might not like to acquire new skills when they observe that pay for new skills is lower than what they earn on the skill already acquired. The effectiveness of person-focused pay plan depends on the well planned training programme so as not to incur additional personnel cost because organisation could not precisely measure the monetary value of skill and knowledge cost.

There are certain constraints/factors that should be considered in employing Person focussed pay in a given organisation such as avoiding payments for skills that are not useful to the organisation, analysis of skills needed, and the advancement or progression to the next pay grade should be based on the budgetary allocations (Drucker, 2000).

Therefore, no empirical evidence suggested that person-focused pay plan would result at workers commitment, work motivation and job satisfaction (Gupta, et al, 1987).

The rationale behind this research was to address the pay differential that exists in Jigawa States’ civil service as stated in chapter one. However, one of the short comings of person-focussed pay is that it creates pay differential, hence it is not a suitable pay package worthy to be investigated in this regard. Although, workers in Jigawa state public sector are employed some times based on qualifications or skills but their pay is based on seniority regardless of qualifications. Therefore, this study’s subject area was specifically the pay package used in the Jigawa state public service, called seniority pay.

2.8.1.4 Incentive/Contingent Pay
Incentive or variable pay is a system which compensates workers for partial or complete achievement of a pre-established job objective (Armstrong, 2002, Madhani, 2012). It is considered as compensation apart from base wage or salary which changed in line with employee’s achievement of standard, such as pre-determined formulas, single or group goal or company revenue (Peck, 1993). According to Armstrong (2008), incentive or variable pay referred to additional financial rewards that could be offered and are contingent to performances, competences, contributions, skills or experiences. Gomez et al. (2012) argued that most workers assumed that they should be compensated to recognise their achievement of predetermined performance. They defined incentive system as a system that compensates workers for the accomplishment of a given task. These payments involved incentives, commissions, bonuses and merit pays (Decenzo et al., 2007). Dransfield (2000) viewed it that automatic increases within the fixed pay bands have largely disappeared and the trend is shifted towards performance-related-pay as a preferred technique. Dessler (2008) defined financial
incentives as rewards paid to employees for performing beyond predetermined standard. Bowen (2000) added to the definitions that performance-based rewards are such payments given to workers based on the job performance ability. The reward is relative to the performance of a worker on the job. These rewards include commissions; piece work pay plans; incentive systems, group bonuses, or other forms of merit pay plans. Variable pay has been considered by many people as the most suitable method of motivation, but it is simplistic to presume that it is the only extrinsic motivator in the form of pay that can generate long-term motivation; hence other factors need to be considered (Armstrong, 2008).

Armstrong (2008) stated that there are various incentives and recognition programmes applicable to different workers in an organisation, namely incentives for individual workers, sales people-related, team or group-based organisation-wide and executive incentives. He further stated that the individual worker incentive and recognition programmes are incentive plans specifically, suited for use with workers for instance, piece work plan, merit pay as an incentive, merit pay options and incentives for professional. Bowen (2000) viewed it that the incentive plan could be applied to individual, group or organisation-wide performance. An individual incentive is an incentive offered to workers for their additional contributions towards organisational objectives, while group incentives are used when the output of the workers is not measurable due to interdependency with other workers’ tasks/jobs.

Decenzo et al. (2007) defined incentives for professional employees like system analysts and programmers, engineers, doctors and economists whose work involved the use of learned skill to give a solution (competency-based compensation plan). Professional workers are also incentivised by the use of recognition-based awards. These are non-financial incentives such as employee-of-the-year awards; job well done cards; and star award cards, which are meant to give performance feedback (Decenzo et al, 2007). In the same vein, Dessler (2008) defined incentives as piece work plan which offered pay based on a number of items produced by individual employee in a unit of time. He further, stated that merit pay as an incentive, (merit raise) is a salary increase to individuals for their performance or improvements.

Incentives for sales men come in the form of sales commissions, straight salaries or a combination of both. This is with an aim of ensuring the top line numbers or turnover (Dessler, 2008). Armstrong (2008) expounded the above points by giving the applicability of the different forms like salary only, salary plus commission and salary plus bonus. He viewed that the “salary only option” is employed in an organisation where direct selling is more important
than sales volume; hence there is a need to enhance customer service rather than high-pressure selling.

However, this could attract under achievers while salary plus commission is more suitable when it is assumed that sales can increase if a commission is offered. Thus, a base salary is required to attract people as it improves a direct motivation for performance.

Team or group incentive plans are plans in which production standard is set for a specific work group and its members are given incentives if the group perform beyond the standard (Dessler, 2008). Despite that team incentives boost a sense of cooperation and unanimity, the main shortcoming of the plans is that workers might be rewarded proportionately regardless of personal efforts put to the work, which normally de-motivate hard working employees (Dessler, 2008). Furthermore, Gomez et al. (2012) also viewed that even though the team-based method might help in performance measurement; the system might warrant free-riding effects and social pressure or might reduce performances since pay is given based on the group performance rather than individual efforts.

Organisation-wide incentive plans (variable pay plans) are schemes in which all or most workers enjoy rewards due to the overall organisational performance (Dessler, 2008). These incentive plans include profit sharing, employee stock ownership (ESOP) and gain sharing plans. According to Bowen (2000), these organisation-wide incentives plans are also called membership-based rewards. They are those payments that are offered based on membership to the organisation. This entailed that the basis of providing the rewards in an organisation is based on membership. Hence, the reward is given to all workers regardless of their performance. Incentives for managers and executives were rewards meant for recognising the vital roles that they play in the divisional and company wide profitability (Dessler, 2008). These incentives in this regards might be short-term incentives like an annual bonus or long-term incentives like stock options.

Clegg and Birch (2002) urged that reward is not all about money, like wise Armstrong (2008) lamented that there are many ways of rewarding workers apart from monetary gains. Decenzo et al. (2007) stated that nowadays employees’ expectations are more than just financial gains. Equally; they want additional attention that would sustain their livelihood. They expressed non-monetary rewards as the desirable extras in the workplace, which do not directly increase the workers’ financial position but is rather an attraction tools. These non-financial rewards
might involve preferred office furnishings; assigned parking spaces; business cards; having their own secretary; and recognition amongst other things (Armstrong, 2008).

This study also focused on one aspect of incentive pay in the form of allowance, a worker receives for additional responsibilities. Allowances are paid to workers for achieving a pre-determined job objective. The allowance is considered as a pay apart from the basic wage or salary which varies in line with the workers’ attainment of standards. The type of variable pay which this study focussed was the one that compensates workers for partial or complete achievement of pre-established job objectives, since the case study area (Jigawa state) is public rather than private (Armstrong, 2002; Madhani, 2012). These forms of pay in the Nigerian public service context are called allowances. This study was carried out in a non-profit making sector which is Ministry of works and transport. Other types of incentives mentioned are not applicable in Jigawa State public construction organisations. The only type of incentive used in this research is allowance, as mentioned earlier.

Companies commonly applied incentive pay programmes to control payroll costs or to motivate workers’ productivity. A sound incentive pay system is based on three assumptions. These are:

a. both workers and team work group varies on how they contribute to the firm in what they achieve and the extent to which they effectively achieve it;

b. the organisational overall performance is contingent upon the individual and group performance; and

c. firm must compensate workers base on their relative performance and treat them fairly in order to attract, retain and motivate high achievers.

Similar to seniority and merit pay methods, incentive pay supports employee-based pay but it regards seniority pay as a one-time payment. In most cases, workers earn both continuous base pay and incentive pay. Meanwhile, base pay accumulates the larger proportion of the core compensation. Nowadays, many workers deserve to earn incentive pay because firms want to control costs and direct their efforts towards motivating personnel to stick to higher performance. Some organisations now make use of incentive pay to reward their workers in areas such as production, technical and service. Companies mostly formed an incentive pay programme to control payroll costs or to motivate workers. Firms could control costs using incentive pay plans instead of annual merit or seniority pay increases or fixed salaries. Clearly, incentive pay compensates workers for performing pre-determined activities or work
(Martocchio, 2008). Thus, workers could influence their pay when they engage in additional responsibilities. Organisations employed incentive payment plan/programme in different situations and positions of workers in an organisation.

Incentive pay plans could be categorised into three (Martocchio, 2008):

1) individual incentive plans - these plans compensates employees who perform work independently (individually). This is relative to the number of output produced in a given time;  
2) group incentive plans - this programme/plan encouraged a collective effort towards productivity among employees. This plan is applicable in manufacturing and service delivery firms, which relied on a group for their operations; and 
3) company wide incentive plans - these plans attached workers’ reward to the firm’s performance in short time period, normally three months to five years.

**Designing incentive pay programmes**

Human-resource professionals either in private or public when designing effective incentive plan should take the following factors into account: there must be a clear distinction on which type of plan to be used either based on group or individual worker performance, and the acceptable level of risk in which the company agreed to pay as the total compensation package. Others are: there must be a clarification as to whether the plan is designed to replace or complement traditional pay. Furthermore, the weighting parameters for measuring the performance should be stated and the time frame for the plan communicated, that is the long-term or short-term incentives of the programme or a combination of the two.

Incentive pay is offered to workers for achieving a pre-determined job objective. The incentive is considered a pay apart from basic wage or salary, which varies in line with the workers’ achievement of standards. When it is offered in a group, it makes workers less committed because some group members might make a little contribution. It is impossible to apply profit-sharing scheme incentives in public organisations unlike in their private counterparts because of the legislative constraints. The plan might be a threat to the economic security of employees in profit-sharing incentives because profit fluctuates with incentives.

Some element of incentive or variable pay in the form of workers allowances have been used by this research due to their applicability in Jigawa state of Nigeria.
2.9 Workers’ Benefits

Benefits play a crucial role to workers because they served as an income upon retirement. Commonly workers in the public sector in Nigeria, specifically Jigawa state are enjoying gratuity and pension as benefits after retirement. The minimum years workers qualified for gratuity is five years while for pension is ten years (See Appendix H).

Benefit is a general term used to denote the components of compensation offered by organisations to their workers (Smith, 2000). Workers benefits represent a substantial cost to the organisation (Smith, 2000). Nevertheless, workers’ benefits have an impact on attraction, retention, motivation and overall job performance (Smith, 2000). IDS (1999) stated that benefits had a positive impact on employees’ commitments. Therefore, benefits should be given more priority (Smith, 2000) in any organisations that intend to exploit workers’ commitments.

Bernardin (2003) defined benefits as indirect forms of reward which are designed to enhance the quality of life for workers. Indirect monetary/financial rewards consist of subsidised benefits such as retirement plans, paid sick leaves and purchase discounts. Decenzo et al., (2007) defined workers benefits as non-financial compensation given to attract and retain workers. He further stated that they have grown in importance and variety as employers have realised that such benefits affect the decision of applicants when accepting or declining employment offers. DeNisi and Griffins (2008) defined benefits as any kind of rewards, incentives and other things of value that an organisation offers to its workers apart from their wages, salaries and other types of direct monetary compensation. Dessler (2008) considered other payments such as employer-paid insurance and vacations as types of financial benefits. In the UK, there are certain peculiar benefits which are not applicable in the Jigawa state civil service.

Dessler (2008) defined benefits as indirect financial and non-financial payments that workers earned for working in a given organisation. Gomez et al. (2012) also indicated that benefits at times are called indirect compensation as they are offered to workers in the form of a plan rather than cash; they serve as a security to workers and their family members. In the Nigerian public sector context, the benefits that are offered to workers are always in monetary values. The current study defined benefits as a reward given to workers after retirement which involved gratuity and pension.
This study focused on the retirement benefits obtainable in Nigerian public services in the form of gratuity and pension. Retirement benefits are given in both countries but with different names, despite all the procedures and systems of offering being the same. In the UK, the gratuity is called lump sum pay.

2.9.1 Types of Benefits

Workers’ benefits are said to be components of compensation offered by employer to employees. Smith (2000) classified workers’ benefits into three main classes as follows:

1- perquisite (perks) - this involved the benefits which are offered in form of something of value to workers e.g. company car;
2- allowances - is a fixed payment given at regular interval to cater for special situations e.g. protective clothing allowance given to construction workers in the UK; and
3- fringe benefits - this referred to the benefits in kind in addition to financial reward which an organisation offers to workers such as cars, work-related equipment, a loan, training, sick pay, discounts, maternity leave, care assistance and a pension scheme (Smith, 2000). The current study looked at the fringe benefits of workers based on Nigerian context, specifically Jigawa state.

The term benefits in Nigeria involved pension and gratuity only, whereas in the UK, it covered other aspects like car; loan; training; and maternity leave. Some aspect of variable pay in the UK were regarded as benefits but are called allowances, for instance protective clothing allowance for construction workers in the UK.

Hence, this study focused on the fringe benefits in the form of a retirement plan, specifically gratuity and pension. These are the only benefits packages observed being used by Jigawa state public sector to compensate public construction workers upon retirement.

![Figure 2.4: Types of Workers’ Benefits](image)

**Source:** (Developed from this Study)
The main significance of pension and gratuity is that they are the income received by workers after retirement. Benefits were reported in the course of this research literature as beneficial and significant factors used by organisations to motivate, satisfy, attract and retain workers.

Workers’ benefits in Nigeria are crucial and would not be ignored in any compensation research because they covered a substantive part of a reward policy in any public services in Nigeria.

2.9.1.1 Pension
Pensions are generally deferred payments, which are funded by both workers and employers’ contributions, and sometimes workers only. Pension scheme is applicable in both public and private sectors in the UK. In Nigeria, pensions are only paid in the public sector. Setting up and administering a pension scheme, is a very technical process. Pensions are determined by a salary percentage (Smith, 2000). The survey conducted by Merce (1994) revealed that organisations provide a pension scheme to workers for the following reasons:

1- to create a good image and impression about the organisation in the eye of public;
2- to attract and retain the best talent workers;
3- to serves as an indication that the organisation is having a great concern for its workers; and
4- to enhance workers’ motivation.

Criteria for approving pension scheme
The pension scheme office (PSO) – a special department established in the Inland Revenue – bears the responsibility for approving a pension scheme based on the following criteria:

1- the amount of pension must not exceed two-thirds of the final pay of the employee after 40 years while in service;
2- pension payment is limited to a certain amount (82,220 pounds in 1996);
3- three-eightieths of what workers earned for each year in service might be paid as a lump sum, which is non-taxable instead of a pension (or called cash commutation);
4- the dependents of a pension must not outnumber the pension members;
5- death benefits offered as a lump sum amount might not exceed four times salary plus returning the deceased contribution while in service or 1,000 pounds when the workers die in retirement;
6- employers’ contribution must not exceed 14% of the members’ final salary contribution to the scheme. However, in a personal pension scheme, a higher contribution could be given by organisations starting from 17.5%;
7- employers’ contribution is stipulated at 15%; and
8- several complex regulations have been identified for administering the scheme.

**Retiring age and sex discrimination**
The retiring age was 65 for men and 60 years for women. Thus, under the sex discrimination act of 1986, it is null and void to discriminate on retirement age. In a judgment of Barber vs Guardian royal exchange on 17 May 1990, the court ruled that henceforth, a pension must be paid under article of 199 of the treaty of Rome (provisions of equal pay). Therefore, it is prohibited to discriminate between men and women with respect to pension rights and privileges. It was ruled that a pension would not be counted as pay before 17 May 1990.

**Benefit statement**
Members who subscribe to the occupational scheme must be provided with annual statements showing the scheme benefits. Furthermore, provided the scheme met certain stipulated requirements, it could be contracted out of the State Earnings Related Scheme (SERPS).

**Type of pension scheme**
A pension can be obtained through workers’ contributions to the scheme in three different arrangements: state; personal; and occupational schemes (Smith, 2000).

**State pension arrangement**
State pension arrangements offer full benefits to male beneficiary of 65 years of age, who contributed to the scheme for at least 45 years. Female beneficiaries aged 60 years and above, who contributed for at least 39 years, are also entitled to receive a pension in this scheme. Since, 1978 the UK government controlled the state earnings-related pension scheme (SERPS) which stems from with graduated scheme initiated in 1962. Subscribing to an occupational (company) or personal pension scheme gives an opportunity for a worker to contract out of SERPS. In 1998, the state pension was 64.70 pounds per week for a single individual and 103.40 for married couples (Wright, 2004, 2000).
**Personal pension**

Personal or private pension schemes became an integral part of ‘alternative’ benefits provided as a result of the 1988 Finance Act, which allows money purchase plans outside of the normal worker route to the retirement provisions. Workers have the right to choose which pension scheme applies to them or could even make their own arrangements at a place of work. This is an added advantage to workers who keep changing job. Organisations are equally motivated to move from the SERPS scheme to private personal scheme pension schemes, provided there is monetary gain (Smith, 2000) attached to it.

These pension plans have not help in enhancing UK pension provisions due to the lack of awareness and large administrative charges. They are only helpful to self-employed and those workers covered by occupational plans by choice or through situational influences (due to the failure of organisation of not employing the scheme) (Amstrong, 2009).

**Occupational pension schemes**

This type of pension scheme could be defined as a procedure in which an employer provides a pension to workers upon retirement, income for families of deceased former employees, or deferred payments to workers who are still living. It is called deferred pay because it is funded by the contributions made by workers while in service.

Occupational pension schemes are governed by the trusts who are not supposed to be controlled by employers. Their functions are to oversee the affairs of the fund of the scheme. These trustees normally invest the funds in stocks, shares and other securities or insurance.

**Contributions**- A pension could be contributory or non-contributory. In a contributory scheme, normally workers and employers both contribute. Usually, in the UK workers contribute 5% of their income while employers contribute twice that amount. In a non-contributory pension scheme employers alone paid the whole amount.

**An approved scheme**- Workers who are entitled for the occupational pension scheme approved by the Inland Revenue were not subjected to the tax payments from their contribution. This make occupational pension scheme the most tax-efficient in the UK. However, employers are allowed to form unapproved pension schemes that offer more benefits than an approved scheme but are subjected to allowance tax pay.
Types of occupational pension scheme

a) Defined benefit scheme
This is a form of occupational pension scheme in which pension is assured, part of which might be given as a tax-free cash sum. In a defined benefit scheme, the pension is a fraction of final pensionable earnings for each year served by an employee (one-sixtieth). Employees also can benefit up to two-thirds pension provided they put in 40 years at work.

b) Defined contribution scheme or money purchase
Employers in this scheme fix the contribution they want to pay workers by promising to pay a specific percentage of earning regardless of the benefit availability upon retirement. The scheme gives workers undisclosed benefits because it depends on the total value of the contribution invested, investment return achieved and the rate at which the consolidated fund can be turned into pension upon retirement.

c) Hybrid scheme
Hybrid schemes combined the features of final salary and money purchase arrangements in many ways. For instance, the money purchase underpins a final salary benefit by paying a pension on money purchase basis formula when this amount is larger than the one provided under the salary arrangement.

d) Executive pension plan (top hat scheme)
This is a kind of pension scheme for directors or senior executives. Under this plan the maximum benefits payable to members would take into consideration for their pension from the group scheme.

e) Group personal pension scheme (GPPS)
Under group personal pension schemes (GPPS), workers have their own personal pension contract, and the plan under the bundles of individual personal pension scheme. The employers would deduct members’ contributions on the pay roll from net pay, remitting them to the pension provider along with workers’ contributions. GPPS is not in accordance with the occupational pension scheme due to the fact that benefits are limited, despite the contribution being limited to a specific scale, which increases with age. The schemes generally do not promise a particular amount as pension benefits to workers on retirement.

The pension scheme is applicable in Jigawa State state’s pension scheme, in which the government shapes all of the rules and regulations governing its payments. In the Nigerian
public sector, pensions are paid through both the government and workers’ contributions. There is no choice of the plan to subscribe unlike in the UK where there are available options with regard to pension scheme to join. Hence, the Nigerian pension scheme is a purely state scheme with no gender discrimination, and is paid only in the public sector unlike in the UK (both public and private).

2.9.1.2 Gratuity (Lump Sum Payment)
Lump sum pay is a tax-free reward offered to the worker on retirement (Wright, 2004). The Inland Revenue provided guidelines on the lump sum payment, which is 3/80ths of the final salary of the worker for each year served to the upper limit of 40 years. This offers the maximum lump sum of 120/80ths or 1.5 times the final salary of workers. Under a final salary scheme, the amount of the lump sum is normally secured by exchanging or commuting part or a portion of the workers’ pension for the gratuity pay. As for money purchase schemes, the lump sum is normally paid from the fund available upon retirement, before taking the remaining balance to buy pension benefits. A lump sum pay scheme is a plan which is generally being used by employers. The up-lifted scales and Inland Revenue limits is applicable only on any worker who retires at less than 40 years and a member who subscribes to the scheme on or after 17 May 1987.

Lump-sum pay is tax-free while pensions are taxable schemes. Thus, to members lump sum pay is of great significance, because it could be channelled to tackle the pressing economic needs such as a home purchase or a mortgage repayment.

Gratuity is also offered to public workers only in Nigeria unlike in the UK. This type of benefits is peculiar to the civil service sector in Nigeria. Private sector workers do not enjoy this form of benefit through their work career or upon retirement.

2.10 Features of Pay and Benefits in Nigeria and the United Kingdom
Lai (2011) defined salary as the payment that a public organisation gives to its workers. Based on the clear explanation of Labour Standards Act Article 2, salary is considered a reward for the workers’ labour or for the contributions made to the organisation. Salary has been defined by many researchers despite it meaning the same or similar. Uen and Chien (2004) stated that salary was the reward public organisations employed or offered to their workers for the contributions made to the organisation. Uen and Chien (2004) indicated that salary was the most commonly used technique to motivate workers towards achieving the objectives of the organisation.
a) Pay (salary) in Nigeria

In Nigeria, public sector workers are rewarded with a monthly salary for their contributions to the organisation. Salary involves basic salary and other entitlements which make up a fixed monthly salary such as: rent, transport, meal subsidies, leave grants and medical and utility payments. These entitlements are not separated from salary.

The following are the features of a salary in the Jigawa state public sector (Jigawa State Condition of Service):

- salary is a monthly reward offered to workers for the service rendered or work done;
- salary pay is fixed and paid in every month (30 days);
- it is applicable to all the staff in the public sector from grade level 01-16;
- salary payment is based on seniority not performance;
- the rate of salary payment is relative to grade level and salary steps of a worker;
- the minimum wage for the public sector employee is N18, 000; and
- payment is made up of basic salary and allowances and; Salary was calculated on an annual basis.

Source: Jigawa State condition of service (2003).

b) Allowances

An allowance is a monetary benefit other than a salary offered to workers for a specific purpose. Therefore, all of the allowances offered in the Nigerian civil service including Jigawa state are subjected to periodic review by the National Salaries, Incomes and Wages Commission through the issuance of appropriate circulars and scales.

The allowances which are paid to workers in Jigawa State are classified as follows:

Personnel engagement allowance: this involved the allowance offered to workers for a specific responsibility given to them by the government.

- responsibility allowance;
- overtime allowance;
- call duty allowance/field work; and
- training allowance.

Personal security allowance: this covers all the allowances given to workers for their welfare and betterment.

- domestic servant allowance; and
- disengagement allowance.
Personnel movement allowance: this covered the allowance workers enjoy for undertaken organisational responsibility elsewhere or because of transfer.

- duty tour allowance; and
- resettlement allowance.

**Source:** Extracted from Jigawa State condition of service (2003).

These above mentioned allowances have been described in this research in chapter seven (See Section 7.5.3)

**C) Gratuity**

Gratuity was a payment offered to staff who has served for 5-9 years.

- a staff member is entitled to a gratuity after putting in five years of service irrespective of years of age;
- when a staff member retired after serving for five years, the gratuity pay is 100% of their basic salary, transportation and rent; and
- the gratuity is increased to 8% yearly after serving for 11 years to the maximum of 300% irrespective of grade level.

**Source:** Appendix H and Jigawa State condition of service.

**D) Pension**

- a pension is paid to a worker upon retirement;
- pension payments are based on a percentage of the staff member’s total emolument;
- for any staff member to enjoy a pension, they must spend at least 10 years in service and be at least 45 years of age;
- pension payments are applicable to all staff upon retirement;
- pension payments are 30% of the staff emolument (specific basic salary, rent and transport) irrespective of grade level;
- pensions are increasing at the rate of 2% yearly to the maximum of 80%; and
- permanent secretaries, chairmen of the board of internal revenue, accountant generals, and auditor generals are paid 100% of their total emolument (their pension is fixed not changing unlike other staff who attract 2% yearly increase) as a pension.

Contribution to the scheme:
A- 17 percent by the employer; and,
B- 8 percent by the employee.
For staff participating in this scheme to enjoy the full benefit, they must have contributed to the scheme for at least five years.

No gratuity or pension should be given under this law unless the worker retired under the following circumstances:

- on statutory retirement under this provision of this law;
- on voluntary retirement after serving for at least 10 years;
- on compulsory retirement for facilitating improvement in the employer’s establishment;
- based on the advice of constituted medical board;
- on total or permanent disability of the staff while in service;
- on abolition of the office;
- on the ground of public interest, and
- on termination of appointment.

**Source: Jigawa State Condition of Service**

**Salary in the UK**

The study found that salary is applicable in the United Kingdom public sector due to the following facts, as:

- minimum wage is applicable in the UK depending on age and hours worked (LPC, 2016);
- 60% of workers do not enjoy any additional payment apart from basic pay;
- 19% of public service workers were paid an incentive (Armstrong, 2009);
- salary is paid monthly;
- salary is calculated on annual basis (White and Drucker, 2000)
- salary in the UK had two components: basic salary and allowances;
- salary is built upon the principle of equal pay for work of equal value (EPA ACT 1970); and
- salary is also paid based on seniority, i.e. the length of service or age in some organisation in the UK (LPC, 2016).
**Pension scheme in the UK**

The scheme is basically considered as the most important workers’ benefit in the UK. It is generally financed through workers’ contributions while in service. Pension serves as an assurance of income for workers and their dependents upon retirement or after death.

- pension payment is mandatory in the UK;
- in the UK, it is about 5% of the employee total salary;
- pension is paid after retirement;
- the pension is given to workers’ dependents after their death;
- there is a choice with regard to which scheme to subscribe in the UK (optional);
- no pensionable age limit but the maximum is 40 years;
- pension is calculated based on employees’ final salary;
- pension is subjected to income tax;
- pension is calculated based on percentages;
- it is being increased at the rate of 3–5% yearly;
- the more an employee grows in an organisation, the more his/her pension increases in the UK; and
- in the UK public sector pensions schemes increases relative to the retail price index (RPI) to which is added the maximum of 5% (Armstrong, 2002).

**Contributory Pension Scheme**

A- subscription to any pension scheme is optional in the UK;
B- the contribution of the employers is three times the employees’; and
C- The employer's contribution is relative to time, which they pay more during inflation and less in boom periods (Armstrong and Murlis, 1994).

**2.11 Comparison of Workers’ Pay and Benefits in Nigeria and the United Kingdom**

A critical review of literature allowed the current research to identify the similarities and differences between pay and benefits in the UK and Nigeria (Armstrong and Murlis, 1994, White and Drucker, 2000; Jigawa state condition of service, 2003; Act of 1970; LPC, 2016)
a) Similarities of Workers’ Pay and Benefits in the UK and Nigeria

Table 2.1: Similarities of Salary Payment in UK and Nigeria

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<th>UNITED KINGDOM &amp; NIGERIA</th>
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<td>• There is a minimum wage in both countries</td>
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<td>• Salary is paid monthly</td>
</tr>
<tr>
<td>• Salary is calculated on annual basis</td>
</tr>
<tr>
<td>• Salary is paid in two components as basic salary and its components</td>
</tr>
<tr>
<td>• Salary is paid to all staff in the public sector.</td>
</tr>
</tbody>
</table>

Table 2.2: Similarities of Allowance Payment in UK and Nigeria

<table>
<thead>
<tr>
<th>ALLOWANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowances are paid both in the UK and Nigeria based on the achievement of predetermined objective or task. Hence, there is uniformity regarding allowances payment in both countries. That is to say the allowances are offered to workers after achieving a predetermined objective, target or goal.</td>
</tr>
</tbody>
</table>

Workers’ benefits

Table 2.3: Similarities of Gratuity Payment in UK and Nigeria

<table>
<thead>
<tr>
<th>UNITED KINGDOM &amp; NIGERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gratuity is offered to workers who serve or retire for at least five years. Both in the UK and Nigeria, a lump sum amount of money is given to a worker upon retirement. The UK authorities called this form of reward lump sum pay not a gratuity. However, the mode of operation in lump sum and gratuity is similar.</td>
</tr>
</tbody>
</table>

Table 2.4: Similarities of Pension Payment in UK and Nigeria

<table>
<thead>
<tr>
<th>UNITED KINGDOM &amp; NIGERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pension payment is mandatory in the UK and Nigeria</td>
</tr>
<tr>
<td>• Pension is paid after retirement</td>
</tr>
</tbody>
</table>
• Pension is calculated based on employees’ final salary
• The pension is calculated based on percentages
• Pension increases at a specific rate yearly
• The more an employee grows in an organisation, the more amount of pension receives in the UK and Nigeria
• The scheme is applicable both in the UK and Nigeria
• The scheme involved a combined contribution of employer (government) and employees based on stated percentage in the both UK and Nigeria.

b) Differences of Workers’ Pay and Benefits in the UK and Nigeria

Table 2.5: Differences in salary Payment across UK and Nigeria

<table>
<thead>
<tr>
<th>UNITED KINGDOM</th>
<th>NIGERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary is built upon the principle of equal pay</td>
<td>Salary is fixed irrespective of the value of work undertaken</td>
</tr>
<tr>
<td>for work of equal value</td>
<td></td>
</tr>
<tr>
<td>60% of the workers do not enjoy any additional</td>
<td>All workers in the Nigerian public sector are</td>
</tr>
<tr>
<td>payment apart from basic pay</td>
<td>paid basic pay together with other entitlements</td>
</tr>
<tr>
<td></td>
<td>which make up monthly fixed salary.</td>
</tr>
</tbody>
</table>

Table 2.6: Differences in Allowance Payment across UK and Nigeria

<table>
<thead>
<tr>
<th>UNITED KINGDOM</th>
<th>NIGERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car Allowance</td>
<td>It is not applicable in Nigerian public sector</td>
</tr>
<tr>
<td>Mileage Allowance</td>
<td>It is not been given to workers</td>
</tr>
<tr>
<td>Clothing allowance</td>
<td>It is not provided to workers</td>
</tr>
</tbody>
</table>

Table 2.7: Differences in Gratuity Payment across UK and Nigeria

<table>
<thead>
<tr>
<th>UNITED KINGDOM</th>
<th>NIGERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gratuity payments</td>
<td>The public sector workers in Nigeria are</td>
</tr>
<tr>
<td>are applicable in</td>
<td>entitled to gratuity benefit for putting in at</td>
</tr>
<tr>
<td>the UK public sector like Nigeria but with different</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
names such as lump sum pay | least five years of service. It is calculated as 100% of basic salary, transport and rent allowances

Table 2.8: Differences in Pension Payment across UK and Nigeria

<table>
<thead>
<tr>
<th>UNITED KINGDOM</th>
<th>NIGERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The UK pension scheme is optional that is to say an employee had a choice on which pension scheme to join</td>
<td>In Nigeria, specifically, Jigawa state the choice of pension scheme to join is enforced by the law</td>
</tr>
<tr>
<td>There is no pensionable age limit but the maximum duration of service is 40 years</td>
<td>In Nigeria, pension is paid to workers when they spend 10 years in service and 40 years of age</td>
</tr>
<tr>
<td>The pension is subjected to income tax in the UK</td>
<td>Pension is not taxable</td>
</tr>
<tr>
<td>It is increasing to 3–5% maximum yearly in the UK</td>
<td>Pension is increasing at the rate of 2% to the maximum of 80%</td>
</tr>
<tr>
<td>The pension is equally paid to employees’ dependents after the death of employee</td>
<td>Pension is not given to employees’ dependents at all</td>
</tr>
<tr>
<td>Pension increases in UK public sector because it is based on Retail Price Index, which is added to the maximum of 5%</td>
<td>The increase is fixed at 2% to the maximum of 80% in Nigeria</td>
</tr>
<tr>
<td>There is a choice in contributory pension scheme to join</td>
<td>In Nigeria, workers have no choice of pension scheme to join</td>
</tr>
<tr>
<td>The contribution of employer with regards to pension in the UK is thrice then the contribution of the employee</td>
<td>In Nigeria, employers contribute twice then the workers’ contribution</td>
</tr>
<tr>
<td>The employer’s contribution is relative to</td>
<td>In Nigeria, it is fixed and cannot be easily</td>
</tr>
</tbody>
</table>
time. Thus, they pay more during inflation and less in the boom period.

2.12 Choice of Components of Compensation Used in this Study

Contingency theory stated that appropriate reward practice is relative to different circumstances (Lawler, 1995; Cox, 2000). Poole and Jenkins (1995; 2000; 1998) stated that the structural factors that influence compensation policy in an organisation are: firstly, whether the organisation was for-profit (private) or is service-oriented (public). Secondly, the size of an organisation has an impact on the workers’ compensation. Furthermore, it needs to examine whether organisation policy focuses on expanding or contracting in size. Therefore, based on the above first postulation, both seniority pay and allowances (incentives) were chosen because of their applicability in Jigawa state public sector. This research also involved components of workers’ benefits such as gratuity (lump sum pay) and pension which are earned upon workers’ retirement. These pay and benefits are peculiar and applicable in Jigawa state public sector. Therefore, this study focussed on the main pay and benefits packages payable in Jigawa state public sector in the form of salary, allowances, gratuity and pension.

2.13 Summary of Chapter 2

This chapter critically reviewed the literature on compensation management strictly based on the research objectives. Compensation is a reward which could be a pay or a benefit employees received for their contribution or service to the organisation. The compensation objectives, plans, factors, determinants, features and its linkage with public construction workers were also examined. Compensation is divided into two: intrinsic which comprised of: task identity; skill variety; task significance; autonomy; and feedback. Extrinsic, on the other hand, involved pay (seniority; performance pay; incentive; and person-focused pays) and benefits (gratuity and pension). Base/basic pay, also known as a membership-based reward, could be defined as the pay rate which is offered to workers relative to their job grades, and was based on the necessary skills required on the job. The pay is categorised into four. Seniority pay is a form of payment which compensates workers according to the time spent in service, which increases base on the number of years put in service by the workers. Performance pay is a type of payment in which reward is earned at any time when workers achieved a predetermined standard at work. Person-focused pay mainly compensates workers for processions of job-related competencies such as knowledge or skills rather than required job performance. Incentive or variable pay is a system compensates workers for partial or complete achievement of a pre-established job objective. Workers’ benefits are forms of
rewards, incentives and other things of value that an organisation offers to its workers apart from their wages, salaries and other types of direct monetary compensations. The benefit is classified into two: gratuity; and pension. Gratuity is given to workers upon retirement after serving for five years while pension is offered to workers who have served for ten years and were 40 years of age. The study had made a comparison of pay and benefits across two countries, namely: the UK; and Nigeria. However, regarding the pay, both seniority pay and allowances (incentives) were being employed in this study because of their applicability in the Jigawa state public sector. This research also involved components of employee benefits such as gratuity (lump sum pay) and pension which are earned upon workers' retirement. These pay and benefits are peculiar and applicable in the Jigawa state public sector too. Therefore, this study focused on the main pay and benefit packages payable in the Jigawa State public sector in the form of salary, allowances, gratuity and pension. Consequently, this chapter has addressed the first research objective.

The next chapter is another aspect of the literature review involving workers’ motivation, job satisfaction, attraction and retention.
3.0 CHAPTER THREE: LITERATURE REVIEW ON MOTIVATION, JOB SATISFACTION, ATTRACTION AND RETENTION

3.1 Introduction to Chapter 3

This chapter entails the second phase of the literature review and focusses on obtaining in-depth understanding on the constructs of motivation, job satisfaction, attraction and retention within public construction projects in general and specifically in Jigawa state of Nigeria. The chapter is geared at achieving the first objective of reviewing relevant literature on the variables considered in this research such as motivation, job satisfaction, attraction and retention. The chapter is divided into four sections and each section concludes with a discussion on various authors’ views on these concepts and their relationship with compensation.

3.2 Workers’ Motivation

The term motivation is derived from the Latin word ‘movere’ which means ‘to move’. It is a generic term given to the whole set of needs, wishes, drives, desires and similar inducements that push individuals to a certain action or performance. Whenever managers motivate their employees, they anticipate that these needs and desires of employees would be satisfied, and would lead them to perform in the desired manner. In essence, workers’ motivation plays a vital role in the success of any organisation (Greenberg, 2011). This is because both the organisational and management activities require motivation for their job performance (Watson, 2006).

Workers’ motivation has been defined in numerous ways by the extant literature (Smithers and Walker, 2000). Johnson and Gill (1993) defined workers’ motivation as the procedures by which individuals are enabled, and encouraged to choose a specific manner of behaviour. Similarly, Robbins and Judge (2010) defined motivation as the willingness to put more efforts in order to achieve organisational goals, which are subjected to the ability to satisfy a person’s need or a way through which people choose a particular cause of action to achieve their goal. In the same vein, Bartol and Martin (1998) defined motivation as a force which drives behaviour, gives direction to behaviour and inspires the behaviour towards a particular aspect in an organisation.

Considering the above definitions of motivation, this study provides explanations about workers’ while at work. Hence, motivation could be defined as the driving force which inspires workers
(physiologically and psychologically) to undertake one or more actions towards the accomplishment of desired organisational objectives (Salisu et al., 2016a).

Further, Schermerhorn (2010) observed that well-motivated individuals exert greater commitments at work than their unmotivated counterparts. Noteworthy, motivation is concerned with how individuals do a given task (Watson, 2006). Thus, the basic task of a manager is to motivate his or her subordinates towards accomplishing the organisational goals (Vroom and Jago, 2007).

In order to achieve motivation, Deci and Ryan (2000) presented a multidimensional framework with two second-order–level forms of motivation. This includes Autonomous and Controlled motivation. While autonomous motivation (also known as intrinsic motivation) refers to doing a particular action willingly by a worker, controlled motivation entails doing an activity due to external forces such as compensation (remuneration) and coercion (external regulation). Some studies have revealed that autonomous motivation yielded more positive behavioural results than controlled motivation (Gagne and Deci, 2005). Similarly, Gagne (2003) and Millette and Gagne (2008) argued that through motivation, performance and retention of voluntary workers is guaranteed, hence autonomous motivation is better than controlled motivation.

In a general classification, there are two types. First, intrinsic motivation involves the internal desires to engage in a given activity or develop a certain skill. Secondly, extrinsic motivation is defined as external forces which are not related to the job done, but give satisfaction which the job itself might not offer motivation (Malka and Chatman, 2003; Latham and Pinder, 2005). An extrinsic factor typically referred to financial rewards often used by managers to compensate workers’ labour. Radosavljevic (2013) stated that extrinsic motivation does not mean that workers would not attain any satisfaction or pleasure on the job but implies the satisfaction expected from an external remuneration would continue to serve as a motivator even when the job to be undertaken has little or no interest to a worker.
The psychological effect of motivation on workers satisfies their needs, and this enhances performance. Contextually, need could be referred to as a means which boost internal desire that affect outcome positively. In contrast, unsatisfied need causes tension, which drives individuals towards searching a particular behaviour, which if achieved, would satisfy the need and subsequently result to tension reduction. Hence, workers would engage in certain activities or actions to reduce tension (Lam and Tang, 2003). The figure 3.1 below illustrates a motivational process in an organisation.

![Figure 3.1: Motivational Process](image)

Source: (Developed from this study)

Need is an inbuilt trait, which distinguishes whether certain outcomes are attractive or not (Robinson and Decenzo, 2004).

The studies of motivation had been conducted over fifty years to facilitate workers to understand factors that were capable of influencing individuals towards organisational goals willingly (Armstrong, 2002).

Accordingly, a number of theories were developed by scholars. The next section presents important theories of motivation.

### 3.2.1 Motivational Theories

In the past few decades, various theories of motivation have come into existence. Bartol and Martin (1998) categorised motivational theories into three classes: Need theory; Cognitive Theory; and Reinforcement theory. These theories are however, classified as either content or process theories (Wood et al., 2004). Categorically, Maslow’s hierarchy of needs, the Motivation-Hygiene theory of Herzberg, McGregor’s Theory X and Y, and Ouchi’s Theory Z
are called content or need-based approaches because they focus mainly on the role of motivational administration in driving workers to achieve a given task. On the other hand, the expectancy theory of Vroom and Lawler, and the goal-setting theory of Locke and Latham are based upon the process approach, in which motivation is used to transform workers into the desirable work attitude (Lam and Tang, 2003). However, Wood *et al.*, (2004) included the reinforcement theory in the Process theory category.

The process-based approach holds the assumption/philosophy that changing or modifying employees’ behaviour and attitude should be executed through conditional rewards and self-directed lifelong learning processes (Hassan, 2009). Therefore, the process theory takes individual differences into account in their approach to motivation. The process-based theorists utilise this philosophy to change or modify workers’ attitude and learning behaviour through the use of compensation and self-directed learning processes. Thus, buttressing the ideology of employing individual differences in motivation while offering opportunities for workers to attain a higher potential with respect to their needs, which include self-esteem and self-fulfilment within an organisation. The essence of reviewing such motivational theories is to get a clear picture of what motivates a worker at work from different authorities or scholars in the field of employee motivation.

Thus, the next section starts with content-based categories.

### 3.2.1.1 Content Theories

Content theories are concerned with how workers seek to satisfy their various needs in their working environment (Wood *et al.*, 2004). These theories were developed specifically to demonstrate the role of motivation in driving workers to achieve a given task. The motivation theories are presented and discussed below.

**Hierarchy of needs theory (Abraham Maslow)**

One of the most renowned theories of motivation is the hierarchy of needs theory put forth by the psychologist Abraham Maslow (Maslow, 1943). Maslow saw human needs as a form of hierarchy which is in an ascending order, which is from the lowest to the highest. He concluded that when a given need is satisfied, that need could no longer motivate again (Maslow, 1943). The theory is built on two principles, namely: the prepotency; and deficit principles. Thus, the prepotency principle holds that only when the lower needs are satisfied, the higher needs become activated (Atiomo 2000), while the deficit principle holds that satisfied needs are not considered a motivating factor of behaviour.
The basic human needs are in ascending order of importance to workers. These needs are relative to the individual’s career level, the organisation size and the locations of workers (Witt, 2009). The Maslow’s hierarchy of need can be illustrated in figure 3.2 below.

Figure 3.2: Maslow’ hierarchy of need

Source: (Developed from this study)

Below is the explanation of the five elements involved in Figure 3.2 above.

1. physiological needs - these involve basic needs that sustain human life, such as food, water, warmth, shelter, cloth, sleep and sex. He stated that other needs would not motivate, until these physiological needs are attained to the extent of maintaining human life;

2. security or safety needs - these needs consist of the desire to set oneself free from physical danger and economic predicament like fear of losing a job/job security, property;

3. affiliation or acceptance needs - these include the needs that border on the desire to belong and/or be accepted by others, as social beings. Fineman (1993) opined that an individual’s feeling of being accepted, respected, affiliated, and loved by others, creates a cordial relationship among workers in an organisation;
4. esteem needs - once people satisfy their social needs, the next need level entails the desire to be respected by others. These covers the need to control others by individuals through power, prestige, status and self-confidence; and

5. self-actualisation needs - these kinds of needs are at the highest level in Maslow’s needs hierarchy. These needs involved the desire of individuals to become what one is capable of becoming in order to maximize one’s potential.

It can be observed that the lower level needs tend to be met through external satisfaction, while the higher level needs tend to be met through internal satisfaction from the above hierarchy. This theory has been criticised by ERG theory (these criticisms are presented as the basis of nitiaion of ERG theory of motivation).

**Theory X and Y by Douglas McGregor**

McGregor (1924) in Hassan (2009) came up with two distinctive versions of workers attitudes at work. After studying the way managers interact with employees, McGregor concluded that the managers’ view of workers’ behaviour on the job could be based on positive or negative assumptions. Thus, the task of managers here was to use the appropriate techniques in motivating workers (Foot and Hook, 2008).

The implications of McGregor’s analysis on motivation could be expressed based on Maslow’s theoretical postulations that theory X has the assumption that biological and security needs dominate human beings. Theory Y holds that social and esteem needs dominate. McGregor upholds that the assumptions of theory Y on worker’s behaviour at work were more valid than those of theory X. Therefore, it was suggested that initiative, responsibility, challenging jobs and group cohesion would lead to a greater effort at work (Torrington and Taylor, 2008).

However, there is no empirical evidence to prove that either theory X or theory Y postulations are valid, or the use of theory Y would motivate employees more than theory X. Therefore, the application of both theories X and Y is relative to a situation a superior finds at work.

**Dual factor Theory (Frederick Herzberg)**

Herzberg was keen on finding out what workers wanted from their respective jobs. Thus, this theory of motivation was introduced, which emphasised on-the-job and the environment in which the job is carried out instead of basing it on human nature. Herzberg conducted research
by interviewing 203 accountants and engineers, asking them to state those issues that make them feel exceptionally good or bad while at work (Herzberg et al., 1967). After interpretation of their responses, the results revealed that there were two distinctive sets of factors affecting motivation at work. The factors were identified as growth/motivators and maintenance/hygiene factors. These are sometimes referred to as satisfiers and dissatisfiers according to Frederick et al. (2002). These factors are related to either job context or content (Marvin and Milton, 1967). Herzberg concluded that when employees felt good about their job, their response varied with others who felt bad about their jobs (Herzberg, 1968).

According to Herzberg (1966), hygiene factors or dissatisfiers included those factors whose existence either in quantity and quality at work tends to yield no dissatisfaction i.e. their existence does not motivate to yield satisfaction, but when such factors are lacking, workers will be dissatisfied. These factors include: company policy and administration; supervision; working conditions; job security, salary/monetary reward; personal relationship with supervisors; peers; and subordinates (Nancy and Graham, 1989). Motivators or satisfiers on the other hand, are related to the job content which includes achievement, recognition responsibility, advancement/growth (on-the-job), and challenging work (Amanda, 1999). The presence of these factors in an organisation creates job satisfaction and a high degree of motivation (James, 2002). Similarly, when they do not exist in an organisation, job dissatisfaction might not necessarily occur. Managers that offer these hygiene factors would only create work harmony, not necessarily motivation (Herzberg, 1987). For this reason, Nathan (1970) suggested that managers should focus their attention on those factors that yield satisfaction or motivators (Nathan, 1970). Based on the above propositions, Herzberg produced a dual continuum showing that the opposite of satisfaction is no satisfaction, and the opposite of dissatisfaction is no dissatisfaction (Marvin, 1967; Wood et al., 2004).

These assumptions can be described in the table 3.1 below:

Table 3.1: Motivators and Hygiene Factors

<table>
<thead>
<tr>
<th>SATISFIERS/MOTIVATORS</th>
<th>DISSATISFIERS/HYGIENE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivator factors presence</td>
<td>Job satisfaction</td>
</tr>
<tr>
<td>Motivator factors absence</td>
<td>No job dissatisfaction</td>
</tr>
<tr>
<td>Hygiene factors presence</td>
<td>No job Satisfaction</td>
</tr>
<tr>
<td>Hygiene factors absence</td>
<td>Job dissatisfaction</td>
</tr>
</tbody>
</table>

Source: (Developed from this study)
Herzberg’s research has been criticised and challenged by some researchers because there is no evidence to back up his two separate and distinct factors. The theory only empathised on job satisfaction/dissatisfaction rather than job behaviour such as performance, absenteeism, or turnover (Pinched and Rhode, 1992).

**ERG Theory (Clayton Alderfer)**

Clayton Alderfer (1969) modified Maslow’s need theory by overcoming its weaknesses. He condensed five levels of needs into three levels (Alderfer, 1969) namely:

a) existence needs - the need for existence includes all the provision of basic safety and survival needs. These requirements were similar to Maslow’s biological and security needs (Benjamin and Clayton, 1973);

b) relatedness needs - these needs focus on people’s desire to relate to social, environment or society that involves interactions, belongings and affiliations with others. Relatedness needs were similar to Maslow’s social and some element of esteem needs (Clayton and Guzzo, 1979); and

c) growth needs- this category of needs involves both desire for potential development and fulfilment. It covered Maslow’s highest need level i.e. self-actualisation need (Clayton, 1972).

Though, the ERG theory modified Maslow’s five needs into three layers, these theories vary in certain degrees (John and John, 1980). For example, the ERG model did not concur that those needs must be in progression from one level to another level, instead they could occur or work concurrently (Hassan, 2009). The theory concurred that when individuals were frustrated at either of the two higher levels, they might return and focus on the lower levels (Schneider and Alderfer, 1973).

**Motivation Theory (David McClelland)**

David McClelland (1976) proposed that three needs should be considered to improve workers’ motivation. These needs are achievement, power and affiliation.

a) *need for achievement* - people that aspire for high achievement show a desire to excel, a willingness to have a personal responsibility and to find solutions to any problems. Normally, those people set their own goals (moderate but challenging goals) and like to have feedback on their progress without time wastage at work. They set themselves apart from others because of their ambition to do things better. They are responsible for
their action and love a situation that could determine their improvement. They do not gamble and also hate success under uncertainty;

b) **need for power** - people with needs for power always want to influence or control others' behaviours. They like others to do things their own ways (Charles, 1987). Individuals with the need for power normally have good qualities and like to take control of others. Furthermore, people with a need for power are characterised as forceful, argumentative, outspoken, good conversationalist and oratory or skilful in public speaking. This category of people like status (position) and competitive situation (Christopher, 1986); and

c) **need for affiliation** - people with affiliation needs like friendships and interpersonal relationships. Individuals with these needs also derive joy for being loved and accepted by others. They dislike being rejected by social groups. These groups of people prefer an atmosphere of cooperation to a competitive situation.

McClelland showed that high achievers work hard to achieve set goals, which are more challenging at work (Litwin and Stringer, 1966). For people in this need category, reward packages are not suitable tools for their motivation but feedback on performance. They are not likely to stay long in an organisation that does not match their need for achievement (Miller and Kilpatrick, 1987). McClelland also proposed that good leadership qualities are required to influence others (David and Richard, 1982). Managers should therefore possess a high need for affiliation when working with others so that employee efforts could be coordinated especially in groups. Managers must also have a high need for power (Jolie, 1987). Improving motivation based on this theory begins with need identification of what workers really want by managers so that to match them with their personal needs. It was unwise for any organisation to place workers with a high need for achievement in routine or non-challenging tasks or place people with the high need for affiliation in a job that isolate them from their peers (Erikson, 1963).

**Ouchi (1980) Theory Z**

The critical factors to organisational success, according to Ouchi (1980), were technology and a holistic technique of managing workers by a strong organisational philosophy. Other factors include long-term workforce development; a distinct corporate culture; workers participation; involvement in decision-making; and enhancement of employees’ behaviours. This theory was popularly known as Theory Z. The theory is based on the Japanese and American ideologies of managing workers which combines the collective concurrence of the Japanese culture with the individualism of the American culture. Ouchi discovered that Japanese firms surpassed their
American counterparts, more especially, regarding automobile, electronics and household appliances production. The reason that accounts for this scenario is that Japanese success depends on the collective effort of people unlike the Americans who attribute their working success to individualism at work.

Ouchi classified the Japanese management approach as ‘Type J’ which provides a life-time employment and total concern for employees. ‘Type J’ laid emphasis on collective decision-making and collective responsibility. It also covers regular evaluation and promotion. Thus, control here is complete and informal, with the non-specialised career path.

In comparison, the conventional American bureaucratic approach to management introduced ‘Type A’ which was attributed to short-term employment and fragmented concern for employees, autocratic means of decision-making and responsibility, rapid evaluation and promotion, and explicit and formal control with specialised career paths. Companies that use Type A postulations are American culture inclined organisations and operate based on individualism. The Type J was based on the Japanese culture of communal or collective responsibility.

However, some aspects of the Japanese culture specifically the work for life, continuous evaluation and promotion aspect might not be appealing to some American managers. Ouchi (1981) on his part reconciled these two parallel dimensions of Type J and Type A into a new approach popularly called Theory Z. Theory Z involves:

- A long time and steady process of evaluation and promotion;
- development of firm’s specific skills and straight career paths;
- informal and virtual control device aided by formal, explicit mechanism;
- people integration in decision-making with a single individual with overall responsibility; and
- more focus on employee’s welfare as an integral part of work relationship and informal relationship between people.

The aim or assumption of this theory is to foster a strong organisational culture that could serve as a source of social affiliation and solidarity in an organisation (McAuley et al., 2007). The theory supported the application of intrinsic motivation and focusses more on the organisation as a collective entity rather than an individual worker; thus fostering greater organisational
devotion among employees which in turn enhances job satisfaction. Therefore, employing this theory into a given organisation would help in the reduction of absenteeism, turnover rate and increase in productivity, performance and another desirable outcome (Parkin et al., 2009).

The next section deliberates on the Process-based theories of motivation.

3.2.1.2 Process Theories
Evidence from the literature indicated that there is no single motivator for all individuals or no force can motivate every employee at once (Wood et al., 2004). Thus, people’s behaviour and attitudes toward motivation at work varies to a certain degree (Hitt et al., 2005).

Process theories focus on the way through which different factors influence people’s attitude and behaviour (Hitt, et al., 2005). According to Mullins (2002), process theories tries to identify dynamic factors or actions needed to influence behaviour. These theories attempt to describe the process at which individuals make a motivational choice. Unlike content theories, most theories in this category could not be traced to a single writer. Process theories were expressed under different themes such as: expectancy based model; equity or social comparison theory; goal setting; and re-enforcement theory.

Expectancy Theory
The expectancy theory was initiated by Vroom (1964). The theory rejects the notion that workers have fixed sets of needs but on the contrary strives to take into account human variability and complexity. Nadler and Lawler (1983) summarised the assumptions of the expectancy theory as follows:

1. individuals make conscious decisions about their own attitude in a place of work, particularly in respect to the amount of effort they are prepared to exert towards doing their tasks;
2. behaviours and orientation of individuals towards work varies, and these are expressed in different needs, desires and goals, which are subjected to thorough analyses;
3. individuals made a selection between the possible alternative from different forms of behaviour which they know. They prepare to choose any possible course of action that would result to outcomes they desire, or at least the option they think is likely to yield positive outcomes; and
4. Key factors to understand human motivation is the need to find the different meanings individuals attach to their job and the environment at which the work is carried out.

The expectancy theory proposes that the strength of a tendency to behave in a particular way was relative to the strength of an expectation that the action would be followed by a desirable outcome. The theory argued that a worker is motivated to put more effort when he or she assumes that effort would result in good performance appraisal which in turn leads to extrinsic rewards such as: bonus, salary increment, and promotional opportunities. Subsequently, these compensation components would satisfy the worker’s personal goals.

The expectancy theory focused on three key relationships:

1. **Effort-performance relationship** – the probability that putting in more effort at work would improve workers’ performance;

2. **Performance-reward relationship** – the extent to which a person perceived that exerting effort of a certain degree would result in the achievement of an intended outcome; and

3. **Rewards-personal goals relationship** – the extent to which organisational rewards satisfied one’s personal needs and the attractiveness of these potential rewards for that person.

The management implication of expectancy theory is that to improve motivation and productivity, the management should make sure that the outcomes which workers perceive as a positive valence are also regarded by those workers as the actual outcomes of their work performance. Obviously, workers relate negative valences to low levels of performance on the job.

Normally, expectancy theorists believe that there are two forms of rewards available to workers in an organisation: intrinsic and extrinsic rewards. An intrinsic reward referred to the rewards which were subjective and earned by workers while performing their work. This comprises of feelings of achievement, challenge, competence and self-worth. Thus, organisations cannot offer these rewards directly but they can develop a structure, culture or atmosphere capable of creating them easily. Extrinsic rewards are rewards offered by agents external to the worker such as payment systems, promotion, benefits and job security. The interaction of the two forms of rewards may not generate a simple, linear relationship with satisfaction and motivation. Edling viewed that offering more extrinsic rewards might have a negative impact on intrinsic motivation for some workers.
Numerous empirical studies have been carried out to investigate the validity of expectancy theory as a model of workers’ motivation (Baker et al., 1989). One of the most comprehensive tests of the model was undertaken by Peters (1977) who reported that the expectancy theory factors/items are causally associated to the degree of effort expended on the job and that the subjects under study were only willing to work longer than needed to accomplish a task when more effort exerted is related to the performance increase, and increased performance resulted in the greater likelihood of achieving desired outcome.

Expectancy theory is so complicated that many studies found it quite difficult to test. Specifically, the measures of various parts of the model may lack validity, and the processes for investigating relationships among the variables or factors have usually been considered by researchers as less scientific (Moorhead and Griffin, 1995).

The expectancy theory of Vroom (1964) and Lawler (1973) viewed that employees would decide to behave in a particular manner because they are motivated to choose a specific behaviour over others due to what they expect the outcome of that chosen behaviour to be (Oliver, 1974). The theory proposed that, even though employees might have various sets of goals, they could be motivated, if they assumed that there is a positive relationship between efforts and performance, and that a good performance would yield a desirable monetary gain (reward). This reward subsequently would satisfy some pressing needs that are capable of making efforts worthwhile.

Expectancy theories are concerned with a person's behaviour at work through observation and actual description of the processes capable of motivating individuals or groups. Expectancy is a general term for motivational theory which was developed based on the principles that individuals are influenced by the expected outcomes for any action taken (Wahba and House, 1974). The basis for these theories is a subjective expectation that a particular action would result to outcome. The theories proposed that selection of a particular behaviour over the other is based on the beliefs that certain outcomes would led to another desired result (Mowday, 1987). The main idea behind expectancy theory is that individuals tend to behave based on their expectations of positive outcomes.

As mentioned earlier, expectancy theory could not be attributed to a single writer; however, this research considered the work of Vroom, Porter and Lawler.
**Vroom’s Expectancy Theory:** Victor Vroom in his book *Work and Motivation* (1964) came up with the expectancy theory which is vital to the organisational behaviour literature. Vroom attempted to describe the task-related effort exerted by the employee.

![Figure 3.3: Vroom’s Expectancy Model](image)

Source: (Developed from this Study)

This theory covers the links and relationship as follows:

- **expectancy (effort-performance linkage)** - this involves the degree to which a person believes that a certain rate of performance leads to instrumentality and valence;
- **instrumentality (Performance-Reward links)** - the degree to which an individual believe that putting in certain performance would serve as a means or instrument to attain a desired outcome or results such as praise, high wages, recognition, promotion, acceptance by peers at work; and
- **valance (Reward-Personal goal links)** - this is the importance or significance an individual attached to the desired outcome (rewards) to be achieved. Valance expressed the degrees at which personal goals or needs were satisfied (Vroom, 1964).

**Vroom’s Expectancy model**

The focused of Vroom’s idea is the notion that motivational forces are determined by the combination of valance and rewards (Salansik and Pfeffer, 1978). Mathematically, this is expressed as:

\[ M = \sum VE \]

Where

- \( M \)=Motivational force/drive or strength
- \( V \)=Extent of desired outcome
- \( E \)=Probability that performance would lead to desired outcomes.

The stated equation expresses that motivational force (urge-to-act), multiplied by the expectancy probability of a particular performance, will result in a particular outcome (Mitchell, 1974 and Connolly, 1976).

Therefore, zero valences or zero expectancy leads to zero motivation (Feather, 1980).
Porter and Lawler’s Expectancy Model
Porter and Lawler came up with an extension of Vroom’s expectancy/valance theory. Porter and Lawler's model is more applicable to the managers that want to address major issues as factors that lead individuals’ effort on one side, the links between that effort and the performance on another side.

Thus, instead of using the mathematical expression of the Vroom model, Porter and Lawler used a diagrammatical expression/model. Contrary to the human relation approach, Porter and Lawler proposed that job satisfaction resulted in performance, but they argued that satisfaction is an instrument rather than a cause for performance. This could be expressed diagrammatically as shown in the figure 3.4 below.

![Figure 3.4: Porter and Lawler's Expectancy Model](image)

Source: (Developed from this Study)
The elements of the model above are discussed below.

- Value of reward- this is similar to Vroom’s valance. That means the value that a person attached to reward or outcome is all about the extent to its attractiveness. Value is the real satisfaction derived.
- Perceived effort/reward probability. Similar to Vroom’s expectancy, this referred to an individual’s perception on the specific rate of effort required to achieve a specific outcome or rewards.
- Effort- this involves the extent of the amount of energy a person expended on a particular action. This is relative to the importance attached to reward and its linkage with effort.
• Ability (and traits) to perform a given task. These abilities covered aspects such as: knowledge and skills; and other variables used to perform effectively.

• Perception of the task required (role perception): means the extent to which a person knows what is needed. This affects the level of effort expended which serves as the prerequisite for achieving the desired performance.

• Performance- this is contingent on the effort put in and the individual’s attributes that could influence performance such as: knowledge; skills; and the perceived nature of the task needed. The ability or accurate perception of what is necessary might lead to the wrong idea; even when individual exerted more effort.

• The reward is a desirable outcome: As Herzberg dissatisfied factors. Extrinsic rewards were coming from outside the job context such as: supervision; work condition; and salary. Intrinsic reward on the other side came from the individual (satisfiers) such as: recognition; sense of achievement; and responsibility. In any organisation, there is a positive correlation between reward and performance.

• Perceived just rewards- this is to do with people’s feelings of how fairly they are paid for achieving a specific performance. As people work, they expect something in return and compare the reward with their effort. Thus, whenever the reward is expected, workers tend to perform well.

• Satisfaction- people perceived that a fair reward for the effort exerted would yield satisfaction. Thus, when people perceived that their rewards are higher than actual reward anticipated they tend to be satisfied and vice versa (Porter and Lawler).

Porter and Lawler’s expectancy model is not straight-forward. The theory demonstrated how the individual’s perception determined efforts. The theory also indicated that managers should evaluate and enhance their reward system through carefully designed plan and duties/responsibilities, management by objective (MBO) and appropriate organisational structure. However, expectancy theories are more relevant in analysing performance related pay (Wright, 2004).

Goal-Setting Theory (Edwin Locke and Latham)
The goal-setting theory of Locke and Latham (1990), proposed that workers were motivated by clear and realistic goals followed by proper feedback. The goal-setting theory entails developing a specific, measurable, achievable, realistic, and time-targeted goal. Practically, both Locke and Latham individually discovered that there was a clear and mutual relationship between the specificity of a goal and worker performance on a given task. Setting clear specific
and high goals was reported to have a significant positive influence on worker’s job satisfaction and performance (Brown and Latham, 2000). The application of this theory could be a useful device for making progress by ensuring that workers clearly understood what was expected of them. Moreover, goal setting may help people to work toward their own personal goal.

The basic principle of the theory is that when people set difficult and realistic goals based on the organisational objectives and feedback, higher motivation and performance would be the end result. The theory holds that intentions to work towards a goal are the main source of workers’ motivation. Particularly, the theory recommends that specific goals enhance performance on the job. Difficult goals when clearly understood produced a greater performance than easy goals did and the feedback resulted in higher performance.

Locke and Latham (1968) viewed goal setting as a vital motivational tool. The theory is based on four prepositions:

1. the goal should be understood;
2. the goal should provide challenges;
3. the goal should be accepted by both parties; and
4. feedback on the previous performance should be communicated in good time.

The theory led to the development of the SMART performance management approach, in which both employers and employees come together to agree on the objective and the rewards attached when it is achieved.

Simply, the assumption of this theory is that all factors remained constant. The more difficult the goal, the higher the level of the workers’ performance achieved. Nevertheless, it is believed that the goal must be accepted by the workers and that easier goals are more likely to be accepted. The difficulty of the task should be easy enough to facilitate acceptance from the workers but difficult enough to improve a high level of effort on the job.

Feedback assists in discovering the difference between what workers have done and what they would do to improve performance. Simply, feedback guides workers to gauge how well they are progressing or otherwise.
The theory concurs that self-directed feedback is the most influential factor of motivation compared to feedback from external sources like supervisors. It has been indicated by the theory (Moorhead and Griffin, 1995) that whenever workers have an equal chance to partake in setting their own goals, they tend to put in more efforts than in a working environment where there is no worker participation with regards to goal setting. Even though the evidence is mixed as to the validity of this hypothesis, workers’ participation in goal setting had been reported to have an impact on workers’ acceptance of difficult goals. In any organisation where workers’ consent has been considered in setting their own goals, they tend to accept those goals no matter how difficult, and even put more efforts to attain them. According to Kennish (1994), control reduces motivation whereas involvement provides a more productive atmosphere in any organisation.

The implication of goal-setting theory to the management is that the productive goal should be clearly stated and drawn to shape behaviour and maintain motivation. The set goal should be difficult but attainable. Thus, goals that are challenging and attainable lead to high motivation and performance because when employees achieved a given predetermined goal, they tend to attribute that to their efforts (Latham, 2004). Therefore, set goals should not be very difficult or seen as unattainable to protect performance from suffering. Goals can thus be set jointly between managers and their employees. In this context, feedback is necessary as a means of evaluating progress performance and redefining goals. The critique of the goal setting theory is that managers considered the theory as a motivational technique rather than a theory.

The managers would achieve their objectives only when workers are involved in setting organisational goals or in short initiated set goal enhances performance. Drucker introduced management by objectives (MBO) which referred to a system of management where both employees and managers come together to set their goals. He employed the acronym SMART (Specific, Measurable, Agreeable, Realistic and Timed). MBO solidly is dependent on the agreement of managers and employees. The manager’s role here is to facilitate the ways through which these goals would be achieved smoothly or without any difficulties so that to improve worker's motivation.

**Reinforcement Theory (B. F. Skinner, 1953)**

Reinforcement theory is a behaviouristic perspective which holds that reinforcement conditions behaviour. Behaviourists believe that behaviour is environmentally caused by reinforcers – i.e. any positive consequence that is immediately followed by a response increases the probability
of that behaviour to be repeated over and over again. Reinforcement theory did not consider the inner state of the people rather concentrates only on what happens to them when they perform an action.

People are ever conscious, meaning that their actions are directed by some forces. They tend to evaluate the costs and benefits of any action or decision taken. Reinforcement theory criticises the goal-setting theory in which the latter holds that people have a stake in their actions, but the former countered this assertion by stating that behaviour is a function of consequences or outcome. In other words, people engage in any activity or actions that would worth their while and avoid any activity or action which is capable of bringing them pain (Bartol and Martin, 1998).

B.F. Skinner developed this theory. He and his associates proposed that there is a need for studying the inner workings of the mind. They went against the needs goals and expectations but instead suggested consequences/outcomes (which was the relationship between behaviour and outcome, and the use of this outcome or consequences to modify peoples’ behaviour). The reinforcement theory rests on the ‘Law of effect” i.e. people tend to exert high efforts and commitments to meet the organisational goal when they perceived that rewards would be offered to them. Therefore, favourable outcome/consequences lead to a similar response in the same circumstance. Furthermore, if outcomes or consequences are painful, employees tend to avoid them.

The proponents of this theory believe that human behaviour could be modified when employing the reinforcement theory. Furthermore, Skinner proposed four simple ways of workers’ behaviour modification in an organisation:

1) positive reinforcement- using beneficial outcome/consequences to motivate or reinforce the desired behaviour through praises, rewards, promotion, paid vacation, holidays leave and allowances (Fred and Alexander, 1999);
2) avoidable learning- more often employees change their attitude so that to avoid unfavourable outcomes such as negative performance review/evaluation, criticism, and so on;
3) extinction- this is the withdrawal of favourable outcome to change the behaviour of workers; and
4) punishment- this is using terrible outcomes like demotion, retirement, payment reduction, dismissal (Korukonda and Hunt, 1989).
The theory was equally criticised by some scholars. The theory postulated that individuals’ actions are influenced by their working place and past experiences. This means that people are not self-directed but rather influenced by external forces to perform. This postulation is always applicable to some workers since there are individual differences as far as motivation is concerned. Miller (1975) opined that for this theory to be more effective the reward should be given immediately upon the completion of a task (laws of contingent and immediate reinforcements). The reinforcement theory prepositions do not consider what creates behaviour, thus it would not be regarded as a motivational theory. In its pure form, reinforcement theory does not consider feelings, attitudes, expectations, and other cognitive factors that were known to have an impact on people’s behaviour.

The study supported the notion that workers motivation is related to their context of operation. Hence, organisations have to consider the sector as well as culture in which they operate in order to motivate workers.

The above mentioned theories were not appropriate in explaining this research. Based on previous studies of compensation in private organisations expectancy theory was used because it is more relevant in explaining performance pay which is more related to private sector. Hence, this study adopted Equity theory being the most suitable theory capable of explaining this research because the research problem and objectives revolves around equity.

**Equity (Social Comparison)**

The equity theory is directed at the employees’ feelings on how fairly they are treated when compared to others. The theory is built upon social comparison where people compare what they contribute to work with the benefits derived from such actions (Adams, 1963).

Reward is the focal point of equity theory and it is considered as the most important factor of motivation. Workers try to strike a balance between what they receive for their efforts and what others are receiving doing the same job.

The equity theory of motivation is attributed to Adams (1963). Equity theory concurred that workers focus not only on the absolute amount of remunerations they earn for their efforts or contributions but also with the relationship of this amount to what others earn within the organisation or elsewhere. Workers, based on their inputs such as efforts, experiences, qualifications and competence, tend to compare such outcomes as reward, recognition and
other extrinsic factors given to them by organisations. Whenever workers felt an imbalance in their outcome–input ratio relative to other workers, tension is created in that workplace due to unfairness (Taris et al., 2002).

Workers normally select their reference person through which they make such comparisons. The theory viewed that making reference to others is the most significant factor in equity theory. Hence, there are four available reference points normally used by workers in making such comparisons:

1. *self-inside* – a worker’s experiences in a different job post inside his or her current working place;
2. *self-outside* – a worker’s experiences in a situation or position outside his other current place of work;
3. *other-inside* – another person or group of people inside the same place working place with a worker; and
4. *other-outside* – another person or group of people outside the worker’s organisation.

A value is attached to different inputs and outcomes depending on how important an employee perceives these variables. Thus, when the employees think that their outcomes are equal to other's total outcomes, they tend to be satisfied and motivated to increase or maintain productivity. If employees saw that what they received as reward was more than what they deserved to get (more than fair reward), they are more likely to increase or put more effort to justify that reward earned (Adam, 1963).

When people observe an imbalance in their outcome/input ratio relative to other workers, it leads to tension. Thus, the more inequalities in terms of reward, the greater the tension created to workers. This tension creates the basis for motivation as individuals strive for what they perceive as equity and fairness. Equity theory viewed that when workers perceive unfairness, they normally tend to select or exhibit one of the six possible behaviours below:

1) change outcome - employees might try to amend the outcome without changing the input such as changing work conditions, status and recognition;
2) cognitive distortion - employees might cognitively distort their inputs or outputs to achieve the result based on the belief that they work harder than anyone;
3) acting others - employees might try to produce changes in others by enforcing them;
4) change the object of comparison: - the employees sometimes might compare themselves with different referent person;
5) leave the field - the employee might seek a more appealing place by requesting for transfer, resign or quitting the job (Jones and Skarlicki, 2003); and
6) change input - here the employee might not put in the required effort but rather engaged in poor quality of work, reduced working hours’ time or absenteeism.

Explicitly, equity theory developed four assumptions/proposals relating to inequitable pay:

1. *given payment by time, over-rewarded workers produce more than equitably paid workers.* Hourly and workers on a salary scale create a high quantity or quality of production to raise the input side of the ratio and bring about equity;
2. *given payment by quantity of production, over-rewarded workers produce fewer, but higher quality, units than equitably paid workers.* People paid on a piece-rate basis exert more effort to get equity, which can lead to achieve better quality or quantity. Though increases in quantity only increase inequity, since producing extra products leads to further over-payment. Thus, efforts should be tailored toward producing quality not quantity;
3. *given payment by time, under-rewarded workers produce less or poorer quality of output.* When workers’ efforts are reduced because of being under-rewarded, this would affect productivity negatively; and
4. *given payment by quantity of production, under-rewarded workers produce a large number of low-quality units in comparison with equitably paid workers.* Workers on piece-rate pay plans can create equity because trading off quality of output for quantity brings about an increase in payment with little or no increase in output.

These four propositions of equity theory have commonly been accepted (Moorhead and Griffin (1995). It has been discovered that inequalities because of over payment did not have a very strong negative effect on workers’ behaviour in most work situations. Workers seemed to accept and tolerate over-payment inequalities than under payment inequalities, or are better able to rationalise them. Although it is believed that workers’ satisfaction with organisational rewards is determined, in part, by comparisons with referent others, the procedure by which people arrive at these conclusions would be virtually impossible to model. While a worker is able to make a rational calculation as to their own outcome/input ratio, it would be difficult to have all relevant information to do so with others. The whole process is more likely to be a subconscious ‘feeling’ that a given referent is ‘better off’ or ‘worse off’ than oneself. This
highly subjective process may or may not be a rational one because in most cases, the choice of referent others tend to be influenced by the psychological profile of the worker. For instance, some people have a tendency of viewing others as being ‘better off’ than them irrespective of the real situation.

The implication of equity theory is that it aids managers to focus on employees’ perception of equitable reward. It also gives employees an avenue to participate in decision making on the outputs to be achieved to increase overall productivity in an organisation (Ackman, 2001). Hence, managers must eliminate or reduce tension and equally any feeling of inequity among workers. Workers who consider themselves unfairly paid are more prone to certain negative symptoms of stress like coronary heart disease, depressions and insomnia which would seriously affect the level of productivity (Taris et al., 2002; Greenberg, 2010).

3.2.2 Authors’ Views on Motivation

This section explores how these authors have viewed the concept of compensation and what were the major determinants of workers’ motivation. Various factors have been used by organisations to improve workers’ motivation in the construction sector in both the private and public sectors. These factors were studied or proposed by many scholars such as: motivational factors (Dolai, 2007); intrinsic motivation (Preacher and Hayes’s, 2008); the model of knowledge-sharing motivation based on a combination of the theory of planned behaviour and self-determination theory (Gagne, 2009); training, motivation, and performance in construction (Tabassi and Abubakar, 2009); critical factors influencing the motivational levels of architects and design engineers’ (AE) motivational level in design firms (Oyedele, 2010); public service motivation (Anderfuhrnen et al., 2010); impact of work motivation on job satisfaction (Saleem et al., 2010); impact of motivation as a human resource bundle on teacher performance (Wanyama et al., 2011); motivation and incentives in relational contracts (Darrington and Howell, 2011); motivational factors (Tan and Waheed, 2011); the effect of training and motivation practices in construction (Tabassi et al., 2012); impact of motivation and leader behaviour on satisfaction (Leonard, 2012); motivational factors impacting the productivity of construction master craftsmen (Jarkas and Radosavljevic, 2013); impact of motivation on employee turnover (Sajjad et al., 2013); the importance of workers’ motivation to enhance organisational performance (Achim et al, 2013); intrinsic motivation and extrinsic incentives (Cerasoli et al., 2014); motivational tools (Safiullah, 2015); intrinsic motivation on workers’ job satisfaction (YousafRaza, 2015); motivational factors (Conrad et al., 2015); the effects of extrinsic and intrinsic motivation (Zhoa and Zhu, 2015); and the role of intrinsic
and extrinsic rewards on the motivation of workers (Smith, 2015).

However, the motivational factors that were frequently reported in construction studies are: real safety, participation in decision-making, clearly defined schedule of duties, job recognition, cordial relationship with peers, work itself, opportunities for over time work, proper supervision of workers, promotion opportunities, challenging task, granting more responsibilities, job security, level of financial reward, ability to choose work mates (Olomolaiye, 1990; Fagbenle et al., 2004; Jarkas and Radosavljevic, 2013).

The factors influencing motivation are numerous as observed from the foregoing various studies but this research focussed on the ones relevant to construction studies. Therefore, this research adopted the factors that were considered as the major determinants of workers’ motivation in Jigawa state’s public construction sector. Furthermore, this study found that in most of the studies on motivational reward was the most vital influencing. Monetary is a motivator because it is a source of livelihood to workers and the back bone of any employment relationship (Salisu et al., 2016a). Money is a prize that you can see, touch and measure just like the job done. May be that is why people assumed money is a motivator as it proves what one has done. The other things achieved from doing a task were not visible. They were personal and difficult to say if they were there or not (Salisu et al., 2016a).

This study is interested in looking at the correlation between the motivation of public construction workers and their packages of compensation unlike the above mentioned studies, which had focussed mainly on compensation as a single construct. Thus, the current study is not similar to the previous researches on motivation in terms of both scope and location. Additionally, these previous studies had concluded that future research can be conducted on motivation either as dependent or independent variable and could include wider economic incentives as a factor. Hence, this study used motivation as a dependent variable of compensation in public construction organisation in Jigawa State of Nigeria. Furthermore, the above mentioned researches recommended that future studies are needed.

The next section reviews the literature on Job satisfaction concept.
3.3 Job Satisfaction

3.3.1 The Concept of Workers’ Job Satisfaction

Job satisfaction is the combination of feelings and perceptions that people have on their current job in an organisation. Workers’ degrees of job satisfaction range from extreme satisfaction to extreme dissatisfaction. Furthermore, apart from workers being satisfied about their job, satisfaction could be influenced by the different attitudes concerning their jobs such as the type of work undertaken, peers, the supervisors and compensation (George et al., 2008).

Job-related behaviours go along with the need for satisfaction (Herzberg et al., 1959). The concept of employee satisfaction is one of the major concerns of an organisation because it affects organisational outcomes like employee performance and productivity, absenteeism and turnover (Onukwube, 2012). Most employees are proud of their various jobs (Onukwube, 2012) because they are satisfied. In fact, employees show a high degree of satisfaction and low turnover intention when the characteristics of their place of work satisfy their needs (Bright, 2008). Job satisfaction is commonly believed to be strongly correlated to productivity as well as to the personal well-being of workers. Job satisfaction entails performing a job one enjoys while performing it well with the intention of effort being rewarded. Job satisfaction also entails enthusiasm and happiness with one’s job. Job satisfaction is a vital factor that determined recognition, reward, promotion, which subsequently leads to a feeling of accomplishment (Kaliski, 2007). Job satisfaction can be referred to as the degree to which workers are contented with the rewards obtained from their various jobs (Statt, 2004). The term job satisfaction could also be defined as the attitudes and feelings people place on their job. Positive and favourable behaviours towards the job signified job satisfaction, while negative and unfavourable attitudes towards the job signified job dissatisfaction (Armstrong, 2006). Hence, when workers felt that remunerations were designed for their betterment, they tend to be satisfied and committed at work (Dewhurst, 2010).

According to Davis et al. (1985) the term job satisfaction is strongly correlated to an individual’s behaviour within an organisation. This involves a combination of positive or negative feelings that employees perceived on their job. In addition, job satisfaction involves a feeling emanating from the perception that the ongoing job facilitates the achievement of both the material and psychological needs of an organisation (Aziri, 2008). Whereas Locke (1969) defined job satisfaction as the pleasurable emotional state which emanates from the assessment of an individual’s job and its potential to facilitate the accomplishment of the personal desired job values, Onukwube (2012) viewed job satisfaction as a feeling of wellbeing, pleasure and
comfortability that workers derived when their earned reward is equitable to their performance or contribution. In a similar perspective, Robbins (2005) highlighted that job satisfaction concerns with the overall feeling an employee have about his/her job. Robbins (2005) argued that positive feelings were attributed to high degree of satisfaction and vice versa. Similarly, Job satisfaction could be defined as workers output against their reward and other supports from the employers (Ajmal et al., 2015).

Although the above definitions of job satisfaction are true and logical, in practice, the scenario is seemingly different. These definitions have not captured a key factor when considering job satisfaction especially within the construction sector which is workers’ compensation in form of pay and benefits (Salisu et al., 2015). Consequently, contrary to the inferences from the definitions above which bother on satisfaction as feeling, emotion or attitude of workers. Hence, job satisfaction could be achieved through employee’s reward and its relationship with his/her contribution to the organisation.

Dipboye et al. (1994) outlined three theories of job satisfaction which include: the dual factor theory; the compares theory; and the cognitive theory. The two or dual factor theory try to highlight how job satisfaction is influenced by intrinsic factors like responsibility and achievement. This supported the assertion that the most significant condition or determinant factors for job satisfaction were intrinsic factors (Ellickson, 2002; Wright and Davis, 2003; Kim, 2004; Borzaga and Tortia, 2006). However, this assertion on the importance of intrinsic factors as a key determinant of job satisfaction is misleading and vague. This is primarily because the outcome and result for any responsibility and the achievement of any task is seen as an extrinsic factor (rewards) and thus should be given more priority. Hence, job dissatisfaction is affected by extrinsic factors such as reward and working conditions.

The Compares theory: the compares theory covered concepts such as need and value as workers measure what they expect to gain within their job and compare it with how it satisfies their need and values.

The significance of job satisfaction lies in the fact that it helps in overcoming many negative consequences of job dissatisfaction such as: lack of loyalty; increased absenteeism; and increase number of accidents (Spector, 1997). Consequently, the three salient features of job satisfaction are:
a. organisations must emphasise human values - this involves the adoption of effective orientation towards treating workers fairly and with respect. Thus, measurement of job satisfaction might serve as a good predicator of employee effectiveness. A high degree of job satisfaction might be a good indicator of emotional and mental state of workers;
b. the attitude of workers depending on the extent or degree of their satisfaction to the job - this would influence the functioning and activities of the organisation's activity. Therefore, it can be concluded that job satisfaction would resulted in positive attitude and job dissatisfaction at work would led to negative attitude of workers; and
c. job satisfaction might serve as predicator of organisational activities (Spector, 1997).

However, some scholars have shown that job satisfaction was higher among public sector employees at all tiers of government. They have mixed results on the extent of job satisfaction among the public sector workers. Some scholar found out that job satisfaction was higher among public sector workers (De-Santis and Durst, 1996; Kamdron, 2005; and Ting, 1997). This claim was countered by conducted by Bogg and Cooper (1995) revealed that it was not higher among public sector employees.

### 3.3.2 Causes of Job Satisfaction

Many researchers have found that job satisfaction could be influenced by certain factors such as: working settings; specific aspects of the job; and employees’ involvement in the organisation (Baron, 1986). Hassan (2009) viewed factors or determinants of job satisfaction in an organisation as: intrinsic motivating factors relating to job content; challenge; responsibility; control over work methods; and control over the workplace, the opportunity to use skills; and abilities and involvement in decision making. Extrinsic factors which relate to workers compensation and the content in which the work is carried out e.g. pay, benefits, and praise. Elton (2010) argued that a man’s desire to be continuously associated in work with his colleague is one of the strongest factors of job satisfaction, if not strongest. Thus, it is true that social interaction could be vital to most people. Therefore, relationship with peers at work could be a major source of job satisfaction. Success or failure in the work performed creates either satisfaction or dissatisfaction.

Lawler and Porter (1967) developed a model for job satisfaction which focussed mainly on the importance of the impact of rewards on job satisfaction unlike the previous model. According to the Lawler and Porter (1967) the intrinsic and extrinsic compensation packages were not directly linked to job satisfaction, because of the workers’ perceptions in respect to fairness of the reward in comparison to the contribution made. Equally, Locke and Latham (1990)
presented a somewhat different model of job satisfaction. They challenged the assumption that the objectives set at the highest level and high expectations for success in work provide achievement and success in performing tasks. Success could be evaluated as an element that provided a job satisfaction. Another classification of factors that determine job satisfaction was presented by Rue and Byars (2003). These factors are: manager’s concern for people; job design (scope, depth, interest, perceived value); compensation (external and internal consistency); working conditions; social relationships; perceived long-range opportunities; perceived opportunities elsewhere; levels of aspiration; and need achievement. These factors that could create job satisfaction also had the potential to cause job dissatisfaction (see Herzberg). Additionally, Christen, et al. (2006) indicated that job satisfaction could be determined by the following factors: job-related factors; role perceptions, job performance; and firm performance.

The extent literature revealed that job satisfaction is influenced by numerous factors such as: the nature of work; reward; promotional opportunities; management; peers; and condition of work. Spector (1997) added contingent reward, fringe benefits, operating condition and communication among these facets. Similarly, the results of a study conducted by Onukwube (2012) revealed that lack of promotional opportunities and salaries were the main causes of job dissatisfaction.

However, this study adopted the most popular determinants of job satisfaction which is reported in most recent studies on job satisfaction. These determinants are generally called five facets of job satisfaction (Onukwube, 2012). Namely as follows:

**Work itself**

Locke (1995) viewed that workers’ job satisfaction is contingent upon job components like work setting. Robbins et al. (2003) defined work itself as the degree at which a job gives an employee stimulating tasks, opportunities for learning and growth and the chance to use their initiative in his/her work. Oshagbemi (2000) has shown that there is a strong relationship between job satisfaction and work itself. Furthermore, Oshagbemi (1997) stated that work itself could create satisfaction and dissatisfaction. The literature established that workers enter into employment relationship with organisation because of the reward for their labour.
Supervision
This is a provision of emotional/technical support and guidance to workers who carry out a job (Robbins, 2003). A number of studies have suggested that supervision which encourages friendship, mutual trust and respect, increases employee satisfaction. The relationship with an immediate supervisor is a step towards worker's job satisfaction (Dupre and Day, 2007). In fact, the concern supervisors have for their workers’ feelings, wellbeing and contribution is an indicator of job satisfaction (McCormack et al., 2006). Hence, when supervisors are adequately rewarded, their job satisfaction would certainly be enhanced. The reward plays a significant role in satisfying workers.

Promotion opportunities
Various studies have suggested that job satisfaction had a strong link with promotion opportunities in an organisation (Pergamit and Veum, 1999). This was supported by Ellickson and Logsdon (2002) who in their study of a public employee found that a strong relationship existed between promotion opportunity and job satisfaction. However, Bowen et al. (2008) and Keiner and Kinicki (2001) added job satisfaction was contingent upon what employees perceived as equity in their employment relation like reward. Workers’ promotion is certainly accompanied with reward increment. The return of promotional advancement experienced by workers is express primarily in monetary terms.

Co-workers
According to the social network theory, support from peers at work serves as a determinant factor of job satisfaction (Bonache, 2005). Several authors stated that the understanding and good relationship between co-workers enhances job satisfaction (Raabe and Beerhr, 2003). Moreover, workers come to an organisation to establish good relationships with co-workers because they are serving a common purpose.

Compensation packages/reward
Studies conducted on the academics and public sector in the UK on the relationship between pay and job satisfaction have revealed conflicting results (Young et al., 1998; Oshagbemi, 2000) which became of concern to both workers and employers. This is a major concern for both workers and their employers. For an employee, pay has a paramount importance in satisfying their economic needs. The pay is so significant because when workers are satisfied with pay, their behaviour and attitude could be influenced towards the desired objective.
(Onukwube, 2012). Employees’ dissatisfaction with pay could lower their morale and commitment, increase theft and enhance employee turnover (Currall et al., 2005).

However, the importance of pay and benefits in satisfying the economic needs of an employee could never be over-emphasised, since they are what employee would gain in his/her employment relationship. This statement was supported by all the authors of job satisfaction in their explanation of what determined employees’ job satisfaction in an organisation. All these mentioned determining factors of job satisfaction when studied critically both in the short and long run concerned finances or monetary aspects. Workers engage in employment relationships mainly for the reward facet which is capable of satisfying his or her needs and later on other job satisfaction facets would follow. Furthermore, there is a correlation between compensation/reward and workers’ job satisfaction (Nelson, 2008). As viewed by Armstrong and Murlis (1994), reward is a means through which various workers’ needs are satisfied. Thus, unsatisfied workers normally reduce workplace morale and lower productivity (Garrett, 1993), although Nzekwe-Excel (2009) suggested that satisfaction of project participants (site participant) is a vital measure and key factor for success in the construction sector (Nzekwe-Excel, 2009). Job satisfaction could thus, be enhanced by increasing autonomy, reducing stress and above all raising compensation (Whitt, 2006).

These above mentioned determinant factors of job satisfaction were equally relevant in evaluating the job satisfaction of public construction workers in Jigawa State of Nigeria. Furthermore, these factors were reported in this research.

Moreover, this study was conducted in different environments, job characteristics, time frame, and specifically, the constructs used in measuring the job satisfaction. These manifest constructs were salary, allowance, gratuity and pension.

Therefore, this research filled in the gaps identified in the previous studies by measuring the influences of these manifest variables (salary, allowance, gratuity and pension) on the latent variable (job satisfaction). The magnitude of these relationships had been identified in the analysis of the research (See Chapter 6).

3.3.3 Measurement of Job Satisfaction

Job satisfaction could be measured/evaluated with interviews, questionnaires or asking a supervisor to estimate the job satisfaction of workers under his/her supervision (Spector, 1997). No employment relationship could exist without compensating workers’ contribution to the
organisation. The rewards system is the prime factor of job satisfaction; alternative job satisfaction measurements are supposed to be observed through the workers’ purchasing power i.e. the value of what can be earned and what is capable of satisfying workers’ needs. An increase in the purchasing power of workers is a function of what is earned as compensation by these workers. The increase in the purchasing power enhances job satisfaction. However, workers’ job satisfaction could be measured using general scientific research methods such as the questionnaire. Job satisfaction can be measured with single as well as several factors (Zigarelli, et al., 1998 cited in Nawab and Bhatti, 2011).

The most notable techniques employed for measuring job satisfaction are:

1) minnesota satisfaction questionnaire; and
2) job description Index.

The Minnesota Satisfaction Questionnaire is a paper-pencil type of questionnaire and can be applied individually or in a group but did not take sex differences into account. This type of questionnaire had one short form and two long forms that date from 1967 and 1977. In fact, 20 job-related features in five levels were measured with this questionnaire. The respondents to this instrument normally took between 15-20 minutes to complete it.

The 1967 version of the Minnesota Satisfaction Questionnaire employs the following response scales: Not satisfied; somewhat satisfied; satisfied; very satisfied and; extremely satisfied. Another version of the Minnesota Satisfaction Questionnaire in 1977 employs the following responses scale which involves very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied and very dissatisfied.

Comparing the two versions of the Minnesota Satisfaction Questionnaire, the 1977 version is more composed because it covered the following aspect of job, such as: co-workers; achievement; activity; advancement; authority; company policies; compensation; moral values; creativity; independence; security; social services; social status; recognition; responsibility; supervision-human relations; supervision technical; variety’; and working conditions.

The Job Description Index is one of the most generally used survey instruments for assessing job satisfaction. One of the features of this type of questionnaire is that it is simple and easy in application. The measurement of strengths and weaknesses within each factor are a sign as in which field improvement and changes are needed. This questionnaire facilitates in obtaining
information on all major aspects of job and takes sex differences into account. This questionnaire was first initiated in 1969 and measures five facets job satisfaction aspects with a total of over 70 potential job descriptions.

The job factors/facets applied on this questionnaire are: the nature of work; compensation and benefits; attitudes toward supervisors; relations with co-workers; and promotional opportunity for workers. Further, the response to the questions on these types of questionnaire on each of the five facets could be evaluated with three available options by the workers or research samples: 1- Relevant, 2- Not relevant, 3- Meaning the employee did not have an opinion.

Currently, numerous studies have been conducted using the job description index (JDI) with a Likert’s scale ranging from 1(Extremely dissatisfied) to 5(Extremely satisfied) (Stanton et al., 2001; Onukwube 2012).

Therefore, this study employed the job description index (JDI) and used a Likert’s scale ranging from 1(Extremely dissatisfied) to 5 (Extremely satisfied) to secure data from public construction workers pertaining to their job satisfaction in Jigawa state. The job description index questionnaire was used in this study because it is concise and easy to understand. The JDI questionnaire have the ability to measure the strength and weakness within each factor for possible modification when the need arises. Moreover, using the JDI questionnaire enabled access to the information on all major aspects of job and takes sex differences into account unlike other job satisfaction measurements.

### 3.3.4 Effects of Job Satisfaction

Job satisfaction causes a series of impacts on various issues in an organisation. These issues include the impact of job satisfaction on workers’ productivity, loyalty and absenteeism etc. Job satisfaction caused increase in productivity if the compensation packages were equitable. There was still an open debate whether satisfaction results in performance or performance causes workers’ satisfaction (Luthans, 1998).

Employee loyalty is one of the most vital factors of human resource management. Employee loyalty is classified into three areas: affective loyalty; normative loyalty; and continuity loyalty. Affective loyalty deals with a situation whereby workers perceive emotional connections to the organisation. Normative loyalty is a kind of loyalty that emanates when the workers feel like they own something or have a stake in the organisation. Continuity loyalty emanates when workers do not have an opportunity to secure employment outside the organisation. There is a strong correlation between job satisfaction and workers’ loyalty, i.e.
the higher the level of job satisfaction, the higher the degree of workers’ loyalty (Vanderbergand Lance, 1992).

Workers’ absenteeism results in additional costs to the organisation. Such organisations are always looking for ways to reduce these costs. Thus, a reduction in absenteeism through an increase in job satisfaction is the probable solution. These mentioned effects of job satisfaction could be properly managed through the provision of an effective equitable compensation scheme, which would eventually increase workers’ job satisfaction. This buttressed the assertion of job satisfaction researchers that fair reward resulted in loyalty, increased productivity and a reduction of absenteeism in an organisation.

3.3.5 Some authors’ Views on Job Satisfaction

The previous researches have linked job satisfaction with various factors: the compensation satisfaction in the Baltics and the US (Carraher et al., 2006); the relationships among employee participation, job satisfaction, employee productivity and commitment (Qureshi and Bhatti, 2007); the effect of HR practices involving reward, promotion and training on job satisfaction (Butt et al., 2007); the relationship between human resource management (HRM) practices and workers' overall job satisfaction (Ileana and Simmons, 2008); the impact of reward and recognition on job satisfaction and motivation (Danish and Usman, 2010); the impact of pay and satisfaction (Artz, 2010); the influence of employee compensation on organisational commitment and job satisfaction (Nawab and Bhatti, 2011); factors affecting job satisfaction of workers in Indonesian construction companies (Marzuki et al., 2012); the impact of economic economic on job satisfaction (O'Shea et al., 2014); the role of conflict and autonomy in the degree of job satisfaction (Belias et al., 2014); the effects of intrinsic and extrinsic compensation on worker attitudes, job satisfaction and organizational commitment as well as the mediating role of perceived organizational support (Ajmal et al., 2015); a conceptual model of relationship between workers’ positive orientation and job satisfaction (Orkibi and Brandta, 2015); the influence of supervisory behaviour and job-induced stress on job satisfaction (Adebayo and Ogunsina, 2011); and the levels of job satisfaction amongst quantity surveyors in private consulting firms in Lagos, Nigeria (Onukwube (2012).

These studies have concerned different sectors of the economy e.g. police personnel (Adebayo and Ogunsina, 2011), quantity surveying (Onukwube (2012), public health departments (Elizabeth et al., 2015), etc. Studies on compensation have also been carried out
in diverse locations globally, e.g. in the Baltics and the US (Carraher et al., 2006), in Indonesia (Marzuki et al., 2012), in Ireland (O’Shea et al., 2014), in Greece (Belias et al., 2014). So many examples which can be followed are available.

The current study used five facets of job satisfaction, being the most used factors in recent studies of job satisfaction because they reflect the essence of the construct. Different measures have been used in evaluating the satisfaction of the workers, but this study opted to use the job description index (JDI) because previous studies gave a signal that there is a need to compare job satisfaction with other human resources aspects in which compensation is part of. The compensation or reward as a single construct was reported to have a significant influence on job satisfaction in the past studies. Hence, the current study considered compensation but split it into four components (salary, allowances, gratuity and pension) in order to have a clear understanding of which one is more significant to public construction workers in Jigawa State. Furthermore, the current study measured the impact of compensation on workers’ job satisfaction in a public construction organisation in Jigawa state of Nigeria unlike the aforementioned studies which focussed mainly on private sector organisations.

Also, past studies had concluded that the functions or influences of other contextual factors on job satisfaction need further investigation in future studies (Onukwube, 2012). Therefore, this research used a different set of constructs and contexts to bridge the gap which existed in the previous researches on job satisfaction.

The next section of this chapter reviews literature on workers’ attraction.

3.4 Attraction of Workers to Jobs

3.4.1 The concept of Job Attraction

The attraction and retention of suitable employees is one of the most important success factors of an organisation. Thus, a good compensation package would help organisations to attract and subsequently maintain the best talents in their workforce.

Workers who are attracted to a particular organisation were more likely to be retained when they fit in to job requirements. Hale (1998) found that 86% of organisations were faced with problems of attracting new workers. Attracting suitable candidates is the most important issue for the success of any organisation. Therefore, sound recruitment and selection procedures were the critical factors for any effective system of HR management (Leisink and Steijn,
Thus, one of the authoritative European writers in the field of compensation management viewed that reward is a key for attracting workers into organisations. So it means that for an organisation to attract employees, the fundamental issue is through the provision of lucrative rewards. Attracting and retaining of employees is a continued exercise in the organisation because the organisation must require the services of its suitable applicants, and at the same time strives to retain the best ones for a long period of time in order to achieve the desired outcomes or objectives.

Effective workers’ attraction policy is a key indicator for organisational success (Gonzalez, 2009). It is apparent that people differ in their needs and this gives more insight in an attempt to describe behaviour in an organisation. Getting the right people into positions in the organisation is not an easy task. Furthermore, different studies revealed that workers’ attraction was equally important as workers’ retention in any place of work. Therefore, to employ a qualified job applicant is as good as the effort to retain them (Gonzalez, 2009). Newell and Shackleton (2000) defined recruitment as an act of attracting individuals who were capable of making a contribution to a given organisation.

Recruiting organisations need planning to meet all their objectives such as best skills and jurisdictions etc. Getting the right people should be the concern of an organisation. When outsiders perceived an organisation as an interesting workplace, where real contributions were made, opportunities for career development are practised; job security and above all substantial compensation packages were offered to workers; there is a very high likelihood that they would be attracted to that organisation.

Therefore, every act an organisation is doing to attract job seekers is called recruiting. Thomas H. Stone says rightly that recruiting was the process of attracting applicants with certain skills, abilities and other personal characteristics to job vacancies that exist in an organisation. Dowling and Schuler (1990) defined recruiting as the process of attracting applicants with certain skills, abilities and other personal characteristics to job vacancies in an organisation. Bratton and Gold (2003) referred to attraction as favourable interaction between the job seekers and images, values and information about an organisation.

In this definition of attraction of potential recruits, the importance of corporate reputation (images) and corporate ethical orientation (values) is clearly focussed on. Workers want to
obtain good compensation and career advancement opportunities while others prepare to feel proud of the organisation they are serving.

However, this study defined attraction as the process of getting the right people with certain attributes such as skills and competencies to join the organisation. Recruitment involves generating a pool of qualified job applicants to fill the job vacancies in an organisation.

For any organisation who wishes to employ workers, it is recommended to adopt an effective intake process in which the skills and knowledge of individual are matched with the demands of the job. Thus, organisations try to sell such information to job seekers through recruitment exercises. Cable and Turban (2001) viewed that in a recruitment exercise, job seekers have three available sources of information, i.e. employer information, people information and job information.

The main function of employee recruitment is to attract qualified people to fill the job vacancies that exist in an organisation (Holtbruggee et al., 2010). Job vacancies could be filled by workers within the organisation or people outside the organisation (Zottoli and Wanous, 2000) or in other words organisations recruit workers either within (internally) or from outside the organisation (externally). All these recruitment methods were vital, that why most organisations used both methods depending on the circumstances (Lepak and Snell, 1999). Organisations used two methods to recruit people, namely: internal methods which involved posting and bidding; employee referral; and skills inventories. External method, which comprised of: employee referral; unsolicited applicants/walk-ins; union hiring halls; recruitment advert; field recruiting; and placement agencies.

Job vacancies might arise because of labour turnover or because a new position has been created. Thus, before offering the appointment letter to the job seeker, organisations used some predictors or devices to distinguish those applicants likely to be successful on the job from those who were not. These predictors consist of: employment interview; test; background and reference check; physical examinations; and health questionnaires, and polygraph testing. In the case study area, employment interviews are normally used for any recruitment exercise.

The decision on which job to apply in an organisation is contingent upon the job applicant’s perception of the people who work in that organisation (Devendorf and Highhouse, 2008). This
is done by job applicants through carefully reading and comparing their skills and competencies with those of the workers in an organisation intending to recruit. Gonzalez (2009) argued that literature on attracting prospective workers is almost non-existence. However, few studies have been conducted on attraction (Forbes, 1997; Noecker, 1997, 1998; Sunoo, 2000).

Noecker (1997, 1998) conducted studies with tittles head on platter and hire power in Mexico respectively. Another study was carried out by Forbes (1997) on locking up the market in Mexico. Similarly, Sunoo (2000) examined strategies for employers on how to deal with human resources challenges in Mexico. However, these studies conducted by the above mentioned scholar is specifically based on Mexican context; hence their findings cannot be extended to other nations. Moreover, their topics of discussion vary with one use in this research and none of these studies were carried out on public construction organisation. In addition, due to the timeframe there is a need to conduct a research on workers’ attraction in different environment, sector, and theme.

The studies mentioned above continue to serve the foundation of attraction concept as one the human resource practices in organisations. In addition to the above several researches, few studies have been conducted on workers’ attraction of which an account has been provided in this study (See Section 3.4.3).

3.4.2 Reasons Why Workers Choose to Work in an Organisation

People were attracted to an organisation not only because of similarities among themselves (Devendorf and Highhouse, 2008) but when such similarities enhance interaction and serve as a source of comfort or joy (Cable and Turban, 2001). Numerous reasons have been stated as causes of attraction. Leisink and Steijn (2008) stated that people were attracted to organisations primarily for psychological contacts to earn (rewards) compensation.

However, these possible reasons for people choosing to work in an organisation were employed into this research based on their relative or consistent appearances in most of the attraction literature. Therefore, based on the findings from literature, workers were attracted to organisations for numerous reasons (Rose and Waterhouse, 2005). According to Ramlell (2003), the motives or reasons for workers choosing to work in a particular organisation are: the distance between the place of work and workers’ homes, and the time taken to commute to and from work (location of the organisation). Rose and Gordon (2010) and Walter et al.
(2012) stated that the amount of money organisations reward their workers in the form of pay and benefits were the most obvious reasons for workers choosing to work in an organisation (Compensation). Leisink and Steijn (2008) highlighted that the actual responsibility a worker has on a particular job is dependent on the place of work (Work itself). Bratton and Gold (2003) stated that the good image of an organisation as shown in many publications, opinions shared by workers, and analysts within the same industry is another factor for attraction (reputation of the organisation). The ability for one to grow in his or her career within a given organisation was a factor for attraction i.e. the prospective employees considered the possibility of moving up the corporate ladder without being frustrated by the organisation. According to Bratton and Gold (2003), some workers leave their current jobs despite higher pay to take a lower job if there is no career development. Hence, they chose a lower job in anticipation of moving up to the corporate ladder (career development). Lewis and Frank (2002) concurred that jobs that are mostly related to low risk are said to be attractive (job security). Thus, whenever an organisation had a record of hiring and firing employees at the slightest chance, that organisation would be unattractive to potential job applicants. The manner in which organisations treat their employees as well as the techniques employed in managing its workers were the keys for attracting workers (organisation culture). The extent to which an organisation motivated its workers to do their work diligently is an attracting tool (challenge) (Ramlell, 2003). Hutchings et al. (2011) viewed that provision of various forms of training programmes in an organisation resulted in worker attraction (training and development). A high degree of worker participation in decisions regarding their work is a vital reason for joining an organisation (empowerment). The effective coverage provided and moderately low premium workers benefits (attractive benefits) also serve as an attractive factor (Ramlell, 2003).

Monetary reward is the main reason why workers join an organisation (Hutchings et al., 2011). Public construction workers in the Jigawa state of Nigeria were attracted to work in the ministry of Works and Transport mainly because of the remunerations offered by the state. Thus, due to a higher unemployment rate and the state’s economic situation, job applicants have no choice where to apply.

These above mentioned factors of attraction have been used in various researches as an account or reason why people choose to join a particular organisation. However, not all the factors could be regarded as a determinant factor for workers’ attraction in Jigawa state public sector. Therefore, this research used only these factors that were more applicable in attracting
workers in Jigawa state. The literature reviewed established that an organisation became attractive after all compensation packages were offered fairly.

3.4.3 Some authors’ Views on Attraction

The discussion below gives an insight into the various authors’ views on the concept of compensation in understanding on how it serves as one of the major determinants of job attraction.

These studies on workers’ attraction revealed that there is inadequate literature on the ‘attraction’ concept. Nevertheless, these scholars have conducted their studies such as: critical information in order for organisations to effectively attract and retain the lower-level Mexican workers (Gonzalez, 2009); retention of engineering and technical (E&T) professionals (Rose and Gordon, 2010); exploring HR managers’ perceptions of how their organisational practices and external contextual changes in industrial relations legislation present challenges for the sector and influence attraction and retention of highly skilled employees (Hutchings et al., 2011); and explored the barriers faced by female undergraduates in the construction disciplines at Nigerian Universities (Adogbo et al., 2015).

Consequently, these studies revealed that factors for attracting workers in to an organisation comprise of: reward; work it-self; supervision; proximity to place of work; advancement; empowerment; job security; guidance; reputation of the organisation; desperation; actual responsibility; manners in which workers are treated; and manner in which the organisation is operating. The lesson learned from these studies was that workers are attracted to organisations because of those mentioned factors. Their studies revealed that reward plays a significant role in attracting workers to the organisations. On the contrary, all of these mentioned studies used compensation as a single factor for attraction rather than splitting it into various components. Since workers’ compensation is not only pay alone but consists of all reward packages offered to the employees for their services or contributions (Bhattacharya and Sengupta, 2009). Hence, the current study was conducted within the public construction sector and it examined the relationship of four peculiar compensable packages with public construction workers’ attraction. Moreover, this study was broader in its coverage and would be highly beneficial because it dealt with the public sector – a broader and wider sector that employs the services of greater segment of the society. The previous researchers on attraction suggested that future studies could be conducted in different environments and topics. Nevertheless, next section reviews the literature on workers’ retention concept.
3.5 Retention of Workers

3.5.1 The Concept of Workers’ Retention

Nowadays, organisations are competing to attract and retain employees based on their job requirements. Dibble (1999) stated that if you think that it is difficult to retain your worker at this time, you should know that in the future it would be worse. Chipunza and Samuel (2009) stated that both private and public sectors were also faced with difficulties in retaining their best talent. Nawab and Bhatti (2011) stated that one of the motives for leaving the organisation was inadequate compensation. A study conducted by Ahsan et al. (2014) revealed that compensation was a significant factor of retention in an organisation.

Workers’ retention programme is considered to be effective when an organisation is geared towards creating a work environment that encourages and supports workers to continue with the employment relationship in the organisation (Sandhya and Kumar, 2011). Workers’ retention issues seem to be the most critical challenge facing organisations in managing workforce in the immediate future. Hence, organisations that are not compensating their workers equitably would eventually face a high rate of turnover (Shakeel, 2015).

Robbins and Judge (2010) concurred that some organisational factors were vital in understanding workers’ behaviour or attitudes to work because they shaped the manner in which workers think, feel, and behave.

However, many studies discovered that factors such as: adverse work environment; lack of organisational support; injustice; poor human resource management policies; and perceived psychological contract breach to have a strong impact on workers’ retention or turnover in an organisation. Ruwan (2007) empirically evaluated six HR practices (realistic job; information; job analysis; work family balance; career development; compensation; and supervisor support). In the course of carrying out a literature review, this study discovered that labour turnover and retention are two sides of the same coin, meaning that whenever retention increases, turnover decreases or vice versa. However, the focussed of this research was on workers’ retention. Some factors associated with these concepts were similar and would depend on how a researcher used them whether positive (retention) or negative (turnover). The workers’ retention and employee turnover constructs have been used interchangeably by scholars to explain why workers stay long in an organisation. In the same vein, any factor that leads to employees’ turnover, when effectively or adequately provided by organisations, could equally leads to workers’ retention.
Therefore, the emphasis in this research was to establish how different compensation packages might influence workers’ retention. This study was however limited to and specifically focussed on the human resource aspect of public sector construction workers. The available literature on the topic revealed that HR practices were multi-dimensional factor which involves advancement and training, recruitment and selection, compensation policies and workers feedback, information exchange and job security, organisational structure and performance (Ahmad and Schroeder, 2003; Demo et al., 2012; Fey and Bjorkman, 2001; Huselid, 1995; Ngo et al., 1998; Pfeffer, 1998; Thang and Quang, 2005).

Human resource management practices could be defined as all policies (annual performance appraisals), specific policies (e.g. equal opportunities), methods (e.g. workers surveys) or approaches (e.g. management by objectives) that can help in managing workers at work place (Petersitzke, 2009).

For the sake of parsimony, the present study focused on compensation packages as major determinants of workers’ retention. Compensation packages include financial and non-financial incentives which are offered to workers for their outstanding contributions to the organisation (Aswathappa, 2008; Thomas, 1999). More precisely, this research was conducted based on financial reward in the form of pay and benefits.

Generally, skilled workers’ retention has been given serious consideration in the event of the persistent increase of employees’ turnover rate. Fheili (2007) concurred that inadequate compensation is one of the prime factors why workers leave organisations.

Organisations, public or private, require skilled employees to survive in a competitive environment (Samuel and Chipunza, 2009), since competitive labour markets have made employee retention a primary concern (Lynch and Perry, 2003). Abbasi and Hollmen (2000) stated that when employees are massively leaving the services of an organisation the drift would endanger the organisational effort in achieving its objectives. This entails that whenever best talents or critical workers are leaving both the innovation and service consistency would suffer. Therefore, organisations should place more emphasis in retaining them because losing them would lower productivity and profitability (Fitz-enz, 1997).

**Definitions of workers’ retention**

There is no single definition of workers’ retention that could be universally acceptable because perception of the organisations towards workers’ retention may differ. McKeown (2002)
concurring that some organisations perceived retention as a low rate of turnover to the viable degree, some based it on pay and benefits while others view it as part of organisational culture (way of how people are treated in organisation). Different opinions have been identified in the current literature on the definition of employees’ retention, the type of employees to be retained and the method to be used in the retention (Mohlala et al., 2012).

Browell (2003) defined employee retention as an act of holding on to workers and not allowing them to join rival organisations. To Bratton and Gold (2003), retention could be defined as organisational practices and incentive techniques directed at making workers prolong their stay. Workers want to obtain good compensation and career advancement opportunities while others feel proud of the organisation they are serving. Whitt (2006) defined employee retention as the organisation’s effort of holding employees to serve for a long period of time in the organisation. Chaminade (2007) viewed workers’ retention as an optical action by an organisation that provides work conditions and environment, which helps employees to stay for a long period of time. Sandhya and Kumar (2011) came up with another definition of workers’ retention as a way through which workers were encouraged to stay in the organisation for a certain period of time or until the completion of a project.

Workers’ retention comprises procedures through which workers are lured to stay long until retirement or until the project is completed (Haider et al., 2015). Therefore, in this research, workers’ retention has been defined as the continuation of an employment relationship between workers and their organisation, which systematically makes adequate provision for improved workers’ welfare and compensation aimed at making working conditions conducive for them to in order to entice them to stay longer and to serve well (Salisu et al., 2016b). However, to address the issue of labour cost which is dreaded by organisations, only skilled and competent workers should be retained by the organisation. Thus, when workers were in possession of these job requirements their pay and benefits should be high so as to prolong their stay for fear of losing them to other organisations. Although, in any organisational set up whenever labour cost goes up it would affect the price of its product, hence only workers who were capable of delivering good results should be retained. Similiarly, McKeown (2002) maintained that only high performers should be retained in an organisation. Equally, this also buttressed the assertion of Samuel and Chipunza (2009) who concurred that the significance of rewarding an employee is to prevent the highly skilled ones from joining another organisation. Bliss (2007) and Sutherland (2004) believed that an organisation loses productivity, social capital and experience when competent and skilled workers leave.
In this regard, the salaries of workers who are highly qualified should be increased to prevent them from leaving for another job (Holtbrugge et al., 2010). Offering equitable compensation packages to public sector workers might serve as a retention technique and may prevent them from leaving to private sector organisations.

### 3.5.2 Factors Associated with Workers’ Retention

A series of studies have revealed that retention is influenced by several key factors. The list of retention factors in the literature reviewed is not meant to be exhaustive of all possible theories or variables connected to workers’ retention. Rather, the focus of this study was placed on testing the relative frequency with which various retention factors appear when examining workers’ reasons for staying or prolonging their employment in a particular organisation (Yazinski, 2009). Patgar and Kumar (2015) stated that certain factors are essential in influencing workers’ decision to either leave or stay in an organisation. Such factors are: compensation packages; convenient and flexible work hours; recognition and rewards for good performance; career growth and promotion opportunities; job security and training; and development programme. Several studies have identified various factors that if managed well would lead to workers’ retention. Although, some researchers have studied retention from the organisations’ perspective and some from employees (Shakeel, 2015). The concerned of this study is what Jigawa state government should do to improve public construction retention. Hence, this study was geared at identifying what workers perceived as important factors for their retention.

Yazinski (2009) classified factors for retaining workers into 12 but this research modified these factors into 11. Moreover, this research used the ones that were relevant in public sector in Jigawa State. Compensation packages play a major role in retaining workers in any setting (Salisu et al., 2016b). This study found out that in Jigawa state, remuneration is the most determinant factor for workers retention capable of preventing them from joining private organisations or elsewhere.

Therefore, the most relatively frequent retention factors employed in various studies could be summarised into 11 factors listed below:

1) **Ability and recognition**: Recognition of personal job accomplishments is an effective retention tool for workers at any level (Yazinski, 2009). Studies revealed that fulfilling
workers need for acceptance by recognising their task accomplishments is one of the factors that make them to stay long in an organisation (Redington, 2007). The organisational benefits of personal recognition are priceless, yet statistics concurred that the influence of verbal praise has the capability to enhance organisational loyalty, motivation, and perseverance at no extra charge. Therefore, both skill recognition (ranging from verbal praise to incentives/rewards) and learning opportunities (growth/development) improve and enhance performance, effectiveness, and retention (Agrela, et al., 2008). Normally, organisations give workers something of monetary value to recognise their efforts. In the Nigerian public sector, effort recognition comes in the form of promotion to the next grade level, which results in getting more pay and benefits (Salisu et al., 2016b).

2) **Education and Working Climate:** Learning and development opportunities were considered a vital factor for the retention of highly skilled workers (Arnold, 2005; Hytter, 2007; Walker, 2001). Therefore, an organisation must enhance learning and working climate. The idea of learning and working climate was derived from past study (Abrams et al., 2008). Specifically, it can be described as an avenue where workers engage their labour and at the same time learning. Simply the concept involve: guidance and recognition on the job; work pressure; the degree of empowerment and the responsibility that employees experience; choice in work to be done and development; challenging and meaningful work; and advancement opportunities. The previous study discovered that the appreciative approach, operationalised through an appreciative learning and working climate, had a significant impact on workers’ retention (Verheijen and Dewulf, 2004). The more workers learn, the more they advance in their career paths, and the more financial reward they would secure (Abrams et al., 2008).

3) **Job Flexibility:** Job flexibility is another key for retaining workers at all level (Boomer Authority, 2009). Scholars illustrated the significance of employment flexibility like scheduling variations that could effectively contain work time of people, workloads, responsibilities of workers, and locations around family responsibilities (Cunningham, 2002; Pleffer, 2007). Organisations added responsibilities, workload or time to workers but attached additional reward.
4) **Cost-Effectiveness:** Organisations providing cost-effective job flexibility options benefits from satisfying the needs of all employees, independent of age, which allows for the reallocation of expenses associated with recruitment, work space changes, sick time, absenteeism, and commuting costs (Agrela, *et al.*, 2008; Boomer Authority, 2009; Cunningham, 2002). There is a relationship between cost-effective "flexibility" choices and workers retention (Boomer Authority, 2009). Eyster, *et al.*, (2008) indicated that organisations can cost-effectively satisfy the needs for job flexibility options to encourage workers retention. However, the provision of cost-effective “flexibility” options is crucial in the retention of all workers, even though there are differences in position, skill/knowledge level, and duration of employment (Eyster, *et al.*, 2008).

5) **Training:** Training is a tool for workers’ retention at any level. The provision of training and development exercises is crucial in aiding organisational growth, more specifically with performance and technological improvements (Boomer Authority, 2009). The training cost an organisation would incur is less than the one incurs when it is not provided (Prenda and Stahl, 2001). Eisen (2005) concurred that when training exercises were accessible to all workers; it correlated with a 70% increase in workers’ retention rates. Eisen (2005) stated that training approaches that connect workers with work challenges, career advancement opportunities, pay, benefits and good work environments are considered as valuable tools for retaining workers at all level. When training programmes are regularly provided, it improves growth, prosperity, and retention for organisation and its workers (Amble, 2006). Both private and public organisations make provision for training programmes which help workers to advance in their career or be allocated with more responsibilities with more reward attached. The focused of this study is training, which is sponsored by Jigawa state. Workers in Jigawa state are sometimes promoted based on additional qualification which entails more reward (Salisu *et al.*., 2016b).

6) **Career Development:** Career planning is one of the aspects of workers’ development programmes. One significant aspect of career development is that it helps workers to manage their lives and alleviate the fear of a lack of promotion track not only to perceive that it was provided just for employers’ benefits. Eyster *et al.* (2008) indicated that job flexibility along with acceptable career and life options were vital rewards to all workers. In the Nigerian service context, job security is more related to the public sector than the private sector.
7) **Superior-Subordinate Relationship**: Employee development programmes cannot be effective without a culture that facilitates them. Therefore, it is required that superior and subordinate relationship is of a great significance in the organisation. In fact it is an intangible incentive that is capable of making a remarkable difference in workers motivation (Moses, 2000).

8) **Compensation**: Establishing a compensation structure facilitates employee development. Many organisations were basing pay rises on workers’ productivity, while others continue to reward workers’ achievements individually (Feldman, 2000). These scenarios bring about confusion when workers were not getting significant pay raises, yet workers at the managerial level were handsomely rewarded (Feldman, 2000). This action would make those who did not receive reward increments to leave the organisation as a result of the perceived inequity. However, when compensation packages are equitably increased, workers are more likely to remain in the organisation for a long period of time (Salisu et al., 2016b). The correlation of benefits with retention is another key for retaining workers. Maccoby (1984) revealed that when workers were satisfied with benefits, they tend to be motivated and work productively, which in turn led them to stay long in an organisation. Therefore, in the event that benefits were not equitable, workers left for another organisation (Salisu et al., 2016b). This is practicable in Nigerian construction organisations where most workers left for private organisations because of inequitable benefits (Salisu et al., 2016b).

9) **Organisational Commitment**: Committed employees stay longer than those who are less committed in an organisation. The more employees are committed, the less intention of leaving to another organisation. Commitment is significantly and positively related to workforce retention. Therefore, Workers’ commitments could be improved with monetary reward in any organisation whether private or public.

10) **Communication**: Good communications enhance worker identification with their organisation and build openess and trust culture. Systematically, organisations supply information on values, mission, strategies, competitive performance, and changes that might have an influence on workers’ enthusiasm (Gopinath and Becker, 2000). Many organisations are striving to provide information that workers require through the most reliable sources. Thus, information pertaining to workers’ rewards is a vital tool for
retention. This information would reduce suspicions which subsequently increase likelihood of workers’ retention.

11) **Motivation:** Management theory and practice mainly focusses on extrinsic motivators. They are powerful motivators; by themselves but no longer sufficient as intrinsic (Herzberg). Compensation is crucial to workers nowadays (Thomas, 2000). Currently, motivational issues are more multifaceted because of the wealth and opportunities workers have benefitted. In the long run, workers need intrinsic compensation for sustenance and productivity (Thomas, 2000). Employees are said to be responsible for their own careers, right to seek appointment in a place where their work would be effectively compensated and where they would have an opportunity for skill development to facilitate their employability (Hall and Associates, 1996). Highly skilled employees are more prone to leave work which attracts low reward. Therefore, in the future, the biggest benefits would systematically enhance the organisation’s intrinsic reward process, making the work itself beneficial and this would lead to retention.

Many studies of retention factors have been carried out in the context of the private sector, with little emphasis on the public sector. This study differed from other research because it was undertaken on the public sector, particularly construction organisation in Jigawa State. The study concluded that all the factors of retention mentioned in the previous studies depended on monetary or financial reward because it is the backbone of workers’ retention in an organisation. The decision to stay or leave solely depends on the amount of remuneration an organisation offered to workers. Organisations offer training, career development, recognition and good working conditions to improve retention. Thus, training is obtained by the workers to advance their career to earn a promotion; of course after promotion monetary aspects are used to reflect that effect. Most recognition is given to workers in terms of financial benefits. Reward prove to be a prime factor in the workers condition of service; if it is not equitable workers are likely to leave to other organisations that offered better pay and benefits. This explanation supported the notion that compensation packages had a strong impact on workers’ retention (Haider et al., 2015).

### 3.5.3 Some authors’ Views on Retention

Many authors have conducted their research on workers’ retention using various factors of human resource aspects. Furthermore, their studies have employed compensation constructs in
different perspectives. The discussion in this section focusses on how these scholars view the concept of compensation and what determines workers’ retention in an organisation.

Several studies have been conducted on workers’ retention such as: application managing employee retention as a strategy for increasing organisational competitiveness (Ramlall, 2003); the extent to which intrinsic and extrinsic motivational variables influence the retention and reduction of employee turnover in both public and private sector organisations in South Africa (Samuel and Chipunza, 2009); Retention of E&T professionals in an Australian public service agency (Rose and Gordon, 2010); Employee retention by motivation in Indian private firms (Sandhya and Kumar, 2011); comparison of the factors affecting employee retention of two heavy engineering manufacturing companies in India (Sinha and Sinha, 2012); Human resource (HR) practices that increase workers’ employee retention in Pakistan telecom sector (Haider et al., 2015); the major factors of retention in organizations in India (Patgar and Kumar, 2015); Workers motivation and its influence on retention in Ambo mineral water factory (Kassa, 2015), motivational factors that impact workers’ retention (Nagabhaskar, 2014); and the influences of reward and work environment on the retention of employees in the Hotel Industry in Mombasa County (Msengeti and Obwogi, 2015).

These above mentioned researches on retention have employed certain factors to define what really make workers to stay long in a given organisation. These factors are: training, supervision, workers commitments, recognition, career opportunities and reward. However, the influence of these retention factors is relative to the sample used, context and the factors used to measure retention concept. Moreover, the current research observed that in most of these researches compensation has a positive impact on retention.

These previous studies viewed workers’ compensation as a single research construct, but this study considered it as a multi-faceted variable construct involving packages such as: salary; allowances; gratuity; and pension. Moreover, no research has yet been reported to have study such compensation aspects in public or private sector, particularly in Nigerian construction sector.

In nutshell, the above previous studies on compensation and motivation, job satisfaction, attraction and retention do not take into account the contribution of different components of compensation in their studies. However, to determine accurately which of the components contribute more, the compensation construct must be split into various components or
packages. Nevertheless, this study bridged this gap of knowledge by conducting a compensation research not as a single construct.

3.6 Influence of the Literature Review on the Current Research

In the course of conducting this study, the literature review influenced this research in different ways. The critical evaluation of the literature revealed that compensation contributed a lot to the motivation, job satisfaction, attraction and retention of workers. It is on this basis that the current study was carried out among some public sector construction workers of Jigawa state of Nigeria. The five constructs studied in this research have been reported in various researches; but none of these previous studies measured the impact of compensation on the aforementioned four constructs concurrently (Chatzopoulou et al., 2015; Haider et al., 2015; Hutchings et al., 2011; Salisu et al., 2015; Salisu et al., 2016a; Salisu et al., 2016b). Critically, compensation has also not taken into account the contribution of its different components (2016a; Salisu et al., 2016b). This study thus built on previous knowledge by researching compensation not as a single construct but as a compounded concept.

The methodology adopted was also influenced by similar methods reportedly used in literature. However, this research is peculiar with regards to the methods used to obtain relevant data from the samples. The current research applied appropriate assumptions, paradigm and approaches to secure data from the workers in the Ministry of Works and Transport. The methodological assumptions involved in this study consisted of ontology, epistemology, and axiology (Blaikie, 2007; Tashakkori and Creswell, 2007; Creswell, 2012). To ensure objectivity, the positivism paradigm was adopted (Easterby-Smith et al., 2002). This paradigm holds the view that knowledge is arrived at through the gathering of facts that provide the basis of laws (Eriksson, and Kovalainen, 2008). In positivism a researcher is expected to be separate from the research process, so that the research could be objective and theory-free (Molina-Azorin, 2012). Another motive behind applying the positivist paradigm in this study was that it could also be employed to measure and analyse causal relationships that were consistent across time and context (Eriksson, and Kovalainen, 2008). Hence, this research is deductive in nature because it started from the general to the specific; it involved making a valid reasoning from one or more statements on a particular issue. This aids in the generalization of findings; and in making deductions from the respondents’ opinions on issues relating to compensation in Jigawa state of Nigeria. In this study, the knowledge of compensation management as a holistic perspective was examined in a specific sector which is the Ministry of Works and Transport. Further, a positivist researcher obtained primary data mostly through sample surveys which
were outcome-oriented and assumed natural laws and mechanisms (Molina-Azorin, 2012). Therefore, literature provided a basis of the choices made in terms of methods.

The current study was a relationship study of independent and dependent constructs, and the literature revealed that to analyse data of that nature several techniques were available to researchers. Consequently, this research discovered that two techniques that were most relevant, namely: regression analysis; and structural equation modelling (Islam and Faniran, 2005; Scrima et al., 2013; Voigt and Hirst, 2014). In order to evaluate the relationship between compensation and public construction workers’ motivation, job satisfaction, attraction and retention in the organisation under study, SEM was more appropriate than regression. This research thus used SEM because of its strength in modelling the relationships among multiple independent and dependent variables at a time (Zainudin, 2012) compared with other methods (e.g regression) that can analyse only one layer of linkage between independent and dependent variables concurrently (Chai et al., 2015). Furthermore, since the relationship between compensation and workers’ motivation, job satisfaction, attraction and retention involved various constructs, it was the contention of this study that SEM would yield a better result than other statistical methods of analysis.

Several studies in construction have been conducted using SEM to obtain different results (Jin et al., 2007, Yang and Ou, 2008; Dolai et al., 2012; Chai et al., 2015). However, the results obtained from the current analyses were new developments in construction research because they came from the responses of workers in public construction sector specifically Jigawa state, Nigeria.

The previous studies conducted so far on both private and public sectors were quite limited as they did not consider workers’ motivation, job satisfaction, attraction and retention collectively. Furthermore, no previous study had been reported on compensation as a multifaceted attitude in either the public or private sector, particularly in the area of construction. Hence, the current study addressed shortcomings and gaps in the previous researches in order to provide a substantive view on the construct of compensation and its relationship with the four variables of motivation, job satisfaction, attraction and retention (as discussed in more details in Chapter 6).
3.7 Summary of Chapter 3

This chapter has covered the discussion in detail in respect of the concepts of workers’ motivation, job satisfaction, attraction and retention. The relationships of compensation with these variables have been examined. Motivation simply described ways of human behaviour. Motivation in this study has been defined as the driving motives (force) behind the reason why people do what they do. Motivate is to offer workers with certain incentives to act in certain desired ways. Therefore, this motivational concept is built around two major theoretical perspectives of motivation, namely content and process theories. All theories discussed under the content category focussed on the factors that influenced motivation. These theories of motivation are: Need, Dual factor, ERG, X and Y, Achievement, and Ouchi theories. These four theories were popular among managers because each had an intuitive logic, and above all the theories were easy to understand. Likewise, process theories involved expectancy, equity and goal-setting theories. These theories focussed on the processes that occurred in motivation. The major criticism of motivational theories is that all are more relevant in their state of origin or context. The chapter established that the most effective motivational tool is the reward. Job satisfaction had been given serious attention by organisations because of its influence over the organisational result/outcomes such as performance, productivity, absenteeism and turnover. Job satisfaction simply referred to the total of all good feelings that workers have with regards to their job. Workers’ job satisfaction was relative to some certain factors such as reward, supervision, co-workers, promotional opportunities, and work itself. However, the major determinant factor is employee reward because it is only through that worker could satisfy their economic need. The reward serves as a vehicle through which workers’ needs are conveyed or satisfied. Job’s satisfaction could be enhanced through the compensation package increase, autonomy at work and stress reduction. Therefore, job satisfaction could be measured through scales like job description index, Minnesota satisfaction questionnaire, job diagnostic survey, but job description index was more popular among researchers. There is a correlation between compensation/reward and workers’ job satisfaction. Workers’ attraction and retention are like two sides of a coin, meaning that it is only when employees are attracted that could serve the basis for their retention provided they perform wonderfully. Workers were attracted to organisations because of many factors like pay and benefit, career development, job security, corporate image, adventure, desperation, challenge, and work it-self. Therefore, this study discovered that ten factors are most frequently been used to explain what determine workers’ retention. These factors were: recognition; education and working climate; job flexibility; training, career development;
This study found that the most vital factors for workers’ retention are compensation packages. It is indicated in the study that pay had a strong influence on worker's attraction and retention in the workplace through critical review of literature.

The next chapter establishes a linkage between the concepts examined in the course of literature review.
4.0 CHAPTER FOUR: DEVELOPMENT OF A CONCEPTUAL FRAMEWORK

4.1 Introduction to Chapter 4
The second objective of this study is to develop a conceptual framework based on the findings from the literature so as to establish appropriate variables and methods that will guide this research. Pursuant to addressing this objective, the chapter established a conceptual framework based on the findings from the literature. Furthermore, the research established the relationships among the constructs under study. Lastly, the chapter concluded with hypotheses development through the established relationships between compensation and workers’ motivation, job satisfaction, attraction and retention.

4.2 Definition of a Conceptual Framework
A conceptual framework is said to be an idea on how the study problem would be investigated (Fisher, 2007). The conceptual framework could also be referred to as a logically structured representation of concepts, variables and relationships involved in a study with the aim of clearly identifying what would be explored, examined, measured or described. The conceptual framework involves the particular direction by which the study would have to be conducted. In the statistical domain, the conceptual framework explains the relationship between a given construct established in the research. Conceptual framework equally contains the input, process and output of the whole study. The conceptual framework is also called the research paradigm (Asher, 1984).

Since this research was a relationship study, hence there is a need for a conceptual framework which would help in understanding the domain of the study (definition of the subject/concept), related literature reviewed (definition of research problem and to identify the gap), and deciding on the methodology to be employed, what would be studied and how to study it.

4.3 The Difference between Conceptual and Theoretical Frameworks
The conceptual framework work tests theories that represent the results of various investigations on how phenomena happen while a theoretical framework offers a general representation of relationships between things in a particular phenomenon (Swanson, 2013). On the one hand, the conceptual framework shows the factors, variables, key agents and how they relate. This conceptual framework is applied when scholars have different concepts and want to show how these concepts interrelated with one another. On the other hand, the theoretical framework is used when a researcher wants to explain a theory. This is to do with
how the various elements of theories link together. This type of framework is applied by researchers on theories (Fisher, 2007). The current study involved both conceptual and theoretical frameworks. The application of conceptual framework in this study was that the research established a relationship among variables. In the application of theoretical framework, this research explained different theories which guided it (See Chapter 2 and 3).

4.4 The Relationship between Compensation and Motivation, Job Satisfaction, Attraction and Retention

This study found from the literature reviewed that good compensation packages would help organisations to attract and subsequently maintain best talents in any organisation. It was indicated from the study that pay had a strong influence on worker's attraction and retention in the workplace. Thus, many studies have been carried out and found that compensation is correlated to employee motivation, attraction, and retention and job satisfaction as viewed by Worldatwork (2007).

In their studies, Kubo and Saka (2002) and Mani (2004) found out that good compensation is the most effective motivator. Islam and Ismail (2008) and Mujah et al. (2011) stressed that monetary reward/compensation had a strong impact on worker's motivation. There is a correlation between compensation/reward workers job satisfaction (Nelson, 2008). As viewed by Armstrong and Murlis (1994), rewards are a means through which various workers’ needs were satisfied. Numerous empirical studies revealed that monetary incentives served as tools for attracting workers (Bhatnagar, 2007; Raman et al., 2007; Hassan, 2009). Leisink and Steijn (2008) opined that people are attracted to the organisation mainly for compensation packages. Hassan also stated that financial gains had a strong influence in attracting workers. A study conducted by Lynch and Perry (2003), Fheili (2007) and Hausknrch et al. (2009) concurred that equitable compensation packages could serve as an effective worker's retention mechanism. Thus, the full detail of these established relationships were thoroughly explored in this study (See chapter 3).
The impact of compensation on workers’ motivation, job satisfaction, attraction and retention have been established from various literature reviewed in the course of this study. This research is quantitative in nature and studied the relationships mentioned earlier. Hence, this study focused only on the variables that were stated in its objectives. Thus, there is a need for the development of a conceptual framework in order to understand relationships better. Therefore, the impact of compensation on variables such as workers’ motivation, job satisfaction, attraction and retention led to the development of the conceptual framework above.

Due to the fact that workers make comparison through four reference point as mentioned in chapter three (3). The equity theory was used to explain these relationships between compensation and public construction workers’ motivation, job satisfaction, attraction and retention.

### 4.4 The Relationship among Motivation, Job satisfaction, Attraction and Retention

It had been shown from the conceptual framework above that the relationship of compensation and variables such as workers’ motivation, job satisfaction, attraction and retention has been established in the literature reviewed.
This study also found out that variables used are related to one another; motivation relates to job satisfaction, workers’ attraction and employee retention. Job satisfaction relates retention and lastly, employee attraction relates to retention. Motivation has an impact on employees’ job satisfaction which in turn leads to high productivity (Samina et al., 2011).

Some motivational factors like good compensation packages are the motive behind the employee attraction to an organisation (Lewis and Frank, 2003; Ramlall, 2003; Leisink and Steijn, 2008). Motivation has a strong influence on workers’ retention when motivational variables are put in place like good reward, promotion opportunities, good working environment (Walter, 2001; Mohlala, et al., 2012).

Therefore, whenever workers are satisfied in their work, it would result in maintaining or holding such workers in the organisations’ workforce for a long period of time (Hausknrch, et. al, 2009; Onukwube, 2012). Workers’ retention is contingent upon the attraction of the qualified staff, since incompetent workers will not stay long in the organisation (Sandhya and Kumar, 2011).

The job satisfaction and retention of public construction workers in Jigawa state are going on the same direction because when workers are fully satisfied with their various jobs, they are unlikely to look for another job elsewhere. Simply job satisfaction might lower employee turnover rate. Equally to buttress this issue, in their studies Hausknrch et al. (2009) and Onukwube (2012) found that whenever workers are satisfied in their work, it result in attraction and retention of workers. Tang et al. (2000) revealed that receiving more reward has little significance or impact on employee retention and further suggested that it could only be significant when job satisfaction is low.

The impact of compensation on these four dependent variables result in certain desirable outcomes like increased productivity, job satisfaction, reduction in turnover rate, reduction in absenteeism and of course potential job applications might likely increase. Furthermore, employee attraction and retention are like two sides to a coin, meaning that whenever top talent is attracted to an organisation, the need for retention arises. In this context, the relevant theory which is capable of explaining the relationships of compensation with workers’ motivation, job satisfaction, attraction and retention in this study was equity theory (social comparison).
4.5 The Theory Used to Explain this Research

The theory adopted to explain this research is called equity theory. Equity theory is directed at the employee’s feelings on how fairly they are treated compared to others. The theory is built upon social comparison where people compare what they contribute to work with the benefits derived from such actions (Adams, 1963). Reward is the focal point of equity theory and is considered the most important factor of motivation. Workers try to strike a balance between what they receive for their efforts and what others are receiving doing the same or similar job. The theory was chosen because expectancy theory is only relevant in explaining performance pay. The expectancy theory is reported to have more application in the private sector, which is established for profit making rather than social services (Wright, 2004). However, this study focussed on seniority pay which has been employed in public sector. Therefore, workers’ motivation, job satisfaction, attraction and retention could be explained using equity theory, since the literature established that the heart of equity theory is money, which is view as the most important reward at the workplace.

4.6 The Influence of the Conceptual Framework on the Research Methodology

The conceptual framework plays a significant role in determining the relationship among variables or constructs from the literature. Furthermore, conceptual framework saves as a backbone or structure upon which this research is built. Likewise, conceptual framework helped this study in deciding what would be studied for it to be relevant and valid. Additionally, conceptual framework also guided this study on how it should be carried out through indicating the appropriate methodology to be used. Moreover, a conceptual framework in research served the purpose of developing hypotheses from a literature which subsequently were tested by the appropriate methodology.

The research questionnaire, which was used to collect the data in this study, was extracted from the conceptual framework (See Appendix C). Therefore, a questionnaire was developed, pilot-tested and administered to gather data on workers’ motivation, job satisfaction, attraction and retention regarding compensable packages, namely: salary, allowance, gratuity and pension.

The data obtained from the survey was analysed using descriptive and structural equation modelling, being the software for establishing relationships among variables. Moreover, the research hypotheses were tested in chapter 6.
4.7 Research Hypotheses

The following hypotheses were established, and subsequently tested in the course of conducting the research.

_Hypotheses on Workers’ Motivation_

- Hypothesis I: The salary paid in this ministry positively influences work motivation.
- Hypothesis II: The allowance paid in this ministry positively influences work motivation.
- Hypothesis III: The gratuity payment after retirement positively influences work motivation.
- Hypothesis IV: The pension payment upon retirement positively influences work motivation.

_Hypotheses on Workers’ Job Satisfaction_

- Hypothesis I: There is a significant relationship between salary paid and job satisfaction in this ministry.
- Hypothesis II: There is a significant relationship between allowance and job satisfaction in this ministry.
- Hypothesis III: There is a significant relationship between gratuity payment and job satisfaction in this ministry.
- Hypothesis IV: There is a significant relationship between pension payment upon retirement and job satisfaction in this ministry.

_Hypotheses on Workers’ Attraction_

- Hypothesis I: The salary paid in this ministry positively related to workers’ attraction.
- Hypothesis II: The allowances paid in this ministry positively related to workers’ attraction.
- Hypothesis III: The gratuity payment after retirement positively related to workers’ attraction.
- Hypothesis IV: The pension payment upon retirement positively related to influences workers’ attraction.
**Hypotheses on Workers’ Retention**

- **Hypothesis I:** The salary paid in this ministry has a positive impact on workers’ retention.
- **Hypothesis II:** The allowance paid in this ministry has a positive impact on workers’ retention.
- **Hypothesis III:** The gratuity payment after retirement has a positive impact on workers’ retention.
- **Hypothesis IV:** The pension payment upon retirement has a positive impact on workers’ retention.

These above mentioned research hypotheses were tested, for more details refer to chapter 6 (See Sections: 6.7.2.1; 6.8.2.1; 6.9.2.1; 6.10.2.1).

### 4.8 Summary of Chapter 4

This chapter covered the conceptual framework which came as a result of the literature reviewed in this study. The definition of a conceptual framework has been explored and how it varied with theoretical framework. The relationships of public construction workers’ motivation, job satisfaction, attraction and retention regarding compensable packages, namely: salary, allowance, gratuity and pension have been examined based on the existing literature. The interrelationships of the factors under investigation were also acknowledged. Furthermore, the theory used to explain this research has been selected based on certain justifications. The framework served the basis of the methodology employed in this research. The influence of conceptual framework on the research methodology, which formed the basis of hypotheses development, was also clearly presented in this chapter. The next chapter presents the methodology employed in this study to collect the relevant data from public sector construction workers in Nigeria in relation to the impacts of compensations on their motivation, job satisfaction, job attraction and retention.
5.0 CHAPTER FIVE: RESEARCH METHODOLOGY

5.1 Introduction to Chapter 5
The third objective of the research is to evaluate various methodological paradigm, approaches and methods in order to collect relevant data from public sector construction workers in Jigawa state in relation to the impacts of compensations on their motivation, job satisfaction, job attraction and retention. Thus, this chapter has discussed the various perspectives to knowledge claims and the selection of the suitable approach by which the study was pursued. The chapter also deliberated the research strategy employed, the research population and its sampling, method of data collection, the pilot and main surveys, response rate, data analysis techniques used, research validity, reliability, generalisibility, the ethical issues in research and how they were addressed in this study.

5.2 Research Paradigm
The word paradigm has been defined in various perspectives. Thus, Punch (2005) defined paradigm based on the assumptions that govern the social world and the suitable techniques and topics that can be studied. Guba and Lincoln (1994) defined it as the set of basic beliefs that define the nature of the world for their holders, an individual’s place in it, and the range of possible relationships to that world and to its parts. Perry and Cavaye (2004) opined that this understanding or perception of the world is what determines the problems that are worthy to be studied, and the technique that could be employed to investigate the research problems. The selection of paradigm influences the ontology, epistemology, and methodology employed in a given study (Guba and Lincoln, 1994; Easterby-Smith, Thorpe and Lowe, 2002).

**Ontology:** Blaikie (2007) stated that ontology is concerned with the form and nature of reality and that it attempts to determine what could be understood about that reality, whereas epistemology is defined as the basic method of understanding something. It gives insight on how a researcher gets to understand what he or she understands.

**Epistemology:** Perry et al. (1998) defined epistemology as the nature of the relationship between reality and the researcher. This study investigated the reality of the subject matter through research procedures.

**Methodology:** means the methods employed to explore the reality (Perry, 1998b). The current research employed methodology in its investigation.
**Axiology:** The word axiology is a Latin word - axio means value while logus means study. Therefore, axiology could be defined as a study of value in the research (Ponterotto, 2005). Axiology entails the value a researcher placed on respondents with regards to the question asked, anonymity and other ethical issues (Creswell, 2012). Axiological position focused on the role of a scholar’s values, intuitions and biases in the study process. The current research strictly adhered to the values of the research participants as a prerequisite for ethical approval. Equally, this research adopted positivism paradigm in which the researcher did not participate in the research, unlike in the interpretivist study where researchers participate actively. The positivism paradigm holds that there is a single comprehensive reality that could be understood, classified, and assessed. This research is objective since the value of the setting in which it is carried out is protected.

5.2.1 **Types of Paradigm**

Various paradigms have been established to guide research (Easterby-Smith et al., 2002; Bryman, 2012). However, numerous studies showed that the four major research paradigms are: positivism, constructivism, critical theory and realism in a study (Guba and Lincoln, 1994; Perry, Riege and Brown, 1999, Ponterotto, 2005). These four paradigms vary in terms of ontology, epistemology, and the methodologies employed to obtain and analyse data are discussed below.

**Constructivism:** The constructivist paradigm is based on the ontological assumption that truth is subjective and created by people (Perry, et al., 1997; Perry, et al., 1999). It is believed that individuals perceived a situation differently, thus, there are bound to be multiple realities. Guba and Lincoln (1994) viewed that the most vital reality is the perception hold by a person and not just the measurements.

The epistemology of constructivist paradigm is that a person conducting research is involved in the study, and that the researcher and the research participants mutually generate the findings (Tashakkori and Creswell, 2007). The researcher becomes a ‘passionate participant’ and gives suggestions and comments to the research participants (Guba and Lincoln, 1994; Perry et al., 1997; Perry et al., 1999). A researcher who uses a constructivist paradigm obtains data mostly through qualitative approaches like in-depth unstructured interviews and participant observations. This paradigm seems to be inappropriate for this research because the researcher is objective by not taking part of the research through participant observation or interview. Perry et al. (1999) cautioned that the constructivist paradigm is rarely used for business
research since it does not clearly capture the real economic and technological dimensions of business.

**Critical theory:** Ontologically, the critical theory paradigm tries to criticise and transform social, political, cultural, economic, and ethnic and gender values that have been crystallised over long periods of time (Bryman and Cramer, 2001). The epistemology of the paradigm holds that there is a close link between a researcher and the research samples. The interpretive abilities of a researcher are the main instrument in the research (Guba and Lincoln, 1994).

In critical theory, data are obtained mainly through qualitative approaches, such as focus group discussions. Some critical theorists engage in long-term ethnographic and historical studies of organisational structures, processes and changes (Perry, 1998b; Perry, *et al.*, 1998). This is because critical theory asserts that knowledge comprises of a series of structural and historical insights that have to be changed over time (Guba and Lincoln, 1994). Critical theory is used in Marxist, Feminist, and Action research (Perry, *et al.*, 1997; Perry, *et al.*, 1998). Assertions made by critical theorists are largely subjective. Critical theory views that knowledge per se is grounded in social and historical trends, and is fundamentally value-dependent (Guba and Lincoln, 1994; Perry, *et al.*, 1998).

This research is conducted to measure the impact of compensation on workers’ motivation, job satisfaction, retention and attraction in Jigawa state of Nigeria. The study was not aimed at influencing participants to change their reactions. Thus, the critical theory paradigm is not appropriate for this study.

**Realism:** This paradigm is also called critical realism, or post-positivism, and it is basically based on an understanding of the common reality of an economic system in which individuals function independently (Perry, *et al.*, 1997). It is mostly qualitative in nature. The ontology of this paradigm is that there is a real world which could only be imperfectly and probabilistically apprehended because of human limitations (Merriam, 1991; Guba and Lincoln, 1994). A research that employs the realism paradigm strives to understand and explain the reason why individuals have different experiences and behaviours (Easterby-Smith, *et al.*, 2002).

The epistemology of the paradigm of realism holds that there is a single reality that could be better known through triangulation (Perry, *et al.*, 1999; Eriksson and Kovalainen, 2008). The main realism methodologies are qualitative case studies and convergent interviews, which do
not investigate cause-and-effect relationships, but are mainly concerned with ‘underlying causal tendencies or powers’ (Perry, 1998; Bryman, 2012). This study has been conducted based on quantitative approach, hence realism paradigm is not suitable because its approach is mainly quantitative not qualitative. Furthermore, the current research does not employed triangulation.

**Positivism:** This paradigm holds the ontological assumption that the social world exists externally, and that facts about this external social world could be evaluated through a precise set of objective techniques (Easterby-Smith *et al.*, 2002). It holds the same methods used in the natural sciences, as it stresses that there is a single comprehensive reality that could be understood, classified, and assessed (Saunders and Thornhill, 2009). The positivist paradigm could also be employed to measure and analyse causal relationships that are consistent across time and context (Eriksson, and Kovalainen, 2008). Perry *et al.*, (1998) stated that the principal role of a positivist research inquiry is deduction or theory testing.

Epistemologically, a researcher is expected to be separate from the research process, so that the research could be objective and theory-free. A positivist researcher perceives the world in a single perspective and the results of a study based on the positivist paradigm could be used to make a generalisation (Guba and Lincoln, 1994). Moreover, such a study can be fast, economical and statistically oriented to ensure objectivity (Easterby-Smith, *et al.*, 2002; Molina-Azorin, 2012). Moreover, a positivist researcher obtains primary data mostly through controlled experiments and sample surveys which are outcome-oriented and assume natural laws and mechanisms.

**5.2.2 Choice of Paradigm for the Research**

The methodology that guided this empirical research followed the positivist epistemological paradigm (which recommends the application to the methods/technique of the natural sciences in the study of social reality and beyond). This paradigm proposes a principle, which holds that knowledge is created through the gathering of facts that provide the basis of laws (Bryman and Bell, 2011). Therefore, positivist researchers usually applied quantitative methods in designing their studies such as surveys and experiments. The constructivism approach views the world based on the interpretation of those who undertake the study, which might be shaped by his or her own views, beliefs, existing knowledge and experiences (McKerchar, 2010).

Therefore, since this research was quantitative, the positivism paradigm was adopted as the most suitable, since its information/results were expressed in numbers (not in form of artefacts,
words, or observation). The positivist approach views the world as objective realism and hence proposes that knowledge is produced by deductive reasoning where by a precise and systematic process is used (McKerchar, 2010). Furthermore, the methods used in this research were in line with the positivism paradigm, hence that was another rationale of adopting it.

5.3 Quantitative Versus Qualitative Methods

Qualitative research techniques have over a long period of time been considered as exploratory methods which usually need further validation by quantitative methods (Angen, 2000; Flick, 2007). Qualitative research varies from quantitative research in four ways. Firstly, qualitative research is a creative process that relies on the insights and conceptual capabilities of the researcher (Cooper and Schindler, 2010), while quantitative research is restricted by statistical rules and formulas. Secondly, qualitative research techniques commonly investigate deeper but are less structured than quantitative methods. Therefore, qualitative research methods are more suitable for exploratory research (Jarratt, 1996). Thirdly, the results of qualitative research are mostly presented in words; unlike the results of quantitative research which are frequently presented as numbers or figures (Miles and Huberman, 1994; Campbell, 1999). Finally, qualitative research played a vital role in clarifying values, languages, and meanings ascribed to various actors within an organisation or community (Sofaer, 1999).

A number of differences existed between qualitative research and quantitative research (Hussey and Hussey, 2009). These differences are classified in the table 5.1:

<table>
<thead>
<tr>
<th>Table 5.1: Differences between Quantitative and Qualitative Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative Research</strong></td>
</tr>
<tr>
<td>Normally produce quantitative data</td>
</tr>
<tr>
<td>Employs large sample</td>
</tr>
<tr>
<td>Applied for testing hypothesis</td>
</tr>
<tr>
<td>Data are specific and precise</td>
</tr>
<tr>
<td>The environment is artificial</td>
</tr>
<tr>
<td>Highly reliable</td>
</tr>
<tr>
<td>Validity is low</td>
</tr>
<tr>
<td>Generalises from sample to population</td>
</tr>
</tbody>
</table>

Source: (Developed from this Research)

This study has been conducted based on quantitative approach because of its intention to determine the relationships between the dependent and independent variables. The current
study employed quantitative approach because it involved all the features of quantitative research as mentioned in the above table.

5.4 Research Design and Approach to the Study

A research design has been referred as a description or plan of how the research intends to answer the established research problem. The motive behind involving the research design as viewed by Blaikie (2003) is to plan, organise and execute the project concerned so as to ensure the validity of the findings. This study used the survey research design approach because it involved the collection of data which are analysed to arrive at logical conclusion through looking at pattern of relationship between the variables (Johnson and Christensen, 2000). Pope, et al. (2002) stated that a survey is the most preferred method of primary data collection used in social and behavioural science as compared to observation, and also a method of collecting original data from the population which is too large to be directly observed (Babbie, 1990).

5.4.1 Research Design and Strategies Used in this Study

Swanson and Holton (2005) and Yin (2009) and stated that five strategies are available to researchers in conducting their various studies, namely: experiments; surveys; archival analysis; history; and case study. Therefore, these strategies employ different ways in data collection and analysis of empirical evidence and equally their strengths and weaknesses involved.

An experiment: is a research strategy/approach used by researchers to measure cause-and-effect relationships among variables. This approach involved manifest and latent variables. A researcher using this method normally measured the independent against dependent variables in order to find the effects of the former on the latter (Zikmund, 2010). Thus, an experiment involved a behavioural control of events which are capable of influencing results or outcomes of the experiment conducted (Haslam and McGarty, 2003; Coolican, 2009).

A survey: is a research strategy employed for data collection from a sample drawn out of a population of the study (Wadsworth, 2011; Zikmund, 2010). Surveys are generally undertaken with a purpose of quantifying certain factual data and also could be used on qualitative data (Zikmund, 2010).

Case study methods: covers the evaluation of a single setting, subject, and depository of documents or particular event in detail (Merriam, 1991; Stake, 1995; Bogdan and Biklen, 2007). As a research methodology approach, case study is generally peculiar because it follows
a particular ways to examine an empirical topic (Yin, 2009). Case study is adopted by researchers to explore a single phenomena in a natural environment through application of various methods so as to secure in-depth knowledge of a given research problem (Bogdan and Biklen, 2007).

Table 5.2: Research Strategies Generally Used in Social Science Research

<table>
<thead>
<tr>
<th>Research Strategies</th>
<th>Research Strategy Used in this Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archival</td>
<td>No</td>
</tr>
<tr>
<td>Case Study</td>
<td>No</td>
</tr>
<tr>
<td>Experiment</td>
<td>No</td>
</tr>
<tr>
<td>History</td>
<td>No</td>
</tr>
<tr>
<td>Survey</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: (Developed from this research)

5.4.1.1 Choice of Research Design
The survey methodology appeared the most appropriate and suitable research method for the purposes of this study. This study used survey research design because it involved the collection of data which are analysed to arrive at a logical conclusion through looking at the patterns of relationships between the variables. Pope, et al. (2002) stated that a survey is the most preferred method of primary data collection used in social and behavioural science as compared to observation, and also a method of collecting original data from the population which was too large to be directly observed (Babbie, 1990).

Table 5.3 summarised the conditions that guided the researcher in choosing the appropriate research strategy as suggested by Lancaster (2005) and Yin (2009).

Table 5.3: Factors Considered when Choosing a Suitable Research Strategy

<table>
<thead>
<tr>
<th>Methods</th>
<th>Form of Research Question</th>
<th>Need for Behaviour Control?</th>
<th>Focuses on Contemporary Event?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archival</td>
<td>Who, What, Where, How Many, How Much?</td>
<td>No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Case Study</td>
<td>How, Why?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Experiment</td>
<td>How, Why?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>History</td>
<td>How, Why?</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Survey</td>
<td>Who, What, Where,</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
In a nutshell, the survey method proved to be the most suitable approach for this research because it allows the researcher to investigate who, what, where, how many and how much types of question in an environment where it is not critical that the researcher totally controls the research setting, and where the research problem is related to a contemporary phenomenon such as this research. Therefore, in this study the ‘Who’ involved the public construction workers, ‘Where’ entailed the Ministry of Works and Transport Jigawa State, ‘How many’ is to do with number of samples used (260), How much questions revealed the workers’ response with regards to the questions asked in the questionnaire.

5.4.2 Types of Management Research

According to Neuman (2010), the type of research design is usually dependent on the aim of a study, which could be used to explore a new area, to explain a given situation or establish why something occurred (Babbie, 2010). Furthermore, Zikmund (2010) opined that business research could be exploratory, descriptive and/or causal. This classification signifies that the choice of a research method is not subjective but rather is determined by the nature of the research problem and the extent of the uncertainty involved. The above argument shows that various research studies could be classified as exploratory, descriptive, or explanatory. In addition, Hussey and Hussey (1997) viewed that certain studies have various aims, though only one of these could be given a more priority.

**Exploratory research:** This form of research is undertaken in the event where little is known about the problems or phenomena at hand or in a situation where there is no information available on how similar problems are researched previously (Sekaran, 2009). Exploratory research is carried out where there is limited knowledge of the research phenomena (Zikmund, 2010). Robson (2011) conceded that exploratory research is significant because of its capability in shedding light on newly developed issues, or seeing issues from diverse angles. Various researchers suggested that exploratory research is more appropriate in explaining and defining the nature of a vague research problem, as opposed to giving accurate measurements (Saunders, et al., 2009; Zikmund, 2010).

Zikmund (2010) listed the major data collection methods used in exploratory research such as: literature review; pilot studies; expert surveys; case studies; focus group discussions; and personal interviews. These methods supply various modes of obtaining information, though it
is the purpose and not the method that would reveal whether a research is exploratory, causal or descriptive (Zikmund, 2010). Researchers used exploratory research approaches because of its highly flexibility since they followed clues, ideas and hunches in developing logical models (McDaniel and Gates, 2006; Rubin and Babbie, 2010). The qualitative result of an exploratory study shows some patterns on the issues of interest, which might serve as a foundation for establishing theories which are subjected to quantitative testing (Sekaran, 2009). Zikmund (2010) suggested that exploratory studies could be followed up with further studies to get substantive evidence.

**Descriptive research:** This is sometimes called diagnostic analysis. The purpose of undertaking this method is to describe the characteristics of a business trend based on some experience of the nature of the research problem (Veal, 2005). The prior experience might have come out of outcomes of an exploratory research conducted previously. Descriptive research seems to be less vague than other types of research because it is conducted against a back drop of previous knowledge of a major research problem. However, the method does not describe the causes of empirical results but rather tries to find out answers to ‘who’ ‘what’ ‘when’ ‘Where’ and ‘how’ questions in the study (Zikmund, 2010). According to Dane (1990): the ‘Who’ questions involved asking who are the researchers, research participants and customers of a research; What questions are mainly emphasise on the theme and the theory on which a research is built upon together with basic untested assumptions of the theory. The Where questions concern the physical and social setting in which the study is carried out. The When questions concern with the time frame of the study, which might influence its usage. The Why questions concern about the motive for undertaking the study in a given environment. A descriptive study could be carried out to explore, describe, predict, explain, and guide action. Dane (1990) stated that the How question deals with the way the goals of the study influenced the methods applied to execute it. According to Sekaran (2009), the results of a descriptive research project help a researcher to think analytically and to understand the features of groups in particular situations. Descriptive studies not only provide ideas for further research but also significantly help in simple decisions making. The main data collection approaches applied in descriptive research include: surveys; expert panels; and participant observations (Cavana, et al., 2001).

**Explanatory research:** This is also known as causal research and is conducted in an event where a research problem has been narrowly defined in the past (Rallis and Rossman (2011). Zikmund (2010) viewed that the major purposes of explanatory study is to examine the cause-
and-effect relationships among variables, and testing hypotheses to evaluate the worth of theories and the capability of given theories in making predictions about social phenomena. Explanatory research has the merits of higher reliability and internal validity but creates an unconducive environment, which would not favour marketing and management studies (McDaniel and Gates, 2006).

From numerous studies (Babbie, 2010; Neuman, 2010; Zikmund, 2010), it has been established that exploratory, descriptive, explanatory, action and predictive research are the five forms of research in social science.

### 5.4.2.1 Comparison of the Research Approaches

Exploratory studies measure whether a particular phenomenon exists or not while descriptive research thoroughly evaluates a given phenomenon in order for it to be understood and how it varies with other phenomena. Predictive research enables a researcher to examine relationships which would help in making predictions of one variable against other variables while explanatory research evaluate the cause-and-effect relationships that exist between two or more constructs. Action research is carried out in order to come up with a solution of a certain research problems. Action research is a methodology employed in applied research to discover an effective technique of bringing about conscious change in a partly controlled setting. This categorisation is similar to the one proposed by Rallis and Rossman (2011), which also stated four possible aims of studies as: exploration; description; explanation; and prediction.

However, Perry (1998a) gave a distinction between exploratory and explanatory study by stating that exploratory research mainly employed qualitative research approaches and seeks to identify the constructs involved in a research problem. This means that formulated research questions are not answered with a mere yes or no answer but with a detailed discussion (Perry, 1998a). Whereas, explanatory research adopts quantitative research approaches; it seeks answers to how or why questions. Thus, testable and measurable research hypotheses could be answered with a yes or no, or a precise answer to the question how many. Perry (1998b) stated two major methods to theory development, are theory building and theory testing. Theory building, sometimes called induction, tries to generate theory from empirical data whereas theory testing, or deduction, tries to validate an existing theory. The explanatory form of management research was chosen because the current study involved in theory testing through deductive reasonning and quantitative analysis.
5.5 Population and Sampling in the Study

The population for this research work encompasses the entire staff of the Ministry of Works and Transport in Jigawa state, Nigeria. This comprises operatives, skilled craftsmen, drivers, security, messengers, technicians, and professionals such as civil engineers, quantity surveyors, and architects within the Jigawa State Ministry of Works and Transport. The population is classified into three stratums namely: the clerical cadre (on salary levels 01-06), officer cadre (on salary levels 07-14) and director cadre (on salary levels15-17). The reason for choosing the staff to serve as the research population was because of their knowledge and idea about the research topic and it was an issue that affected them directly.

The Ministry of Works and Transport, Jigawa State is made up 1,500 staff across six departments, namely 230 electrical Staff, 365 mechanical, 55 transport (Road Traffic), 530 building 530 And 320 civil engineering. Some of the respondents were working in the State Ministry secretariat while others are at various sites in the State. The questionnaires were administered to the concerned departments, i.e. building and civil engineering only. Therefore, the sub-population for the study was 850 broken down according to three (3) cadres; hence workers were carefully selected using the stratified random sampling technique.

5.5.1 Sampling Procedure

The sampling method involved taking a representative portion of the population and using the data collected from such representative portion as research information (Latham, 2007). Using correct sampling methods enables researchers to have the ability to reducing the research costs, conduct the research efficiently (speed), enhance flexibility, as well as greater accuracy (Anderson, 2009). There were two main methods of sampling acknowledged in the literature. These are: probabilistic; and non-probabilistic sampling methods (Bryman, 2012).

5.5.2 Probabilistic Sampling

Probabilistic sampling has been described as a method of sampling in which every subject or unit has an equal chance of being selected from the overall population (Anderson, 2009). This nature of probabilistic sampling of giving everyone an equal chance of being selected enables elimination of the danger of being biased by the researcher (Frey et al., 2000). Thus, the elimination of bias from the sampling gives the researcher an ability to generalise the finding based on the sample. This is because the sample becomes a good representation of the population (Frey, et al., 2000). Probabilistic sampling is divided into four types: simple random, systematic random, stratified random and multi-stage cluster samplings (Latham, 2007) as explained in the Table 5.4 below:
Table 5.4: Probabilistic Sampling Methods

<table>
<thead>
<tr>
<th>Type of Sampling</th>
<th>Selection Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>Each member of the population is given an equal chance of being selected.</td>
</tr>
<tr>
<td>Systematic</td>
<td>Each member of the population is listed, a random start is designated, and then members of the population are selected at equal intervals from the list.</td>
</tr>
<tr>
<td>Stratified</td>
<td>Each member of the population is assigned to a stratum, and then a simple is selected from each of the strata randomly.</td>
</tr>
<tr>
<td>Cluster</td>
<td>Each member of the population is assigned to a cluster, then clusters are selected at random and all members of a selected cluster are included in the sample.</td>
</tr>
</tbody>
</table>

Source: (Developed from this Research)

5.5.3 Non-Probabilistic Sampling

Non-probabilistic sampling is a type of sampling where the sample is generated based on convenience and at little or no cost to the researcher; it is a good sampling method when research studies do not required representativeness of the population (Babbie, 1990). It was described as a good sampling method to be used for conducting a pilot study and those situations where ethical concerns restrain the researcher from speaking to every member of a specific group (Fink, 1995). It is important to note that in non-probabilistic sampling, subjective judgments play an important role (Henry, 1990). Hence, generalisation of the findings by the researcher based on the sample should be done with caution (Latham, 2007). This form of sampling has been classified into four types: convenience, snowball, quota and theoretical non-probabilistic samplings (Anderson, 2009) as explained in the table 5.5:
Table 5.5: Non-Probabilistic Sampling Methods

<table>
<thead>
<tr>
<th>Type of Sampling</th>
<th>Selection Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>Sample is selected based on participants who are readily available and agree to participate in a study, thus, often called accidental.</td>
</tr>
<tr>
<td>Snowball</td>
<td>Group members identify additional members to be included in the sample.</td>
</tr>
<tr>
<td>Quota</td>
<td>Researchers select a sample that yields the same proportions as the population proportions on easily identified variables.</td>
</tr>
<tr>
<td>Theoretical</td>
<td>Researchers select participants in such a way to have theoretical understanding of the area of investigation upon which a grounded theory will be developed</td>
</tr>
</tbody>
</table>

Source: (Developed from this Research)

The quality of research work not only depends on the appropriateness of the methodology and instrumentation but also on the suitability of the sampling strategy used and the size of the sample employed (Blaikie, 2003). This research employed probabilistic sampling method because it involved the most relevant sampling technique used in this study, which is called stratified random sampling.

5.5.4 Choice of Sampling Technique

The stratified random sampling technique was used in this research. This technique is usually used when cases in the population of the study or samples fall into distinctly different categories (strata) and are homogeneous in nature (Linz and Semykina, 2012). Thus, the rationale behind using the stratified random sampling technique has been classified into two: Firstly, with the presence of distinctly different strata within the population and in order to achieve simple randomised sampling, an equally sized randomised sample is obtained from each stratum separately to ensure that each stratum is equally represented. The samples are then combined to form the complete sample from the whole population. The second reason for the application of stratified random sampling technique in this research work is to elicit responses from the samples, which are subsequently analysed (Fogelman, 2002).

Stratified random sampling has been employed in this research respondents belong to different strata/cadres in the ministry.
5.5.5 Sample Size

This research population was less than 50,000. Thus, the current study determined sample size with reference to the formula proposed by Godden (2004). Therefore, the formula below was employed to determine the sample size.

*Sample Size – Finite Population (Where the population is less than 50,000)*

New SS = New Sample Size

\[
\frac{1 + (SS - 1)}{POP}
\]

Pop = Population is 850

*Note: Calculate the sample size using the infinite population formula first. Then use the sample size derived from that calculation to calculate a sample size for a finite population.*

New SS = New Sample Size

\[
\frac{384}{1 + (384 - 1)}
\]

\[
\frac{850}{1.4505}
\]

\[\text{New SS} = 264.7\]

\[\Rightarrow \text{The sample size for the research is 265 approximately.}\]

The ministry’s workforce cadre distribution is as follows:

Clerical cadre = 610

Officer cadre = 190

Director cadre = 50

Total staff = 850

Therefore, the samples used for this field survey were 265 respondents. Additionally, the respondents used in this survey were chosen from each cadre through stratified sampling using the formula given by Hunt and Tyrrell (2001) and Sarridal *et al.* (2003) as:

Each group sample size is divided by the total sample size and multiplied by the required sample size.

\[
\frac{\text{GSS} \times \text{RSS}}{\text{TSS}}
\]

Where:

GSS = Group/Strata Sample Size (610: 190: 50)

TSS = Total Sample Size (850)

RSS = Required Sample Size (265)

Thus; sample of:
Clerical cadre $= \frac{610}{850} \times 265 = 190$

Officer cadre $= \frac{190}{850} \times 265 = 59$

Director cadre $= \frac{50}{850} \times 265 = 16$

Total sample to be used $= 265$

### 5.5.6 Effect of Data Analysis on Sampling

Normally, the covariance-based SEM (CB-SEM) method of analysis needs a relatively large sample size because of its underlying objective of a hypothesised validation of model analysis. Tenenhaus (2008) suggested that there were different views in using the term ‘large’ among the scholars across various disciplines. Thus, there is no agreement on any acceptable sample size (Doloi et al., 2012). A study conducted by Jin et al. (2007) for understanding the relationship-based determinants of building projects used 116 respondents. Vinodh and Joy (2012) secured 60 valid responses while investigating the factors affecting lean manufacturing practices, and Doloi et al. (2012) conducted a study on the Structural Equation Model (SEM) for investigating factors affecting delay using 77 respondents. Based on these precedents, the number of respondents required or sample size to conduct SEM analysis could not be generalised. Therefore, the sample size established for this research was 260 respondents; hence it could be regarded as reliable and appropriate for SEM analysis in this study.

### 5.6 Methods of Data Collection

The survey study generally depends on asking the respondents questions either through self-completed questionnaires, interviews or observations (William and Baiche, 2001; Creswell, 2006). Observation is an act of observing, recording, description, analysis and interpretation of respondents’ behaviour or attitude by a researcher (Saunders, et al., 2007). Interview is a process where an interviewer reading questions to the respondents and records their opinion or answers with regards to a particular phenomenon (Blaxter, 2010). A questionnaire is a list of questions in a paper format written by the researcher in which answers of the respondents are recorded (Bryman, 2012).

The questionnaire is more suitable, cheaper and less time consuming. Interview is more appropriate where additional information is required from the respondents. Another advantage of the interview is that it affords high degree of confidence in the replies than self-completion questionnaire and can consider non-verbal behaviour of the interviewee. Observation is used in laboratory or natural setting to observe people’s actions and behaviour. It is more appropriate when a research is intended to observe people’s attitudes and behaviour directly. However, in
this research both interview and observation were not chosen because of some reasons which were accounted in the section below.

5.6.1 Choice of Data Collection Method
The questionnaire method has been adopted in this survey in order to obtain the views/opinions of the research respondents about the impact of compensation on public sector construction workers in Jigawa State Ministry of Works and Transport. In self-administered questionnaires, respondents answer questions by completing the questionnaire themselves. Other methods of data collection like interview was not chosen due to interview bias, class bias, race or sex bias, time consumption in terms of getting a sample and conducting the interview, travel and hospitality costs to the interviewer, and above all interviewer bias (Collins and Hussey, 2009). Equally the observation method of data collection was not selected because of observer bias, failure to observe certain activities due to distractions, ethics, objectivity, visibility and boredom. Also, the grid designed for recording observation might be deficient because it might be incomplete or ambiguous. Thus, in some studies, the questionnaire method is more appropriate (Brace, 2008; Kumar, 2014). Therefore, other reasons for adoption of the questionnaire method in this study are: it is cheaper to administer; quick to administer; and convenient for respondents as they can complete it whenever they want and at the speed they want (Bryman, 2012).

5.6.2 Designing the Questionnaire
The survey instrument (questionnaire) in this study was developed in order to obtain relevant information required from the research respondents who happened to be public construction workers in the Ministry of Works and Transport, Jigawa state. The questionnaire is divided into three parts, which are described as follows:

Part 1: These questions involved the profile or characteristic of the population under study (public construction workers in Jigawa State, Nigeria). The appropriate or common statistics used on this section was descriptive statistics and the data were presented graphically by column bar chart with Statistical Package for Social Sciences (SPSS) version 20.0 which aided easy computations (Montgomery et al., 2012).

Part 2: This part involved the concepts of workers’ motivation, job satisfaction, attraction and retention. Those questions in part 2 were analysed together with the questions in part 3 using Structural Equation Modelling software (Amos).
Part 3: This part involved the impact of compensation on the motivation, job satisfaction, attraction and retention. The questions in part 3 were also analysed using Structural Equation Modelling software (Amos) to find out relationships between the impact of compensation and public construction workers’ motivation, job satisfaction, job attraction and retention in the Ministry of Works and Transport, Jigawa state.

The Likert scale method of response was employed where the questionnaire was rated on a five-point Likert scale ranging from 1 for strongly disagree to 5 for strongly agree and 1-Extremely dissatisfied to 5-Extremely satisfied (Blaxter, 2010). The reason was that the scale measured the intensity to which respondents felt about an issue (Bryman and Bell, 2011). The main research questionnaire is illustrated in this thesis (In Appendix C).

5.6.3 The Pilot Survey

A pilot survey was conducted for this research as a trial run that assisted in smoothing out the survey instrument (questionnaire) in order to ensure that participants in the main survey did not experience any difficulties in completing it.

The primary aims of the pilot survey are to test the wording of the questionnaire, identify ambiguity in the questions, test the intended technique for data collection and measure the effectiveness of the potential response (Igalens and Roussel, 1999), to ensure that participants in the main survey will not experience any difficulties completing it (Peterson, 2000). The measures in parts 2 and 3 of the questionnaire were derived from previous empirical studies in the literature. Thus, for compensation construct these measures were adopted from the following: (Balkin and Gomez-Mejia, 1990; Igalens and Roussel, 1999; Sturman, 2001; Hoque et al., 2013); for the attraction construct: (Frank, 2002; Ramlall, 2003; Leisink and Steijn, 2008; Gonzalez, 2009; Rose and Gordon, 2010; Hutchings et al., 2011); for job satisfaction construct: (Stanton et al., 2001; Marzuki et al. 2012; Onukwube, 2012); for motivation construct: (Oyedele, 2010; Tan and Waheed, 2011; Tabassi et al., 2012; Jarkas and Radosavljevic, 2013; Cerasoli et al., 2014; Smith, 2015; Yousaf, et al., 2015); and finally, for retention construct: (Rose and Gordon, 2010; Sinha and Sinha, 2012; Samuel and Chipunza, 2009). To adapt the measures to the specific conditions in Nigeria, the questionnaire was pilot-tested using 60 respondents who happened to be workers of the Ministry of Works and Transport, Jigawa State. However, 54 were returned indicating response rate of (97%). Amendments were made to the questionnaires based on suggestions and recommendations given by the compensation experts and senior officials of the Ministry of Finance and Works and Transport in Jigawa State before the pilot survey. They suggested that some questions
needed to be simple and clear; irrelevant questions should be deleted and the timing to complete the questionnaire should be increased to 30 minutes.

The pilot survey findings indicated that all the questions were complete and straightforward, the questionnaire was not difficult to complete (easy to complete) and the respondents also were comfortable with all the questions. Further, it took approximately 30 minutes to complete the questionnaire. The instrument for data collection (Questionnaire) used in the pilot survey was found to be effective because it attracted all intended responses.

5.6.4 Administering the Questionnaire

The final research questionnaire was sent via post. The questionnaires (in a paper format) were sent to obtain the views/opinions of the research respondents about the impact of compensation on public sector construction workers’ motivation, job satisfaction, retention and attraction in Jigawa State, Ministry of Works and Transport. The time taken for the questionnaire administering and collection in this study was two months. The analysis in this regard was conducted in Chapter 6 (See Section 6.2).

5.6.5 Response Rate

The determined sample size for this study was 265 respondents. Thus, two hundred and sixty-five questionnaires were distributed to the respondents directly by the researcher using stratified random sampling. 260 questionnaires were returned indicating response rates of (98%) while 5 questionnaires were not returned (2%). No questionnaire was invalid or returned unfilled. The table below summarises the responses of this research.

<table>
<thead>
<tr>
<th>Job Cadre</th>
<th>Clerical</th>
<th>Officer</th>
<th>Director</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number in the Ministry</td>
<td>610</td>
<td>190</td>
<td>50</td>
<td>850</td>
</tr>
<tr>
<td>Questionnaire sent to Civil and Building Depts</td>
<td>190</td>
<td>59</td>
<td>16</td>
<td>265</td>
</tr>
<tr>
<td>Responses from</td>
<td>187</td>
<td>58</td>
<td>15</td>
<td>260</td>
</tr>
<tr>
<td>Response rate</td>
<td>98%</td>
<td>98%</td>
<td>98%</td>
<td>98%</td>
</tr>
</tbody>
</table>

(Source: Developed from this Research)

The researcher’s persistent follow-up towards enhancing the response rate was one of the reasons for the full participation of the respondents. Furthermore, the workers believed that when the framework is developed and recommended for implementation, it would address the pay differential between the ministries in the State. Hence, they felt encouraged to participate
fully in the study because it was designed to solve their pressing need as far as reward was concerned in the State public sector.

5.7 Data Analysis Techniques

Three data analyses were carried out to analyse non-response bias, descriptive statistics and Structural Equation Modelling (SEM). These analyses were discussed below, while their implementation was covered fully in chapter 6:

5.7.1 Non-Response Bias

A non-response bias test was carried out to examine whether there is significant statistical difference between early and late responses. This analysis is in line with Benke and Street’s (1992) and Lindner et al. (2001) who posited that the most commonly used method to prove non-response bias is to compare responses obtained before and after follow-ups. Where there was no significant statistical difference between responses before and after follow ups it could be concluded that non-response bias did not exist. This non response bias analysis was conducted using the Statistical Package for Social Sciences (SPSS) software v21.

5.7.2 The Use of Descriptive Statistics

Descriptive analysis was used to analyse the demographic profile of the respondents in such a way as to obtain preliminary ideas of workers in Jigawa state, with regard to gender, years spent in service, job cadre, nature of job, and frequency of salary payment. Similar to the non-response bias test, this analysis was also conducted using the SPSS software v21.

5.7.3 The choice of Structural Equation Modelling

The relationships between the dependents and independents variables would be evaluated using Structural equation modelling (SEM); to seek for any the relationship between compensation and public construction workers’ motivation, job satisfaction, attraction and retention in the ministry of works and transport, Jigawa state of Nigeria. Given that, this study aimed at establishing relationship among variables within the construction industry, it justifies the reason behind the selection of the SEM approach, which is also in line with the previous researchers mentioned earlier (See chapter 6).

SEM is more effective than regression specifically when there were poorly measured variables in the data sample (Molenarr et al., 2000). One of the main reasons that this research used SEM lied with its strength in simultaneously modelling the relationships among multiple independent and dependent variables (Zainudin, 2012); compared with other methods that could analyse only one layer of linkage between independent and dependent variables.
concurrently (Chai et al., 2015). As the relationship between compensation and workers’ motivation, job satisfaction, attraction and retention involved various constructs, it was the contention of this study that SEM would yield a better result than other statistical methods of analysis. Indeed, SEM is more effective than regression analysis when the variables in the data are poorly measured (Molenarr et al., 2000).

SEM has various approaches which are: Covariance Based; Partial Least Square; and Generalised Structured Component Analysis (these approaches have been highlighted in Section 6.4.1). This study employed the SEM-CB method in its analysis being the most suitable (Chai et al., 2015). CB-SEM has commonly been used in the field of social sciences in the previous years, and still stands to be the more preferred data analysis technique for confirming or rejecting theories through testing of hypothesis, especially if a large sample size was used, the assumption of data normality was fulfilled, and particularly, the model was correctly specified or defined. That is, the suitable variables were selected and linked together in the course of converting a theory into a structural equation model (Hair et al., 2011; Hwang et al., 2010; Reinartz et al., 2009). Ringle et al. (2007) concluded in their study that under the normal data situation, irrespective of the measurement models used in a research, CB-SEM provided a precise and robust parameter estimates that were equal or superior in comparison to other SEM approaches like PLS estimates. Therefore, the current study chose Covariance-Based SEM (CB-SEM) to analyse its data especially as the later that it fulfilled all the requirements of this approach such as data normality, large sample size and hypotheses testing.

5.8 Research Validity, Reliability and Generalisability

5.8.1 Research Validity

In a quantitative study, validity refers to the extent to which a concept is appropriately measured (Heale and Twycross, 2015). Three points are critical in establishing validity in quantitative research. First is the intended population of the study. Second is the purpose of the test. Last is the form of the test for validity. This implies that if a study related to the construction sector the respondents should be in that sector for the study to be valid. The validity should have a purpose; it should either be intended to ensure that the instrument measures what it is intended to measure. There should also be a form of the test for validity, either a qualitative test (face and content validity) or quantitative test (criterion and construct validity). Therefore, validity test falls into four forms: face validity; content validity; criterion validity; and construct validity.
The face validity: refers to an expert’s evaluation of research instrument, particularly relating to language usage and understandability (Turner 2010). Face validity was established in this research through pilot study (See Section 5.6.3).

The content validity: involves the extent to which the research instrument capture all aspects of the construct to be measured (Heale and Twycross, 2015). It is also considered how appropriate the items were used in measuring the construct. The content validity of the measurement instruments were evaluated by the directors of salary and pension under the leadership of permanent secretary, Ministry of Works and Transport, Jigawa State of Nigeria. These senior workers in Jigawa state public service have many years of experience both in practice and academic in the area of workers’ compensation. Therefore, based on their assessment and observations, some changes were made on to the questionnaire.

The criterion validity: means the extent to which the instrument used for the research compared or related to other instruments that measured the same construct (Heale and Twycross, 2015). The agreement of the findings of this study and published research has been demonstrated (See Chapters 2, 3, 6), hence criterion validity was attained in this research.

Construct validity: refers to how well a research instruments measured what it was supposed to measure (Heale and Twycross, 2015). Put differently, it measured how statistically meaningful the items are in measuring a construct. This form of validity was established through the statistical measurements in this research (See Chapter 6).

5.8.2 Reliability

Reliability means the statistical consistency of a measure of a particular construct (Heale and Twycross, 2015). For example in a survey relating to motivation, the participants would be expected to give similar responses on that construct each time they are asked to complete the same survey. There are two most common measures of construct reliability: Cronbach’s alpha and composite reliability (Peterson and Kim, 2013).

5.8.3 Generalisability

Generalisability is the degree to which the study results and conclusions undertaken on a specific research groups or situations can be applied to the whole population (Saunders et al., 2007). In making generalisation three factors should be considered, namely nature of the sample, response rate and response bias test (Radhakrishna and Doamekpor, 2008). These scholars posited that where random sampling is employed with a good response rate with no
difference between early and late response, a researcher could generalised to the whole population. Therefore, following Radhakrishna and Doamekpor (2008), this research employed a scientific procedure of sampling (Stratified random sampling is form of sampling which gives every subject in a given population an equal chance to be selected). The response rate (98%) was also very good in this study and the non-bias response test was conducted where it revealed that no response bias was present because there was no difference between the early and late sets of responses. Therefore, the research findings could be generalised to both the population of the Ministry of Works and Transport and the various states of Nigeria, specifically, the civil engineering and building departments. This generalisation could also be extended to all the government ministries in Nigeria because they operated under the same civil service structure with similar bureaucratic procedures. Another reason why the results of this study are robust enough for wider application is that the salary scales and the retirement period of public workers is similar across government organisations in Nigeria. Consequently, an argument can be established that the workers of the Nigerian Government Ministeries are motivated by allowance and gratuity, attracted by salary, pension and gratuity, retained and derived job satisfaction through the influences of pension and gratuity.

5.9 Ethical Considerations

Ethics are the most vital issues which should be considered in conducting any scholarly research (Bailey 2007). As quantitative research (either in one way or the other) deals with human beings, it has to be regularly reviewed by institutional reviewers to ensure that ethical rules are strictly adhered to (Flick 2008). Ethical considerations are mandatory to protect the research participants and their organisations, get their confidence and trust, enhance the study quality, integrity, and safeguard against inappropriateness in the research (Creswell 2009; Farell 2011). The research identified ethics as a priority in undertaking this study from the topic of the research, data collection and analysis to results dissemination. Therefore, the entire study was carried out in a way that ensured that confidentiality and integrity of the samples were protected. The research participants were fully informed about the aims and objectives of the study, and that their participation was on a voluntary basis and that at the end of the study, data obtained from them would be disposed (Oppenheim 1992; De Vaus 2002). In order to encourage the full participation of the participants, all the questions in the questionnaire were developed in such a way that they were free of threats, misguidance and deception (Neuman 2006; Bryman 2008). Prior to administering the questionnaire ethical approval was obtained from the Faculty of science and Engineering ethics committee. Granting of this approval which involved the vetting types of questions to be asked is provided (See Appendix A). In addition,
the approval of the supervisors was sought and obtained before the questionnaire was sent out. The supervisors also vetted the final set of questions before granting their approval.

5.10 Summary of Chapter 5

This chapter thoroughly examined and described the methodology used in this research. The chapter began with a description of the research methodology and the philosophical assumptions, research design and methods of data collection adopted in the study. The philosophical justification led to the adoption of the positivism approach. The quantitative method was thus adopted and used in this research. As discussed in the published literature, most relationship studies used the questionnaire method. Thus, in this research, one of the most commonly used techniques, which is called the questionnaire survey, was chosen to obtain the relevant data from the respondents. The questionnaire was carefully developed in line with the guidelines discussed in the chapter. A pilot study was undertaken to improve and validate the questionnaire and then subsequently administered to the participants. Furthermore, the sample of the study was selected using stratified random sampling; the application and method of data analysis had been identified in this chapter; where the descriptive statistics was employed to analyse the profiles of the respondents. Similarly, structural equation modelling (SEM) was conducted to analyse the data collected to find out the relationships between the impacts of compensations on motivation, job satisfaction, job attraction and retention. CB-SEM is commonly used in the field of social science and is the preferred data analysis technique for confirming or rejecting theories through testing hypotheses, especially when the research involved large sample size, fulfilment of data normality, and the model is correctly defined.

The next chapter presents the full analysis of the data obtained through the questionnaire survey in this study.
6.0 CHAPTER SIX: DATA ANALYSIS

6.1 Introduction to Chapter 6

The fourth objective of the study is to analyse the data using appropriate statistical techniques to find out relationships between the impacts of compensation on the motivation, job satisfaction, job attraction and retention of the workers studied. Therefore, this chapter sets out the proposed analysis for measuring the data collected from the sample beginning with the non-response bias test. Next is a brief discussion of the descriptive analysis. This is followed by an introduction to the SEM together with their measures to evaluate the models of the research. The application of SEM in construction research has been examined. In order to achieve this objective, the analyses of models such as motivation, job satisfaction, attraction and retention were undertaken thoroughly in this chapter.

6.2 Non-Response Bias

A non-response bias test is conducted to ensure that there is no bias on the samples used. Benke and Street (1992) stated that the most commonly method used to prove non-response bias is by comparing early responses to late responses or first responses to responses obtained after follow-ups. If the differences between the two groups of responses are insignificant, it could be considered that the problem of non-response did not exist. Therefore, based on Lindner, et al. (2001) recommendation a T-test should be conducted to compare the early and late response. It is important to note that the data collection is planned to be conducted within one month, however, due to the low response, an additional one month is dedicated for follow-up to optimise the response rate. Thus, a sequel to the follow-up in the second month – a t-test – is conducted to test whether there is bias in response between the responses collected before and after follow-ups. The result is contained in Table 6.1.

It is evident from Table 6.1 that 157 responses are collected in the first month; this is classified as an early response while 103 are collected in the second month after follow-up, thus classified as late responses. Therefore, from the result of non-response bias tests conducted using t-test, as contained in Table 6.1, it is concluded that using a two-tail test that there is no difference between early and late response, implying that there is no bias between the responses before and after follow-up.
### Table 6.1: T-test for Non-Response Bias

<table>
<thead>
<tr>
<th>Variables</th>
<th>Response</th>
<th>N</th>
<th>F</th>
<th>Sig.</th>
<th>T-stat</th>
<th>df</th>
<th>Sig. 2 tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>Early Response</td>
<td>157</td>
<td>2.581</td>
<td>.109</td>
<td>-.431</td>
<td>258</td>
<td>.667</td>
</tr>
<tr>
<td></td>
<td>Late Response</td>
<td>103</td>
<td>-.625</td>
<td></td>
<td>52.258</td>
<td>.535</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Early Response</td>
<td>157</td>
<td>.226</td>
<td>.635</td>
<td>-.226</td>
<td>258</td>
<td>.822</td>
</tr>
<tr>
<td></td>
<td>Late Response</td>
<td>103</td>
<td></td>
<td></td>
<td>36.796</td>
<td>.824</td>
<td></td>
</tr>
<tr>
<td>Retention</td>
<td>Early Response</td>
<td>157</td>
<td>3.842</td>
<td>.051</td>
<td>1.177</td>
<td>258</td>
<td>.240</td>
</tr>
<tr>
<td></td>
<td>Late Response</td>
<td>103</td>
<td>1.013</td>
<td></td>
<td>34.319</td>
<td>.318</td>
<td></td>
</tr>
<tr>
<td>Attraction</td>
<td>Early Response</td>
<td>157</td>
<td>1.718</td>
<td>.191</td>
<td>-.478</td>
<td>258</td>
<td>.633</td>
</tr>
<tr>
<td></td>
<td>Late Response</td>
<td>103</td>
<td></td>
<td></td>
<td>52.902</td>
<td>.488</td>
<td></td>
</tr>
<tr>
<td>Salary</td>
<td>Early Response</td>
<td>157</td>
<td>5.039</td>
<td>.026</td>
<td>.839</td>
<td>258</td>
<td>.402</td>
</tr>
<tr>
<td></td>
<td>Late Response</td>
<td>103</td>
<td>2.042</td>
<td></td>
<td>224.462</td>
<td>.064</td>
<td></td>
</tr>
<tr>
<td>Allowance</td>
<td>Early Response</td>
<td>157</td>
<td>5.816</td>
<td>.017</td>
<td>-.918</td>
<td>258</td>
<td>.359</td>
</tr>
<tr>
<td></td>
<td>Late Response</td>
<td>103</td>
<td></td>
<td></td>
<td>186.112</td>
<td>.053</td>
<td></td>
</tr>
<tr>
<td>Pension</td>
<td>Early Response</td>
<td>157</td>
<td>.400</td>
<td>.528</td>
<td>-.316</td>
<td>258</td>
<td>.752</td>
</tr>
<tr>
<td></td>
<td>Late Response</td>
<td>103</td>
<td></td>
<td></td>
<td>34.261</td>
<td>.788</td>
<td></td>
</tr>
<tr>
<td>Gratuity</td>
<td>Early Response</td>
<td>157</td>
<td>.007</td>
<td>.935</td>
<td>-.845</td>
<td>258</td>
<td>.399</td>
</tr>
<tr>
<td></td>
<td>Late Response</td>
<td>103</td>
<td></td>
<td></td>
<td>46.563</td>
<td>.270</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Developed from this Research)

Therefore, non-response bias is undertaken to enhance workers full participation in this research. The number of questionnaires collected before and after the follow up is significant in terms of a very good response rate. Therefore, parts 2 and 3 of the questionnaire are used in this test (See Appendix C, for details of Parts 2 and 3).

### 6.3 The Analysis Using Descriptive Statistics

Descriptive analysis in this study provides preliminary ideas of the profile of public sector construction workers in Jigawa State in relation to: gender, years spent in service, job cadre, nature of job and salary payment frequency. The descriptive statistics tools used to analyse these data are percentages and column bar chart with SPSS software.

#### 6.3.1 The Results of the Analysis Using Descriptive Statistics

**Gender**

Based on the questionnaire responses with regards to gender, 254 were males (98%) while only 2% were (6) females. This showed that the majority of the research samples were males. Males
outnumbered females in this ministry for religious and cultural reason. Jigawa state is one of the state in which religion imposed sanctions on the education of females. In addition, the culture of the people places a barrier between the jobs for the male and female in which construction work was particularly regarded exclusively male job.

*Years Spent in Service*

![Graph showing years spent in service](image)

**Figure 6.1: Working experience**

The above figure shows that respondents who have been working for less than 5 years (7: 3%), 5-10 years (92: 35%), 11-20 years (134: 51%) and 20-35 years (27: 10%). Workers within the range of 11-20 years outnumbered the other ranges. Workers within the range of 11-20 years are regarded as ‘able bodied’ and were capable of undertaking construction work effectively. The workers within that range involved mainly labourers, operatives and foremen.

*Job Cadre in the Ministry*

![Graph showing job cadre](image)

**Figure 6.2: Job cadre**
It showed from the above figure that staff who are in the clerical cadre are 186 (72%), officer cadre 58 (22%) and director cadre 16 (6%). No response was recorded for other cadres. This revealed that workers in the clerical cadre consisted of bricklayers, labourers, painters, foremen, and carpenters while staff in the officer cadre involved Civil engineers, Quantity surveyors, Architects and Technologists. Equally, staff in the director cadre comprised of Civil Engineers, Quantity Surveyors, and Architects who reached this cadre through promotion. Therefore, it was established that construction work was labour-intensive in Jigawa State, which requires many people onsite, hence more workers in the clerical cadre were required.

**Nature of Workers Job in the Ministry**

![Figure 6.3: Nature of work](image)

The above figure depicts the nature of work for the staff in the ministry under study such as office with 94(36%), onsite 141(54 %) and both office and onsite 25 (7%), with no response recorded for other places of work. It is shown in Fig. 6.3 that some staff works at the ministry’s headquarters and some at various sites in the state while others work both at the office and onsite. A larger percentage of employees worked onsite because construction involved physical products such as houses, bridges, roads and so on. Hence, most construction works were undertaken on various sites.

**Salary Payment Frequency**

Based on the responses from the questionnaire, the entire samples of the survey (260: 100%) agreed that they receive their salary monthly. Hence, it is observed that Jigawa State government compensated its workforce monthly not weekly or twice in a month.
6.3.2 The Linkage of Descriptive Statistics with SEM Analysis in the Study

The descriptive statistics with regards to demographic data showed the level of representativeness of the sub-groups in this study in terms of gender, frequency of payment of salary, number of years in service, cadre and nature of work. The combination of these characteristics of public construction workers in Jigawa State confirmed the objectivity and validity of the data collected and analysed using the SEM method. The descriptive statistics are used in this study only to show the workers profile. The aim of this research is to find out the relationship between compensation and workers’ motivation, job satisfaction, job attraction and retention of public sector construction workers of Jigawa state of Nigeria. Hence, SEM analysis is more preferable as established in the literature.

However, in this research both descriptive statistics and SEM results are related or linked together because SEM results represent the whole views of workers who are involved in those characteristics such as: gender; nature of work; and years of service in the ministry of Works and Transport, Jigawa state of Nigeria.

The next section in this chapter covers the analyses, results and discussions on how compensation impacts public construction workers’ motivation, job satisfaction, attraction and retention in Jigawa State of Nigeria.

6.4 Structural Equation Modelling

Structural equation modelling (SEM) is an analytical technique which is developed by sociologists and psychologists (Yang and Ou, 2008). SEM is a multivariate technique used to establish a series of relationships among latent and manifest variables (Molenaar et al., 2000). SEM is a second-generation multivariate data analysis method which has widely been applied in many fields, such as behavioural sciences (Bass et al., 2003), business strategy (Hulland, 1999) and in organisations (Solik et al., 2009).

Therefore, the relationships among variables were analysed using SEM by many HR researchers (Igalens and Roussel, 1999; Scrima et al., 2013; Voigt and Hirst, 2014).

SEM has now become very popular among social scientists due to its ability to perform path analytic modelling with latent variables (Chin and Newsted, 1999). Hair et al. (2006) argued that this newly developed statistical software, which combines the multivariate tools such as multiple regression, path analysis, factor analysis and principal component analysis, is actually
developed in the middle of the 20th century but became commonly used by the researchers in the 1990s. SEM is preferred among researchers because of its greater flexibility to interact between theory and data (Chin and Marcolin, 1995; Chin and Newsted, 1999). Furthermore, researchers give SEM priority because of its four key characteristics as follows:

(1) the estimation of multiple and interrelated dependence relationships;
(2) an ability to represent unobserved concepts and correct for measurement error in the estimation process;
(3) a focus on explaining the covariance among the measured items; and
(4) a theory-based approach, where strong theory is needed to specify relationships in the models, that is, confirmatory analysis (Hair et al., 2006).

SEM is a hybrid of factor analysis and path analysis. In order to establish a model, two procedures are used. These two stages or procedures are measurement and structural models. The measurement (inner) model explains the relationships between observed or latent variables while the structural (outer) model explains the relationships between a latent variable and its observed or manifest variables (Hair et al., 2006).

6.4.1 Approaches to SEM

Wong (2013) revealed that there are three approaches available to researchers for conducting their study with structural equation modelling:

the first approach is called covariance-based SEM (CB-SEM), using software packages such as AMOS, EQS, LISREL and MPLUS;

second approach is partial least squares (PLS), which focuses on the analysis of variance and is conducted using PLS-GRAPH, VISUAL PLS, SMARTPLS and WARPPLS; and

third approach is a component-based SEM called generalised structured component analysis (GSCA).

6.4.2 Application of SEM in Construction Studies

Although SEM is commonly used across various disciplines, it had little application in construction management research. In recent times, many empirical studies have confirmed the effectiveness of the SEM method in establishing relationships among key correlative variables (Dolai et al., 2012). Investigating the relationship among key causes of delay in Taiwanese construction projects, Yang and Ou (2008) established that SEM had the ability of measuring

Moreover, Doloi (2009) applied SEM in investigating the influence of communication, trust or confidence and joint risk management on relational partnering success. Based on these findings, it is revealed clearly that the SEM approach is preferred for exploring the relationships among multiple latent factors and resolving complex interactions with the measured outcomes within construction practices. Additionally, Using the SEM methodology, the following researchers have conducted their studies in construction; Islam and Faniran (2005) presented an assessment model for quantifying the influence of project planning effectiveness in the Australian construction industry; Eriksson and Pesamaa (2007) successfully unveiled some of the key issues of procurement effects on cooperative arrangements within construction organisations; Jin et al. (2007) carried out study on an investigation for understanding the relationship-based determinants of building projects; Doloi (2009) found that communication is the key factor in relational partnering success on Australian construction projects; Vinodh and Joy (2012) investigated the factors affecting lean manufacturing practices across different industries in India; and Chai et al. (2015) explored the relationship between mitigation measures and delay in housing using SEM in Malaysia.

6.4.2.1 How the Data was Prepared prior to the SEM Analysis

The data preparation in this research involved different activities. Firstly, the completed questionnaires are obtained (260 questionnaires were secured in this study). Secondly, the collected questionnaires were screened in order to detect any invalid or the missing values. No questionnaire is invalid or has any missing values. Thirdly, the data was entered in to a statistical tool called SPSS v20. Fourthly, the data are checked to ensure that all values are correctly recorded. Fifthly, the data was saved into a file and lastly the researcher transferred all the variables involved into a programme called AMOS and subsequently ran the analysis. The SEM analysis in this research involves the estimation of a measurement model and afterwards testing the structural model. The full detail of these tests and assumptions of SEM are discussed in subsequent sections in this chapter.

Therefore, next section discusses the processes involved in respect to data preparation by this study prior to the SEM analysis.
6.4.3 Components of SEM

SEM covers two components: a measurement model linking a set of manifest indicators to a smaller set of latent constructs; and a structural model linking the hypothesised model’s latent constructs (Vantanasakdakul, 2007; Henseler et al., 2009). Latent constructs are referred to unobserved variables which could be measured indirectly by two or more observed indicators. The difference between the measurement model and structural model is illustrated below:

![Diagram showing structural and measurement models]

**Figure 6.4: Structural and Measurement models**

Source: Developed from this research

In conducting SEM, two (2) stages are involved: The first stage is to estimate the measurement model, and the second stage is to test the theoretical/structural model. The measurement model consist of the assessments of: (1) confirmatory factor analysis (CFA) using average variance extracted (AVE) and Composite Reliability (CR), (2) Normality, and Linearity, and (3) Goodness of Fit (GOF). The structural model is for hypothesis testing using t-statistics and p-values.

6.5 Criteria for Evaluation of SEM Measurement Model

The measurement (inner) model explains the relationships between observed or latent variables (Henseler et al., 2009). In the course of conducting the measurement model, the validity and reliability of these manifest indicators in measuring the latent constructs are assessed. Therefore, whenever the validity and reliability of the measures in the measurement model are
developed, the relationship between the latent constructs could be examined by path analysis to test the research hypotheses.

6.5.1 Confirmatory Factor Analysis (CFA)

CFA is a prerequisite for a measurement model where both the number of factors’ loadings and their corresponding items or indicators is defined clearly and is useful for testing convergent validity (Kline, 2011). Further, Loehlin (2004) stated that CFA is a latent variable analysis in which a model that is containing those latent variables is fit into correlation matrix for the purpose of measurement and structural models confined to simple correlations among the latent variables. Therefore, in the research, CFA has been considered to be a general modelling technique that could be used to test hypotheses about a factor structure for a number of interpretations to arrive at certain future prediction (Loehlin, 2004). According to Hair et al. (2009) CFA is of great significance to researchers because in conducting it, theory came first; thus, this gives them an opportunity to test a theory to observe analytically how indicators (constructs) represent latent variables in the model. CFA has been evaluated using AVE and constructs reliability.

6.5.1.1 Average Variance Extracted (AVE) for Convergent Validity

CFA is conducted to test the convergent validity of the individual constructs in the questionnaire through the assessment of factor loadings, Average Variance Extracted (AVE) and construct reliability. An AVE of 0.5 and above indicates high convergent validity (Fornell and Larcker 1981). However, Hair et al. (2009) argued that convergent validity is established when individual items factor loading were ≥ 0.5. Thus, any construct fall below ≥ 0.5 should be deleted. The formula to calculate average variance extracted (AVE) is given below:

\[ AVE = \frac{\sum \lambda^2}{n} \]

Where \( \lambda^2 = Square \ multiple \ correlation \ for \ each \ indicator \)

\( n = Number \ of \ indicators \)

6.5.1.2 Construct Reliability

Construct reliability (CR) is an indication of internal consistency which means that the measures are consistent in representing the latent constructs which they measure. Reliability values of at least 0.6 are acceptable (Hair et al., 2010; Henseler et al., 2009). CR is calculated from the sum square of factor loading (\( \Sigma \lambda \))^2 for each construct and the sum of error variance terms (\( \Sigma \delta \)) for a construct or variable. As recommended by the rule of thumb, a reliability estimate of greater than .7 suggests good reliability. Henseler et al. (2009)
recommended that values of .6. However, Hair et al. (2010) suggested that reliability between .6 and .7 could be accepted.

6.5.1.3 Assessing Normality and Linearity

Checking for normality and outliers is a required step in undertaking sound and reliable research. However in this study, test of normality was used in order to clear the data from any type of error. Byrne, (2010) opined that in any statistical research the Skewness has more effect on the mean. Therefore, DeCarlo (1997) and Byrne (2010) agree that in SEM, kurtosis should be given more emphasis because it severely affects the tests of variance and covariances, though the later argues that, there is no clear consensus on the actual bench mark of extreme kurtosis (Kline, 2005). However, West et al. (1995) suggested that values in excess of 7 indicate early departure from normality while Ullman and Bentler (2001) recommended that a threshold of 5. In any case, the Kurtosis for all items ranged from a minimum of -0.918 to a maximum of 2.625, all falling below 5. Also, the overall multivariate Kurtosis was 43.768 which is not large, as argued by Gao et al. (2008) and implied that the sample was normally distributed. Scrima et al. (2014) stated that the kurtosis multivariate index should not exceed the critical cut-off of 483.

Correlation analysis was conducted to examine the linearity of the independent variables i.e. salary, allowance, pension and gratuity. Barbaranelli (2003) proposed that the underlining correlations should be equal to or greater than 0.30, since the correlation coefficient is sensitive to the sample size and capable of detecting the existence of low level of significance in the relationship between constructs. All the constructs involved in this study were within or greater than 0.30, showing that all variables used in the model related with each other statistically.

6.5.2 Goodness of Fit (GoF) Indices

According to Ho (2006) Goodness-of-Fit indices (model fit) determine the degree to which a proposed model predicts (fits) the observed covariance matrix.

Model Fit

Kline (2005) seriously recommended the use of the chi-square test, the RMSEA, the CFI and the RMR/SRMR as indices that should be reported in model fit.

The Model fitting indices used in this research, as recommended by Kline (2005) were chi-square ($\chi^2$), relative $\chi^2$ ($\chi^2$/df), Root mean square error of approximation (RMSEA),
Goodness-of-fit statistic (GFI) and the adjusted goodness-of-fit statistic (AGFI), Root mean square residual (RMR) and standardised root mean square residual (SRMR), CFI (Comparative fit index), Incremental fit indices. Indeed the chi-square ($\chi^2$) statistic is a vital measure in this regard (Joreskog and Sorbom, 1993) where a model is accepted if the $\chi^2$ value is less than three times the degree of freedom (Carlmines and McIver, 1981), which is referred to as relative $\chi^2$. If the chi-square is significant, the model is regarded as unacceptable or not-fit. The Chi-Square has some shortcomings (Bentler and Bonnet, 1980; Joreskog and Sorbom, 1993), thus, the relative/normed chi-square ($\chi^2/df$) statistic with values up to 5.0 has been proposed (Wheaton et al., 1977; Schumacker and Lomax, 2004). IFI values that exceed .90 are accepted in the model, and sometimes IFI index can be greater than > 1 Bollen (1990). GFI and AGFI—the lowest acceptable threshold is 0.80 (Hart, 1994). CFI values of 0.90 depicting the acceptable threshold for good fit model (Bentler, 1990). Finally, Root Mean Square Error of Approximation (RMSEA) suggested by Steiger and Lind (1980), measures the error of approximation in the population. Browne and Cudeck, (1989) proposed that RMSEA value < .05 signify good fit, whereas value > .08 shows reasonable errors of approximation in the population. Equally, RMSEA value of 0.06 was recommended by Hu and Bentler (1999). Byrne (2010) viewed that RMSEA values ranging between .08 to .10 “indicate mediocre fit”, and those values > .10 indicate poor fit. Ho (2006) suggested that RMSEA and RMR should be $\leq$ .056 and .065 respectively. However, Hair et al. (2009) recommended that whenever three out of four indices (goodness of fit indices) meet up the requirement, both measurements and structural models can be accepted.

6.6 Evaluation of SEM Structural Model for Hypotheses Testing

The SEM is used to observe the individual and collective contribution of set of predictors (independent/manifest) variables entered in to the equation in relation to the outcomes (dependent/latent) variables.

The following sections analyse and discuss motivation, job satisfaction, attraction and retention as the dependent variables of compensation.

6.7 The SEM Results of the Workers’ Motivation

As discussed in section 6.4.3, whenever, data are analysed using SEM, two basic stages must be followed namely: estimation of the measurement model; and testing the theoretical/structural model. These stages are followed in analysing the data for workers’ motivation model in this study.
6.7.1 Measurement model results for workers’ motivation

As mentioned in 6.5 for the evaluation of the measurement model results three criteria are used (1) confirmatory factor analysis (CFA) using average variance extracted (AVE) and composite reliability (CR), (2) normality, and linearity, and (3) goodness of fit (GoF).

6.7.1.1 Confirmatory Factor Analysis for Workers’ Motivation Model

CFA is conducted for the assessment of factor loadings, average variance extracted (AVE) and construct reliability (CR). AVE of 0.5 and above indicates high convergent validity (Fornell and Larcker 1981). For construct reliability (CR), as recommended by the rule of thumb, reliability values greater than .7 suggest good reliability. However, Hair et al. (2010) suggested that reliability between .6 and .7 can be accepted. Therefore, Table 6.2 below illustrates the first- and second-order CFAs of the study in which all the items that did not meet the cut-off point of 0.5 were removed from the path diagrams of CFAs, and the variance extracted (AVEs) and construct reliability (CRs) also calculated.

As shown in Table 6.2 below, from the beginning, workers’ motivation (EM) has 13 items and after the first order CFA, nine of the items are retained with AVE = .36 and CR = .83. 83 (See Appendix C Part 2A). Salary (CSM) has 3 items, and after conducting first order CFA all three items are maintained with AVE = .50 and CR = .73. Similarly, allowance (CAM) has three items also after the first order CFA all three items are retained with AVE = .36 and CR = .61 (See Appendix C Part 3A). Pension and gratuity have single items, thus, the AVE and CR are equal to 1 in each case (See Appendix C Part 3A).

It can be seen from Table 6.2 that all the constructs achieve convergent validity of .5 except motivation and allowance which can be justified by Hair et al. (2009) assertion that convergent validity was established when individual items factor loading was ≥ 0.5. Additionally, all constructs in this model are reliable with minimum value of 0.6 to 0.7.
### Table 6.2: Confirmatory Factor Analysis (CFA) for Constructs’ Validity and Reliability of Motivation, Salary and Allowance, Gratuity and Pension

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Factor Loading $\geq 0.5$</th>
<th>Average Variance Extracted (AVE)$&gt; 0.5$</th>
<th>Construct Reliability (CR) $&gt; 0.7$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st Order CFA</td>
<td>2nd Order CFA</td>
<td></td>
</tr>
<tr>
<td>Motivation (EM)</td>
<td>Non- remuneration EM 1</td>
<td>.39</td>
<td>–</td>
<td>.36</td>
</tr>
<tr>
<td></td>
<td>Safety programme EM 2</td>
<td>.67</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Difficult task EM 3</td>
<td>.66</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Schedules of duty EM 4</td>
<td>.57</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognition EM 5</td>
<td>.53</td>
<td>.52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervision EM 6</td>
<td>.70</td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decision- making EM 7</td>
<td>.53</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promotion EM 8</td>
<td>.58</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job security EM 9</td>
<td>.61</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compensation EM 10</td>
<td>.51</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work it-self EM 11</td>
<td>.37</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delegation EM 12</td>
<td>.45</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Peers relations EM 13</td>
<td>.57</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>Salary (CSM)</td>
<td>Monthly salary CSM 1</td>
<td>.67</td>
<td>–</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>Yearly salay Inc CSM 2</td>
<td>.87</td>
<td>–</td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td>Promotional Inc CSM 3</td>
<td>.50</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Allowance (CAM)</td>
<td>Personnel Move. CAM 4</td>
<td>.51</td>
<td>–</td>
<td>.36</td>
</tr>
<tr>
<td></td>
<td>Personenel Sec. CAM 5</td>
<td>.67</td>
<td>–</td>
<td>.61</td>
</tr>
<tr>
<td></td>
<td>Personnel Eng. CAM 6</td>
<td>.57</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Gratuity (CGM)</td>
<td>CGM7</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pension (CPM)</td>
<td>CPM8</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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Figure 6.5: First Order CFA of Motivation

Figure 6.6: Second Order CFA of Motivation
6.7.1.2 Assessing Normality and Linearity

Table 6.3 below illustrates the respective kurtosis values for the individual latent and measure variables/constructs. Kurtosis for all constructs ranges from maximum of .829 to minimum of -1.158. The kurtosis in this model falls within the values of less than 5 as recommended by Ullman and Bentler (2001). Equally, the overall multivariate Kurtosis = 70.958 indicated that
the sample is normally distributed since multivariate Kurtosis is not large. Gao et al. (2008) stated that when large multivariate Kurtosis was observed, it means that the sample has a serious multivariate non-normal distribution issues. However, Scrima et al. (2014) stated that the kurtosis multivariate index should not exceed the critical cut-off of 483.

**Table 6.3: Assessment of Normality for Motivation, Salary, Allowance, Gratuity, and Pension**

<table>
<thead>
<tr>
<th>Items</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>c.r</th>
<th>Kurtosis</th>
<th>c.r</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM2 Safety</td>
<td>3.000</td>
<td>5.000</td>
<td>-.258</td>
<td>-1.660</td>
<td>-1.046</td>
<td>-3.362</td>
</tr>
<tr>
<td>EM3 Difficult task</td>
<td>2.000</td>
<td>5.000</td>
<td>-.455</td>
<td>-2.925</td>
<td>-.011</td>
<td>-.036</td>
</tr>
<tr>
<td>EM4 Schedules</td>
<td>3.000</td>
<td>5.000</td>
<td>-.152</td>
<td>-0.979</td>
<td>-1.158</td>
<td>-3.723</td>
</tr>
<tr>
<td>EM5 Recognition</td>
<td>2.000</td>
<td>5.000</td>
<td>-.651</td>
<td>-4.188</td>
<td>.105</td>
<td>.338</td>
</tr>
<tr>
<td>EM6 Supervision</td>
<td>3.000</td>
<td>5.000</td>
<td>.071</td>
<td>.457</td>
<td>-.880</td>
<td>-2.828</td>
</tr>
<tr>
<td>EM8 Promotion</td>
<td>2.000</td>
<td>5.000</td>
<td>-.454</td>
<td>-2.920</td>
<td>.045</td>
<td>.145</td>
</tr>
<tr>
<td>EM9 Job security</td>
<td>3.000</td>
<td>5.000</td>
<td>-.250</td>
<td>-1.604</td>
<td>-.856</td>
<td>-2.751</td>
</tr>
<tr>
<td>EM10 Compensation</td>
<td>3.000</td>
<td>5.000</td>
<td>-.510</td>
<td>-3.277</td>
<td>-.881</td>
<td>-2.831</td>
</tr>
<tr>
<td>EM13 Peers</td>
<td>3.000</td>
<td>5.000</td>
<td>-.150</td>
<td>-0.966</td>
<td>-.607</td>
<td>-1.952</td>
</tr>
<tr>
<td>CSM1 Monthly salary</td>
<td>3.000</td>
<td>5.000</td>
<td>-.137</td>
<td>-0.884</td>
<td>-.494</td>
<td>-1.588</td>
</tr>
<tr>
<td>CSM2 Yearly Salary</td>
<td>3.000</td>
<td>5.000</td>
<td>-.124</td>
<td>-0.794</td>
<td>-.518</td>
<td>-1.665</td>
</tr>
<tr>
<td>CSM3 Promotiona Sal</td>
<td>2.000</td>
<td>5.000</td>
<td>-.648</td>
<td>-4.166</td>
<td>.289</td>
<td>.929</td>
</tr>
<tr>
<td>CAM4 Personnel Mvt</td>
<td>2.000</td>
<td>5.000</td>
<td>-.329</td>
<td>-2.112</td>
<td>.891</td>
<td>2.865</td>
</tr>
<tr>
<td>CAM5 Personnel Sec</td>
<td>3.000</td>
<td>5.000</td>
<td>-.168</td>
<td>-1.079</td>
<td>-.797</td>
<td>-2.561</td>
</tr>
<tr>
<td>CAM6 Personnel Eng</td>
<td>2.000</td>
<td>5.000</td>
<td>-.400</td>
<td>-2.570</td>
<td>.076</td>
<td>.243</td>
</tr>
<tr>
<td>CGM7 Gratuity</td>
<td>2.000</td>
<td>5.000</td>
<td>-.469</td>
<td>-3.015</td>
<td>.829</td>
<td>2.664</td>
</tr>
<tr>
<td>CPM8 Pension</td>
<td>2.000</td>
<td>5.000</td>
<td>-.131</td>
<td>-0.841</td>
<td>.452</td>
<td>1.452</td>
</tr>
<tr>
<td><strong>Multivariate</strong></td>
<td></td>
<td></td>
<td><strong>70.958</strong></td>
<td></td>
<td><strong>23.081</strong></td>
<td></td>
</tr>
</tbody>
</table>

Having confirmed the normality of the data for workers’ motivation model, the next stage is to test collinearity using Pearson’s correlation test. For linearity, Barbaranelli (Barbaranelli, 2003 in Scrima, 2014) proposed that the underlining correlations should be equal to or greater than 0.30, since the correlation coefficient is sensitive to the sample size and capable of detecting the existence of a low level of significance in the relationship between constructs. The analysis indicated that multi-collinearity is not an issue as shown in Table 6.4 below.
Table 6.4: Correlation Estimates of Motivation, Salary, Allowance, Pension and Gratuity

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Y</th>
<th>X₁</th>
<th>X₂</th>
<th>X₃</th>
<th>X₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y (Motivation)</td>
<td>4.32</td>
<td>.41</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X₁ (Salary)</td>
<td>4.09</td>
<td>.68</td>
<td>.654***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X₂ (Allowance)</td>
<td>4.10</td>
<td>1.08</td>
<td>.672***</td>
<td>.793***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X₃ Gratuity</td>
<td>4.34</td>
<td>.59</td>
<td>.400**</td>
<td>.591***</td>
<td>.463***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>X₄ Pension</td>
<td>4.12</td>
<td>.60</td>
<td>.394***</td>
<td>.524***</td>
<td>.588***</td>
<td>.368***</td>
<td>1</td>
</tr>
</tbody>
</table>

***. Correlation is significant at the 0.01 level (2-tailed).
**. Correlation is significant at the 0.05 level (2-tailed).

6.7.1.3 Model fit for workers’ motivation model
Therefore, Figure 6.9 below depicts the measurement model of the workers’ motivation, salary, allowance, gratuity and pension after several adjustments has been made from both first and second order confirmatory factor analysis (CFA). The goodness of fit indices are as follows: Chi-square ($\chi^2$) = 213.929, df = 111, Relative $\chi^2$ ($\chi^2$/df) = 1.927, $p = .000$, AGFI = .875, GFI = .909, CFI = .920, IFI = 0.921, RMSEA = .061 and RMR = .017 which confirmed a good model fit (Bentler, 1983; Ho & Bentler, 1999; Byrne, 2010). From these goodness of fit indices, the researcher concluded that the measurement model was fit because all the model fit indices had met the requirements (Bentler, 1983; Ho & Bentler, 1999; Byrne, 2010). (See Section 6.5.2).

Figure 6.9: Measurement Model of Motivation, Salary, Allowance, Pension and Gratuity
6.7.2 Structural Model Results for Workers’ Motivation

Goodness of fit indices illustrate that the structural model in figure 6.10 below satisfied all the requirements of model fit as shown by the following indices: \( \chi^2 (CMIN) = 375.619 \) \( (df = 115) \), relative \( \chi^2 (CMIN/df) = 3.266, \) \( p = .000 \), \( AGFI = .822 \), \( GFI = .866 \), \( CFI = .904 \), \( IFI = .907 \), \( RMSEA = .079 \) and \( RMR = .048 \). Conventionally, relative \( \chi^2 (CMIN) \) should be < 5, while \( AGFI, GFI, CFI \) and \( IFI \) should be > .9 (Bentler, 1983; Ho & Bentler, 1999; Byrne, 2010) and \( RMSEA \) and \( RMR \) should be < .08 (Browne & Cudeck, 1989; BacCallum et al. 1996; cited in Byrne, 2010). Furthermore, Ho (2006) suggested that, \( RMSEA \) and \( RMR \) should be \( \leq .056 \) and \( .065 \) respectively (See Section 6.5.2).

Figure 6.10: Structural Model of Motivation
Table 6.5: Unstandardised and standardised regression weight in the hypothesised path model

<table>
<thead>
<tr>
<th>Hypothesised relationships</th>
<th>Unstandardised Regression Weight</th>
<th>Standardised Regression Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate (B)</td>
<td>S.E.</td>
</tr>
<tr>
<td>Motivation &lt;--- Salary</td>
<td>.220</td>
<td>.163</td>
</tr>
<tr>
<td>Motivation &lt;--- Allowance</td>
<td>.586</td>
<td>.186</td>
</tr>
<tr>
<td>Motivation &lt;--- Gratuity</td>
<td>.111</td>
<td>.041</td>
</tr>
<tr>
<td>Motivation &lt;--- Pension</td>
<td>.075</td>
<td>.041</td>
</tr>
</tbody>
</table>

6.7.2.1 Results and Hypotheses Testing
The SEM analysis shows that the standardized path coefficients are consistent with the hypotheses as:

- Allowance contributed significantly to workers’ motivation (β = .543, CR = 3.146, p = .002). This finding supported hypothesis II; that the allowance paid in this ministry influences work motivation positively.

- Similarly, gratuity contributed significantly and positively to the workers’ motivation (β = 0.148, CR = 2.688, p = 0.007). This aligns with the research findings of Kubo and Saka (2002), Islam and Ismail (2008), Mujah et al. (2011) and (Samina and Khuram, 2011) who have indicated that extrinsic rewards in the form of compensation are capable of influencing the motivation of workers.

- Exceptionally though, Pension (β = .101, CR = 1.853, p = .065) has no significant positive influence on the motivation of the employees. Consequently, Hypothesis IV (pension payment upon retirement influences work motivation positively) is not supported by the analysis.

- Salary too (β = .224, CR = 1.347, p = .178) has no positive influence on the motivation of the employees; thus Hypothesis I (salary paid in this ministry influences work motivation positively) is not supported. This later outcome is consistent with Herzberg’s view that money is not a strong motivating factor in workers’ behaviour.
**6.7.2.2 Discussion of Results**

This section discusses the analysis of the quantitative data pertaining to motivation presented in the preceding sections.

Extrinsic benefits were found to significantly induce workers’ performance in the sample studied. Extrinsic refers to sources of motivations that are external to the task or individuals concerned, such as pay and benefits. The result indicates that employees in the public sector place great value on a variety of incentives given to them by their employers. Furthermore, motivation has a substantial nexus with how workers can perform their expected roles best. This argument aligns with equity theory which opines that fairness in a payment package tends to yield greater performance from employees (Adams, 1963). Therefore, when extrinsic incentives are either absent or not commensurate workers will likely exhibit discomfort, non-commitment to their jobs and lower performance.

Equity theory concurs that people focus not only on the absolute amount of remuneration they earn for their efforts or contributions, but on the parity of this amount to what equals earn in other organizations (Safiullah, 2015). Thus workers tend to compare their inputs like efforts, experiences, qualifications and competence with outcomes such as reward, recognition and other extrinsic factors. They will often relate an imbalance in their input-outcome ratio to inequity. Furthermore, equity to workers involves two aspects namely distributive and procedural justice. Distributive justice entails the fairness of how rewards are allocated to workers while Procedural justice describes how the workers perceive equity in rewards for labour in an organisation. Thus, equity can be achieved with regards to reward when both distributive and procedural justices are considered in formulation of any compensation policy in any setting.

Allowance is significant to motivation due to the fact that it is an extra amount of money on top of salary which workers receive while in service. Since it is paid based on certain conditions like travelling, it can serve as a catalyst for motivating workers to carry out certain assignments.

The significance of gratuity, which is a lump sum given to workers upon retirement,
is such that it motivates workers to attain the requisite number of years that will qualify them for this payment. A large gratuity can thus reduce labour turnover.

Salary and pension are not too significant to the motivation of the workers’ studied because these are fixed and not paid based on performance per se. Moreover, the amount of pension paid is based on a worker’s contributions to a pension-scheme while in service and may not necessary serve as a strong motivating factor.

Employees are concerned with equity in compensation because they compare themselves with their contemporaries that are working in other organizations. When employees notice inequalities in their compensation, their motivation may be dampened. Hence, organizations should take this into consideration while drawing up their compensation strategy. The use of secrecy in compensation also generates mistrust and reduces motivation and consequently organizational effectiveness.

6.8 The SEM Results of the Workers’ Job Satisfaction
Similar to the motivation model, two stages are involved in job satisfaction model that is estimation of the measurement model, and structural model for hypotheses testing. These two stages are strictly followed to develop a job satisfaction model in this research.

6.8.1 Measurement Model Results for Job Satisfaction
The measurement (inner) model which explains the relationships between observed or latent variables (Henseler et al., 2009) are evaluated in this research using three criteria (1) confirmatory factor analysis (CFA) using average variance extracted (AVE) and Composite Reliability (CR), (2) Normality, and Linearity, and (3) Goodness of Fit (GoF).

6.8.1.1 Confirmatory Factor Analysis (CFA)
CFA is conducted for the assessment of factor loadings, as well as average variance extracted (AVE) and construct reliability (CR). AVE of 0.5 and above indicates high convergent validity (Fornell and Larcker 1981). For construct reliability (CR), as recommended by the rule of thumb, reliability values greater than .7 suggests good reliability, However, Hair et al. (2010) suggested that reliability between .6 and .7. As shown in Table 6.6 below, from the beginning, job satisfaction (EJ) has five items and after the first order CFA, four items are retained with AVE = .40 and CR = .72 (See Appendix C Part 2B). Salary (CJS) has three items, and after conducting first order CFA, all three items are maintained with AVE = .62 and CR = .83. Similarly, allowance (CAJ) has three items also after the first order CFA, three items are
retained with AVE = .53 and CR = .77 (See Appendix C Part 3B). Pension and gratuity have single items, thus, the AVE and CR are equal to 1 in each case (See Appendix C Part 3B).

It can be seen from Table 6.6 that all of the constructs achieve convergent validity of .5 except job satisfaction which can be justified by Hair et al.’s (2009) assertion that convergent validity is established when individual items’ factor loading is ≥ 0.5. Moreover, all of the constructs achieved the minimum reliability value of > 0.6 (Hair et al., 2010).

Table 6.6: Confirmatory Factor Analysis (CFA) and Constructs Validity and Reliability of Job satisfaction, Salary, Allowance, Pension and Gratuity

<table>
<thead>
<tr>
<th>CONSTRUCTS</th>
<th>ITEMS</th>
<th>Factor Loading≥ 0.5</th>
<th>Average Variance Extracted&gt; 0.5</th>
<th>Construct Reliability (CR) &gt; 0.7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st Order CFA</td>
<td>2nd Order CFA</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction (EJ)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensation</td>
<td>EJ 1</td>
<td>.40</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>Promotion policy</td>
<td>EJ 2</td>
<td>.65</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Supervisors relations</td>
<td>EJ 3</td>
<td>.68</td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td>Job it-self</td>
<td>EJ 4</td>
<td>.58</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Peers relations</td>
<td>EJ 5</td>
<td>.61</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Salary (CJS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly salary</td>
<td>CJS 1</td>
<td>.79</td>
<td>–</td>
<td>.62</td>
</tr>
<tr>
<td>Yearly salary Inc</td>
<td>CJS 2</td>
<td>.80</td>
<td>–</td>
<td>.83</td>
</tr>
<tr>
<td>Promotional Inc</td>
<td>CJS 3</td>
<td>.78</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Allowance (CAJ)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel Move</td>
<td>CAJ 4</td>
<td>.78</td>
<td>–</td>
<td>.53</td>
</tr>
<tr>
<td>Personnel Sec.</td>
<td>CAJ 5</td>
<td>.70</td>
<td>–</td>
<td>.77</td>
</tr>
<tr>
<td>Personnel Eng.</td>
<td>CAJ 6</td>
<td>.70</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Gratuity (CGJ)</td>
<td>CGJ7</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pension (CPJ)</td>
<td>CPJ 8</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Figure 6.11: First Order CFA for Job Satisfaction

Figure 6.12: Second Order CFA for Job Satisfaction
6.8.1.2 Assessing Normality and Linearity

Table 6.7 below illustrated the respective kurtosis values for the latent constructs and measured variables. Kurtosis for all items ranges from maximum of 3.293 to minimum of -1.139 falls within the values of less than 5, as suggested by Ullman and Bentler (2001). Moreover, the overall multivariate Kurtosis = 23.680 implied that the sample is normally
distributed because the multivariate Kurtosis is not large. Gao et al. (2008) stated that large multivariate Kurtosis indicated that the sample has a severely multivariate non-normal distribution problem. Hence, Scrima et al. (2014) stated that the kurtosis multivariate index should not exceed the critical cut-off of 483.

Table 6.7: Assessment of Normality for Job satisfaction, Salary, Allowance, Gratuity and Pension

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>c.r.</th>
<th>Kurtosis</th>
<th>c.r.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EJ1 Compensation</td>
<td>3.000</td>
<td>5.000</td>
<td>.023</td>
<td>.154</td>
<td>-.857</td>
<td>-2.822</td>
</tr>
<tr>
<td>EJ2 Promotion policy</td>
<td>3.000</td>
<td>5.000</td>
<td>.201</td>
<td>1.321</td>
<td>-.554</td>
<td>-1.822</td>
</tr>
<tr>
<td>EJ3 Supervisors</td>
<td>2.000</td>
<td>5.000</td>
<td>-.217</td>
<td>-1.430</td>
<td>-.108</td>
<td>-.357</td>
</tr>
<tr>
<td>EJ5 Peers relations</td>
<td>3.000</td>
<td>5.000</td>
<td>-.297</td>
<td>-1.953</td>
<td>-1.139</td>
<td>-3.748</td>
</tr>
<tr>
<td>CJS1 Monthly salary</td>
<td>1.000</td>
<td>5.000</td>
<td>-1.277</td>
<td>-8.407</td>
<td>2.660</td>
<td>8.754</td>
</tr>
<tr>
<td>CJS2 Yearly salary In.</td>
<td>1.000</td>
<td>5.000</td>
<td>-1.422</td>
<td>-9.362</td>
<td>3.293</td>
<td>10.837</td>
</tr>
<tr>
<td>CJS3 Promotional Inc.</td>
<td>1.000</td>
<td>5.000</td>
<td>-.940</td>
<td>-6.189</td>
<td>1.184</td>
<td>3.897</td>
</tr>
<tr>
<td>CAJ4 Personnel Move</td>
<td>1.000</td>
<td>5.000</td>
<td>-.509</td>
<td>-3.350</td>
<td>.110</td>
<td>.361</td>
</tr>
<tr>
<td>CAJ5 Personnel Sec</td>
<td>1.000</td>
<td>5.000</td>
<td>-.509</td>
<td>-3.354</td>
<td>.230</td>
<td>.758</td>
</tr>
<tr>
<td>CAJ6 Personnel Eng.</td>
<td>1.000</td>
<td>5.000</td>
<td>-.618</td>
<td>-4.069</td>
<td>.507</td>
<td>1.667</td>
</tr>
<tr>
<td>CGJ7 Gratuity</td>
<td>1.000</td>
<td>5.000</td>
<td>-1.074</td>
<td>-7.068</td>
<td>.382</td>
<td>1.257</td>
</tr>
<tr>
<td>CPJ8 Pension</td>
<td>1.000</td>
<td>5.000</td>
<td>-.910</td>
<td>-5.990</td>
<td>.094</td>
<td>.309</td>
</tr>
<tr>
<td><strong>Multivariate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>23.680</strong></td>
<td><strong>10.415</strong></td>
</tr>
</tbody>
</table>

For linearity, Barbaranelli (Barbaranelli, 2003 in Scrima, 2014) proposed that the underlining correlations should be equal to or greater than 0.30, since the correlation coefficient is sensitive to the sample size and capable of detecting the existence of a low level of significance in the relationship between constructs. As shown in Table 6.8 below, multicollinearity is not a problem in this model based on Barbaranelli’s (2003) suggestion.
**Table 6.8: Correlation Estimates of Job Satisfaction, Salary, Allowance, Pension and Gratuity**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Y</th>
<th>X₁</th>
<th>X₂</th>
<th>X₃</th>
<th>X₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y (Job Satisfaction)</td>
<td>4.32</td>
<td>.41</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X₁ (Salary)</td>
<td>4.09</td>
<td>.68</td>
<td>.583</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X₂ (Allowance)</td>
<td>4.10</td>
<td>1.08</td>
<td>.312</td>
<td>.630***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X₃ (Gratuity)</td>
<td>3.96</td>
<td>.67</td>
<td>.711</td>
<td>.612***</td>
<td>.326***</td>
<td>.664***</td>
<td>1</td>
</tr>
<tr>
<td>X₄ (Pension)</td>
<td>4.01</td>
<td>1.03</td>
<td>.417</td>
<td>.353***</td>
<td>.318***</td>
<td>.326***</td>
<td>.664***</td>
</tr>
</tbody>
</table>

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

### 6.8.1.3 Goodness of Fit (GOF) Indices

The goodness of fit indices are as follows: chi-square ($\chi^2$) = 28.850, df = 32, relative ; $\chi^2$ ( $\chi^2$/df) = .902, p = .627, AGFI = .963, GFI = .979, CFI = 1.000, IFI = 1.005, RMSEA = .000 and RMR = .015, thus can be considered sufficient in line with the prior studies (Browne and Cudeck, 1989; Byrne, 2010). From this goodness of fit indices, the researcher concludes that the measurement model is fit because all the model fit indices have met the requirements (Browne &Cudeck, 1989; Byrne, 2010) (See Section 6.5.2).
Therefore, the analysis of SEM using AMOS has shown that the structural model is fit. This indicates that the model fits the data as illustrated by the following goodness of fit indices in Figure 6.16 below: $\chi^2 (CMIN) = 76.390$ ($df = 50$), relative $\chi^2 (CMIN/df) = 1.528$, $p = .010$, $AGFI = .931$, $GFI = .956$, $CFI = .969$, $IFI = .970$, $RMSEA = .045$ and $RMR = .059$.

Conventionally, relative $\chi^2 (CMIN)$ should be < 5, while $AGFI$, $GFI$, $CFI$ and $IFI$ should be > .9 (Bentler, 1983; Ho & Bentler, 1999; Byrne, 2010) and $RMSEA$ and $RMR$ should be < .08 (Browne & Cudeck, 1989; BacCallum et al. 1996; cited in Byrne, 2010). Furthermore, Ho (2006) suggested that, $RMSEA$ and $RMR$ should be $\leq .056$ and .065 respectively. (See Section 6.5.2).
Table 6.9: Unstandardised and standardised regression weight in the hypothesised path model

<table>
<thead>
<tr>
<th>Hypothesised relationships</th>
<th>Unstandardised Regression Weight Estimate (B)</th>
<th>S.E.</th>
<th>Standardized Regression Weight Estimate (β)</th>
<th>C.R.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction &lt;- Salary</td>
<td>.036</td>
<td>.047</td>
<td>.060</td>
<td>.760</td>
<td>.447</td>
</tr>
<tr>
<td>Job Satisfaction &lt;- Allowance</td>
<td>.017</td>
<td>.054</td>
<td>.025</td>
<td>.310</td>
<td>.757</td>
</tr>
<tr>
<td>Job Satisfaction &lt;- Gratuity</td>
<td>.048</td>
<td>.035</td>
<td>.131</td>
<td>1.360</td>
<td>.024</td>
</tr>
<tr>
<td>Job Satisfaction &lt;- Pension</td>
<td>.025</td>
<td>.034</td>
<td>.101</td>
<td>.748</td>
<td>.045</td>
</tr>
</tbody>
</table>
6.8.2.1 Results and Hypotheses Testing

The results from the SEM analysis indicate that:

- Pension ($\beta = .101, CR = .748, p = .045$), and gratuity ($\beta = .131, CR = 1.360, p = .024$) contributed significantly to job satisfaction. However, salary ($\beta = .060, CR = .760, p = .447$) and allowance ($\beta = .025, CR = .310, p = .757$) has no significant influence on job satisfaction. The analysis from table 6.9 above shows that the standardised path coefficients are consistent with the hypotheses tested in the study. Firstly, there is a significant relationship between pension and job satisfaction (hypothesis IV); gratuity and job satisfaction (Hypothesis III). Studies such as Belias et al. (2014), Ajmal et al. (2015) and Chatzopoulou et al. (2015) have established similar findings.

- However, there is no significant relationship between salary and job satisfaction (Hypothesis I) or between allowance and job (Hypothesis II). Young et al.’s. (1998) study of public sector employees in the UK, did likewise find no significant relationship between pay and job satisfaction.

6.8.2.2 Discussion of the Results

This section discusses the analysis of the quantitative data of job satisfaction presented in the preceding sections.

At the centre of equity theory is money, which is viewed as the most important form of reward in an organization (Adams, 1963). Thus, employees try to balance the reward they receive by comparing it with what other workers in organizations that are similar to theirs are paid and base their job satisfaction on this analysis.

It is a common belief that an increase in job satisfaction will result in improved performance. The human relation school advocates the behavioural perspective that employees deserve to be the central focus of any organised activity (Wood et al., 2004). This movement makes managers more concerned for their workers’ needs. All the proponents of human relation school such as Elton Mayo, McGregor, Abraham Maslow, and Herzberg have advocated that work rules, technology and standards do not necessarily guarantee better performance; instead success depends on how organisations treat people or their employees. Thus, the key to improving worker's productivity in the human relation thrust is to increase the satisfaction of their employees (Hassan, 2009). Therefore inducements such as pay and other benefits could be used as means of satisfying workers so that they will in turn work at a higher degree of productivity (Wood et al., 2004).
The significance of a gratuity to workers is apparent because, the lump sum payment they receive helps in satisfying their various needs upon retirement. Pension is also significant to workers’ job satisfaction because at least they will be receiving or earning some money monthly after retirement. As an overall sense of happiness at work and as a key to improving both firm and individual performance, job satisfaction has a significant influence toward employees’ performance in the Nigerian public sector.

Although the salary which workers are paid is not sufficient in most cases, employees in the public sector take comfort in the fact that the payment of a gratuity and pension after retirement is automatic. These two elements of compensation have been reinforced by the Nigerian pension commission in their new pension reform scheme which has guaranteed a certainty of inflows of income after retirement. This reform has galvanized workers in the public sector in their productivity and pleasure. It has also given them a sense of comfort. This reform has instilled confidence and certainty in the minds of Nigerian public sector workers with regards to their after-service entitlements. Prior to the introduction of the new pension scheme, the rate of labour turnover in the Nigerian civil service was high and prevalent. A satisfied worker contributes hugely towards the overall success of the firm, and consequently their competitive advantage. By extension, employees that are satisfied on the job are motivated to accomplish their company’s objectives.

Salary had no significant influence on job satisfaction. Indeed, public sector employees in Nigeria are not usually satisfied with their salaries as the amount paid is lower than that of other sectors. This has led to consistent agitations for salary review in the public sector. Likewise, allowance had no significant impact on job satisfaction because it is not paid on a regular basis but relative to certain circumstances.

6.9 The SEM Results of the Workers’ Attraction
Similar to motivation and job satisfaction models, two stages are involved in workers’ attraction model. The two stages are: the estimation of the measurement model; and structural model for hypotheses testing. These two stages are followed in this study to develop workers’ attraction model.

6.9.1 Measurement Model Results for Workers’ Attraction
The measurement (inner) model explains the relationship between observed or latent variables (Henseler et al., 2009). Therefore, the measurement model of workers’ attraction is evaluated
using three criteria namely; (1) confirmatory factor analysis (CFA) using average variance extracted (AVE) and composite reliability (CR), (2) normality, and linearity, and (3) goodness of fit (GoF).

6.9.1.1 Confirmatory factor analysis (CFA)
CFA is conducted for the assessment of factor loadings, average variance extracted (AVE) and construct reliability (CR). An AVE of 0.5 and above indicated high convergent validity (Fornell and Larcker 1981. Henseler et al. (2009) recommended that values of .6 might be accepted. Moreover, Hair et al. (2010) suggested reliability between .6 and .7.

Therefore, Table 6.10 below illustrated the first- and second-order CFAs of the study after deleting all of the items that did not meet the cut-off point of 0.5 from the path diagrams of CFAs. It can be seen from Table 6.10 that workers’ attraction (EA) has 12 items and after the first order CFA, seven of the items are retained with AVE = .37 and CR = .77(See Appendix C Part 2C). Salary (CSA) has three items, and after conducting first order CFA all three are maintained with AVE = .60 and CR = .75. Similarly, allowance (CAA) has three items, and also after the first order CFA all three items involved are retained with AVE = .35 and CR = .61(See Appendix C Part 3C). Pension and gratuity has single items, thus, their AVE and CR are equal to 1 in each case (See Appendix C Part 3C). It can be seen from Table 6.10 that all of the constructs achieved convergent validity (AVE) of .5 except attraction and allowance which can be justified by Hair et al. (2009) assertion that convergent validity is established when individual items factor loading is ≥ 0.5. The constructs involved in this model are reliable with the minimum value of > 0.6 as suggested by Henseler et al. (2009).

Table 6.10: Confirmatory Factor Analysis (CFA) for Constructs Validity and Reliability of Attraction, Salary, Allowance, Gratuity and Pension

<table>
<thead>
<tr>
<th>CONSTRUCTS</th>
<th>ITEMS</th>
<th>1st Order CFA</th>
<th>2nd Order CFA</th>
<th>Average Variance Extracted &gt; 0.5</th>
<th>Construct Reliability (CR) &gt; 0.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attraction (EA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative distance</td>
<td>EA 1</td>
<td>.57</td>
<td>.52</td>
<td>.37</td>
<td>.77</td>
</tr>
<tr>
<td>Compensation</td>
<td>EA 2</td>
<td>.56</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibilities</td>
<td>EA 3</td>
<td>.54</td>
<td>.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advancement</td>
<td>EA 4</td>
<td>.57</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low risk</td>
<td>EA 5</td>
<td>.53</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowerment</td>
<td>EA 6</td>
<td>.62</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>------</td>
<td>-----</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desperation</td>
<td>EA 7</td>
<td>.55</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Way of operation</td>
<td>EA 8</td>
<td>.52</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manner of treatment</td>
<td>EA 9</td>
<td>.59</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance</td>
<td>EA 10</td>
<td>.61</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publication reputation</td>
<td>EA 11</td>
<td>.53</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reputation shared</td>
<td>EA 12</td>
<td>.59</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Salary (CSA)</strong></td>
<td></td>
<td>.60</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly salary</td>
<td>CSA 1</td>
<td>.67</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yearly salary Inc</td>
<td>CSA 2</td>
<td>.87</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotional Inc</td>
<td>CSA 3</td>
<td>.50</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Allowance (CAA)</strong></td>
<td></td>
<td>.35</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel Move</td>
<td>CAA 4</td>
<td>.51</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel Sec</td>
<td>CAA 5</td>
<td>.67</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel Eng.</td>
<td>CAA 6</td>
<td>.57</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gratuity(CGA7)</strong></td>
<td>CPA 8</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension (CPA8)</td>
<td>CGA7</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6.17: First Order CFA of Attraction
Figure 6.18: Second Order CFA of Attraction

Figure 6.19: CFA of Salary for Attraction
6.9.1.2 Assessing Normality and Linearity

Table 6.11 below illustrates the respective kurtosis values for the latent and measured variables. Kurtosis for all items ranges from maximum of 2.625 to minimum of -0.918 falls within the values of less than 5 as suggested by Ullman and Bentler (2001). Likewise, the overall multivariate Kurtosis = 43.768, which implied that the sample is normally distributed because the multivariate Kurtosis is not large, as argued by Gao et al. (2008). Further, Gao et al. (2008) stated that large multivariate Kurtosis indicated that the sample has a severe multivariate non-normal distribution issues. Hence, Scrima et al. (2014) recommended that the kurtosis multivariate index should not exceed the critical cut-off of 483.

Table 6.11: Assessment of Normality for Attraction, Salary, Allowance, Pension and Gratuity

<table>
<thead>
<tr>
<th>Items</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>c.r</th>
<th>Kurtosis</th>
<th>c.r</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA1 Relative distance</td>
<td>2.00</td>
<td>5.00</td>
<td>-.281</td>
<td>-1.85</td>
<td>.645</td>
<td>2.122</td>
</tr>
<tr>
<td>EA2 Compensation</td>
<td>1.00</td>
<td>5.00</td>
<td>-.771</td>
<td>-5.077</td>
<td>2.163</td>
<td>7.120</td>
</tr>
<tr>
<td>EA3 Responsibilities</td>
<td>3.00</td>
<td>5.00</td>
<td>-.145</td>
<td>-.953</td>
<td>-.650</td>
<td>-2.139</td>
</tr>
<tr>
<td>EA4 Advancement</td>
<td>2.00</td>
<td>5.00</td>
<td>-.426</td>
<td>-2.804</td>
<td>.379</td>
<td>1.248</td>
</tr>
<tr>
<td>EA5 Low risk</td>
<td>2.00</td>
<td>5.00</td>
<td>-.243</td>
<td>-1.601</td>
<td>.078</td>
<td>.256</td>
</tr>
<tr>
<td>EA6 Empowerment</td>
<td>2.00</td>
<td>5.00</td>
<td>-.498</td>
<td>-3.280</td>
<td>.037</td>
<td>.123</td>
</tr>
<tr>
<td>EA7 Desperation</td>
<td>2.00</td>
<td>5.00</td>
<td>-.338</td>
<td>-2.224</td>
<td>.150</td>
<td>.492</td>
</tr>
<tr>
<td>CSA1 Monthly Salary</td>
<td>3.00</td>
<td>5.00</td>
<td>-.204</td>
<td>-1.343</td>
<td>-.622</td>
<td>-2.049</td>
</tr>
</tbody>
</table>
Therefore, in assessing linearity, Barbaranelli (Barbaranelli, 2003 in Scrima, 2014) recommended that correlations should be equal to or greater than 0.30. The result shows that multi-collinearity is not an issue as contained in Table 6.12 below.

Table 6.12: Correlation Estimates of Attraction, Salary, Allowance, Pension and Gratuity

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Y</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y (Attraction)</td>
<td>4.32</td>
<td>.41</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1 (Salary)</td>
<td>4.09</td>
<td>.68</td>
<td>.539***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2 (Allowance)</td>
<td>4.10</td>
<td>1.08</td>
<td>.734***</td>
<td>.701***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3 (Gratuity)</td>
<td>4.28</td>
<td>.55</td>
<td>.517***</td>
<td>.404***</td>
<td>.525***</td>
<td>.562***</td>
<td>1</td>
</tr>
<tr>
<td>X4 (Pension)</td>
<td>4.29</td>
<td>.61</td>
<td>.479***</td>
<td>.403***</td>
<td>.668***</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

***Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

6.9.1.3 Goodness of Fit (GOF) Indices

The goodness of fit indices for workers attraction model are as follows; Chi-square ($\chi^2$) = 209.509, df = 82, Relative $\chi^2$ ($\chi^2$/df) = 2.555, p = .000, AGFI = .920, GFI = .950, CFI = .959, IFI = 0.959, RMSEA = .050 and RMR = .021, which can be considered sufficient, in line with previous studies (Bentler, 1983; Ho & Bentler, 1999; Byrne, 2010). From these goodness of fit indices, the researcher concludes that the measurement model is fit because all the model fit indices have met the requirement suggested (Bentler, 1983; Ho & Bentler, 1999; Byrne, 2010). (See Section 6.5.2).
6.9.2 Structural Model Evaluation and Hypotheses Testing for Attraction

The analysis of structural equation modelling using AMOS depicts that the structural model is fit, which means that the model fits the data as illustrated by the following goodness of fit indices in figure 6.22 below: $\chi^2 (CMIN) = 305.867 \ (df = 86)$, relative $\chi^2 (CMIN/df) = 3.557$, $p = .000$, $AGFI = .818$, $GFI = .870$, $CFI = .912$, $IFI = .915$, $RMSEA = .079$ and $RMR = .050$. Conventionally, relative $\chi^2 (CMIN)$ should be $< 5$, while $AGFI$, $GFI$, $CFI$ and $IFI$ should be $> .9$ (Bentler, 1983; Ho & Bentler, 1999; Byrne, 2010) and $RMSEA$ and $RMR$ should be $< .08$ (Browne & Cudeck, 1989; Baccallum et al. 1996; cited in Byrne, 2010). Furthermore, Ho (2006) suggested that $RMSEA$ and $RMR$ should be $\leq .056$ and $.065$ respectively, which fall within the adequate range as suggested by Ho (2006)(See Section 6.5.2).
Table 6.13: Unstandardised and standardised regression weight in the hypothesised path model

<table>
<thead>
<tr>
<th>Hypothesised relationships</th>
<th>Unstandardised Regression Weight</th>
<th>Standardized Regression Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate (B)</td>
<td>S.E.</td>
</tr>
<tr>
<td>Attraction &lt;- Salary</td>
<td>.438</td>
<td>.138</td>
</tr>
<tr>
<td>Attraction &lt;- Allowance</td>
<td>.059</td>
<td>.133</td>
</tr>
<tr>
<td>Attraction &lt;- Gratuity</td>
<td>.062</td>
<td>.037</td>
</tr>
<tr>
<td>Attraction &lt;- Pension</td>
<td>.166</td>
<td>.045</td>
</tr>
</tbody>
</table>
6.9.2.1 Results and Hypotheses Testing

The results from the SEM analysis in the Table 6.13 above reveals that salary ($\beta = .507$, $CR = 3.188$, $p = .001$) has a significant influence on workers’ attraction. Likewise pension ($\beta = .288$, $CR = 3.704$, $p = .004$), and lastly gratuity also contributed significantly to workers’ attraction ($\beta = .120$, $CR = 1.645$, $p = .020$). However, allowance has no significance to workers’ attraction ($\beta = .60$, $CR = .446$, $p = .655$). Hence, Salary, gratuity and pension significantly and positively influenced public sector construction workers’ attraction while allowance was not significant to the attraction of workers in the public construction sector in Jigawa state, Nigeria. The analysis from the SEM in Table 6.13 above showed that the standardised path coefficients were consistent with the hypotheses. Moreover, the hypotheses were tested thus:

- The salary paid in this ministry is positively related to workers’ attraction. Hypothesis I, which stated that the salary paid in this ministry is positively related to workers’ attraction, is confirmed.
- The pension payment upon retirement was positively related to workers’ attraction. Hypothesis IV, which stated that the pension payment upon retirement positively related to influences workers’ attraction, is supported.
- Gratuity also contributed significantly to workers’ attraction. Hypothesis III, which stated that the gratuity payment after retirement is positively related to workers’ attraction, is confirmed. These findings were in congruence with other researchers’ results such as: Leisink and Steijn (2008); Rose and Gordon (2010); Hutchings et al. (2011). From these studies, compensation was viewed as a tool for attracting people to fill in the job vacancies that exist in an organisation.
- However, allowance has no significant influence on workers’ attraction. Hypothesis II, which held that the allowances paid in this ministry positively related to workers’ attraction, is not supported. This is in line with what is reported by Gonzalez (2009), that using any form of reward was unnecessary and is not an effective tool for attracting workers.

6.9.2.2 Discussion of Results

This section deliberates the analysis of the quantitative data with regards to attraction presented in the preceding sections.

Literature reveals that much of the work on equity theory is attributed to the work developed by J. Stacey Adams (1963). The theory refers to workers’ perceptions of fairness of remunerations. It relies on what workers feel when they are equally treated as compared to
others. Money as the most significant remuneration occupies the centre position in equity theory. Generally, workers compare inputs (effort, experience, education and competence) and outcomes (reward) in relation to other people’s inputs and outcomes. According to equity theory, fairness comes from two perspectives: distributive justice or perceived fairness of the outcome; and procedural justice i.e. fairness of how the rewards are allocated or decision about the reward (Wright, 2004). Therefore, workers consider procedural justice before being attracted to the organisation through external comparability, which has been considered a vital issue to reward management theory and practice because for two salient reasons. One, work done has no demonstrable value; therefore organisation measures the value of a particular job by comparing it to the same work in other organisations. Two, compensation packages are the only part of the job offer which potential applicant could easily compare with what others are offering (Fay,1989). Hence, it is obvious that organisational reward could be compared with what is obtainable in other organisations. Attractive compensation packages provide an organisation with the best qualified workers who wish to fill in job vacancies that existed in the organisation than others who offered unattractive packages.

Salary has a significant influence on workers’ attraction due to the high unemployment rate in the country. Thus, job applicants are not selective in choosing where to work but where to earn something for a living, despite the fact that the public sector salary is not attractive when compared to private sector. Gratuity has a significant influence on workers’ attraction because upon retirement, the lump sum amount paid to workers could be used to start a new investment. Pension also significantly influenced attraction because after retirement it could serve as a source of income to workers. Allowance has no significant impact on workers’ attraction because when workers are seeking for a job, they usually look at the salary which is paid monthly not the allowance.

6.10 The SEM Results of the Workers’ Retention

Similar to the other three models of motivation, job satisfaction and attraction discussed above, workers’ retention model also follows two stages involving the estimation of the measurement model, and structural model for hypotheses testing.

6.10.1 Measurement Model Results for Workers’ Retention

The evaluation of measurement model result for workers’ retention is in line with Henseler et al. (2009). Thus, the measurement model of workers’ retention was evaluated using three criteria (1) confirmatory factor analysis (CFA) using average variance extracted (AVE) and Composite Reliability (CR), (2) Normality, and Linearity, and (3) Goodness of Fit (GoF).
6.10.1.1 Confirmatory Factor Analysis (CFA)

For CFA, the average variance extracted (AVE) is required to be 0.5 and above, there by depicting high convergent validity (Fornell and Larcker 1981). However, Hair et al. (2009) argued that convergent validity is established when individual items factor loading is ≥ 0.5. As recommended by the rule of thumb, a construct’s reliability of greater than .7 suggests good reliability. However, Hair et al. (2010) suggested that reliability values between .6 and .7 could be useful in SEM analysis.

As shown in Table 6.14 below, from the beginning, workers’ retention (ER) has six items and after the first order CFA, five of the items are retained with AVE = .54 and CR = .86 (See Appendix C Part 2D). Salary (CSR) has three items, and after conducting first order CFA the three items are maintained with AVE = .66 and CR = .85 (See Appendix C Part 3C). Similarly, allowance (CAR) has three items; also after the first order CFA, all three items are maintained with AVE = .60 and CR = .82 (See Appendix C Part 3C). Pension and gratuity have single items, thus, their AVE and CR are equal to 1 in each case (See Appendix C Part 3C).

Hence, all the constructs achieve convergent validity as AVE of each is higher than the recommended value of >0.5 (Fornell and Larcker 1981). Moreover, the construct reliability is also achieved because all the values are greater than the threshold of > 0.7 (Hair et al., 2010).

Table 6.14: Confirmatory Factor Analysis (CFA) for Constructs Validity and Reliability of Retention, salary and Allowance, Gratuity and Pension

<table>
<thead>
<tr>
<th>CONSTRUCTS</th>
<th>ITEMS</th>
<th>Factor Loading≥ 0.5</th>
<th>Average Variance Extracted&gt;0.5</th>
<th>Construct Reliability (CR) &gt; 0.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention (ER)</td>
<td>1st Order CFA</td>
<td>2nd Order CFA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training program</td>
<td>ER 1</td>
<td>.58</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>Supervisory relationship</td>
<td>ER 2</td>
<td>.80</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>Ministry’s commitments</td>
<td>ER 3</td>
<td>.81</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Recognition</td>
<td>ER 4</td>
<td>-.08</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Career development</td>
<td>ER 5</td>
<td>.67</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>Factor</td>
<td>Item</td>
<td>ER 6</td>
<td>.66</td>
<td>.80</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------</td>
<td>------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Salary (CSR)</strong></td>
<td>Monthly salary</td>
<td>CSR 1</td>
<td>.57</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Yearly salary Inc</td>
<td>CSR 2</td>
<td>.97</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Promotional Inc</td>
<td>CRS 3</td>
<td>.84</td>
<td>–</td>
</tr>
<tr>
<td><strong>Allowance (CAR)</strong></td>
<td>Personnel Move.</td>
<td>CAR 4</td>
<td>.85</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Personnel Sec.</td>
<td>CAR5</td>
<td>.80</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Personnel Eng.</td>
<td>CAR6</td>
<td>.67</td>
<td>–</td>
</tr>
<tr>
<td><strong>Gratuity (CGR)</strong></td>
<td>CGR7</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Pension (CPR)</strong></td>
<td>CPR8</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

![Figure 6.23: First Order CFA of Retention](image)

Chi-square = 31.381 (df = 9); P value (>0.05) = 0.00; Relative Chi-Sq (<0.6) = 3.487; AGFI (>0.9) = 0.912; CFI (>0.9) = 0.962; CFI (>0.8) = 0.960; IFI (>0.8) = 0.960; RMSEA (<0.08) = 0.006; RMR (<0.05) = 0.049 (Standardized estimates)
Figure 6.24: Second Order CFA of Retention

Figure 6.25: CFA of Salary for Retention

Figure 6.26: CFA of Allowance for Retention
6.10.1.2 Assessing Normality and Linearity

Table 6.15 below illustrates the respective kurtosis values for the latent and measured variables. Kurtosis for all items ranges from maximum of 2.480 to minimum of .064 falls within the values of less than 5 as suggested by Ullman and Bentler (2001). The overall multivariate Kurtosis = 56.954 implied that the sample is normally distributed because the multivariate Kurtosis is not large. Gao et al. (2008) stated that large multivariate Kurtosis indicated that the sample has a severe multivariate non-normal distribution problem. Hence, Scrima et al. (2014) stated that the kurtosis multivariate index should not exceed the critical cut-off of 483.

Table 6.15: Assessment of Normality for Retention, Salary, Allowance, Gratuity and Pension

<table>
<thead>
<tr>
<th>Items</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>c.r</th>
<th>Kurtosis</th>
<th>c.r</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER1 Training program</td>
<td>1.00</td>
<td>5.00</td>
<td>-.928</td>
<td>-6.108</td>
<td>.224</td>
<td>.739</td>
</tr>
<tr>
<td>ER2 Supervisory</td>
<td>2.00</td>
<td>5.00</td>
<td>-1.177</td>
<td>-7.751</td>
<td>.639</td>
<td>2.103</td>
</tr>
<tr>
<td>ER3 commitments</td>
<td>1.00</td>
<td>5.00</td>
<td>-.864</td>
<td>-5.687</td>
<td>.443</td>
<td>1.458</td>
</tr>
<tr>
<td>ER5 Career Dev.</td>
<td>1.00</td>
<td>5.00</td>
<td>-1.548</td>
<td>-10.190</td>
<td>2.329</td>
<td>7.667</td>
</tr>
<tr>
<td>ER6 compensation</td>
<td>1.00</td>
<td>5.00</td>
<td>-.764</td>
<td>-5.030</td>
<td>.187</td>
<td>.617</td>
</tr>
<tr>
<td>CSR2 Yearly salary</td>
<td>2.00</td>
<td>5.00</td>
<td>-.813</td>
<td>-5.353</td>
<td>.091</td>
<td>.298</td>
</tr>
<tr>
<td>CSR3 Promotional Inc</td>
<td>1.00</td>
<td>5.00</td>
<td>-.898</td>
<td>-5.912</td>
<td>.506</td>
<td>1.666</td>
</tr>
<tr>
<td>CAR4 Personnel Mvt</td>
<td>2.00</td>
<td>5.00</td>
<td>-.787</td>
<td>-5.183</td>
<td>.064</td>
<td>.212</td>
</tr>
<tr>
<td>CAR5 Personnel Sec</td>
<td>2.00</td>
<td>5.00</td>
<td>-.753</td>
<td>-4.956</td>
<td>.107</td>
<td>.351</td>
</tr>
<tr>
<td>CAR6 Personnel Eng.</td>
<td>2.00</td>
<td>5.00</td>
<td>-.881</td>
<td>-5.799</td>
<td>.586</td>
<td>1.928</td>
</tr>
<tr>
<td>CGR7 Gratuity</td>
<td>2.00</td>
<td>5.00</td>
<td>-.758</td>
<td>-4.989</td>
<td>.235</td>
<td>.774</td>
</tr>
<tr>
<td>CPR8 Pension</td>
<td>1.00</td>
<td>5.00</td>
<td>-1.276</td>
<td>-8.397</td>
<td>2.480</td>
<td>8.162</td>
</tr>
</tbody>
</table>

| Multivariate               | 56.954 | 21.416 |

For linearity, the test is performed in accordance with suggestion of Barbaranelli (Barbaranelli, 2003 in Scrima, 2014) who proposed that the underlining correlations should be equal to or greater than 0.30. It is evident that multi collinearity is not an issue as there is no high correlation among the predictor variables in Table 6.16 below.
Table 6.16: Correlation Estimates of Retention, Salary, Allowance, Gratuity and Pension

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Y (Retention)</th>
<th>X1</th>
<th>X2 (Allowance)</th>
<th>X3 (Gratuity)</th>
<th>X4 (Pension)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y (Retention)</td>
<td>4.32</td>
<td>.41</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1 (Salary)</td>
<td>4.09</td>
<td>.68</td>
<td>4.88***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2 (Allowance)</td>
<td>4.10</td>
<td>1.08</td>
<td>3.05***</td>
<td>.813***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3 (Gratuity)</td>
<td>4.18</td>
<td>.78</td>
<td>3.85**</td>
<td>6.10***</td>
<td>7.44***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>X4 (Pension)</td>
<td>4.29</td>
<td>.78</td>
<td>4.43***</td>
<td>3.32***</td>
<td>3.73***</td>
<td>.452***</td>
<td>1</td>
</tr>
</tbody>
</table>

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

6.10.1.3 Goodness of Fit (GOF) Indices

The goodness of fit indices are as follows; chi-square ($\chi^2$) = 208.493, df = 57, relative $\chi^2$ ($\chi^2$/df) = 3.658, p = .000, AGFI = .824, GFI = .890, CFI = .917, IFI = 0.918, RMSEA = .071 and RMR = .057, which can be considered sufficiently in line with prior literature (Browne & Cudeck, 1989; BacCallum et al. 1996; cited in Byrne, 2010). From this goodness of fit indices, the researcher concludes that the measurement model is fit because all the model fit indices have met the requirements (See Section 6.5.2).

Figure 6.27: Measurement Model of Retention, Salary, Allowance, Gratuity and Pension
6.10.2 Structural Model Evaluation and Hypotheses Testing

The analysis of SEM using AMOS shows that the structural model is fit, which means the model fits the data as illustrated by the following goodness of fit indices in figure 6.28 below; $\chi^2 (CMIN) = 247.844 \ (df = 86)$, relative $\chi^2 (CMIN/df) = 5.680$, $p = .000$, $AGFI = .878$, $GFI = .954$, $CFI = .942$, $IFI = .944$, $RMSEA = .063$ and $RMR = .047$. Conventionally, relative $\chi^2 (CMIN)$ should be < 5, while $AGFI, GFI, CFI$ and $IFI$ should be > .9 (Bentler, 1983; Ho & Bentler, 1999; Byrne, 2010) and $RMSEA$ and $RMR$ should be < .08 (Browne &Cudeck, 1989; BacCallum et al. 1996; cited in Byrne, 2010). Furthermore, Ho (2006) suggested that, $RMSEA$ and $RMR$ should be ≤ .056 and .065 respectively, which fall within the adequate range as suggested by Ho (2006). The result from the current study is depicted in the figure below (see section 6.5.2).

![Figure 6.28: Structural Model of Retention](image-url)
Table 6.17: Unstandardised and Standardized Regression Weight in the Hypothesised Path Model

<table>
<thead>
<tr>
<th>Hypothesised relationships</th>
<th>Unstandardised Regression Weight Estimate (B)</th>
<th>S.E.</th>
<th>Standardised Regression Weight Estimate (β)</th>
<th>CR.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention &lt;- Salary</td>
<td>.095</td>
<td>.152</td>
<td>.111</td>
<td>.627</td>
<td>.055</td>
</tr>
<tr>
<td>Retention &lt;- Allowance</td>
<td>.222</td>
<td>.229</td>
<td>.177</td>
<td>.972</td>
<td>.264</td>
</tr>
<tr>
<td>Retention &lt;- Gratitude</td>
<td>.173</td>
<td>.057</td>
<td>.204</td>
<td>3.045</td>
<td>.002</td>
</tr>
<tr>
<td>Retention &lt;- Pension</td>
<td>.424</td>
<td>.062</td>
<td>.482</td>
<td>6.821</td>
<td>.000</td>
</tr>
</tbody>
</table>

6.10.2.1 Results and Hypotheses Testing

The results from the SEM analysis in the Table 6.17 above indicates that gratuity (β = .204, CR = 3.045, p = .002) and pension (β = .482, CR = 6.821, p = .000) contributed significantly to workers’ retention. However, salary (β = .111, CR = 0.627, p = .055), and allowance (β = .177, CR = .972, p = .264) has no significant influence on workers’ retention.

The analysis from the SEM for hypotheses testing in Table 6.17 above indicates that the standardised path coefficients are consistent with the hypotheses. In the same vein, the hypotheses are tested below:

- The gratuity contributed significantly to workers’ retention. Therefore, Hypothesis III, which stated that the gratuity payment after retirement has a positive impact on workers’ retention, is confirmed.
- Pension also contributed significantly to workers’ retention. Hypothesis IV, which stated that the pension payment upon retirement has a positive impact on workers’ retention, is confirmed. These results from this study are in line with other scholars’ findings that compensation packages can influence workers’ retention (Hausknrcht et al., 2009; Sandhya and Kumar, 2011; Haider et al., 2015; Nagabhaskar, 2014).
- Salary has no significant influence on workers’ retention. Hypothesis I, which stated that the salary paid in this ministry has a positive impact on workers’ retention, is not supported.
- Allowance has no significant influence on workers’ retention. Hypothesis II, which stated that the allowance paid in this ministry has a positive impact on workers’
retention, is also not supported. That is line with Tang et al. (2000) and Msengeti and Obwogi (2015) who found that receiving more reward has little significance or impact on employees’ retention. Further, suggested that it could only be significant when job satisfaction is low.

6.10.2.2 Discussion of Results
This section discusses the analysis of the quantitative data pertaining to workers’ retention presented in the preceding sections.

Employees working in other organisations and employees within an organisation are concerned with compensation equity. Hence, while drawing up the compensation policy, the organisation has to give this aspect more emphasis. When workers noticed inequities in their reward, their morale normally decreased.

Equity theory believes that people are focussed not only on the absolute amount of remunerations they earn for their efforts or contributions but also on the relationship of this amount to what others earn elsewhere (Adams, 1963). Workers, based on their inputs like efforts, experiences, qualifications and competence, tend to compare such outcomes as reward, recognition and other extrinsic factors given to them by organisations. If an imbalance existed in input-output ratio, this generates tension in an organisation. Based on the equity theory, fairness was perceived in two aspects: distributive justice or perceived fairness of the outcome. Procedural justice i.e. fairness of how the rewards are allocated or decision about the reward (Wright, 2004), involves those for whom the decision to formulate policies on behavioural justice must include and the procedure for the allocation of such packages.

Therefore, retention of workers could be achieved by offering equitable compensation. Workers tend to compare their efforts, qualifications, skills and competencies with those of other workers before they could be retained. Hence, there is every probability that an organisation which offers higher rewards would retain the best workers.

Interestingly, gratuity has a significant impact on workers’ retention because workers in the public sector retain their employment mainly to qualify for a gratuity payment upon retirement. Likewise, pension has a significant influence on workers’ retention due to the fact that it is paid monthly. Contributory pension schemes have substantially affected employee’s commitment to work and retention. The new pension scheme is contributory in nature with the aim of making
sure that every worker who has worked in the public sectors received his or her retirement benefits when they are due. Similarly, the reform provides the beneficiaries with a social welfare scheme which would cater for their livelihood during old age. The new scheme is anticipated to have a multiplier effect on employees’ vis-à-vis retirement, labour retention as well as commitment to duties. Hence, pension and gratuity lure employees in the Nigerian public sector to retain their job primarily to qualify for gratuity benefits as soon as they exit from active service. Similarly, pension and gratuity benefits assure employee’s comfort and dedication to the organisation. However, salary has no significant influence on workers’ retention because what they earn is less than what others receive in other ministries despite the fact that they are equally professional and are exposed to risk involved in construction work. Allowance has no significant influence on workers’ retention because it is less than what others earn in other ministries, though working under the same circumstance.

This research used the rule of thumb for interpreting the magnitude of relationship for the correlational analysis in accordance with Cohen (1998). He recommends the rule of thumb where correlation is denoted by \( r \). The following table 6.18 below shows the strength of relation of effect size expressed in term of ‘ \( r \) ’ with regard to the models studied in this research.

<table>
<thead>
<tr>
<th>The Strength of Relation of Effect Size Expressed in Term of ‘ ( r ) ’ Correlation Coefficient</th>
<th>Strength of Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>When ( \cdot r \cdot ) is between 0.10 – 0.29</td>
<td>Small effect size (Small relationship)</td>
</tr>
<tr>
<td>When ( \cdot r \cdot ) is between 0.30 – 0.49</td>
<td>Medium effect size (Medium relationship)</td>
</tr>
<tr>
<td>When ( \cdot r \cdot ) is between 0.50 – 1.00</td>
<td>Large effect size (Large relationship)</td>
</tr>
</tbody>
</table>

Therefore, motivation model has a large effect size with .57. The job satisfaction model recorded .16, hence the effect is small. Furthermore, the job attraction model has the magnitude of .44 which is a medium effect. Additionally, retention model has a medium effect size with .36.
6.11 Summary of Chapter 6

This chapter has addressed the fourth research objective which has been developed to analyse the data using appropriate statistical techniques to find out relationships between the impacts of compensation on the motivation, job satisfaction, job attraction and retention of the workers studied. This chapter set out and analysed the data collected from the sample beginning with the non-response bias test to ensure that there is no bias on the samples used by comparing early responses to later responses. The data were analysed using descriptive statistics and structural equation modelling where appropriate. The descriptive statistics (t-test, percentages and column bar chart with SPSS software) was used to analyse non-response bias and the profile of public sector construction workers in Jigawa state in relation to: gender, years spent in service, job cadre, nature of job and salary payment frequency. The structural Equation Modelling (SEM) was conducted using general statistical modelling software, which was developed to established relationship among variables. SEM is a multivariate technique used to establish a series of relationships among latent or manifest variables. The SEM approach has proven to be the most appropriate method of analysis in this study as it is a relationship study. There are three approaches available to researchers for conducting their study using SEM, namely covariance-based SEM (CB-SEM), using software packages such as AMOS, EQS, LISREL and MPLUS; partial least square (PLS), which focuses on the analysis of variance and is conducted using PLS-GRAPH, VISUAL PLS, SMARTPLS and WARPPLS; and component-based SEM, called generalised structured component analysis (GSCA).

Although SEM is commonly used across various disciplines, it has little applications in construction management research. Nevertheless, some researchers using the SEM methodology have conducted studies in construction successfully. In conducting SEM, two stages were involved: the first was to estimate the measurement model, and the second stage was to test the theoretical/structural model. The evaluation of a measurement model covered confirmatory factor analysis (CFA) through average variance extracted (AVE) and composite reliability (CR), normality, and linearity, and goodness of fit (GoF). The model development involved two stages: the first stages were for data preparation while the second stage was for full pledge SEM. The results of this research in relation to the motivation model revealed that salary and pension have no significant influence while allowance and gratuity had a significant influence on public sector construction workers’ motivation. In respect to the job satisfaction model, the research findings revealed that salary and allowance have no significant influence while gratuity and pension have a significant influence on public sector construction workers’ job satisfaction. The results from the attraction model shown that
salary, gratuity and pension have a significant influence whereas allowance has no significant influence on public sector construction workers’ attraction. The workers’ retention model discovered that salary and allowance have no significant influence while gratuity and pension had a significant influence on the retention of public sector construction workers.

The next chapter involves the framework of the research, which was developed from the results obtained in chapter six.
7.0 CHAPTER SEVEN: DEVELOPMENT OF AN INTEGRATED DETERMINANT FRAMEWORK

7.1 Introduction to Chapter 7

This chapter presents an integrated determinant framework which highlights the findings from this research in relation to the impact of compensation on workers’ motivation, job satisfaction, attraction and retention. The framework addressed the fifth objective which is to extend the conceptual framework (from objective No.2) into developing and validating a compensation framework applicable to public sector construction workers of Jigawa state, Nigeria on the basis of the findings of objective No.4. The chapter commences with the discussion on theories, models and frameworks in the general literature and the justifications for adopting a framework approach for this research. The needs for an improvement in the compensation packages of Jigawa state ministry of Works and Transport, as well as challenges for the implementation of the framework and the suggested solutions were also included in this chapter. The chapter concludes by presenting the integrated determinant framework, based on the outputs from the previous chapters (See Chapters 2, 3 and 6).

7.2 Theories, Models and Frameworks

The theories, models and frameworks have been described in this study as:

- Generally, a theory could be defined as a set of analytical principles or statements developed to shape our observations, comprehension and description of the universe (Frankfort-Nachmias and Nachmias, 1996; Wacker, 1998). Other scholars explain that a theory involves definitions of variables, a field where the theory is being practiced, a set of relationships between the factors and specific predictions (Hunt, 1991). Moreover a good theory gave a clear description of how and why particular relationships result in particular events or outcomes. In fact, theories are termed an abstraction continuum by researchers (Carpiano and Daley, 2006). A theory generally implied some predictive capability and tried to explain the causal means of implementation.

- Similarly, a model can be defined as an intentional simplification of a phenomenon or event or a specific aspect of a phenomenon or event. However, it was not necessary for models to give an accurate description of reality (Cairney, 2012). Models are strongly associated with theory and there was a little difference between the two. Models can be regarded as theories with a more narrowly defined scope of description of an event while a theory was also
explanatory and descriptive in nature (Frankfort-Nachmias and Nachmias, 1996). Models are usually employed to describe and/or guide the process of converting research outcomes into actions (implementation practice) rather than to forecast or evaluate what factors impact implementation outcomes (implementation research).

- A framework generally represents a structure, overview, outline, system or plan comprising many descriptive categories, for instance, concepts, constructs or variables, and the correlations between them that are assumed to account for a phenomenon or event (Sabatier, 2007). Determinant frameworks explained all forms of determinants that are hypothesised or had been discovered to have an impact on implementation outcomes (Nilsen, 2015). Unlike a theory or model, frameworks did not give descriptions; they only expressed empirical phenomena or events by fitting them into a set of categories (Frankfort-Nachmias and Nachmias, 1996). Frameworks had a descriptive function by indicating the factors presumed or discovered to influence implementation outcomes (influences of independent on dependent variables) (Cochrane et al., 2007; Damschroder et al, 2009).

### 7.3 Justifications for Adopting a Framework in the Study

Studies conducted by Graham and Tetroe (2007), Mitchell et al. (2010), Flottorp et al. (2013), Meyers et al. (2012) and Tabak et al. (2012) have not differentiated between process models, determinant frameworks or classic theories. This is because they all involved variables assumed or discovered to have an influence on implementation processes and outcomes of an investigation. However, what matters most is not the name of the concepts to be used but their assumptions, aims and other characteristics, which have implications for their use in a study. The understanding and explaining what influences implementation outcomes can be reflected or developed on the determinant frameworks (Nilsen, 2015). Thus, both theory and model were not suitable in this regard because this study involved influencers and implementation outcome which can be evaluated through framework. Therefore, this research adopted determinant framework due to its relevant.

Moreover, this research aimed to consider the impacts of concepts (compensation packages); therefore, a determinant framework was more appropriate in this study. In this framework, each
type of determinant usually consist of various individual barriers (hinders, impediments) and/or enablers (facilitators), which are called independent variables that have an influence on the implementation outcomes, such as dependent variables (Greenhalgh et al., 2005; Durlak and DuPre, 2008; Nilsen, 2015). The enablers/or facilitators in this study are salary, allowance, gratuity and pension, while the implementation outcomes are workers’ motivation, job satisfaction, attraction and retention.

In the same vein, another rationale for employing a determinant framework in this research was identifying the strength by giving a clear understanding and description of what influenced (compensation packages) implementation outcomes (motivation, job satisfaction, attraction and retention). In addition, these integrative determinant frameworks acknowledged that implementation is a multidimensional phenomenon, with multiple interacting influences (Gurses et al., 2010). Thus, both influencers and implementation outcomes were employed in this study to fulfil the condition of a determinant framework. This research was a study of relationships which employed a deductive approach. Hence, it considered the impact of independent variables on dependent variables. Therefore, the determinant framework was more relevant and suitable. Furthermore, the frameworks allowed information about what factor influenced implementation outcomes and might be useful for developing, and executing implementation techniques.

7.4 The Development of Determinant Framework

The determinant frameworks can be developed in numerous ways. Several frameworks were designed through synthesising findings from empirical studies of barriers and enablers for implementation success in a given study (Ferlie and Shortell, 2001; Greenhalgh et al., 2005; Grol et al., 2005; Nutley et al., 2007; Durlak and DuPre, 2008). However, other frameworks depend on existing determinant frameworks and relevant theories in various disciplines before development (Damschroder et al., 2009; Gurses et al., 2010).

Therefore, this research developed a determinant framework of the impact of compensation packages on public construction workers’ motivation, job satisfaction, attraction and retention based on concepts found out in the literature reviewed (See Chapter 2 and 3) and the research results obtained in chapter 6.

7.5 The Need for a Framework

The outcomes of this study as demanded by the staff in the ministry were presented by the researcher. During the presentation, the following personnel were present: The Permanent
Secretary, Directors, as well as staff representatives. Therefore, in the discussion, these representatives from the ministry requested that recommendations should be developed in order to improve their motivation, job satisfaction, attraction and retention. The proposed framework was a response to this request.

7.5.1 Improvement in Compensation Packages
This study equally observed that compensation packages need to be reviewed in Jigawa state, Nigeria to achieve public construction workers’ motivation, job satisfaction, attraction and retention. The findings in chapter 6 have shown that there is a need to increase staff remunerations: salary, allowances, gratuity and pension. To this end, the study is directed and aimed at investigating the relationship between compensation packages and workers’ motivation, job satisfaction, attraction and retention. Therefore, to achieve this aim a framework was developed to show how the new improved compensation packages could be employed or applied to improve public construction workers’ motivation, job satisfaction, attraction and retention in the ministry of Works and Transport, Jigawa State as mentioned earlier.

7.5.2 Compensation Packages: Applications in the Ministry of Works and Transport
The different compensation packages were identified and discussed in Chapter 2. This study focused on the ones that were being used in Jigawa state, Nigeria. These packages were as follows:

1) Salary- monthly payment received by workers as a reward for their labour. It is applicable to all public construction sector workers in the state;
2) Allowances-payments offered to workers for achieving pre-determined objectives/tasks. They are earned based on additional responsibilities attached to a worker;
3) gratuities - payments given to a worker upon retirement. This form of pay is earned by workers immediately after retirement as a lump sum pay. It is also paid to workers who served for at least five years and,
4) pension payments - form of pay offered to workers monthly after retirement. This type of pay is used as a source of income to workers that served for at least ten years.

Chapters two, three, four and six also discussed that these compensable packages have relationships with workers’ motivation, job satisfaction, attraction and retention in Jigawa State, Nigeria.
7.5.3 The Link between Compensation Packages and Public Construction Workers’ Motivation, Job satisfaction, Attraction and Retention

The research, specifically in chapter six, discovered that the compensation packages used in this study had an influence on public construction workers. Moreover, chapter six revealed different reactions on how these compensation packages related to workers’ motivation, job satisfaction, attraction and retention in the Ministry of Works and Transport Jigawa State (See chapter 6).

These packages (salary, allowance, gratuity and pension) if implemented could be used to improve workers’ motivation, job satisfaction, attraction and retention within the context of this research. Based on this, the conceptual framework was developed in chapter four. The strength of these relationships was tested using the quantitative technique (Structural Equation Modelling), as reported in chapter six. The table below presented manifest variables (compensable packages/influencers) that could be used to improve or influence latent variables (motivation, job satisfaction, attraction and retention/implementation outcomes), in the Ministry of Works and Transport in Jigawa state. These manifest and latents variables were established in the literature review (See Chapter 2 ).

Table 7.1: The Compensable Packages (CP1-CP18) Used to Influence Workers’ Motivation, Job Satisfaction, Attraction and Retention (LF1-LF4).

<table>
<thead>
<tr>
<th>COMPENSABLE PACKAGES (CP1-18)</th>
<th>LATENT FACTORS (LF1-LF4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resettlement Allowance (RSA)</td>
<td></td>
</tr>
<tr>
<td>Responsibility Allowance (REA)</td>
<td></td>
</tr>
<tr>
<td>Training Allowance (TA)</td>
<td></td>
</tr>
<tr>
<td>Overtime allowance (OTA)</td>
<td>Motivation</td>
</tr>
<tr>
<td>Disengagement Allowance (DEA)</td>
<td></td>
</tr>
<tr>
<td>Duty Tour Allowance (DTA)</td>
<td></td>
</tr>
<tr>
<td>Domestic Servant Allowance (DSA)</td>
<td></td>
</tr>
<tr>
<td>Field Work Allowance (FWA)</td>
<td></td>
</tr>
<tr>
<td>Gratuity Increase (GI)</td>
<td>Job Satisfaction</td>
</tr>
<tr>
<td>Gratuity Increase (GI)</td>
<td></td>
</tr>
<tr>
<td>Pension Increase (PEI)</td>
<td></td>
</tr>
<tr>
<td>Yearly Salary Increment (YSI)</td>
<td></td>
</tr>
<tr>
<td>Promotional Salary Increase (PSI)</td>
<td></td>
</tr>
<tr>
<td>Basic Salary Review (BSR)</td>
<td>Attraction</td>
</tr>
<tr>
<td>Gratuity Increase (GI)</td>
<td></td>
</tr>
<tr>
<td>Pension Increase (PEI)</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---</td>
</tr>
<tr>
<td>Gratuity Increase(GI)</td>
<td>Retention</td>
</tr>
<tr>
<td>Pension Increase (PEI)</td>
<td></td>
</tr>
</tbody>
</table>

**Definitions of the compensation packages involved in the framework**

*Resettlement Allowance* - is given to workers whose job requires transfer from one place to another.

*Responsibility Allowance* - is given to workers who hold an additional responsibility in the state civil service.

*Training Allowance* - is offered to workers who undergo training on the job such as seminars, workshop or study for an additional qualification.

*Overtime Allowance* - is given to employees who work beyond normal working hours.

*Disengagement Allowance* - is offered to workers who leave or quit the service of the ministry while waiting for their gratuities.

*Duty Tour Allowance* - is given to workers who travelled to undertake the ministry’s duties elsewhere.

*Domestic Servant Allowance* - is offered only to workers on grade levels 15-16 to help them with domestic work.

*Field Work Allowance* - it also called a call duty allowance in other ministries. It is given to workers that enjoy a special salary scale.

*Yearly Salary Increment* – this is an annual increment of workers’ salary in the form of pay steps.

*Promotional Salary Increase* – this is an increment of workers’ salaries upon promotion to the next grade level.
**Basic Salary Review** – this involved a review of salary scale upward or downward. Whenever salaries are reviewed, workers experience increments in all remuneration packages offered, because these packages are calculated based on the workers’ annual basic salary. This research considered upward review.

**Gratuity** - is given to workers who had served for five years.

**Pension** – is offered to workers who had served for ten years and are at least 45 years of age.

Four separate schematic diagrams of the SEM results were illustrated below:

![Diagram](image)

*Figure 7.1: Summary of SEM Results of Workers’ Motivation*
Figure 7.2: Summary of SEM Results of Workers’ Job Satisfaction

Figure 7.3: Summary of SEM Results of Workers’ Attraction
Four separate diagrams of the impact of compensation on public construction workers’ motivation, job satisfaction, attraction and retention are illustrated below:

Figure 7.4: Summary of SEM Results of Workers’ Retention

Figure 7.5: Impact of Compensation on Motivation Framework
Figure 7.6: Impact of Compensation on Job Satisfaction Framework

Figure 7.7: Impact of Compensation on Attraction Framework
7.6 The Development of a Research Framework

In the course of undertaking this study, the link between compensation packages and public construction workers’ motivation, job satisfaction, attraction and retention was conceptualised as an integrated framework depicted by Figure 7.9 below.
Figure 7.9: Determinant of the Framework of Compensation Impact on Workers’ Motivation, Job Satisfaction, Attraction and Retention
7.6.1 What the Framework will achieve in the Ministry

The figure 7.9 illustrated that to improve workers’ motivation, job satisfaction, attraction and retention, certain inputs were needed. In this research the inputs (influencers/enablers) were compensable packages i.e. salary, allowances, gratuity and pension.

Consequently, achieving the above objectives would involve a process where all the suitable components of compensation are applied in order to obtain the desired outcomes (output/implementation outcomes) in the form of workers’ motivation, job satisfaction, attraction and retention. It was assumed that upon the implementation of the above techniques, the full benefits of these various compensable packages would be derived. Additionally, the developed framework was assumed to be capable of meeting public construction workers’ expectations because when salary, allowances, pension, and gratuity are increased in the Ministry of Works and Transport, the pay differential issues that existed between the ministry and other ministries in the state would be addressed as suggested by the framework. Therefore, in any egalitarian society, if workers on the same level of academic or professional training with equal exposure to hazard are paid equally across ministries, benefits such as productivity, satisfaction, more job attraction and less turnover rate would also be realised in the ministry of Works and Transport, Jigawa State.

Construction work is essentially labour intensive which especially in developing nations where the level of mechanisation is low, and labour is both available and cheap. Undoubtedly, Labour forms a key input in the construction process along with materials (Compensation packages) and to a lesser extent equipment. Every construction project is directly or indirectly affected by a wide range of factors. The loss of construction productivity was commonly attributed to various factors, rather than a single one. Furthermore, factors affecting construction productivity are rarely independent of the others; some factors may be the result of the same cause, or one factor may trigger the occurrence of others. Nevertheless, it had been identified that factors affecting construction productivity in Jigawa state could be improved through paying equitable compensation. Hence, fair remunerations influences workers motivation which in turn leads to the enhancement of their productivity.

It was not unreasonable belief that an increase in job satisfaction would result in improved
performance and productivity. Furthermore, the whole human relations movement is based on the understanding that productivity could be increased by making workers more satisfied. Thus, the equitable compensation packages were deemed by this research to be very vital because when workers were satisfied with them, both their behaviour and attitude to work could be influenced towards the desired objective. Hence, reward should be paid fairly to bridge the gap of inequality in the state.

Similarly, monetary reward is one of the main reasons why workers joined an organisation. Public construction workers in Jigawa state of Nigeria are attracted to work in the Ministry of Works and Transport primarily because of the rewards given by the State. Due to a higher unemployment rate and the state’s economic situation, unemployed people have a few alternatives on where to apply for jobs. Hence, compensating workers in the ministry with equitable packages in comparison with other ministries would attract potential employees and enhance retention.

The findings of previous studies on retention revealed that when workers are massively leaving the services of an organisation, there is every tendency for such organisation to lose majority of its talented and skillful workers. Moreover, when this drift occurred, it would endanger the organisational effort in achieving its objectives. To avoid possible calamity, the Ministry of Works and Transport should place more emphasis on retaining their workers because losing them would result to lower productivity. Adequate remuneration can enhance of motivation and satisfaction. This, in turn, can influence workers to stay long in the service of the ministry. Moreover, offering equitable compensation packages to workers in the Ministry of Works and Transport in Jigawa State might serve as a retention technique and might prevent them from leaving to join the private sector organisations.

The next section gives the policy makers in Jigawa state guidelines on how to successfully implement the developed framework.

**7.6.2 How to implement the developed Framework**

The current research proposed the following guidelines for the successful implementation of the framework in order to improve workers’ motivation, job satisfaction, attraction and retention as well as meeting workers expectation of pay equality. These guidelines were developed based on the suggestions observed from the senior officials of the organisation under study and the Nigerian labour congress (the Union) representatives during a field trip.
to the ministry:

change of scale - the entire salary scale needs to reflect the package increments observed in the framework for efficiency and effectiveness in the ministry;

time - the time suitable for the framework to be presented to the government is during budget defense. This would allow the framework proposals to be included in the recurrent expenditure of the state;

lobbying - the staff concerned had to lobby the government for the implementation of the new improved salary scale for construction workers; and,

budget - after including the framework in the recurrent expenditure, the state should grant an approval through its various arms for full implementation.

7.6.3 Challenges of Implementing the Framework

The study noted that the application of the new developed compensation packages to improve these four latent variables could be affected by a number of challenges. The new developed packages could only be used by the government, subject to approval through bureaucratic channels, such as, state assembly, legal draft, and final approval by the Jigawa state executive committee. Essentially, passing these stages would take time before the recommendation for review of staff renumerations becomes law in Jigawa state. One of the rationales for the delay of approval for implementation is that all expenses that would be incurred by the Jigawa state government must be contained and approved as from the next fiscal year budget. Hence, the implementation depends upon the time. Apart from time, other factors, such as the willingness of the government to improve workers’ wellbeing and the availability of financial resources, also would play significant roles in achieving (or delaying) implementation.

7.6.4 Means of Overcoming the Challenges

These challenges have to be tackled in order to achieve the intended benefits of the framework. The tactics that should be employed are: the labour union of the state has to lobby the house of assembly for quick deliberations and passing it into law for onward implementation. Hence, once it is passed into law then the union and stakeholders as far as compensation policy is concerned in the state should ensure that it is reflected in the budget. Additionally, there should be willingness on the part of political leaders and administrative heads to improve the wellbeing of Jigawa state public construction workers. This in turn would eventually lead to the
provision of compensation packages to accommodate reviewed remunerations in the Jigawa state annual fiscal year budget. Finally, the execution would now depend on the availability of financial resources.

7.7 The Validation of the Research Framework

The study used the initial respondents (public construction workers) that participated in the main surveys to validate the new developed compensation framework. The rationale behind using personnel from the initial samples is to do with time frame. There was a limited time within which the research was to be accomplished; as such the only method that should be followed to speed up the research process was to use a questionnaire to validate the framework. The cover letter, questionnaire and new developed framework were sent to public construction workers in the Ministry of Works and Transport in Jigawa state that happened to have participated in the main questionnaire survey. Therefore all of the necessary information pertaining to the validation was not strange to them. Details of this validation are discussed in chapter 8.

7.8 Summary of chapter 7

This chapter presented the outcomes of the framework development. The chapter initially summarised the research, noting the major findings. The chapter then, on the basis of the findings from quantitative study, presented an integrated determinant framework that could serve as a guide to the Jigawa state government on various variables to be factored in and considered when implementing a revised compensation package to improve public sector construction workers’ motivation, job satisfaction, attraction, retention as well as addressing pay disparity in the state civil service. Moreover, having developed such an integrated framework, the research now moves to validate the framework from the initial respondents’ point of view. The samples used in this validation involved the respondents that participated in the initial survey.

The next chapter presents the validation process in more detail.
8.0 CHAPTER EIGHT: RESEARCH VALIDATION

8.1 Introduction to Chapter 8

The previous chapter presented the outcomes of the research findings in the form of an integrated determinant framework to guide Jigawa state government in using compensation packages to improve public construction workers’ motivation, job satisfaction, attraction and retention (See chapter 7). However, the extent to which the research outcomes can be relied upon depends on the validation processes followed in establishing its validity. Hence, in order to fully achieve the fifth objective of the research, this chapter discusses the validation process employed in this study.

8.2 Research Validation

The essence of the study findings was to present measures that could be employed to improve existing processes or procedures. Consequently, it was vital to establish the validity of such findings so that expected process improvement can be reliably attained when the results or findings are being practically used. Hair et al. (2010) viewed validation as the process of measuring the extent to which measures accurately represent what they suppose to measure. Brewer (2000) noted that the validation process is undertaken not only to constitute the validity of a study or research results but equally the validity of the research design. Cook and Campbell (1979) and Hair et al. (2010) reported that research validation involved four phases, as follows:

1. validity of research constructs;
2. validity of statistical findings;
3. external validity; and
4. internal validity.

The study earlier on established the validity of the research constructs and statistical findings through pilot studies and factor loading, convergent validity and correlation tests (See chapter 5 and 6). Therefore, the emphasis of validation presented in this chapter is on internal and external validation only.

8.2.1 External Validation

According to Fellows and Liu (2008) external validity is a procedure or act of establishing the degree of research findings’ general applicability despite variations in environment, individuals and study method. Brinberg and McGrath (1985) stated that external validation process is
purposely aimed at gaining confidence in study findings and is a process that converts research findings into knowledge. External validation has been categorised into three classes: replication; boundary search; and the convergence analysis.

8.2.1.1 Replication
Rosenthal and Rosnow (1991) stated that replication is the process of conducting the research process over and over again to ascertain whether the same set of findings or outcomes can be obtained once more. Kerlinger and Lee (2000) defined replication as a reliability test for the research or study. Brinberg and McGrath (1985) and Ankrah (2007) viewed that given the logistical constraints of undertaking the processes involved in social research, replication is virtually not possible and has rarely been used or employed. A financial constraint of conducting doctoral research is another factor, which negatively effects replication. Hence, the replication approach was not used in this study but the self-administered questionnaire was effectively designed and pre-tested through the pilot survey to guarantee the reliability of the research findings or results.

8.2.1.2 Boundary Search
Brinberg and McGrath (1985) defined boundary search as an act of creating the conditions under which the research results will not hold. Boundary search is undertaken over time through replication and convergence analysis. However, this external validation process was not carried out in this study because of the time and cost constraints. Convergence analysis was employed instead.

8.2.1.3 Convergence Analysis
According to Ankrah (2007) and Denzin (2009) convergence analysis is making use of different research methodologies or strategies to determine the agreement of research findings or results. Nevertheless, in this study, content analysis (qualitative) is used to validate the results obtained from the framework. Therefore, it has been thoroughly presented in this study (See Section 8.2.1.4).

Silverman (2006) viewed that convergence validation is obtained or achieved in a course of study through a process called respondent validation, which involves the use of research samples’ opinions to confirm the validity of research outcomes (Silverman 2006; Creswell 2009). This method of convergence analysis has been regarded as a feature of sound research (Reason and Rowan 1981). Thus, it has been used in previous construction management research (Hari et al., 2005; Ankara 2007; Anvuur, 2008; Tuuli 2009; Manu 2012). In this respect, a questionnaire administered to the research samples was adopted to validate research framework results. It contains questions that are intended to verify the validity of the research
findings and the relevance of the developed framework to the public construction sector in Jigawa State which was used in this study.

The people chosen for the convergence validation were among the samples that partook in the quantitative survey and who showed their interest in the research results and in participating in subsequent stages of the study. A total of 67 public sector construction workers (three questionnaires for each grade) were employed to partake in the validation process. 54 questionnaires were returned. The questionnaires (See Appendix D) and framework were duly sent along with the cover letter to workers who participated in the last two stages of the study.

8.2.1.4 Results of Validation by Respondents

The validation in this study involved both quantitative and qualitative analyses. In quantitative analysis, data are analysed by employing statistical analysis. Hsieh and Shannon (2005) stated that qualitative data are analysed using analytical interpretations (this involves finding similarities in responses).

Stemler (2001) defined content analysis as an act of doing word-frequency count by a researcher. The postulation of content analysis held that the words that were mentioned most frequently were the words that were given much emphasis. While this may be true in some cases, there are several counter points to consider when using simple word frequency counts to make inferences about matters of importance (Neuendorf, 2002). When used appropriately, content analysis is a powerful data-reduction method. It is beneficial to researchers because it is a systematic and replicable method for reducing several words of text into fewer content categories based on the precise conventions of coding. Content analysis has salient features of being unobtrusive, and being useful in dealing with huge amounts of data (Stemler, 2001).

Hsieh and Shannon (2005) concurred that content analysis is divided into three phases: conventional; directed; and summative. All three methods are applied to interpret meaning from the content of text data and subscribe to interpretive paradigm. The main differences among the methods are coding schemes, origins of codes, and threats to trustworthiness. In conducting conventional content analysis, coding categories are generated directly from the data text. In undertaking the directed method, analysis commences with a theory or relevant research findings as guidance for codes at the beginning. A summative content analysis involves counting and comparisons, normally of keywords or content, accompanied by the interpretation of the underlying context (Elo and Kyngas, 2008).
Qualitative or quantitative data can be analysed using content analysis (in an inductive or deductive way) (Elo and Kyngas, 2008). Inductive content analysis is applied in cases where there are no previous studies on particular phenomenon/concepts or when it is fragmented. On the other hand, a deductive method of content analysis is useful if the general aim is to measure or evaluate a previous theory in different conditions or to compare categories at different time frames. Moreover, both inductive and deductive content analysis processes involved three main stages: preparation; organising; and reporting. The preparation stage is similar in both methods. The concepts are generated from the data in inductive content analysis while deductive content analysis is employed when the structure of analysis is operationalised on the basis of previous knowledge in a given study (Elo and Kyngas, 2008). This research generated data from a questionnaire so as to validate the developed framework (See Appendix D), and used content analysis to evaluate its data.

Therefore, the current research adopted a summative approach to analyse the responses of public sector construction workers in Jigawa State with regards to the developed framework. A summative content analysis involves counting and comparisons, normally of key words or content, accompanied by the interpretation of the underlying context.

**Quantitative Analysis of the Views of Respondents**

The analysis of validation has been conducted on workers’ motivation, job satisfaction, attraction and retention. The results of the framework validation are presented below:

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An increase in gratuity will have a positive impact on your motivation.</td>
<td>54</td>
<td>48</td>
<td>6</td>
<td>Majority of the respondent indicated that an increase in gratuity will have a positive impact on their motivation.</td>
<td>The amount given as gratuity would enable them to make a life investment.</td>
</tr>
</tbody>
</table>

**Gratuity**

The public construction workers concurred that if gratuity is increased it would enable them to make a life investment after retirement.
<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Your motivation will increase when resettlement allowance is added to your entitlements.</td>
<td>54</td>
<td>47</td>
<td>7</td>
<td>Majority of the respondents concurred that if resettlement allowance is added to their entitlements their motivation will increase.</td>
<td>The amount given usually allows them to get properly settled.</td>
</tr>
</tbody>
</table>

**Resettlement allowance**

The workers agreed that increase in resettlement allowance would help them to get properly settled in their current place of work.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Granting 'domestic servant' allowance to workers on grade levels 12-14 will increase their motivation in this ministry.</td>
<td>54</td>
<td>49</td>
<td>5</td>
<td>Majority of the respondents viewed that granting 'domestic servant' allowance to workers on grade levels 12-14 will increase their motivation in this ministry.</td>
<td>Workers on grade levels 12-114 stated that the allowance will serve as a motivating factor and would allow for fairness and justice to be done for those on the stated grade levels. The workers on grade levels 02-06 believed that the stated allowance will serve as equity and fairness in the civil service. The workers on grade levels 15-16 opined that extending this allowance to workers on the stated grade levels will surely motivate those workers.</td>
</tr>
</tbody>
</table>

**Domestic servant allowance**

The workers believed that the allowance would serve as a motivating factor and would allow for fairness and justice to be done for staff on grade levels 12-14. Furthermore, they believed
that the stated allowance would offer them equal treatment and fairness in the civil service. In addition to that, extending this allowance to workers on grade levels 12-14 would surely enhance motivation.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Increasing the amount of ‘duty tour allowance’ will serve as a motivational tool.</td>
<td>54</td>
<td>50</td>
<td>4</td>
<td>Majority of the respondents stated that increasing the amount of ‘duty tour allowance’ will serve as a motivational tool.</td>
<td>The duty tour allowance increment will motivate for maximum output and clear sense of commitments in duties.</td>
</tr>
</tbody>
</table>

**Duty tour allowance**

The workers viewed that the duty tour allowance increment would motivate them to achieve maximum output and clear sense of commitments in duties.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Increasing your ‘disengagement allowance’ will enhance your motivation in this ministry.</td>
<td>54</td>
<td>48</td>
<td>6</td>
<td>Majority of the respondents indicated that increasing workers’ ‘disengagement allowance’ will enhance their motivation in this ministry.</td>
<td>The amount given in form of disengagement allowance at any time when quitting the service, significantly improves workers’ choice among various opportunities. This form of allowance sustains workers before getting a new employment or receiving reward in a new place of work.</td>
</tr>
</tbody>
</table>

**Disengagement allowance**

This type of allowance differs from gratuity because it is earned by workers immediately after quitting the service in respective of the years served. Moreover, workers received gratuity after serving five years.

The public construction workers in Jigawa State of Nigeria indicated that if disengagement allowance is increased at any time when quitting the service would significantly improve
workers’ choice among various opportunities. Furthermore, findings indicated that this form of allowance would sustain workers before getting a new employment or receiving reward in a new place of work.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Introducing ‘field work allowance’ to workers on grade levels 2-10, will significantly influence their motivation</td>
<td>54</td>
<td>51</td>
<td>3</td>
<td>Majority of the respondents opined that introducing ‘field work allowance’ to workers on grade levels 2-10, will significantly influence their motivation.</td>
<td>Workers on grade levels 15-16 viewed that the amount will introduce fairness and justice in the operational mode of the civil service in the state. The workers on grade levels 7-10 concurred that the allowance will help in addressing one aspect that causes pay differential in the state. Other ministries offer hazard allowance or duty call allowance to their workers, hence, when introduction to the workers on grade levels 2-10 will supplement hazard or duty call allowances. The workers on grade levels 02-06 believed that introduction of field work allowance will boast their morale on construction site.</td>
</tr>
</tbody>
</table>

**Field work allowance**

Workers on grade levels 15-16 believed that the amount would introduce fairness and justice in the operational mode of the civil service in the state. The workers on grade levels 7-14 agreed that the allowance would help in addressing one aspect that causes pay differential in the state. Other ministries within Jigawa state offered hazard allowance or duty call allowance to their workers. Therefore, the introduction of field work allowance supplements hazard or duty call allowances for staff on grade levels 2-10. The workers on grade levels 2-10 believed that introduction field work allowance would boast their morale on construction site. This indicated that introducing field work allowance in the ministry would boast the morale of workers.
Responsibility allowance

The research respondents viewed that granting ‘responsibility allowance’ will promote dedication and commitments in the discharge of such responsibilities.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Granting you ‘training allowance’ will positively influence your motivation.</td>
<td>54</td>
<td>49</td>
<td>6</td>
<td>Majority of the respondents indicated that granting ‘training allowance’ will positively influence their motivation.</td>
<td>It would promote a sense of commitments and dedication to the performance of official duties.</td>
</tr>
</tbody>
</table>

Training allowance

The outcome of this study indicated that granting training allowance to workers would promote a sense of commitment and dedication to the performance of official duties.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. An increase in ‘overtime allowance’ will have a positive impact on your motivation.</td>
<td>54</td>
<td>46</td>
<td>8</td>
<td>Majority of the respondents stated that an increase in ‘overtime allowance’ will have a positive impact on their motivation.</td>
<td>When overtime allowance is paid promptly and when due, it will significantly improve workers’ motivation. The construction work takes more than normal working hours in the state, hence if it is enhanced and granted will positively influence workers’ motivation as viewed by the respondents.</td>
</tr>
</tbody>
</table>
**Overtime allowance**

The research respondents viewed that when overtime allowance is paid promptly, it would significantly improve workers’ motivation. The construction work takes more than normal working hours in Jigawa state. Hence, enhancing and granting this allowance would positively influence workers’ motivation in the ministry.

**Comment on what the Ministry can do to maximise your motivation**

The findings of this study showed that public construction motivation could be enhanced when these packages such as gratuity, resettlement, duty tour, domestic servant, disengagement, responsibility, field work, and training and overtime allowances are offered as when due.

**JOB SATISFACTION**

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An increase in the amount of gratuity paid will have a positive impact on your job satisfaction.</td>
<td>54</td>
<td>52</td>
<td>2</td>
<td>Majority of the respondents opined that an increase in the amount of gratuity paid will have a positive impact on their job satisfaction.</td>
<td>The money obtained can be judiciously invested for the benefit of the receivers and their family.</td>
</tr>
<tr>
<td>2. An increase in the pension package will positively influence your job satisfaction.</td>
<td>54</td>
<td>49</td>
<td>5</td>
<td>Majority of the respondents indicated that an increase in the pension package will positively influence their job satisfaction.</td>
<td>Pension increase is capable of saving the retirees from engaging themselves in excessive debt upon retirement. Thus, the package has a positive impact on their job satisfaction.</td>
</tr>
</tbody>
</table>

**Gratuity**

The workers confirmed that the money obtained in form of gratuity increase can be judiciously invested for the benefit of the receivers and their family.
**Pension increase**

Workers opined that pension increases would eventually lead to an increase in their household income and reduce or possibly eradicate excessive debt upon retirement. Hence, the package had a positive impact on their job satisfaction.

**Comment on what the ministry can do to maximise your job satisfaction**

The respondents indicated that satisfaction with regards to workers’ jobs in the ministry could be enhanced when both gratuity and pension are increased. They also stressed that those packages would serve as an investment outlay and income to them after retirement.

**ATTRACTION**

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.An increase in the amount of gratuity paid will have a positive impact on your attraction.</td>
<td>54</td>
<td>46</td>
<td>8</td>
<td>Majority of the respondents concurred that an increase in the amount of gratuity paid will have a positive impact on their attraction.</td>
<td>It would encourage more people to join the services of this organisation since a lump sum amount would be given upon retirement.</td>
</tr>
</tbody>
</table>

**Gratuity**

The public construction workers in the Jigawa state stated that an increase in gratuity would encourage more people to join the state services, since a lump sum amount would be given upon retirement which eventually serves as security against their retirement.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.An increase in the pension package will positively influence your attraction to this ministry.</td>
<td>54</td>
<td>50</td>
<td>4</td>
<td>Majority of the respondents indicated that an increase in the pension package will positively influence their attraction to this ministry.</td>
<td>It would encourage more people to join the services of this organisation because it offers pension to its workers after retirement.</td>
</tr>
</tbody>
</table>
**Pension package**

This study finding also indicated that an increase in pension package would encourage more people to join the Ministry of Works and Transport of Jigawa state, because it is offered pension to its workers after retirement.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
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<th>DISAGREE</th>
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<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. A yearly salary increment would have a positive impact on your attraction to this ministry</td>
<td>54</td>
<td>47</td>
<td>7</td>
<td>Majority of the respondents viewed that a yearly salary increment would have a positive impact on their attraction to this ministry.</td>
<td>They equally opined that a yearly salary increment would help in attracting workers provided it is equitably paid in relation to other ministries.</td>
</tr>
</tbody>
</table>

**Yearly salary increment**

Jigawa state construction workers opined that a yearly salary increment would help in attracting workers provided it is equitably paid in relation to other ministries. This indicated that despite of its significant but it is not equitable when compared to what is obtainable in other ministries such as health.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
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<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Increasing the amount of your promotional salary increment would have a positive impact on your attraction to this ministry.</td>
<td>54</td>
<td>48</td>
<td>6</td>
<td>Majority of the respondent indicated that increase of salary as a result of promotional salary will have a positive impact and attract more people to work with this ministry.</td>
<td>Reduction in financial burdens or debt, and increase in disposable income for the workers.</td>
</tr>
</tbody>
</table>

**Promotional salary increment**

This will help Jigawa state construction workers to reduce their financial burdens or debts, and subsequently increase their spending power through enhancement of their disposable income.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. A review of ‘basic salary’ every four years will positively</td>
<td>54</td>
<td>52</td>
<td>2</td>
<td>Majority of the respondents indicated that a review of ‘basic salary’ every four years will</td>
<td>Hence, if done properly it would encourage a sense of contentment among workers in the State. Moreover, the</td>
</tr>
</tbody>
</table>
Basic Salary Review every Four Years

The workers believed that when salary reviews are properly conducted, they would encourage a sense of contentment among workers in the state. The total remunerations are being increased based on salary review, since all calculations of reward are based on salary. Hence, undertaking a salary review every four years could serve as a vital attraction tool. This buttressed the statement made by Wright (2004) that no compensation scheme can be effective for more than five years.

Comment on what the ministry can do to maximise the attraction of workers to this establishment.

The respondents indicated that making provision of these packages adequately and equitable in relation to what other sectors packages, would make this ministry very attractive to both job seekers and workers.

RETENTION

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An increase in the amount of gratuity paid will have a positive impact on your retention.</td>
<td>54</td>
<td>48</td>
<td>6</td>
<td>Majority of the respondents opined that an increase in the amount of gratuity paid will have a positive impact on their retention.</td>
<td>An increase in gratuity influences workers’ retention because workers in the public sector retain their employment mainly to qualify for gratuity payment after retirement.</td>
</tr>
</tbody>
</table>

Gratuity

Workers stated that an increase in gratuity influenced their retention. The workers lamented that they retained their employment mainly to qualify for gratuity payment after retirement.
<table>
<thead>
<tr>
<th>QUESTION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>EVOLVING FACTS</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. An increase in your pension package will have a positive impact on your retention in this ministry.</td>
<td>54</td>
<td>50</td>
<td>4</td>
<td>Majority of the respondents indicated that in increase in pension has a significant influence to their job retention</td>
<td>Pension has a significant influence to their job retention due to the fact it is paid monthly, hence can serve as income to them.</td>
</tr>
</tbody>
</table>

**Pension**

The workers in the ministry of Works and Transport in Jigawa state indicated that an increase in pension had a significant influence on their job retention because workers were provided with a guarantee of receiving a monthly income in the form of a pension after active service or retirement. This is considered as a security against future expectations.

**Comment on what the Ministry can do to maximise the retention of workers.**

The majority of respondents indicated that the government needs to enhance both gratuity and pension to prevent workers in this ministry from leaving. Essentially, both gratuity and pension serve as income and investment upon retirement. Hence, they should be offered adequately and fairly as obtainable in other ministries within the state. Undoubtedly, employing the same gesture of offering equitable reward similar to other ministries (Health, Justice and education) within Jigawa state that employ the services of professionals would boost staff morale and improve staff retention.

**Qualitative Data Analysis**

*Feedback on the Developed Framework in Terms of its Simplicity*

*Comment on the developed framework in terms of its simplicity.*

The respondents were asked to comment on the developed framework simplicity in terms of understandability. The majority of the respondents viewed that the framework was very easy to understand. One of the respondents stated that ‘The new developed framework was very simple to understand because it was designed based on workers’ pressing needs that addressed call for equal pay in the state civil service’.
**Feedback on the Benefits of the Framework**

*In your own opinion what are the benefits of the framework?*

The respondents were asked to assess the benefits of the framework. The majority of the respondents showed that the framework is beneficial to them. One of the respondents indicated that the framework was beneficial to them because: *It would help in the enhancement of the overall public construction workers’ welfare. The benefits derivable specifically involve improving workers’ motivation, job satisfaction, attraction and retention. Furthermore, once these compensation packages are increased, it would equally help in addressing pay disparity in the state.*

**Feedback on the Possibilities of Adopting the Developed Framework**

*What are the possibilities of adopting the developed framework to address the pay differential that exists in the state civil service?*

The respondents were asked to comments on the possibilities of adopting the framework. The majority of the respondents believed that it was feasible to implement the framework in the ministry of works and transport in Jigawa state. Some of the respondents stated that: *The compensation packages that could be improved are been identified in the framework. Hence, it is possible that it may be implemented considering the wealth of the state, economic viability and willingness of leadership in the state.*

**Feedback on the Framework Improvement**

*What can be improved on the framework?*

The respondents were asked to comments on what can be improved on the framework. The majority of the respondents showed that the framework is comprehensive but others suggested that it could be improved by capturing some of the aspect of compensation such as loan, housing, hazard, safety wears allowance and bonus. Since, these packages were not applicable in Jigawa state; the research subsumed them as part of its recommendations, because they cannot reflect on the framework. In general public construction workers in Jigawa state viewed that:

*After its realisation and actualisation, other aspects of the compensation might still be introduced to improve public construction workers’ motivation, job satisfaction, attraction and retention. Hence, this framework is comprehensive.*
8.2.2 Internal Validation

An internal validation was undertaken in this study to ensure the objectivity of the research findings/results, as viewed by Garson (2011). Fellows and Liu (2008) and Garson (2011) recommended that internal validity could be attained through a sound research design. Internal validation could also be attained through agreement of findings of the research with published research and also through academic validation secured via research publications. Researchers such as Proverbs (1998), Xiao (2002) and Ankara (2007) have further demonstrated internal validation by establishing convergence between research findings, published research and academic validation. Manu (2012) viewed that this approach has been applied in construction management doctoral studies in order to assess the studies against published works and subject the studies to expert scrutiny. Therefore, this section demonstrates how this study established internal validity.

Agreement of research outcomes with published work is reported by De Vaus (2002) as a criterion for validity. This referred to how related a new measure of a concept is to the existing measure of the concept. The agreement of the findings of this study and published research has been presented (See Chapters 2, 3, 6).

Academic validation refers to the dissemination of the findings/results of a study through seminar presentations, doctoral workshops, conferences and journal papers, which are subject to peer review. Xiao (2002) viewed that a peer review of the research publications offered an opportunity for the methodologies, meanings and interpretations of the study to be questioned by independent assessors. Academic gatherings such as seminars, workshops and conferences were also used to scrutinise the research findings and receive feedback and comments, which were also included into the study to improve its validity and quality. The current research publications were given good recommendations by the reviewers; hence validity has been achieved in this research. The channels used to disseminate the findings of this research are presented in section 9.7. Consequently, the outcomes of this research could still be valid without academic validation. Academic validation only adds value to validation but without it the results could also be regarded as valid.
8.3 Improvement of Framework due to Validation

In their views (public construction workers), the framework was comprehensive and relevant to their needs with regard to compensation in the ministry. Therefore, the framework had not been improved due to its validation by the public construction workers in the Ministry of Works and Transport, Jigawa State.

8.4 Summary of Chapter 8

The chapter has presented the processes carried out to validate the research findings both externally and internally. The external validation was undertaken using the convergence analysis approach through samples’ or respondents’ validation. The questionnaire was administered with 67 public construction workers’ in Jigawa state to validate the research findings as well as to evaluate the relevance of the framework in Jigawa state’s public construction sector. Generally, the public construction workers under study, who happened to be the initial research respondents, agreed with the research findings and opined that the framework could be used to influence their motivation, job satisfaction, attraction and retention. Similarly, when the developed framework is implemented, the workers expectations of pay equality would be realised through increments of these packages involved in it. However, they noted additional techniques that could be added to the framework and also suggested ways of improving the framework. Furthermore, the respondents were of the opinion that the framework is relevant to the ministry for improving their motivation, job satisfaction, attraction and retention. Although most of the suggestions made by the respondents in the validation questionnaire were already captured in the framework, future research should also look at the additional strategies identified. Furthermore, the internal validation was established through agreement between past studies, the research findings as well as academic validation of the research publications. Having validated the research findings, the fifth research objective has now been fully addressed.

The next chapter draws a conclusion on the entire study and makes recommendations where appropriate.
9.0 CHAPTER NINE: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

9.1 Introduction to Chapter 9

The sixth objective of the study is to draw conclusions and make recommendations on various issues to be factored and considered when implementing a revised compensation package and framework for public sector construction workers in Jigawa state, Nigeria. In order to achieve this objective, this chapter reflects on the analysis and the findings presented in the above chapters. The chapter also presents the research conclusions and contributions to knowledge. Further, it recommends action that should be taken by the Jigawa State government of Nigerian in light of the findings. It equally, suggests further research that is required to be undertaken. Additionally, the limitations of this research are also discussed. Finally, the ways through which this study disseminates its finding is also highlighted in this chapter.

9.2 The Key Findings

Chapter one sets out the background of the research. The chapter noted that the Nigerian construction industry is heavily labour-intensive, which requires mutual management of human relationships to thrive. The sector employs human resources with various skills, which comprise operatives, skilled craftsmen, technicians, and professionals such as civil engineers and surveyors. Compensation plays a significant role as it is the back bone of any employment relationship, more especially in an industry like construction, which requires human effort to achieve its objectives. Construction workers in the area under study were not paid at the same rate as in other ministries that engage professionals in the state, like the ministry of health, environment and so on. This pay differential causes operatives, skilled craftsmen, technicians, and professionals ranging from engineers, architects, and quantity surveyors to leave Ministry of Works and Transport, Jigawa State to go to the private sector where they think the reward is commensurate with their efforts, skills, and qualifications. This payment disparity is clearly shown on the different salary scales applied to ministries in Jigawa state. Hence, there is a need for the state to employ the same policy of offering equitable reward in all the ministries that engaged professionals. Public sector construction workers’ skills and competencies are not fully utilised because most construction projects are contracted out to private companies. Hence workers are leaving because they are not satisfied or motivated and the job becomes unattractive due to inequitable compensation. The literature reviewed in this study revealed that many studies have been carried out and found that compensation is correlated to workers’ motivation, attraction, job satisfaction and retention. However, all of these mentioned studies used compensation as a single aggregated factor
while studying motivation, job satisfaction, attraction and retention rather than splitting it into various components. Also, the current study observed that workers’ compensation is not only paying alone but consisted of all reward packages offered to the employees for their services or contributions. Therefore, this study examined the relationship of four peculiar compensable packages (salary, allowance, gratuity and pension) with public construction sector workers’ motivation, job satisfaction, attraction and retention in Jigawa state, Nigeria. In order to address this aim, a number of objectives were identified. The explanation below summarised how the objectives were achieved in this research.

9.2.1 Concepts of Compensation, Motivation, Job satisfaction, Attraction and Retention

To satisfy the first research objective, Chapter 2 and 3 reviewed the relevant literature in-depth on compensation management, in order to evaluate its methods, features, impacts on public construction workers’ motivation, job satisfaction, job attraction and retention, and to make a comparison between the UK and Nigerian systems towards identifying disparities and especially identifying areas where the later can benefit from the former. Compensation is a reward involving pay or benefits that employees receive for their contributions or service to an organisation. The compensation objectives, plan, factors, determinants, features and its linkage with public construction workers were also examined.

The study found that compensation could either be intrinsic or extrinsic. Hence the focus was on extrinsic compensation, which involved workers’ pay and benefits. The study equally discovered that pay is classified into four aspects, namely seniority, performance pay, incentives and person-focused pay. Benefits, on the other hand, are categorised into gratuity and pension. The study made a comparison of pay and benefits across two countries, namely the UK and Nigeria. The research equally found similarities and differences between workers’ pay and benefits both in the UK and Nigeria. The study found that salary, allowances, gratuity and pension are the four type of compensation packages used in Nigerian public sector.

Understanding what motivates employees and how they are motivated has been the focus of many previous researchers. The study noted the five major approaches that led to our understanding of motivation and they are: Maslow’s need-hierarchy theory; Herzberg’s two-factor theory; Vroom’s expectancy theory; Adam’s equity theory; and Skinner’s reinforcement theory. The study found that the most relevant and appropriate theory to explain this research
is the equity theory. Despite the fact that there is a difference between public and private sector workers with regards to job features or factors that motivate them, there existed uniformity in terms of their compensation. The study discovered that the factors that determined workers’ motivation in both private and public construction sectors are: real safety; participation in decision-making; clearly defined schedule of duties; recognition and cordial relationship with peers; the work itself; overtime; proper supervision; promotion; challenging task; more responsibilities; job security; choosing work mates; and level of financial reward. It is apparent that compensation scheme is a technique used to motivate workers so as to change work attitude for the benefit of an organisation. The study supported the notion that workers motivation is related to their context of operation. Hence, organisations have to consider the sector as well as culture in which they operate in order to motivate workers.

The literature indicated that the most popular determinants of job satisfaction could be traced to five facets of job satisfaction namely: work itself; supervision; promotion opportunities; co- workers, and compensation packages/ reward. This study found that all these five facets of job satisfaction when studied critically both in the short and long run, concerns finances or monetary aspects. The job description index questionnaire (JDI) was used in this study because it was concise and easy to understand. The JDI questionnaire has the ability to measure the strength and weakness within each factor for possible modification when the need arises. Moreover, using the JDI questionnaire enabled access to the information on all major aspects of job and took gender differences into account unlike other job satisfaction measurements. Job satisfaction has an impact on workers’ productivity, loyalty and absenteeism. However, the importance of pay and benefits in satisfying the economic needs of an employee could not be over emphasised as the main gain of employees in their employment relationship are pay and benefits. This statement is supported by literature according to (Nelson, 2008) on job satisfaction and similar constructs such as promotion, work itself, co-workers, supervision and compensation are also mentioned.

The literature reviewed revealed that effective workers’ attraction policy was a key indicator for organisational success. Furthermore, the literature indicated that workers are attracted to organisations for numerous reasons such as: distance; Work itself; Reputation of the organisation; career development; Job security; Organisation culture; Challenge; opportunities for training and development; empowerment; and amount of compensation package. The research noted that public construction workers in Jigawa state of Nigeria are
attracted to work in the Ministry of Works and Transport mainly because remunerations are offered by the state. Thus, due to higher unemployment rate and economic situation of the State, job applicants have no choice with regards to where to join. The more attractive packages offered, the more job applicants would be willing to fill in the job vacancies that existed in an organisation. Hence, any organisation that provided its employees with sufficient rewards would have the upper hand in attracting the best talented workers.

This research found out that workers retention issues seemed to be the most critical challenge facing organisations in managing workforce in the immediate future. This study discovered from the literature that ten factors are most frequently used to explain what determines workers’ retention. These factors are: recognition; education and working climate; job flexibility; training; career development; superior-subordinate relationship; organisational commitment, communication, motivation; and compensation. This study found that the most vital factor for workers’ retention was compensation packages. Hence, organisations that are not compensating their workers equitably eventually face a high rate of turnover. It equally, shown that offering equitable compensation packages to public sector workers might serve as a retention techniques and might prevent them from leaving to private sector organisations. Therefore, in the event that pay and benefits are not equitable, workers left for other organisations. That was practicable in Jigawa state construction organisation where most workers often leave to private organisations because of inequitable compensation packages. In a nutshell, the study found that equitable compensation could be used by Jigawa State of Nigeria to attract, motivate, satisfy and retain public construction workers.

9.2.2 Conceptual Framework Development

To satisfy the second research objective, in chapter 4 the conceptual framework of relationship has been developed from the literature reviewed in this study. The relationships of public construction workers’ motivation, job satisfaction, attraction and retention regarding compensable packages, namely salary, allowance, gratuity and pension, have been established based on the existing literature. The interrelationships of the factors understudy are also acknowledged by this study. Furthermore, the theory (Equity) used to explain this research has been selected based on certain justifications. The influences of the conceptual framework on the research methodology, which formed the basis of hypotheses development, are also clearly shown in the chapter.
9.2.3 Methodology used for Investigation in this Study
To satisfy the third research objective, chapter 5 presented how the research was designed, and data were generated and analysed to address the research hypotheses, aim and objectives. To identify the most suitable methodology, chapter five made an extensive review of the various paradigms, approaches and methodology options. The chapter identified the most appropriate method in collecting the requisite data, analysing the results and testing the validity of the findings. This was conducted putting the study limitations and constraints into account. The study found out that quantitative survey was the most suitable and appropriate method in establishing relationship between compensation and motivation, job satisfaction, attraction and retention.

9.2.4 The Analysis of the Data Collected from the Public Construction Workers
To satisfy the fourth research objective, Chapter 6 presented how the data analysis was carried out using both descriptive statistics and structural equation modelling (SEM). SEM was used by researchers to establish a relationship between or among variables. The research found that SEM yields a better result than other statistical methods of analysis because of its strength in modelling the relationships among multiple independent and dependent variables at a time, compared with other methods that could analyse only one layer of linkage between independent and dependent variables concurrently. The descriptive statistic revealed that respondents consisted of 254 males (98%) and 6 females (2%). Those who were working less than 5 years are 7 (3%), 5-10 years 92 (35 %), 11-20 years 134 (51%) and 20-35 years 27 (10%). The staff cadre: 186 (72 %) were clerical, 58 (22%) were officers and 16 (6%) were directors. The nature of work in the ministry: office with 94(36%), onsite 141(54 %), both office and onsite 25 (7%). The results of this study revealed that allowances contributed significantly to workers’ motivation. Similarly, gratuity contributed significantly to workers’ motivation. However, the analysis revealed that salary and pension have no significant influence on workers’ motivation. In addition to that, pension and gratuity contributed significantly to job satisfaction. Salary and allowance has no significant influence on job satisfaction. Gratuity and pension contributed significantly to workers’ retention. Salary and allowance has no significant influence on workers’ retention. Moreover, salary, gratuity and pension were significantly and positively influenced by public sector construction workers’ attraction while allowance was not significant to attract workers in the public construction sector in the Jigawa state of Nigeria.
9.2.5 Integrated Framework and Its Validation Processes

To satisfy the fifth research objective, chapter 7 presented the outcomes of the research in form of determinant framework. The integrated determinant framework was developed based on findings from the literature review, quantitative study and qualitative study to guide Jigawa state government in using identified compensation packages to improve public construction workers’ motivation, job satisfaction, attraction and retention. The framework consists of three parts: input; processes; and output. The input is what the government puts into the system; the processes are the interactions that transpire to produce the desired output. Specifically in this study, the input involved the compensation packages given to construction workers by the government; the process is the selection, adoption and application of those identified packages on workers. The output involved the outcomes in form of motivation, job satisfaction, attraction and retention which could be generated from the workers by the state. The integrated determinant framework also suggested the ways that could be adopted in addressing any challenge to or arising from the processes. The adoption of this integrated framework by the Jigawa state government would subsequently serve as a guide for using compensation packages to improve public construction worker’s motivation, job satisfaction, attraction and retention in the state. Additionally, the framework suggested that increase in these packages would address the pay disparity that existed in the state civil service.

To further satisfy the fifth study objective, chapter 8 presented findings from the validation process. The entire research findings were validated using external and internal validation processes. In the external validation, respondent validation was employed to conduct a convergence analysis. The questionnaires were sent directly through the research assistants to the intended respondents who were expected to validate the research findings as well as assess the relevance of the framework in the Ministry of Works and Transport in Jigawa state. Generally, the workers who happened to be the research respondents concurred with the study findings/results and believed that the framework could be applied to improve their motivation, job satisfaction, attraction and retention as well as pay differential in the state civil service. Nevertheless, they suggested ways of improving the framework. Additionally, the respondents have indicated that the framework is relevant to the Ministry of Works and Transport in enhancing workers’ motivation, job satisfaction, attraction and retention as well as addressing the pay differentials in Jigawa state.
9.2.6 Conclusions and Recommendations in Respect of Compensation Packages

To satisfy the sixth objective, chapter 9 presented the research conclusions. Further, the recommendations on various issues to be factored and considered when implementing a revised compensation package and framework for public sector construction workers have been given to the policy makers. Equally, future research areas have been suggested in this chapter.

9.3 The Conclusions of the Research

The research has investigated the impacts of compensation on 1) motivation, 2) job satisfaction, 3) job attraction and 4) retention among public sector construction workers in the Jigawa State of Nigeria. Moreover, the study has developed the relationship between compensation packages and four concepts of motivation, job satisfaction, job attraction and retention with data from public construction workers in Jigawa state of Nigeria. This research concluded that gratuity and allowance positively and significantly influenced workers’ motivation whereas salary and pension have no impact on workers’ motivation. Likewise, gratuity and pension positively and significantly influenced workers’ job satisfaction while salary and allowance have no impact on workers’ job satisfaction. Similarly, gratuity and pension positively and significantly influenced workers’ retention while salary and allowance have no impact on the retention of workers. Moreover, salary, gratuity and pension positively and significantly influenced workers’ attraction while allowance has no influence on attraction of public construction workers in Jigawa state of Nigeria.

Overall, none of the compensation elements of salary, allowance and pension is significant in all the four factors of motivation, job satisfaction, attraction and retention. Furthermore, the overall conclusion of this study indicated that gratuity is the main aspect or significant factor which influenced public construction workers’ motivation, job satisfaction, attraction and retention in Jigawa state of Nigeria. The workers heavily rely on gratuity because it helps them to solve many pressing needs immediately upon retirement. Thus, Jigawa state government should give more priority to gratuity so as to improve motivation, job satisfaction, attraction and retention in the ministry of Works and Transports.

Other conclusions with regards to this study are:

This study confirmed that Workers’ efforts or contributions are remunerated based on four attributes: seniority, performance, person focused, and incentive. The current study concurred that rewards should be given to a worker, rather than to the work done or performed. Seniority
form of compensation is more applicable in the public sector than private (profit-making). Due to the fact that seniority based compensation scheme exists and functions to provide services to the people rather than profit-making. Performance-related pay is one of the main features of the British compensation system.

In Nigeria, Salary is fixed irrespective of the value of work undertaken by the workers (did not conform to the principle of equal pay for work of equal value). Hence, workers in the public sector in Nigeria were less productive than that of private sector counterparts. Gratuity payments are applicable in the UK public sector like Nigeria but with different names such as lump sum pay. The methods of gratuity payments in both countries also vary.

In Nigeria, specifically, Jigawa state the choice of pension scheme to join is enforced by the law (unlike in the UK). In Nigeria, Pension is not given to employees’ dependents at all (unlike in the UK). In Nigeria the employer’s contribution to the pension scheme is fixed and could not be easily changed, since it is a law.

Workers’ attraction and retention are like two sides of a coin, meaning that it is only when employees are attracted that could serve the basis for their retention provided that they perform wonderfully.

This study equally, concluded that some factors associated with the concepts of retention and employee turnover are similar and would depend on how a researcher used them whether positive (retention) or negative (turnover). These constructs on workers’ retention and employee turnover have been used interchangeably by scholars to explain why workers stay long in an organisation. In the same vein, any factor that leads to employees’ turnover, when effectively or adequately provided by organisations, could equally lead to workers’ retention.

The study critically observed based on literature review that all the factors that determined job satisfaction, attraction and retention were derived from the concept of motivation. These factors such as compensation, work itself, good supervision, relation with peers or superiors, promotion opportunities, training commitments, responsibility were all used as one of the determinants factor of motivation.

This study also established that variables used in this research are related to one another; motivation is related to job satisfaction, workers’ attraction and employee retention. Job
satisfaction is related retention and lastly, employee attraction is related to retention. Motivation has an impact on employees’ job satisfaction which in turn leads to high productivity.

As the relationship between compensation and workers’ motivation, job satisfaction, attraction and retention involved various constructs, this study discovered that SEM yields a better result than other statistical methods of analysis.

The framework could be developed in order to improve public construction workers’ motivation, job satisfaction, attraction and retention; as well as addressing pay disparity in Jigawa state of Nigeria or any organisation, sector with similar problem.

Finally, the research concluded that its findings could be generalised because workers in the public sector are motivated by allowance and gratuity, attracted by salary, pension and gratuity, retained and derived job satisfaction through the influences of pension and gratuity. Since, all the government ministries in Nigeria operate under the same civil service structure with similar bureaucratic procedures.

9.4 Contribution of the Study
Many studies had been conducted on the area of workers’ compensation across the globe. This particular study which was carried out in the Ministry of Works and Transport in Jigawa State of Nigeria is unique and novel. Therefore, this research had made relevant contributions in addressing the knowledge gap which was identified. The contributions of this research to knowledge are as follows:

- This study established relationships between the impacts of compensations on the motivation, job satisfaction, job attraction and retention of public construction workers of Jigawa state, which were previously unknown.
- The current study had successfully, based on literature reviewed made the comparison between UK and Nigerian compensation systems.
- This research effectively employed the Structural Equation Modelling technique on data concerning the Nigerian construction sector in order to identify relationship between compensation and public construction workers’ motivation, job satisfaction, job attraction and retention.
- The research developed a new comprehensive compensation framework which was
capable of improving public construction workers’ motivation, satisfaction, attraction and retention, as well as addressing the pay disparity which existed in Jigawa State of Nigeria.

- The study split workers’ compensation into four components (salary, allowance, gratuity and pension) rather than employing it as a single construct. These four components of compensation were employed to study public construction workers’ motivation, job satisfaction, attraction and retention in Jigawa State.

The above mentioned contributions to knowledge were contained in the various publications of this research (See Section 9.7 below).

9.5 Recommendations from the Research

The following recommendations are being made to the government of Jigawa state of Nigeria and the future prospective researchers:

9.5.1 Recommendations to Policy Makers

Based on the conclusions of this research, the following recommendations are suggested to Jigawa State government:

Salary helps in attracting prospective job applicants in to the ministry, but it could be more attractive if it was paid based on the workers’ productivity (performance) and not based on seniority alone. Furthermore, the findings of this research suggest that salary should be reviewed at least every four years. This will mark a departure from the status quo where the review is carried out without any stipulated time.

Allowances given to workers serve as a motivating factor. This research established that when these allowances are increased, the motivation of workers would be improved. In this regards therefore, the study recommends the introduction of hazard allowance to the ministry of Works and Transport which as obtainable in other ministries (such as education, health and the judiciary) that involve hazardous tasks. This recommendation is pertinent because construction work involves hazards and accidents more than any other job. These hazards include building collapse, falling from heights and dust inhalation.

Although, pension was significant to public construction workers’ job satisfaction, attraction and retention, it should be paid based on the total emolument of workers, not on percentages when considering the contributions made by the public construction workers and the risk
involved in the work. According to the result of this study, pension package should be offered irrespective of their age because some people retire early due to the injuries they sustain while serving the ministry. The state government contribution to the statutory pension scheme (17 percent) is meagre. Considering the fact that the government takes the credit for any construction project achieved. Thus, the contribution of the government to the scheme should be increased to three times the amount which the workers contribute. Furthermore, the scheme should be optional, not compulsory, as practiced in the UK.

This thesis strongly recommends that the Jigawa State Government should address pay differentials in the state civil service through adopting the framework developed in this study.

Gratuity should be given more emphasis with regards to compensation policy in the Ministry of Works and Transport, considering its significance on workers’ motivation, job satisfaction, attraction and retention. Hence, gratuity should be paid by the government after the probation period of two years or soon after a worker became permanent and pensionable instead of five years in service.

In addition to the foregoing recommendations which came directly from the empirical research. The following are recommended on the basis of literature for incorporation into public sector construction workers’ pay scales in order to improve motivation, satisfaction, attraction and retention of workers in the ministry. These are:

grant housing loan to workers, as practiced in e.g. UK: this a kind of loan would help workers to get properly settled and prevent work absenteeism;

grant monetary loans, as practiced in e.g. UK: an interest-free loan should be offered to workers to alleviate any economic predicament that might arise at any point of time. The terms of repayment should be designed in accordance with their ability to pay, not based on the conventional method of salary received basis;

provide safety clothing allowance to workers, as practiced in e.g. UK: the government should introduce uniform allowance to construction workers since their work entails wearing particular attire while at work, such as overalls, and other safety clothing or gear, like gloves, helmets and boots; and,

offer bonus to workers: the government should emulate the private sector by offering bonuses
to construction workers upon successful completion of a project.

9.5.2 Recommendations for Future Research

It is believed that the results recorded during the investigation had appropriately addressed the scope of the research objectives. The research was conducted in Jigawa state, Nigeria, specifically on public construction workers; the variables used in establishing the relationships in the study were limited to compensation (salary, allowance, gratuity and pension) and motivation, job satisfaction, attraction and retention. Therefore, future studies could be conducted in other states in Nigeria using additional variables, which might not have been employed in this study such as performance and training. Furthermore, it is possible to conduct a study on these factors used in this research on private sector construction workers.

Other suggestions are:

- How changes in compensation can be linked to inflation.
- Why compensation influences productivity.

9.6 Limitations of the Study

Almost every research meets some constraints either in one way or the other and this study is not an exception. One of the limitations of this thesis relates to the method used to collect the data (questionnaire). This method has inherent limitations such as a non-response bias, misinterpretation of the questions, lack of clarification and dishonest responses. These might have materialised in this study. Nevertheless, all necessary measures were taken to reduce the effects of these limitations in this study (See Sections: 5.6.3, 5.7.1). Moreover, in order to address the delay in responding to the questionnaire, frequent follow ups were made to remind the respondents and this has helped significantly. The questionnaire was carefully designed based on suggestions that came out from the pilot survey (See Section: 5.6.3), so that the questions could be understood in the Nigerian context easily. The current research employed concerned people so as to avoid the issue of dishonest responses.

Additionally, due to financial and time constraints, the research was limited to public construction workers in Jigawa state. Thus, the study covered only extrinsic reward/compensation and its relationship with motivation, job satisfaction, attraction, and retention of public construction workers in Jigawa state of Nigeria. The study also was limited to the departments of building and civil engineering.
9.7 Dissemination of the Research Findings

In the course of this research, there were a number of media employed to disseminate information on the findings. The research findings were disseminated through conferences, seminars, journal publications, departmental seminar presentations such as the Built Environment Research Seminars (BEERS), as well as poster presentations. Consequently 3 journal publications and two conference publications have been delivered on the findings from this research. The citations are given thus;

**Journal Papers**


**Conferences**


Seminar

A seminar titled: ‘Application of Structural Equation Modelling (SEM) in Construction Research’ was presented on 17th December, 2014 at the Built Environment and Engineering Research Seminars (BEERS) at School of Architecture and Built Environment, Faculty of Science and Engineering, University of Wolverhampton, in respect of the Application of SEM in Construction Management Research.
REFERENCES


Bhatti, K.K and Qureshi, T.M. (2007) Impact of Employee Participation on Job Satisfaction, Employee Commitment and Employee Productivity. *International Review of Business Research Papers, 3*(2), pp.54-68.


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APPENDICES

APPENDIX A: ETHICAL APPROVAL OF THE RESEARCH

ETHICAL APPROVAL LETTER

Hi Jamilu,

Your ethics form has been approved 15/12/2015.

Regards

Pierre – Lloyd Parson

Research Administrator

Faculty of Science & Engineering (MI310)

University of Wolverhampton, City Campus (Wulfruna),

Wulfruna Street, Wolverhampton, WV1 1LY.

Tel: (UK) 01902 518530

Email: pierre.parson@wlv.ac.uk
Dear........................................
Ministry of Works and Transport,
Dutse, Jigawa State.

THE IMPACT OF COMPENSATION ON PUBLIC SECTOR CONSTRUCTION WORKERS IN JIGAWA STATE OF NIGERIA

A PhD RESEARCH QUESTIONNAIRE / SURVEY WITH MINISTRY OF WORKS & TRANSPORT JIGAWA STATE OF NIGERIA

My name is Jamilu Bappa Salisu, a PhD student at the University of Wolverhampton. As a part of my programme I am carrying out a study to investigate the impact of compensation on public sector construction workers in Jigawa State of Nigeria. I would like to invite you to participate in this research by completing a questionnaire for me.

Please note that completion of the attached questionnaire is voluntarily and will take approximately 30 minutes. In addition, there are instructions to guide you answer all the questions. All responses are anonymous, and will be confidentially and strictly used by the researcher under the supervision of his supervisors.

Should you choose to complete the questionnaire, your anonymity will be highly attained via returning it in the enclosed stamped self-addressed envelope by post. Returning this questionnaire will be considered as your consent to participate in the survey.

Once completed, a summary of results will be available at the conclusion of the research. If you wish to obtain a copy of these results, don’t hesitate to provide your contact details.

In the end, I would like to express my warm appreciation to you for taking your time to be one of my respondents.

Yours sincerely,
Jamilu Bappa Salisu,

Doctoral Research Student,
Faculty of Science and Engineering,
University of Wolverhampton,
Wulfruna Street, WV 1 1LY,
United Kingdom.
APPENDIX C: MAIN STUDY QUESTIONNAIRE

QUESTIONNAIRE ON THE IMPACT OF COMPENSATION ON PUBLIC SECTOR CONSTRUCTION WORKERS IN JIGAWA OF NIGERIA

GENERAL INSTRUCTIONS
Please, answer all questions on the basis of your employment with the Ministry of Works and Transport, Jigawa State of Nigeria. Also answer by selecting and ticking the most appropriate answer to each question.

<table>
<thead>
<tr>
<th>PART 1: GENERAL INFORMATION.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
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<td></td>
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<tr>
<td>3</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>
|    | a) Office [ ] b) Onsite [ ] c) Both office and onsite [ ] d) Other (please specify)................
| 5  | How often do you receive your salary? |
|    | a) Monthly [ ] b) Twice in a month [ ] c) Other frequency (please specify)......................... |

<table>
<thead>
<tr>
<th>PART 2: EVALUATION OF WORKERS’ MOTIVATION, JOB SATISFACTION, ATTRACTION AND RETENTION.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NB: Part 2 has 4 sections dealing with motivation in section 2A followed by job satisfaction in 2B, worker’s attraction in 2C and retention in 2D. Please indicate your answer to each question in part 2 by ticking in the appropriate box on the 5-point scale provided.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 2A: ASPECT OF YOUR MOTIVATION.</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>The rating scale is: 5-Strongly agree, 4-Agree, 3-Undecided, 2- Disagree, 1-Strongly disagree.</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>1</td>
<td>Are you involved in non-remuneration decisions affecting you?</td>
</tr>
<tr>
<td>2</td>
<td>Are good safety programmes provided for your work?</td>
</tr>
<tr>
<td>3</td>
<td>Are your job tasks difficult to accomplish?</td>
</tr>
<tr>
<td>4</td>
<td>Are schedules of duty clearly defined?</td>
</tr>
<tr>
<td>5</td>
<td>Are the services you render to this ministry recognised?</td>
</tr>
<tr>
<td>6</td>
<td>Is your work supervised effectively?</td>
</tr>
<tr>
<td>7</td>
<td>Are you involved in decision-making on your remuneration issues?</td>
</tr>
<tr>
<td>8</td>
<td>Is your promotion implemented as and when due?</td>
</tr>
<tr>
<td>9</td>
<td>Is your job security is high?</td>
</tr>
<tr>
<td>10</td>
<td>Is your compensation paid as and when due?</td>
</tr>
<tr>
<td>11</td>
<td>Do you enjoy working with this ministry?</td>
</tr>
<tr>
<td>12</td>
<td>Is delegation of authority practiced in this ministry?</td>
</tr>
<tr>
<td>13</td>
<td>Is the relationship between you and your peers cordial?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 2B: ASPECT OF JOB SATISFACTION IN THIS MINISTRY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The rating scale is: 5-Strongly agree, 4-Agree 3-Undecided 2- Disagree, 1-Strongly disagree.</td>
</tr>
<tr>
<td>As a worker, are you satisfied with:</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>
### SECTION 2C: ASPECT OF WORKERS' ATTRACTION.
The rating scale is: 5-Strongly agree, 4-Agree 3-Undecided 2- Disagree, 1- Strongly disagree.

<table>
<thead>
<tr>
<th>RATING</th>
<th>ASPECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The relative distance to and from work.</td>
</tr>
<tr>
<td>4</td>
<td>The equitable compensation packages offered to workers.</td>
</tr>
<tr>
<td>3</td>
<td>The actual responsibilities attached to workers in a specific job.</td>
</tr>
<tr>
<td>2</td>
<td>The opportunity for you to advance within the ministry.</td>
</tr>
<tr>
<td>1</td>
<td>The relatively low risk associated with working with the ministry.</td>
</tr>
<tr>
<td></td>
<td>The expectation that you would be empowered by the ministry to make some decision on matters affecting your work.</td>
</tr>
<tr>
<td></td>
<td>The desperation to get a job because of the level of employment opportunities in the country.</td>
</tr>
<tr>
<td></td>
<td>The way this ministry operates.</td>
</tr>
<tr>
<td></td>
<td>The manner in which workers are treated.</td>
</tr>
<tr>
<td></td>
<td>The extent to which the ministry guides its workers to perform their duties without delay.</td>
</tr>
<tr>
<td></td>
<td>The reputation of this ministry as written in its various publications.</td>
</tr>
<tr>
<td></td>
<td>The reputation of this ministry as shared by workers.</td>
</tr>
</tbody>
</table>

### SECTION 2D: ASPECT OF WORKERS' RETENTION.
The rating scale is: 5-Strongly agree, 4-Agree 3-Undecided 2- Disagree, 1- Strongly disagree.

<table>
<thead>
<tr>
<th>RATING</th>
<th>ASPECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The ministry's training program.</td>
</tr>
<tr>
<td>4</td>
<td>The good supervisory relationship.</td>
</tr>
<tr>
<td>3</td>
<td>Ministry’s commitments to its staff.</td>
</tr>
<tr>
<td>2</td>
<td>Recognition of job skills in the ministry.</td>
</tr>
<tr>
<td>1</td>
<td>The opportunity for career development.</td>
</tr>
<tr>
<td></td>
<td>Equitable compensation packages are paid to you.</td>
</tr>
</tbody>
</table>

### PART 3: THE IMPACT OF COMPENSATION ON THE MOTIVATION, JOB SATISFACTION, ATTRACTION AND RETENTION OF PUBLIC SECTOR CONSTRUCTION WORKERS.

**NB:** Part 3 has 4 sections dealing with motivation in section 3A followed by job satisfaction in 3B, worker’s attraction in 3C and retention in 3D.

Please indicate your answer to each question in part 3 by ticking in the appropriate box on the 5-point scale provided.

### SECTION 3A: THE IMPACT OF COMPENSATION ON WORKERS’ MOTIVATION.
The ratingscale is: 5-Strongly agree, 4-Agree 3-Undecided 2- Disagree, 1- Strongly disagree.

<table>
<thead>
<tr>
<th>RATING</th>
<th>ASPECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Equitable monthly salary pay.</td>
</tr>
<tr>
<td>4</td>
<td>Equitable yearly salary- increment.</td>
</tr>
<tr>
<td>3</td>
<td>Equitablepromotional salary increment.</td>
</tr>
<tr>
<td>2</td>
<td>Payment of equitable personnel movement allowance.</td>
</tr>
<tr>
<td>1</td>
<td>Equitable personal security allowance.</td>
</tr>
<tr>
<td></td>
<td>Equitable personnel engagement allowance.</td>
</tr>
<tr>
<td></td>
<td>Fair payment of gratuity after retirement.</td>
</tr>
<tr>
<td></td>
<td>Fair payment of pension after retirement.</td>
</tr>
</tbody>
</table>
SECTION 3B: IMPACT OF COMPENSATION ON WORKERS’ JOB SATISFACTION.
The rating scale is: 5-Extremely satisfied, 4-Satisfied, 3-indifferent, 2- Dissatisfied, 1- Extremely dissatisfied.

<table>
<thead>
<tr>
<th>Please, indicate the level of your satisfaction with regard to:</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The salary you are paid compared to the services (contribution) you render.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Your yearly salary increase.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 The amount paid to you as a promotional salary increase compared to your contribution (performance, skills, etc.).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 The personnel movement allowance paid to you compared to the services (contribution) you render.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 The personal security allowance paid to you compared to the services (contribution) you render.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 The personal engagement allowance paid to you compared to the services (contribution) you render.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 The payment of workers’ gratuity by Government.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Government’s contribution to the workers’ pension scheme.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3C: IMPACT OF COMPENSATION ON WORKERS’ ATTRACTION.
The rating scale is: 5-Strongly agree, 4-Agree 3-Undecided 2- Disagree, 1- Strongly disagree.

<table>
<thead>
<tr>
<th>You were attracted to this ministry because of its:</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Equitable monthly salary pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Equitable yearly salary increase.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Equitable promotional salary increase.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Payment of equitable personnel movement allowance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Equitable personal security allowance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Equitable personnel engagement allowance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Fair payment of gratuity after retirement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Fair payment of pension upon retirement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3D: IMPACT OF COMPENSATION ON WORKERS’ RETENTION IN THIS MINISTRY.
The rating scale is: 5-Strongly agree, 4-Agree 3-Undecided 2- Disagree, 1- Strongly disagree.

<table>
<thead>
<tr>
<th>You have remained in this ministry because of:</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Its equitable monthly salary.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Its equitable yearly salary increase.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Its equitable promotional salary increase.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Its equitable payment of personnel movement allowance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Its equitable personal security allowance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Its payment of equitable personnel engagement allowance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Your enthusiasm to earn an equitable gratuity pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Your trust in the prompt payment of equitable pension after retirement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of questionnaire.
Thank you for your time and answers.
Please return your completed questionnaire to:
Jamilu Bappa Salisu,
Doctoral Research Student,
Faculty of Science and Engineering,
University of Wolverhampton,
Wulfruna Street, WV1 1LY.
M: 08038054850/ +447404337099
E: jb.salisu@yahoo.com/jb.salisu@wlv.ac.uk
APPENDIX D: FRAMEWORK VALIDATION QUESTIONNAIRE

RE: PhD STUDY BY JAMILU BAPPA SALISU: A SURVEY TO VALIDATE A FRAMEWORK DEVELOPED

TITLE OF STUDY: The impact of compensation on public sector construction workers in Jigawa State of Nigeria.

INTRODUCTION

I previously collected data towards completing the research with the title shown above. This second phase of data collection is required to validate a framework which has been developed from both an in-depth literature review and synthesis of the results of the data collected in the first phase.

This second and final phase of data collection will validate the framework generated. I would like to invite you to participate in this validation of framework by completing a questionnaire for me. In this regard, the framework is attached with explanatory notes which will enable you understand its recommendations. When you are fully familiar with the framework, then you can proceed to answering the questionnaire.

Please note that completion of the attached questionnaire is voluntarily and will take approximately 30 minutes. All responses are anonymous, and will be used confidentially and strictly by the researcher, under the supervision of his supervisors. Should you choose to complete the questionnaire, your anonymity will be highly maintained by posting it through the enclosed stamped and self-addressed envelope. Returning this questionnaire will be taken as your consent to participate in the survey.

Thank you in advance for your participation.

Yours sincerely,

Jamilu B. Salisu
**FRAMEWORK VALIDATION QUESTIONNAIRE**

**YOUR DETAILS**
NAME: ..........................................................
GRADE LEVEL: ................................................
POSITION: ......................................................

DID YOU PARTICIPATE IN THE FIRST PHASE OF THE STUDY? Please tick:
YES ……./ NO ……….

The study has come up with some recommendations which will improve workers’ motivation, job satisfaction, attraction, and retention. These recommendations are shown as statements in sections A-D below. Please indicate if you agree or disagree with these various recommendations and explain why, if and where possible:

**A. On Motivation**
1) An increase in gratuity will have a positive impact on your motivation.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) Your motivation will increase when resettlement allowance is added to your entitlements.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) Granting 'domestic servant' allowance to workers on grade levels 12-14 will increase their motivation in this ministry.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4) Increasing the amount of 'duty tour allowance' will serve as a motivational tool.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5) Increasing your 'disengagement allowance' will enhance your motivation in this ministry.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6) Introducing ‘field work allowance’ to workers on grade levels 7-10, will significantly influence their motivation.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7) Granting ‘responsibility allowance’ to you will positively influence your motivation in this organisation.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8) Granting you ‘training allowance’ will positively influence your motivation.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9) An increase in ‘overtime allowance’ will have a positive impact on your motivation.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10) Comment freely on what the Ministry can do to maximise your motivation

................................................................................................................................................
................................................................................................................................................
................................................................................................................................................
**B. On Job satisfaction**

11) An increase in the amount of gratuity paid will have a positive impact on your job satisfaction.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td></td>
<td>Please explain why you disagree:</td>
<td></td>
</tr>
</tbody>
</table>

12) An increase in the pension package will positively influence your job satisfaction.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td></td>
<td>Please explain why you disagree:</td>
<td></td>
</tr>
</tbody>
</table>

13) Comment freely on what the Ministry can do to maximise your job satisfaction

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………

**C. On Job Attraction**

14) An increase in the amount of gratuity paid will have a positive impact on your attraction.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td></td>
<td>Please explain why you disagree:</td>
<td></td>
</tr>
</tbody>
</table>

15) An increase in the pension package will positively influence your attraction to this ministry.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td></td>
<td>Please explain why you disagree:</td>
<td></td>
</tr>
</tbody>
</table>

16) A yearly salary increment would have a positive impact on your attraction to this ministry.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td></td>
<td>Please explain why you disagree:</td>
<td></td>
</tr>
</tbody>
</table>
17) Increasing the amount of your promotional salary increment would have a positive impact on your attraction to this ministry.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18) A review of ‘basic salary’ every four years will positively influence job attraction in this ministry.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19) Comment freely on what the Ministry can do to maximise the attraction of workers to this establishment

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

D. On Job Retention

20) An increase in the amount of gratuity paid will have a positive impact on your retention.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21) An increase in your pension package will have a positive impact on your retention in this ministry.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please explain why you agree:</td>
<td>Please explain why you disagree:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22) Comment freely on what the Ministry can do to maximise the retention of workers

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
E. GENERAL COMMENTS ON THE DEVELOPED FRAMEWORK

Comment on the developed framework in terms of its simplicity.

In your own opinion what are the benefits of the framework?

What are the possibilities of adopting the developed framework to address the pay differential that exists in the state civil service?

What can be improved on the framework?

End of questionnaire.

Thank you for your time and answers.

Please return completed questionnaire to:
JamiluBappaSalisu
Doctoral Research Student
Faculty of Science &Engineering
University of Wolverhampton
Wulfruna Street
WV1 1LY
Mob: 07404337099/08038054850
Email: jb.salisu@yahoo.com/ jb.salisu@wlv.ac.uk
<table>
<thead>
<tr>
<th>QL</th>
<th>SALARY STEPS</th>
<th>INCR RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Basic Salary</td>
<td>1,195</td>
</tr>
<tr>
<td></td>
<td>Rent Supplement</td>
<td>1,037</td>
</tr>
<tr>
<td></td>
<td>Transport Allowance</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Meal Subsidy</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>LTG</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Medical Allowance</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>utility</td>
<td>550</td>
</tr>
<tr>
<td>Gross Monthly Pay</td>
<td>18,018</td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>Basic Salary</td>
<td>9,256</td>
</tr>
<tr>
<td></td>
<td>Rent Supplement</td>
<td>1,851</td>
</tr>
<tr>
<td></td>
<td>Transport Allowance</td>
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</tr>
<tr>
<td></td>
<td>Meal Subsidy</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>LTG</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Medical Allowance</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>utility</td>
<td>550</td>
</tr>
<tr>
<td>Gross Monthly Pay</td>
<td>18,433</td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>Basic Salary</td>
<td>9,529</td>
</tr>
<tr>
<td></td>
<td>Rent Supplement</td>
<td>1,800</td>
</tr>
<tr>
<td></td>
<td>Transport Allowance</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Meal Subsidy</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>LTG</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Medical Allowance</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>utility</td>
<td>550</td>
</tr>
<tr>
<td>Gross Monthly Pay</td>
<td>18,784</td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>Basic Salary</td>
<td>9,657</td>
</tr>
<tr>
<td></td>
<td>Rent Supplement</td>
<td>1,991</td>
</tr>
<tr>
<td></td>
<td>Transport Allowance</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Meal Subsidy</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>LTG</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Medical Allowance</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>utility</td>
<td>550</td>
</tr>
<tr>
<td>Gross Monthly Pay</td>
<td>19,364</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>Basic Salary</td>
<td>11,088</td>
</tr>
<tr>
<td></td>
<td>Rent Supplement</td>
<td>2,243</td>
</tr>
<tr>
<td></td>
<td>Transport-Allowance</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Meal Subsidy</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>LTG</td>
<td>850</td>
</tr>
<tr>
<td></td>
<td>Medical Allowance</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>utility</td>
<td>550</td>
</tr>
<tr>
<td>Gross Monthly Pay</td>
<td>19,965</td>
<td></td>
</tr>
</tbody>
</table>

Prepared by: SALARY CENTRE, DIRECTORATE OF SALARY & PENSION ADMINISTRATION
<table>
<thead>
<tr>
<th>SALARY STEPS</th>
<th>INCR RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Salary</strong></td>
<td>339</td>
</tr>
<tr>
<td>Rent Supplement</td>
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</tr>
<tr>
<td>Transport Allowance</td>
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<tr>
<td>Meal Subsidy</td>
<td>2.000</td>
</tr>
<tr>
<td>LGT</td>
<td>850</td>
</tr>
<tr>
<td>Medical Allowance</td>
<td>550</td>
</tr>
<tr>
<td><strong>Gross Monthly Pay</strong></td>
<td>24,099</td>
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Prepared by: SALARY CENTRE, DIRECTORATE OF SALARY & PENSION ADMINISTRATION

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Prepared by: SALARY CENTRE, DIRECTORATE OF SALARY & PENSION ADMINISTRATION
### APPENDIX F: A CONSOLIDATED HEALTH SALARY STRUCTURE IN JIGAWA STATE, NIGERIA

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APPENDIX G: THE SALARY SCALE FOR TERTIARY INSTITUTIONS IN JIGAWA STATE

CONSOLIDATED POLYTECHNIC AND COLLEGES OF EDUCATION SALARY STRUCTURE (CONPCASS)

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### APPENDIX H: THE GRATUITY AND PENSION TABLE USED IN JIGAWA STATE

**Table B**

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*Payment should be based on annual emolument i.e. basic salary plus annual transport allowance, annual rent subsidy, annual meal subsidy, annual entertainment allowance, annual utility allowance, and annual salary of domestic staff entitled officer (i.e. 2 domestic staff for GL 17 officers and 4 for officers on consolidated salaries occupying pensionable posts).
APPENDIX J: THE BUDGET OF JIGAWA STATE, NIGERIA.

PUBLIC FINANCIAL MANAGEMENT

Summary Budget and Actual Financial Results 2004–2010

JIGAWA STATE GOVERNMENT FACT SHEET 01

Table 1: Opening balance plus receipts (N million)

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<td>Opening balance</td>
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<td>644</td>
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<td>IGR: Other Revenue – (Note 2)</td>
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<td>69,187</td>
<td>76,700</td>
<td>60,823</td>
<td>72,780</td>
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Total receipts + opening balance (N million) | 34,312 | 25,821 | 40,420 | 41,463 | 48,800 | 47,349 | 45,001 | 33,474 | 71,700 | 69,187 | 76,700 | 60,823 | 72,780 |

Total payments + closing balance (N million) | 34,312 | 25,821 | 40,420 | 40,022 | 46,800 | 54,701 | 45,001 | 33,596 | 71,700 | 62,397 | 76,700 | 71,940 | 72,780 |

Difference | 1,451 | -7,352 | -122  | 6,790  | 11,317 |