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### THE IMPACT OF COMPENSATION ON PUBLIC CONSTRUCTION WORKERS' RETENTION IN JIGAWA STATE OF NIGERIA

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#### ABSTRACT

Compensation is the remuneration workers receive for their services or contributions to an organisation. Extant literature points to the fact that compensation packages have relationships with job retention. A study established a theoretical framework based on the equity theory and used it to examine how compensation influences workers' retention. The aim of this research was to investigate the impacts of compensation on retention among public sector construction workers in Jigawa state of Nigeria. The Positivist paradigm guided this empirical research. A questionnaire was developed, pilot-tested and administered to gather data on workers' retention regarding four compensable aspects, namely: salary, allowances, gratuity and pension. A total of 265 questionnaires were administered and 260 were collected, representing 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 SEM. The Structural Equation Modelling established that pension and gratuity do positively and significantly influence public construction workers' retention in Jigawa state, Nigeria. The study focused on the public construction sector of Jigawa State, Nigeria. Therefore, the findings cannot be extended to the whole country.

**Keywords:** Compensation, Public sector construction workers, Structural Equation Modelling, Workers' retention.

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#### INTRODUCTION

Nowadays, organisations are competing to retain employees based on their job requirements. Dibble (1999) concurred that "If you think that it is difficult to retain your worker at this time, you should know that in the future it will be worse." Chipunza and Samuel (2009) stated that both private and public sectors are also facing difficulties retaining their best talent. Nawab and Bhatti (2011) viewed that one of the motives for leaving the organisation is inadequate compensation. Workers' retention issues seem to be the most critical challenge facing organisations in managing workforce in the immediate future. Moreover, studies discovered that adverse work environment as shown by lack of organisational support, injustice; poor human resource management policies and perceived psychological contract breach have a strong impact on workers' retention or turnover in an organisation (Ruwan, 2007; Robbins and Judge (2010). Additionally, organisations that are not compensating their workers equitably will eventually face a high rate of turnover (Shakeel, 2015).

#### Theoretical framework

There is need to explain the two constructs/ variables used in this study, before measuring the impact of compensation on workers' retention. These two constructs are compensation and retention of public construction workers in Jigawa State of Nigeria.

#### The compensation packages

The research employed seniority reward being the most applicable in Jigawa state of Nigeria. Workers' compensation involved pay and benefits packages (White, 2000). Hence, this study focused on salary, allowances, gratuity and pension. Salary is a fixed amount paid to workers for the services or work done (monthly salary, yearly salary and promotional salary increase). Salary is calculated on weekly, monthly or annual basis. The salary is designated to pay white-collar workers, administrative, professional and executive employees (DeNisi and Griffin, 2008). Thus, salary is also called basic pay and its components. Allowances are monetary benefits other than salary offered to workers for the achievement of a predetermined task (Madhani, 2012). Benefits are supplementary compensation given to workers apart from the basic salary as a result of some

certain circumstances like retirement, health, and transfer (Ciarniene and Vienazindiene, 2010). Therefore, this study only focused on gratuity and pension. Gratuity is a lump sum amount paid to workers after retirement and Pension is a benefit paid to workers upon retirement monthly. For a worker to be entitled for gratuity and pension must have served for at least five and ten years respectively in Jigawa state public sector.

## 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) concurred that some organisations perceive retention as a low rate of turnover to the viable degree, some base 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 onto workers and not allowing them to join rival organisations. To Bratton and Gold (2003), retention can 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 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 are encouraged to stay in the organisation for a certain period of time or until the completion of a project. Additionally, 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 was 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 entice them to stay longer and to serve well.

## Factors for workers' retention

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 will lead to workers' retention. Some have studied retention from the organisations' perspective and some from employees (Shakeel, 2015). The concern of this study is what Jigawa state government should improve public construction retention. Hence, this study is geared at identifying what workers perceive 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. The study found that remuneration is the most determinant factor for workers retention.

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

- 1) *Ability 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 stay long in an organisation (Redington, 2007). 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.
- 2) *Education and Working Climate*: Learning and development opportunities are considered a vital factor for the retention of highly skilled workers (Hytter, 2007). Therefore, an organisation must enhance learning and working climate. The idea of learning and working climate is 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. The more workers learn, the more they advance in their career paths, and the more financial reward they secure (Abrams *et al.*, 2008).

- 3) *Job Flexibility*: Scholars illustrated the significance of employment flexibility like scheduling variations that can effectively contain work time of people, workloads, responsibilities of workers, and locations around family responsibilities (Pleffer, 2007). Organisations add responsibilities, workload or time to workers but there is additional reward attached to them.
- 4) *Cost-Effectiveness*: 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.
- 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 incurs is less than the one incurs when it is not provided (Prenda and Stahl, 2001). Both private and public organisations make provision for training programmes which help workers to advance in their career or be allocated more responsibilities with more reward attached. The focus 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.
- 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 is provided just for employers' benefits (Eyster *et al.*, 2008). 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 are basing pay rises on workers' productivity, while others continue to reward workers' achievements individually (Feldman, 2000). These scenarios bring about confusion when workers are not getting significant pay raises, yet workers at the managerial level are handsomely rewarded (Feldman, 2000). These will make those who do not receive reward increments 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. The correlation of benefits with retention is another key for retaining workers. Therefore, in the event that benefits are not equitable, workers leave for another organisation. This is practicable in Nigerian construction organisations where most workers leave for private organisations because of inequitable benefits.
- 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. Workers' commitments improve with monetary reward in any organisation whether private or public.
- 10) *Communication*: Good communications enhance worker identification with their organisation and build openness and trust culture. Systematically, organisations supply information on values, mission, strategies, competitive performance, and changes that may have an influence on workers' enthusiasm (Gopinath and Becker, 2000). Thus, information pertaining to workers' rewards is a vital tool for retention.
- 11) *Motivation*: Management theory and practice mainly focuses on extrinsic motivators. They are powerful motivators; by themselves they are no longer sufficient as intrinsic stated by Herzberg. Compensation is crucial to workers nowadays (Thomas, 2000). Currently, motivational issues are more multifaceted because of the wealth and opportunity a lot of 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 will be effectively compensated and where they will 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 will be systematically enhancing the organisation's intrinsic reward process, making the work itself beneficial and this encouragement in turn improves retention.

Many studies of retention factors were carried out in the context of the private sector, with little emphasis on the public sector. This study differs from other research because it is undertaken on the public sector, particularly construction organisation in Jigawa State. The study concludes that that all the factors of retention mentioned in the previous studies depend 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 is the prime factor in the workers condition of service; if it is not equitable workers are likely to leave to other organisations that offer better pay and benefits. Furthermore, Compensation packages are related to workers' retention; hence they are the most powerful predictors of retention in an organisation (Haider *et al.*, 2015).

### **Compensation links to workers' retention**

In this regard, Walker (2001) indicated that compensation was the prime factor for retaining workers (it was ranked first in his study) when respondents were asked to rank seven factors (provision of challenging work, opportunity for promotion and advancement, friendly working environment, relations with peers, health balance between professional and personal life, good communication with regard to their retention). Lynch and Perry (2003) and Ramlall (2003) stated that an equitable compensation scheme can serve as an effective employee retention mechanism. Fheili (2007) opined that inadequate compensation adversely affects workers' retention. Hausknrecht *et al.*, (2009) concurred that compensation is a factor for workers retention. The most suitable way to workers' retention is by the use of a reward system appropriately to make employees happy to stay and continue with their employment. Similarly, 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 may serve as a retention technique and may prevent them from leaving to private sector organisations. Sandhya and Kumar (2011) stressed that money serves as a motivating factor for employees' retention. Mohlala *et al.*, (2012) also postulated that a good reward system is one of the factors that can affect employee retention. Extrinsic remunerations can be employed by organisations to retain workers (Ajmalet *et al.*, 2015). However, on the contrary, Tang *et al.*, (2000) opined that receiving more reward has little significance or impact on employees' retention and further suggests that it could only be significant when job satisfaction is low.

### **RELATED STUDIES ON RETENTION**

The study conducted by Sandhya and Kumar (2011) pertaining to employee retention by motivation in Indian private firms used no sample and data were analysed based on the literature reviewed. The study found that compensation was a strong factor for workers' retention.

Samuel and Chipunza (2009) conducted a study to identify 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 with a sample of 145 respondents. The self-administered questionnaire was employed in the research. The chi-square test of association was used to analyse the data. The results revealed that salary package significantly influenced retention in the public sector while in the private sector the variable did not have any significant influence on retention. The results also showed that terminal/pension benefits have a significant influence on retention in the public sector without a corresponding significance in the private sector.

Ramlall (2003) conducted a study on large complex organisations with regards to organisational application managing employee retention as a strategy for increasing organisational competitiveness through a series of surveys, observations, and interviews of 78 respondents. The data were analysed using simple percentages. It

was revealed that the location of the organisation and its compensation package (competitive salary with attractive benefits) were the most important factors for workers stay.

Rose and Gordon (2010) examined retention of E&T professionals in an Australian public service agency by collecting data from 670 E&T professionals to compare attraction, retention and turnover intention by age and occupation through questionnaire electronically. Since age (collected in bands) and occupation are categorical data, group differences were analysed with MANOVA. The result revealed that compensation/remuneration packages are highly significant to workers' retention in an Australian public service agency.

The research carried out by Sinha and Sinha (2012) sought to compare the factors affecting employee retention of two heavy engineering manufacturing companies in India, using a sample of 100 middle managerial staff of these companies through the questionnaire method. The data were analysed with Structural Equation Modelling software called Lisrel version 8.7. The study found that compensation was strongly significant to workers' retention in these organisations.

Therefore, having critically examined the various related literature by many studies, findings have shown that compensation and other related welfare packages are found to have a significant impact on workers' retention. The earlier studies conducted so far on both private and public sectors were quite inadequate and did not show much substance relevant to workers' retention. A few studies were carried out in public sector such as Rose and Gordon (2010), which examined the retention E&T professionals in an Australian public service agency. However, their study differed with this research in its context, samples used, methods of data analysis and the scope of the topic. In spite of this, the present study is on public sector workers' retention programmes and policies. It is interesting to note that all the available literature have shown that no study of this type has been conducted, particularly studies with an emphasis on public sector construction workers specifically in Nigeria.

The research by Sinha and Sinha (2012), which compared the factors affecting employee retention of two heavy engineering manufacturing companies in India, using a sample of 100 middle managerial staff of these companies through the questionnaire method, is significantly different from my study. Sinha's study applied different formulae and methods of analysis for the data than my study, the context and the country is different and it is on private companies while mine is public parastatals. Their data were analysed using Lisrel version 8.7. The study found that compensation was strongly significant to workers' retention in these organisations.

The present study is not a comparative study but rather a relationship study carried out on public sector construction workers in Nigeria. The data were analysed using Structural Equation Modelling with Amos software. The study therefore aimed at bridging the gap of knowledge by establishing the relationship between compensation packages and workers' retention in Nigeria, specifically in the public sector. The study used a peculiar topic which is novel, in other words a pioneering work in this particular area. While other studies viewed workers' compensation as a single research construct, this study considers it a multi-faceted and a dual variable research construct involving such components as salary, allowances, gratuity and pension. Thus, no research is reported to have yet studied such compensation aspects in public or private sector, particularly in the area of construction.

#### ***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.

#### **METHODOLOGY**

A quantitative study was carried out, because of the intention to determine the relationships between the dependent (motivation) and independent (compensation) variables. Somekh and Lewin, (2005) highlighted that the correlational study was a quantitative approach for determining the relationship between two or more quantitative variables. The research employed a structured questionnaire which comprised of three sections. The first section obtained information about the respondents' profile. The second and third sections obtained information pertaining to the impact of compensation on workers' motivation, job satisfaction, attraction and retention.

The data was analysed using descriptive statistics and Structural Equation Modelling with Amos software version 20. The results were expressed in numerical values or figures and hypotheses were tested. One of the main reasons this research adopted the use of Structural Equation Modelling (SEM) was the advantage of SEM in modelling the relationships among multiple independent and dependent variables all at a time (Zainudin, 2012) compared with other methods that can analyse only one layer of linkage between independent and dependent variables concurrently (Chai *et al.*, 2015, Motawa and Oladokun, 2015). As the relationship between compensation and workers' motivation involved various constructs, it was the contention of this study that SEM would yield a better result than other statistical methods of analysis.

### The measures

The measures were derived from previous empirical studies in the literature. To adapt the measures to the specific conditions in Nigeria, the questionnaire was pilot-tested using a sample of 50 respondents. Amendments were made to the questionnaires based on suggestions and recommendations that emerged from the pilot survey so that the questions could be understood in the Nigerian context easily.

Workers' retention was measured using the combination of items of the workers retention scale used by these scholars (Rose and Gordon, 2010; Sinha and Sinha, 2012; Samuel and Chipunza, 2009). One of the samples is: 'As a worker in this ministry, you remained because of the opportunity for career development?' with construct reliability of 0.86. The scale of salary was measured using Igalens and Rousell (1999) and Lai, (2011) scales. Concerning the workers' salary, one of the items is: As a worker you have remained in this ministry because of its equitable yearly salary increment. A likert scale ranging from 1(Strongly disagree) to 5(Strongly agree) was adopted with construct reliability of 0.85. Allowance was measured using Igalens and Rousell (1999) and Lai (2011) scale. A Likert scale ranging from 1(Strongly disagree) to 5(Strongly agree) was used with construct reliability of 0.82. One of the samples is: You have remained in this ministry because of its equitable personnel security allowance. Pension and Gratuity were measured using Igalens and Rousell (1999) and Lai (2011) scales. A Likert scale ranging from 1(Strongly disagree) to 5(Strongly agree) was used with construct reliability of 1 both in each case.

### Sample and procedure

The Ministry of Works and Transport, Jigawa State is made up 850 public construction workers across three cadres, namely clerical (610), officer (190) and Director (50). 265 out of 850 workers were chosen using stratified sampling technique since the samples fall into distinctly different categories/ cadre (strata) and each is homogeneous. The questionnaires were administered in paper format via face to face to the research respondents.

Normally, the covariance-based SEM methodology needs a relatively large sample size because of its underlying objective of a hypothesized validation of model analysis. (Tenenhaus, 2008) suggested that there are different views in use of 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 Jinet *et al.*, (2007) for understanding the relationship-based determinants of building projects used 116 samples. Vinodh and Joy (2012) secured 60 valid responses in the investigating the factors affecting lean manufacturing practices, Doloi *et al.*, (2012) conducted a research on Structural equation model for investigating factors affecting delay using 77 respondents. Based on the above review, the number of respondents required or sample size to conduct SEM analysis cannot be generalized. Therefore, the sample size for this research i.e. 260 can be regarded as reliable and appropriate for SEM analysis in this study.

### Demographic data

Respondents consisted of 254 males (98 %) and 6 females (2 %). Those who are 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%).

### DATA ANALYSIS

#### a) Confirmatory factor analysis (CFA)

CFA is said to be a prerequisite for measurement model in which both the number of factors loadings and their corresponding items or indicators are defined clearly (Kline, 2011).

Confirmatory factor analysis (CFA) is used to test convergent validity. Average Variance Extracted (AVE) is normally conducted in which 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 is  $\geq 0.5$ . Thus, any construct falling below  $\geq 0.5$  should be deleted.

Construct reliability (CR) is an indication of internal consistency which means that the measures are consistent in representing the latent constructs for which they measured. However, Hair *et al.*, (2010) suggested that reliability between .6 and .7. But Henseler *et al.*, (2009) recommended that values of .6 may be accepted.

#### **b) Assessing normality**

Checking for normality and outlier 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) viewed that in any statistical research Skewness has more effect on mean. Therefore, DeCarlo (1997) argued that when conducting structural equation modelling, kurtosis should be given more emphasis because it severely affects test of variance and covariances. Byrne (2010) further emphasized that since SEM is an analysis of covariance structures, the researchers should at all times consider kurtosis. Though, there is no clear consensus on the actual bench mark of extreme kurtosis (Kline, 2005). However, West *et al.*, (1995) viewed that values  $> 7$  to be early departure from normality. Ullman and Bentler (2001) recommended that kurtosis values  $> 5$  are regarded to be non -normally distributed. Thus, based on that normality test of the data, it revealed that both the latent and measured variables/ constructs were  $< 5$ .

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 which implies that the sample is normally distributed because the multivariate Kurtosis is not large, as argued by Gao *et al.*, (2008) that, large multivariate Kurtosis indicates that the sample has severe multivariate non-normal distribution. Scrima *et al.*, (2014) stated that the kurtosis multivariate index should not exceed the critical cut-off of 483.

#### **c) Assessment of linearity**

The correlation analysis was conducted to examine the linearity of the independent variables i.e. salary, allowance, pension and gratuity. Though, independent but can be regarded as components of the same domain. The tables 1 below shows that all variables used in the model are related to each other statistically. 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.

*Table 1: Correlation Estimates of Retention, Salary, Allowance, Gratuity and Pension.*

Variables	Mean	SD	Y	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>
Y (Retention)	4.32	.41	1				
X <sub>1</sub> (Salary)	4.09	.68	.488***	1			
X <sub>2</sub> (Allowance)	4.10	1.08	.305***	.813***	1		
X <sub>3</sub> (Gratuity)	4.18	.78	.385**	.610***	.744***	1	
X <sub>4</sub> (Pension)	4.29	.78	.443***	.332***	.373***	.452***	1

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

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

#### **d) Goodness of fit (Gof) indices**

According to Ho (2006) Goodness-of-Fit indices (model fit) determined the degree to which the proposed model predicts (fits) the observed covariance matrix. Therefore in assessing the goodness of SEM, the researchers adopt the Goodness-of-Fit indices (model fit).

Model fit indices used in this research includes; chi-square ( $\chi^2$ ), relative  $\chi^2$  ( $\chi^2/\text{df}$ ), AGFI, GFI, CFI, IFI, RMSEA and RMR. Further, Kline (2005) recommended the use of the Chi-Square test, the RMSEA, the CFI and the RMR/SRMR as the indices that should be reported in model fitting.

One of the most vital measures of assessing the Goodness-of-Fit in SEM is chi-square ( $\chi^2$ ) statistics (Joreskog and Sorbom, 1993) and the model accepted if the  $\chi^2$  value is less than three times the degree of freedom (Carlmines and McIver, 1981), which is refers to relative  $\chi^2$ . If chi-square is significant, the model is regarded as unacceptable or not fit. Therefore, numerous researches did not consider this index when the sample size exceeds 200 or so and other model fit indices met the requirement (Bentler and Bonnet, 1980; Jöreskog and Sörbom, 1993). Thus, because of these shortcomings of Chi-Square, scholars (researchers) have come up with alternative indices to measure model fit. One of this alternative statistics that reduces the consequence of Model Chi-Square on sample size is called Wheaton *et al.*, (1977) relative/normed chi-square ( $\chi^2/\text{df}$ ).

Even though, there is no standard or acceptable ratio threshold for this statistic, but Relative/normed chi-square ( $\chi^2/\text{df}$ ) values as high as 5.0 (less than 5) (Wheaton *et al.*, 1977, Schumacker and Lomax, 2004) are recommended.

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 thrash hold is .80 (Hart,1994). CFI value of .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 show 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.

### **Structural model evaluation and hypotheses testing**

Structural equation modelling is the third level of analysis so, in this study, structural equation modelling was used to examine the individual and collective contribution of set of predictors (independent) variables entered in to the equation in relation to the outcomes (dependent) variables. Therefore, the analysis of structural equation modelling using AMOS showed that the structural model is fit, which means the model fits the data as illustrated by the following Goodness-of-Fit indices in figure 1 below:

Chi-square = 247.844 (df = 58);  
P value (>=0.05) = .000;  
Relative Chi-Sq (<=5) = 4.273;  
AGFI (>=0.9) = .878;  
GFI (>=0.9) = .954;  
CFI (>=0.9) = .942;  
IFI (>=0.9) = .944;  
RMSEA (<=0.08) = .063; RMR (<=0.08) = .047  
(Standardized estimates)

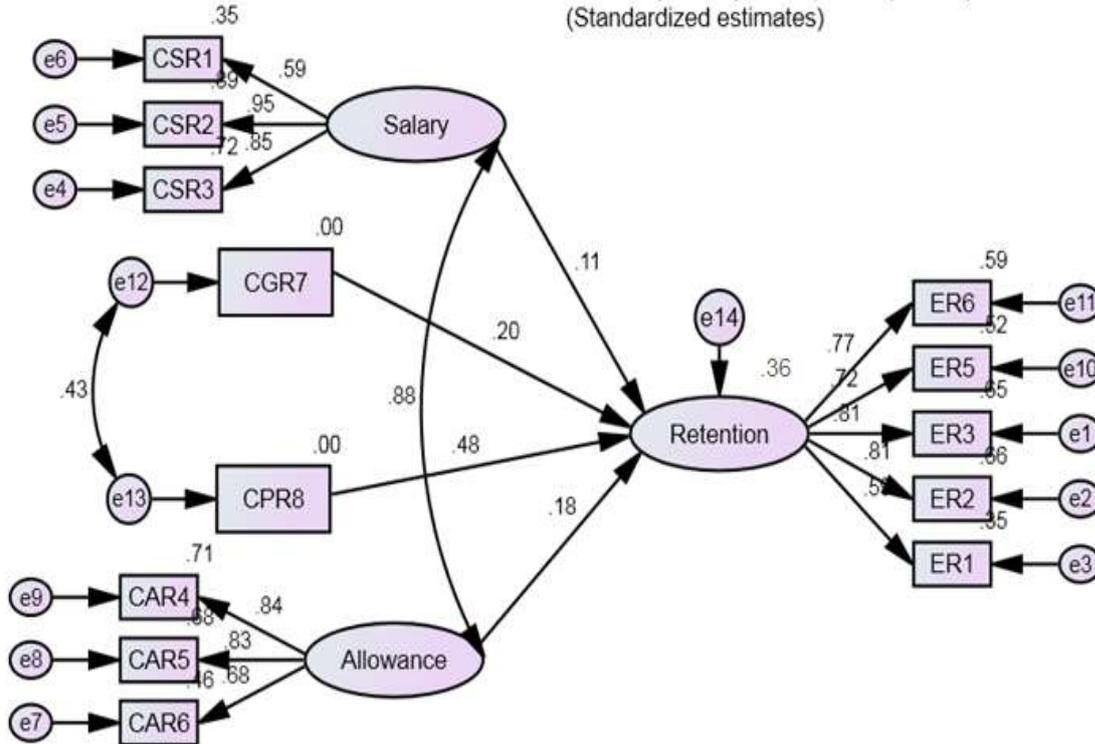


Figure 1: Structural Model of Retention.

**RESULTS**

The analysis from the SEM for hypotheses testing revealed that the standardised path coefficients were consistent with the hypotheses by indicating that gratuity ( $\beta = .204$ , CR = 3.045,  $p = .002$ ) Hypothesis III, which states that the gratuity payment after retirement had a positive impact on workers’ retention, was supported. Pension ( $\beta = .482$ , CR = 6.821,  $p = .000$ ) contributed significantly to workers’ retention. Hypothesis IV, which states that the pension payment upon retirement has a positive impact on workers’ retention, is supported. These results are in line with other scholars’ findings that compensation packages can influence workers’ retention (Hausknrecht *et al.*, 2009; Sandhya and Kumar, 2011; Sinha and Sinha, 2012; Patgar and Kumar, 2015). However, salary has no significant influence on workers’ retention ( $\beta = .111$ , CR = .627,  $p = .055$ ). Hypothesis I, which states that the salary paid in this ministry has a positive impact on workers’ retention, is not supported. Likewise, allowance has no significant influence on workers’ retention ( $\beta = .177$ , CR = .972,  $p = .264$ ). Hypothesis II, which states that the allowance paid in this ministry has a positive impact on workers’ retention, is not supported.

**DISCUSSION OF RESULTS**

Employees working elsewhere 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 notice inequities in their reward, their morale normally decreases. 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. 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 workers by organisations. Whenever workers feel an imbalance in their outcome-input ratio relative to other workers, tension is created in that workplace because

there is no equity or fairness. Equity or fairness involves 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 best or talented 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 can be retained. Hence, there is every probability that an organisation which offers higher rewards tends to retain the best talented workers.

Interestingly, gratuity influences 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 to workers' retention due to the fact it is paid monthly, and can serve as an income to them as well. 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 receives his or her retirement benefits when they are due. Similarly, the reform provides the beneficiaries with a social welfare scheme by ensuring that employees save to 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, a pension and gratuity benefit assures employee's comfort and dedication to the organisation. However, salary has no significant influence on workers retention because what they are earning is less than what others are receiving 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 are earning in other ministries, though under the same circumstance because of pay packages disparity.

## CONCLUSION

The study established a connection between compensation and retention with data collected from public construction workers in Jigawa state of Nigeria. The research concluded that pension and gratuity have a significant influence on workers' retention. However, salary and allowance have no significant impacts on workers' retention.

Based on the findings stated above, this paper recommends that compensation packages offered by the government to public sector construction workers should be adequate and capable of retaining workers in Jigawa state ministry of Works and Transport.

## LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

Despite the fact that this study revealed the extent to which compensation influences public construction workers, some limitations need to be considered. 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 salary, allowance, gratuity and pension and retention. Therefore, future researches can be conducted in other states in Nigeria, or elsewhere using additional variables which might have not been employed in this study.

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