

# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

## Extrinsic Reward System and Employee Productivity: A study of National Examinations: Council (NECO) Headquarters, Minna, Niger State, Nigeria

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### **Abstract:**

*The aim of this study is to examine the effect of extrinsic rewards on employee performance at NECO Headquarters, Minna, Niger State, and Nigeria. The various aspect of extrinsic rewards examined in the study includes pay rise, bonuses, insurance cover and pension fund scheme. The study makes use of primary data collected through a structured questionnaire administered on 275 staff of the Council out of which 174 were returned for analysis. The study employs both descriptive and inferential statistics (Ordinary Least Square) to analyse the data collected. Findings from the study show that pay rise ( $\beta = 0.061$ ; sig. 0.037) and insurance cover ( $\beta = 0.328$ ; sig. 0.000) have statistically significant effect on employee productivity; bonuses ( $\beta = 0.029$ ; sig. 0.718) have a non-significant positive effect on employee productivity while pension fund scheme has ( $\beta = 0.016$ , sig. = 0.804) non-significant negative effect on employee productivity. Thus, while two of the null hypotheses were rejected, two were retained. The study therefore concludes that extrinsic reward as being practice at NECO Headquarters, Minna, has affected employee productivity positively to some extent, though, its application has not been very effective which accounts for the non-significant results obtained from the analysis and recommended among others that employers should considered regular pay rise, device a policy that strengthens the issuance of bonuses to employees, more comprehensive staff insurance scheme with adequate coverage of their immediate family members so as to get the best in term of productivity from employees and overhaul its pension scheme so as to allay employees fear and misgiving about the scheme so employees could give their best by way of increased productivity.*

**Keywords:** Extrinsic reward, pay rise, bonuses, insurance cover, pension scheme, employee productivity, NECO

### **1. Introduction**

Corporate organizations throughout the world acknowledge the importance of employee motivation and performance in the short and long-term success of an organization (Nemeckova, 2017). According to research carried out by Morgan *et al.* (2013), organizations are in constant search of best practices that lead to an increase in employee's motivation and eventually their performance. One of the most used strategies to improve performance among employees is the extrinsic reward system (Francis *et al.*, 2020). Extrinsic rewards refer to tangible rewards given by organizations to their employees in recognition of their exemplary performance in their job roles. In most of the cases, extrinsic rewards usually come in the form of financial rewards and benefits. According to Noko and Nwuzor (2021), extrinsic rewards in an organization are characterized with being easily justifiable, embeddedness in organizational routines and processes and also measurable. Scholars have identified the following forms of extrinsic reward: pay rises issued to employees due to their excellent performance in their job role (Noko & Nwuzor, 2021; Bravo, 2019; Judge *et al.*, 2010; Larkin *et al.*, 2012), bonuses awarded to the employee after an excellent corporate performance in a financial year (Francis *et al.* 2020; Anik *et al.* 2013, Ahammad *et al.*, 2015); pension plans issued by organizations to their employees (Noet *et al.*, 2017; Montizaan *et al.*, 2010; Nemeckova, 2017; Daniel, 2019) and insurance (Awan .& Tahir, , 2015), paid meal, paid education, paid vacation, sick days and seniority pay (Nemeckova, 2017; Oloke *et al.*, 2017). However, in view of the extrinsic reward

system in practice at National Examination Council (NECO) Headquarters, Minna, which is the study area of this research, the study shall focus on pay rise, bonuses, insurance scheme and pension scheme.

Scholars had undertaken studies that were aimed at investigating the nexus between extrinsic reward and employee productivity. The impact of each or a combination of these components has been studied but a model that used all these components is rarely found. Also, a good number of these studies were carried out outside Nigeria and as such did not consider the peculiar situation of the Nigerian labour environment. There have also been differences in methodological approach adopted by researchers and findings have been varying too.

Additionally, despite the common knowledge regarding the relationship between extrinsic rewards and job performance, many corporate organizations are hesitant in its application with its attendant poor job performance. This is an indication of lack of proper understanding of the mechanics of extrinsic reward system on the part of corporate organizations

It is against this background that this study is being conducted to take cognizance of the peculiar labour environment in Nigeria using an approach slightly different from most previous work with the aim of finding out the impact of these various measures of extrinsic reward system on employee productivity. This paper considers the achievement of the following specific objectives central to the overall achievement of the main objective:

- Examining the effect of pay rise on employee productivity at NECO Minna
- Examining the effect of bonuses to employees on employee productivity at NECO Minna
- Accessing the effect of insurance covers on employee productivity at NECO Minna
- Investigating the impact of the establishment of a pension fund scheme on employee productivity at NECO Minna

### 1.1. Research Hypotheses

The following are the null hypotheses for the research

- Pay rises has no statistically significant effect on employee productivity at NECO Minna
- Bonuses do not significant affect the productivity of employees at NECO Minna
- There exists no significant effect of the issuance of insurance covers to employees on their productivity at NECO, Minna
- Pension Fund Scheme has no statistically significant impact on employee productivity at NECO Minna

## 2. Literature Review

### 2.1. Conceptual Review

#### 2.1.1. Conceptualization of Extrinsic Rewards

A reward is a term that is used in reference to something that is given in recognition of service or achievement by an individual. Organizations use rewards as a human resource management tool to recognize the exemplary performance by their employees (Noko & Nwuzor, 2021). There are various types of rewards that include intrinsic rewards and extrinsic rewards. Extrinsic rewards refer to tangible rewards given by organizations to their employees in recognition of their exemplary performance in their job roles. In most of the cases, extrinsic rewards usually come in the form of financial rewards and benefits (Bravo, 2019; Morgan *et al.*, 2013). They are termed extrinsic because they are external to finishing the task and controlled by other people apart from the employee (Bravo, 2019) possess the following features: easily justifiable, measurable and embeddedness in organizational routine and processes (Noko & Nwuzor, 2021)

Extrinsic reward has been conceptualized by scholars in different ways. Judge *et al.* (2010) and Larkin *et al.* (2012) conceptualized extrinsic reward as issuance of a pay rise and salary bump to employees after their exceptional performance. According to Judge *et al.* (2010), employers use pay rise as a motivating factor to ensure that employees work hard to achieve high performance. Employees are more likely to perform better if at the end of an exemplary performance there is likelihood for a pay rise. They posit that regular pay regardless of the amount cannot serve as a source of motivation for an employee. For that reason, organizations ought to establish a pay structure where employees who perform well are rewarded using pay rise. This technique plays a major role in obtaining the best from employees.

Conceptualization of extrinsic rewards as the issuance of bonuses at the back of an exceptional performance by a corporate organization after a financial year was done by Anik *et al.* (2013) and Ahammad *et al.* (2015). According to Anik *et al.* (2013), bonuses can be a substitute for the issuance of pay rises to employees after an exceptional performance. Bonuses are issued to employees after a financial year when an organization has been able to surpass its expectations regarding financial performance. When employees feel that their exceptional performance is likely to lead to the issuance of bonus, they are likely to perform better. Ahammad *et al.* (2015), argue that it is important for organizations that match or surpass their performance financial to reward its employees for their role in achieving that. When this happens, employees will be more motivated and look forward to subsequent years to achieve higher performance and win more bonuses.

In the views of Awan & Tahir (2015) and Yousaf *et al.* (2014), extrinsic reward has to do with the issuance of insurance policy covers to all employees. This, according to Nemeckova (2017) could be life or health insurance. Awan & Tahir (2015) opine that organizations should give insurance covers to some of the risks that the employees face. They proposed the issuance of a health insurance cover to ensure that employees do not worry about their medical bills. This promotes their motivation and ultimately their performance. In the same vein, Yousaf *et al.* (2014) posit that employees

are worried about their social welfare as well as the social welfare of their loved ones especially their spouses and children. For that reason, eliminating this social welfare worry increases the employee focus and motivation which translates to better organizational performance.

Conceptualization of extrinsic rewards as the establishment of a pension fund to all employees was done by Wang & Shultz, (2010) and Montizaan *et al.* (2010). According to Wang & Shultz (2010), the establishment of a pension fund works in similar dynamics as issuing insurance cover to employees. Establishment of a pension plan for all employees helps in safeguarding their financial security in old age. When an employer has safeguarded the financial security of an employee, the employee is motivated and more likely to focus on their work and performance (Montizaan *et al.*, 2010).

Employee motivation is a term that is used in reference to the level of energy, commitment and the creativity that an employee brings to his role in the workspace. According to Nemeckova (2017), motivation is a goal-oriented behaviour of each individual. It consists of a set of internal factors, which are the driving forces of a human being. Regardless of the economic dynamics, whether employees are motivated or not are always a management concern (Dobre, 2013). Rewards, employee motivation, employee performance, and organizational performance have a direct correlation. When an employer issues rewards or any other form of positive reinforcement to employees, the level of energy, commitment, and creativity that they bring to their role increases. This is because a productive worker equals a happy worker (Viteles, 1953; Nemeckova, 2017). When this happens, the performances registered by the employee also improve. Ultimately, when the rewarding is in large scale, the performance of the organization in a financial perspective is also boosted (Saira *et al.* 2014).

Employee performance is a term that is used in reference to the series of tasks and responsibilities allocated to an employee and how well that employee does to execute these roles and responsibilities. Similar to employee motivation, employee performance is a major concern for the management regardless of the economic cycles experienced. Performance of the employees is a critical factor in determining the performance of the organization. For that reason, organizations that wish to improve their performance or maintain a level of performance ought to be concerned about the performance of every particular employee within the organization. It is also important for an organization to use creative methods of motivations such as intrinsic and extrinsic rewards to keep motivation and high performance of employees (Anitha, 2014).

The conceptual framework of the study is shown in Figure 1 below:

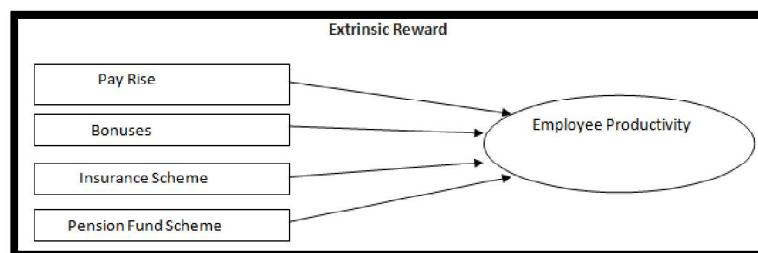


Figure 1: Conceptual Framework  
Source: Author's Conceptualization (2021)

## 2.2. Theoretical Review

From the literature review, previous research has seen extrinsic rewards through the lenses of pay rises issued to employees due to their excellent performance in their job role, bonuses awarded to the employee after an excellent corporate performance in a financial year and other benefits such as insurance and pension plans issued by organizations to their employees. The various previous researches have used Maslow's Hierarchy of Needs, Victor Vroom's expectancy theory and Herzberg's two-factor theory to explain the relationship between these extrinsic rewards and employee's performance. The current study shall zero in on Alderfer's ERG theory, Herzberg's two-factor theories and Victor Vroom's expectancy theory in investigating this relationship.

In his works, Alderfer's existential, relatedness, growth (ERG) theory (Alderfer, 1972; Nemeckova, 2017) is an extension of Maslow's Hierarchy of needs by re-categorizing the needs into existence, relatedness, and growth. The existence category comprises of basic materials that a human being needs for survival. They consist of what Maslow referred to as physiological and safety needs. Relatedness, referred to as the need for love and esteem by Maslow, refers to the need for human beings to maintain interpersonal relationships with others through social interactions and engagements (Shearer, 2012). Lastly, growth category is made up of the intrinsic need for personal development. These are the needs that Maslow referred to as self-actualization.

From the perspective of ERG theory, employers can prime their extrinsic rewards to align with the need for existence, relatedness, and growth. When an organization primes its rewards in a way that they help an individual achieve the need for existence, relatedness, and growth, the rewarded employee is likely to be more motivated to perform better so they can be able to receive the rewards and achieve these needs.

Herzberg's two-factor theory argues that there are factors in the employment space that motivate employees to perform better in their roles while there is a set of other factors that influence employees to perform poorly. According to the theory, these two sets of factors work independently of each other. For that reason, it is the responsibility of the management to ensure that the right environment is created to ensure that employees are motivated to perform better.

The theories posit that rewards, positive reinforcement, and feedback motivate employees who are likely to keep up the good performance or improve (Shearer, 2012).

Expectancy theory is a psychology theory that was developed by psychologist Victor Vroom. According to the theory, an individual is likely to behave in a certain way or make a certain choice because they have been motivated to select that choice or behave in that manner due to what they expect if they make that choice. Interpreting this from the perspective of extrinsic rewards system, it follows necessarily that extrinsic rewards given to employees who perform well in their job roles are likely to lead to a better performance from the rewarded employees (Lunenburg, 2011).

In view of its all-encompassing nature in respect of this current study, the Alderfer's ERG theory will be used as the theoretical framework of this study since it encapsulates the various components of extrinsic reward considered in this study.

### 2.3. Empirical Review

Noko and Nwuzor (2021) carried out research on employee and organizational performance: employee perception of intrinsic and extrinsic rewards system. The aim of the study was to evaluate the perception of employees on both intrinsic and extrinsic rewards system. The result obtained from the generated data from 400 respondents and analyzed using structural equation modeling (SEM-PLS) showed that extrinsic rewards have positive and significant effect on employee performance: The study therefore concluded that rewards play an important role in both employee performance and organization performance.

Francis *et al.* (2020) researched on reward system as a strategy to enhance employee's performance in an organization. The research was administered through constructive analysis from different articles that base on reward system. Descriptive and exploratory research designs were used for the purpose of this research work. The study revealed a direct positive relationship between rewards and employee's performance. However, rewards system, in an organization should be designed with a constructed strategy that need to be a neighborhood of organization's culture.

Onuegbu & Ngige (2018) carried out research to identify organizational rewards system and its effects on employees' performance in selected polytechnics of South-East Nigeria. The data utilized in this study were obtained from both primary and secondary sources. While the primary data were derived from questionnaire and interviews from focus group discussions, the secondary data were obtained from relevant textbooks, journal and government document. Using Pearson Product-Moment Correlation Coefficient of determination and Student t-distribution to analysed the data, their finding reveal that employee rewards policy significantly affects organizational performance. The result further shows that extrinsic rewards and employees' productivity are not significantly correlated. Similarly, studies by Abdul-Gafoor & Tafique (2015) in Pakistan, Nemeckova (2017) in Czech Republic, Emmanuel (2013) in Ghana and Oloke *et.al.* (2017) in Nigeria have established that extrinsic rewards significantly predict productivity of employees.

Muhammed & Owais (2015) carried out research on impact of reward on employee performance at Malakand private school. Qualitative approach was used for the study, 100 questionnaires were used as instrument to check the respondent's opinion. Descriptive, correlation and multiple analysis regression tests were applied for data analysis. Findings show that there is a positive relationship between reward system and employee job performance. Recommending that organizations should implement rewards system to increase the job performance and job satisfaction.

Yousaf *et.al.* (2014), Ahmed *et al.* (2016), Olokeet *al.* (2017) and Owolabi *et al.* (2019) in their own research efforts investigated the effect of salary, bonuses, pension plans and insurance scheme on employees' productivity using different methods both for data collection and analysis and discovered that these variables have significant positive effects on productivity. Similarly, the relationship between insurance, pension, and pay rise and employees' performance was the subject of the studies conducted by Nemeckova, (2017), Bello & Adebajo (2014), Latin *et al.* (2013) and Irshad (2016) at different time periods in different geographical areas using different approaches. Their findings reveal that there is a significant relationship between employee's performance and salary package, bonuses, pension and insurance and performance and in-service allowance.

## 3. Methodology

### 3.1. Research Design

This research study adopted a descriptive survey research design. Primary data was collected with the used of well-structured validated questionnaire administered by the researcher to 275 staffers of NECO Headquarters Minna, computed using Yamene's (1967) formula for sample size determination and randomly selected using the simple random sampling technique, from a population of 880 staff of the Council as at 2019. The questionnaire which was divided into two section –A and B, contained a total of thirty items. Section A, which centered on respondent's biodata contained seven items while section B which centered on the variables of the study contained twenty-three close-ended items drawn using Likert scale of the format: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly disagree (1). Before administering the questionnaire, some diagnostic tests were run. These included validity, pilot study test, multicollinearity and autocorrelation tests. Validity and reliability tests were conducted. Face and content validity of the instrument was carried out by subjecting it to thorough scrutiny by a linguist and a management expert respectively.

A pilot study was conducted to test instrument reliability. 10% of the sample, that is, 28 respondents as suggested by Maalim & Gikandi (2016) was used. The test-retest method was used which involved the administration of the instrument on the 28 selected respondents twice allowing a week gap between the 1<sup>st</sup> and 2<sup>nd</sup> test. Thereafter a correlation test was carried out to determine the strength of the relationship between the two tests as shown in Table 1 below:

		test1	test2
test1	Pearson Correlation	1	.788*
	Sig. (2-tailed)		0.047
	N	48	48
test2	Pearson Correlation	.788*	1
	Sig. (2-tailed)	0.047	
	N	48	48

Table 1: Test-Retest Reliability Result  
 Source: Author's Computation (2021) Using spss version 23

The result as shown in the Table 1 indicates a Pearson correlation value of 0.79 which puts it within the acceptable reliability region (Krippendorff, 2012).

A multicollinearity and autocorrelation tests were performed to determine the level of correlation among the independent variables and the level of correlation between the dependent and independent variables respectively. Table 2 below shows the results of the two tests as extracted from SPSS 23 Output:

	Variance Inflation Factor	Tolerance Level
Pay rise	1.268	0.789
Bonuses	1.257	0.795
Pension fund	1.178	0.849
Insurance	1.122	0.892
Durbin waston		1.901

Table 2: Multicollinearity and Autocorrelation Test  
 Source: Author's Extraction from SPSS 23 Output (2021)

The result in Table 2 above shows that the tolerance level of each of the variables is lower than 1 while their respective variance inflation factor (VIF) is less than 10. Therefore, it shows that there is no threat of multicollinearity (Pallant, 2010; Bello *et al.* 2018) Similarly the Durbin-Watson statistic of 1.901 which is a little less than 2 shows that there is absence of auto and serial correlation among the variables (Ango & Haruna, 2018)

3.2. Measurement of Variable

As with any empirical work, it is important to consider how the proposed variables should be measured. All the variables of the study were measured with a set of relevant questions carefully generated from the reviewed literature and theories. According to Wagner *et al.* (2012) this is an acceptable practice in research that can be used instead of adapting or adopting previous research instruments, especially, when such is not readily available.

The dependent variable which is employee productivity (a series of tasks and responsibilities allocated to an employee and how well that employee does to execute these roles and responsibilities) was measured with five items. The independent variables -pay rise, bonuses, pension funds scheme and insurance scheme were measured with a set of five, five, four and four items all of which were code using a 5-point Likert Scale (coded as 5=Strongly agree, 4=Agree, 3 = Neutral, 2=Disagree and 1=Strongly disagree).

3.3. Model Specification and Data Analysis Method

The researcher adapted the regression model developed by Oloke *et al.* (2017). The model expresses the relationship between the variables thus:

$$Y = \alpha + \beta_1 X \dots\dots\dots (1)$$

Where:

Y= Dependent Variable (Employee Productivity (EP))

$\alpha$  = Intercept

$\beta$  = Coefficient of independent variables

X = Independent Variables (Extrinsic Reward)

e = error term

Based on the options of extrinsic reward offered by NECO Headquarters, Minna, as earlier stated, X is defined as  $X_1, X_2, X_3$  and  $X_4$

Where:  $X_1$  = Pay Rise (PR);  $X_2$  = Bonuses (BN);  $X_3$  = Insurance Scheme (IS);  $X_4$  = Pension Fund (PF)

The model specifies that the dependent variable employee productivity is dependent on pay rise, bonuses, insurance and pension fund.

This is functionally expressed as:  $EP = f (PR, BN, IS, PF) \dots\dots\dots (2)$

The model can then be expressed econometrically as:

$$EP = \beta_0 + \beta_1 PR + \beta_2 B + \beta_3 I + \beta_4 PF + e \dots\dots\dots (3)$$

Based on previous studies and theories, the a priori expectation of the functional relationship between the dependent variable and each of the independent variables is as stated below: the intercept ( $\beta_0$ ) is expected to be positive. This implies that the value of the dependent variable is positive if all the independent variables remain unchanged; pay rise, bonuses, insurance scheme and pension funds are expected to be positively signed. That is:

$$\beta_0 > 0; \beta_1, \beta_2, \beta_3, \beta_4 > 0$$

SPSS 23 was used to analyse the data. Both descriptive statistic and inferential statistic were employed to analyse the data. Descriptive statistic was used to describe the biodata of the respondents while inferential statistic was used to test the hypotheses and draw inferences on the result. The above specified model was estimated using the ordinary Least Square Regression after the underlying assumptions have been sufficiently satisfied.

#### 4. Discussion of Results

##### 4.1. Administration and Collection of Questionnaires

The table below shows the total number of questionnaires administered and number filled and returned.

Number of Questionnaires Administered	Number of Questionnaires Returned	Percentage of Questionnaire Collected
275	174	63%

Table 3: Administration and Collection of Questionnaires  
Source: Author's Computation (2021)

The table above shows that a total of 275 questionnaires were distributed to the panelists in the sample developed. Out of the 275 questionnaires distributed, a total of 174 questionnaires which translates to 63.27% of the total distributed questionnaires. 36.73% of the questionnaires distributed were either not returned or were invalid. Analysis of the data was based on the questionnaires validly filled and returned.

##### 4.2. Analysis of Demographic Profiles of Respondents

The table below presents the distribution of the respondent.

SN	Variable	Frequency (N= 174)	Percentage
1.	<b>Gender</b>		
	Male	124	71.3
	Female	50	28.7
2.	<b>Marital status</b>		
	Single	40	23
	Married	120	69
	Divorce	6	3.4
	Widow	8	4.6
3.	<b>Age group</b>		
	18-30	40	23
	31-40	54	31
	41-50	60	34.5
	50 and above	20	11.5
4	<b>Educational Qualification</b>		
	OND/HND	20	11.5
	BSC	104	59.8
	MBA/MSc	10	5.7
	PhD	40	23
5	<b>Working Experience</b>		
	0-4 Years	22	12.6
	5-8 Years	20	11.5
	9-12 Years	50	28.7
	13 and above	82	47.2

Table 4: Analysis of Finding  
Source: Author's Computation (2021)

The above table shows that out of 175 respondents, 124 respondents which represent 71.3% of the returned questionnaires were male while 50 of the returned questionnaires representing 28.7% were filled by female staff. This distribution shows the preponderance of male over female in the employ of the council. This is a reflection of the overall labor market which is certainly dominated by the male gender.

The result also shows that out of 174 returned responses, 40 representing 23% were within the age group of 18 to 30 years, 54 respondents representing 31% of the returned responses were within the age group of 31 to 40 years. 60 responses representing 34.5% of the employees represented people within the age group of 41 to 50 years. Lastly, 20 of

the returned responses representing 11.5% of the returned responses were above 50 years. A closer look at the distribution, it is clear that 70% of the workforce working in NECO Headquarters are 40 years and above.

Out of the 174 respondents that returned their responses, 20 representing 11.4% were OND/HND, 104 respondents representing 59.8% were bachelor's degree holders, 40 of the returned responses representing 23% of the respondents were PhD holders while 8 of the respondents, representing 5.7%, had an education higher than a bachelor's degree. The table also shows the respondents' working experience; out of the 174 returned responses, 22 of the responses representing 12.6% of the responses have between one to four years of experience, 20 of the responses representing 11.5% of the returned responses have five to eight years of experience. 50 of the returned responses representing 28.7% of the respondents have between nine to twelve years while 82 of the respondents representing 47.2% of the returned responses had more than 13 years of experience. This result shows that majority of the sampled staff have been with the organization for a fairly long period to be able to provide informed responses to the items contained in the research instrument.

#### 4.3. Testing of Hypothesis

The study formulated and tested four null hypotheses on the effect of extrinsic reward system on employees' productivity. In doing so, the ordinary least square (OLS) regression was used. The null hypotheses were tested at 0.05 significant level. Therefore, each of the results is significant if the prob-value of the regression is less than 0.05 and not significant if the value is greater than 0.05. A statistically significant result would lead to the rejection of the null hypotheses; while a non-significant result will lead to the non-rejection of the null hypotheses.

The results are shown in Table 5 below:

Model	Coefficient	S.E	T	Sig
(constant)	2.603	0.392	6.649	0.000
Pay rise	0.061	0.078	0.779	0.037
Bonuses	0.029	0.080	0.362	0.718
Insurance	0.328	0.067	4.894	0.000
Pension fund	-0.016	0.066	-246	0.804
R <sup>2</sup> =0.531		F=7.691	(sig)=0.000	

Table 5: Regression Analysis Results  
Source: Author's Computation (2021) Using SPSS 23

The table shows that the R<sup>2</sup> value of the model is 53. %. This shows that the regressors (Pay rise, Bonuses, Insurance and Pension fund) explain 53.1% of the total change in the regression and (Employee's productivity) while 46.9% of the variation in employees' productivity was accounted for by variables not captured in this study. The F value is 7.691 which is statistically significant at 0.000. This shows that the model has a good fit.

Upon testing, the results as shown in Table 5 reveals that the coefficient for pay rise which is 0.061 is statistically significant at 0.05 level of significance since the sig. value of 0.037 is lower than 0.05. Therefore, the hypothesis that pay rise has no statistically significant effect on employees' productivity at NECO Headquarters, Minna is rejected. The result indicates that a unit rise in pay will produce 0.061 increase in employees' productivity. This result aligns with Alderfer's ERG theory (Alderfer, 1972) which emphasizes the need for extrinsic reward as a way of motivating employees to greater productivity. The result also agrees with the work of Nemeckova (2017) carried out in Czech Republic and that of Oloke *et al.* (2017). The implication of this result is that pay rise as a form of extrinsic motivation can be used by the management of NECO Headquarters, Minna to motivate employees to achieve better results and contribute positively to the performance of the organization.

The second hypothesis that says that bonuses do not significantly affect the productivity of employees' at NECO Headquarters Minna was retained. This is because its coefficient of 0.029, though, positive, is not statistically significant at 0.05 levels since its sig. value of 0.718 is higher than 0.05 critical values. What the result implies is that for every increase of 1 unit in bonuses, employees' productivity will increase at an insignificant rate of 0.029 units. The findings agree with Onuegbu *et al.* (2018) and Irshad (2016) who found out in their studies that bonuses have positive effect on employees' productivity. The insignificant nature of the impact of this variable on employees' productivity might have resulted from the dissatisfaction of the sampled employees as shown by their responses with the manner the Council handles the issue of bonuses.

The third hypothesis that states that there exists no significant effect of the issuance of insurance covers to employees on their productivity at NECO, Minna was also tested using regression analysis. The result shows that there is a statistically significant effect of issuance of insurance on employee's productivity which has a coefficient value of 0.328 which is statistically significant with a p-value of 0.000 at 0.05 level of significance. Therefore, the researcher rejects the null hypothesis which states that there exists no significant effect of the issuance of insurance covers to employees on their productivity. The implication of this result is that a unit increase in the issuance of insurance cover to employees will lead to 0.328 unit increase in their productivity. Though, this result is in tandem with the findings of Oloke *et al.* (2017), Bello & Adebajo (2014) and Owolabi *et al.* (2019) who found significant positive effect of insurance on employee productivity, it contradicts the finding of Yousaf *et al.* (2014) who found that employees are dissatisfied in term of insurance coverage because it didn't cover medical expenses.

Finally, the results of the regression analysis in Table 5 also reveal that pension fund scheme has a negative effect on employees' productivity. This is because the coefficient of pension fund scheme is negative (-0.016) and with p-value of 0.804 which is greater than 0.05 critical value, the study fails to reject the null hypothesis stating that there exists no significant impact of pension fund scheme on employee's productivity. This implies that a unit increase in pension fund scheme produces a decline of 0.016 units in employees' productivity. This is contrary to the findings of Ahmed *et al.* (2016) that there is a significant relationship on adequate pension fund scheme and employees' productivity, and that it has a positive impact on the organization efficiency. Since most of the respondents disagreed with the statement that pension fund scheme of the council meets global best practices, it could be inferred that the scheme is having disincentive effect on employees rather than a positive effect.

## 5. Conclusion and Recommendation

This study set out to examine the effect of extrinsic rewards on employee's productivity. To do this, data were collected, processed and analyzed using regression analysis to test the four hypotheses of the study. Major findings of the result show that apart from pension fund scheme which does not comply with a priori expectation, other variables – pay rise, bonuses and insurance maintain their positive sign though, the coefficient of bonuses is not significant. It is inferable from the analysis that extrinsic reward as being practice at NECO Headquarters, Minna, has affected employee's productivity positively to some extent, though, its application has not been very effective which accounts for the non-significant results obtained from the analysis.

The study therefore recommends in view of the findings from the study:

- Given that findings show that pay rise affect employee's performance as long as the pay rise follows the performance scorecard, employers should consider regular pay rise as a means of achieving the objective of getting optimal performance from employees.
- Given that findings show that there is a non-significant positive effect of the issuance of bonuses to employees on productivity, NECO Headquarters, Minna, should device a policy that strengthens the issuance of bonuses to employees so that it can have a significant impact on the performance of employees thereby improving their productivity.
- Given that findings show that there exists a significant positive effect of insurance scheme on employee's productivity, the management of NECO should consider a more comprehensive staff insurance scheme with adequate coverage of their immediate family members so as to get the best in term of productivity from employees.
- Given that findings show that pension fund scheme has negative effect on employees' productivity, it is then advised that NECO overhaul its pension scheme so as to allay employees fear and misgiving about the scheme so employees could give their best by way of increased productivity.

## 6. Suggestions for Future Research

The study suggests that future researchers should investigate the impact of extrinsic rewards on employees' productivity in other states or group of states. Secondly, since this study focused on extrinsic rewards, further study could be carried out to determine the impact of intrinsic rewards on employee's productivity in NECO Headquarters, Minna for comparison.

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