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THE EFFECT OF PERFORMANCE MANAGEMENT SYSTEM ON EMPLOYEES' PERFORMANCE: IN SELECTED FEDERAL COLLEGES OF EDUCATION IN NORTH EASTERN NIGERIA

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Abstract

The study examined the Effect of Performance Management System on Employees' Performance, using selected Federal Colleges of Education in north East, Nigeria. Relevant theoretical and empirical literatures were reviewed. The study was anchored on feedback theory. The population of the study was 3,296 and the sample size was 346 using Krejcie & Morgan table. Cluster and Simple random sampling techniques were used to select the respondents. Primary source of data collection was adopted. The study used structured questionnaire as instrument for data collection. Statistical Package for Social Sciences (SPSS) V. 23.0 was used to analyse the data. The study used both Descriptive and inferential statistics in analysing data. Specifically, Ordinal logistic regression was used in answering research questions 1,2 and 3. Findings of the study revealed that Performance Management System has a positive and significant effect on Employees' Performance. Therefore, the study recommended that Public Organizations should improve on the current Annual Performance Evaluation Report (APER). and should pay adequate attention, monitor and lay emphases on 360^0 Feedback Appraisal technique to improve employees' performance, since it was found to have high positive and significant effect on Employees'

Performance. Also Public Organizations should place little or less emphases on Management by Objective Appraisal since this technique was found to have weak but significant effect on Employee Performance.

Keywords: Performance Management System, Annual Performance Evaluation Report (APER), 360^0 Feedback Appraisal Technique, Objective Appraisal Technique and Employees' Performance.

Introduction

Effective evaluation of employees' performance is essential for an organisation's survival and growth. It is the responsibility of any organisation to ensure that the performance of its workforce is highly enhance to achieve organisational goals and objectives. This can be attained through effective implementation of a Performance Management System (PMS). If effectively manage, PMS can have a positive impact on the employees' performance.

Performance management system is the analysis of the performance of an Employee, which usually includes assessment of the employees' current and past work performance., there are two main reasons for the evaluation process. The first is the control purpose, which means making decisions about pay, promotions and careers. The second is about identifying the development needs of individuals. Performance management gives additional value to the organisation by supporting organisational processes and improving the organisational performance (Puhakka, 2018). If the Performance management system is used in the right way, employees' performance will be boosted up, because, employees know that their performance will be measured and the compensation will be rewarded to the merit.

There are however a number of factors that can affect employee performance. These factors include employee's personal problems, influence of co-workers, management expectations, and the culture of the organisation, among others. It follows therefore that employee performance is not entirely about job specifications and delivery but also include those factors that have direct consequences on the overall performance outcome. Perhaps, it is the reason that performance management systems have become essential for most organisations. (Parker et al, 2013). If the assessment process is not based on accurate and

updated job descriptions, workers may get demotivated with all of these grading techniques according to Zamani et al (2021).

The process of performance management has some elements that allows the employer and the employee to redefine their goals and Key Performance Indicator (KPI) to meet the demand of the current situation. The process also accords the employees an opportunity to identify their own developmental need and programs (Yadav, 2021). The management of an organisation then takes up the responsibility to ensure that training and performance support initiative are to meet the skills development identified in the personal developmental needs.

Performance management system entails the assessment of employee's productivity, identify areas of improvement and develop skills to achieve those areas of improvement in order to achieve efficiency in organisations. Covertly, it could be reasonable to suggest that to improve employee performance through performance management system is to improve overall organisational performance. Performance management systems which encompasses employees' performance appraisal is at the core of the human resources management in organisations. Traditionally, performance appraisal has been a method for determining whether the salary earned by employee is justifiably commensurate with their input in the organisations (Bruce, 2014). However, the application of performance management system in the contemporary time has witnessed a shift from an annual duration assessment to that of an ongoing process in the discharge of employees' duties (Bruce, 2014). Following this development, performance management system has thus been improved to incorporate an assessment of both the behaviour and performance of an employee aimed at helping management to make decisions regarding the training and development, transfer, demotion, promotion, salaries increment, and discipline of employee.

The deficiency in performance management system resulting from supervisors' biases, prejudices and stereotypical attitudes could obviously influence the outcome of performance appraisal negatively. In view of this, Bridger (2014), alluded to the fact that appraisal process might be open to biased ratings. Undoubtedly, the subjectivity of such evaluation can smear employee cooperation in the whole process of performance management system, and this could reduce the overall outcome and objectivity of the performance appraisal (Sparrow, 2012). The likelihood of lack of cooperation on the part of employee due to supervisory lapses constitute a major

setback of evaluating the work performance of organisations worldwide (Parker D. et al, 2013) vis-à-vis the set objectives to be achieved.

Employee performance is one of the major challenges which organisations are confronted with in the realization of their set objectives. Employee performance encompasses the process through which management ensures that employees' activities and outputs contributes to the organisations' goals and objectives. Unfortunately, most organisations especially public organisations adhere strictly to a single method of performance evaluation (Annual Performance Evaluation Report) to determine the performance of their employee and this has constituted a difficult position for both the employees and organisations in assessing employees' performance. Worst still is the fact that, in most organisations supervisors are traditionally assigned to assess the performance of employees. The inherent danger in this practice is the tendency for the supervisor's biases to override the objective assessment of the employees which would invariably bring about dissatisfaction on the part of the employees and consequently a direct effect on the overall objectives of organisations.

Given the perceived abysmal performance of employees in most public organisations, the concern of this study therefore include whether the use of Annual Performance Evaluation Report Form (APER) alone is sufficient to addressed problems of low/poor performance of employees in public organisation. It is also the concern of this study to investigate whether the 360^0 Feedback Appraisal Technique and Management by Objective Appraisal Techniques have been deployed in evaluating Employees' Performance in the area of the study. If Performance Appraisal Technique has been adopted, then which of the technique best suits the culture, environment and behavior of employees in the study area? These issues amongst other concerns aroused the interest for this study. Hence, 'Effect of Performance Management System on Employees' Performance in Selected Federal Colleges of Education in North East Nigeria'.

The study will examine the effect of performance management systems on employees' performance and also to discover how other techniques of performance management system foster cooperative behaviour in producing better outcomes. To meet these general objectives, the following specific objectives will be pursued:

i. To examine the effect of Annual Performance Evaluation Report (APER) on Employees' Performance in Federal Colleges of Education in North Eastern Nigeria.
ii. To examine the effect of 360^0 Feedback Appraisal Technique on Employees' Performance in Federal Colleges of Education in North Eastern Nigeria.
iii. To examine the effect of Management by Objective Appraisal Technique on Employees' Performance in Federal Colleges of Education in North Eastern Nigeria.

Literature Review and Theoretical Frame Work:

A conceptual discussion is a collection of concepts, theories, and guiding principles used to organize a presentation later on. The effects of performance management systems on employees' performance are the main topic of this study. Employee Performance is the study's dependent variable, and Performance Management System is its independent variable.

Employee performance in management is defined as the employee's contribution to accomplishing the organization's goals. Employee performance is the output that employees produce using their technical abilities and raw materials to fulfil their duties at the lowest possible cost (Odhiambo, 2015).

Performance management is a method used by management to make sure that employees' activities and outputs support the mission and goals of their organizations. Performance evaluation, which connects with organizational strategy and creates a vibrant connection to general and particular human resource activities, is a systematic procedure for determining a person's performance in the workplace based on specified performance criteria (Clake, 2011). (Vukotich, 2014). The attitudes and responses that employees have to their jobs, however, differ from person to person. Some people will never change no matter what you do to them (Fatile, 2012).

A good performance management system should promote effective performance strategies, provide performance feedback, and facilitate a more equitable compensation scheme.

Performance appraisal is defined by Alvi, Surani, and Hirani (2013), as a structured and formal interaction between a subordinate and supervisor that typically takes the form of an annual or semi-annual interview and examines and discusses the

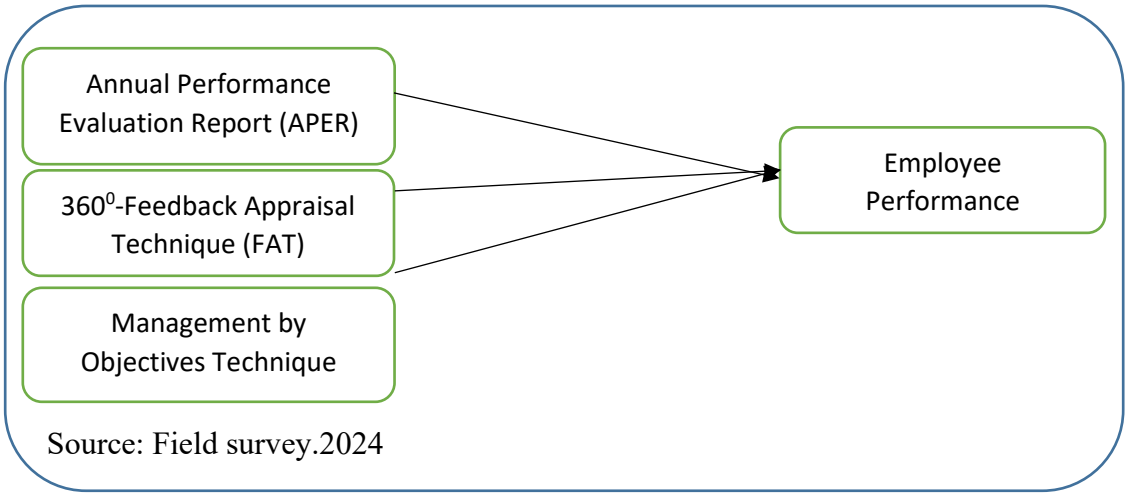
subordinate's work performance with the goal of identifying areas for improvement and skill development.

The process of periodically evaluating one's performance in relation to the various aspects of the job is known as performance appraisal, according to (Parker 2013). One of the key human resources procedures is performance appraisal, which is typically carried out in a formal environment in order to improve employees' performance and serve as a foundation for decisions concerning employees (such as salary and promotion decisions) (DeNisi & Sonesh, 2010). In a sophisticated and well-managed organization, the most effective instrument for organizing personnel to meet strategic goals is performance appraisal (Singh, et al 2010).

Conceptual Model:

One dependent variable and three independent variables are chosen. Independent variables are Annual Performance Evaluation Report (APER), 360^0 Feedback Appraisal Technique and Management by Objective Appraisal Technique. And level of Employees' Performance is considered the dependent variable.

Conceptual Model



Source: Field survey.2024

The table above shows the relationship between performance management system and employees' performance. And the hypothetical effect of the independent variable (performance management system) on the dependent variables (employee performance).

Empirical review

Performance management has been empirically examined by so many scholars. For instance:

Mwema and Gachunga (2014), In their study, which focused on a case study of the World Health Organization in Kenya, established the effects of performance reviews on employee performance. It was decided to utilize a descriptive design, and regression analysis was carried out to determine the impacts. The study concluded that organizations should regularly evaluate their staff members in order to boost employee performance. This may be done by using targets, accomplishments, organizational goals, time management, and efficiency. The findings showed that performance reviews had a major impact on how well staff perform at the World Health Organization of Kenya. Findings of this study cannot be universally apply to all organisation because the study was conducted abroad.

The research done by Osabiya (2014) on the usefulness of performance reviews as a technique to gauge worker performance in Nigerian organizations. The survey found that direct managers are typically the ones that evaluate employees. Both managers and officers claimed that there was a legitimate, established pattern for advancement inside the organization and that this was left up to the management's choice. Managers frequently permit biased criteria, such as rate, sex, tribe look, and personal likeness or hatred, to affect their rating. The evaluation will continue to be lacking in the objectivity that is frequently needed in a fair performance appraisal system unless the ratings are based on actual job performances. The study's findings would have been more reliable if it had looked at how well Nigerian organizations use performance management systems to gauge employee performance.

The impact of performance management systems on employee performance in food and agriculture organizations was studied by Maina (2015). The research design used in the study was descriptive statistics. The target group included 94 employees of food and agriculture organizations. A census was conducted to question every person. A structured questionnaire was used to gather the information. Employee perceptions of the need for a performance management system at FAO were the study's key finding. The study came to the conclusion that how employees felt about performance management procedures was crucial for all organizations since it inspired them to meet the targets set by the latter. Due to the study's small sample size, the conclusion cannot

be extended to all organizations. This suggests that a higher sample size could alter the outcome.

Oluwatosi (2015) conducted research on how performance management affects public sector organizations' performance. The research design used for the study was survey. Chi-Square analysis and simple percentages were used to examine the data (X2). The study found that, when done correctly, performance management has a propulsion effect on the performance of public sector organizations. Based on the findings, the study recommended that government-owned institutions conduct performance evaluations on a quarterly basis to encourage employee commitment to work. Performance management enables organizations to measure the strength and weaknesses of employees in relation to their contributions to the overall goal of the organization. If regression analysis had been used to analyse the data rather than simple percentages and Chi-Square, the study's findings would have been more reliable if inferential statistics had been employed for hypothesis testing, the research's findings would have been more accurate and reliable.

A study on the impact of performance appraisal procedures on worker performance: A case of Muheza District, Tanzania, was undertaken by (Mollel et al. 2017). The study looked into how performance appraisal management practices affected worker performance in Tanzania's Muheza District. The study involved 339 employees in a sample who took part in interviews and questionnaires. Expert judgment was used to ensure validity, and reliability scores for the questionnaire varied from 0.682 to 0.955, indicating that all of the items were trustworthy. Mean scores were represented by descriptive statistics, and potential correlations between the independent and dependent variables were assessed using the Pearson Product Moment Correlation Coefficient. The results of this study demonstrate how important performance appraisal tools, like feedback and recognition, are to employee performance and how they actually affect worker performance in the workplace. According to the study, training and promotion should emphasize improving employees' commitment and should be based on performance in order to increase employee performance. While this study will be undertaken in Nigeria, the author's study was conducted in Tanzania. If the researcher had looked into how Tanzania's Muheza District's performance management system affected employee performance, the results would have been far better. Due to the fact that Nigeria has a different culture and set of policies different from Tanzania, the study's findings would not be applicable to Nigerian public

organizations. Due to the small study sample, it was not possible to generalize the aforementioned findings to all public institutions. This suggests that if a larger sample is utilized, the results would be different. If a huge organization had been selected as the study area for the investigations, the findings would have been more reliable. If the study duration had been longer, the outcomes would have been more favourable.

Edwin Locke created the goal-setting theory in 1968 to provide an explanation for why people behave in particular ways at work. This may be connected to how much input employees had in creating performance reviews. According to this notion, defining goals is fundamentally connected to job happiness. The goal theory's proponents contend, based on a review of the body of literature, that when employees are given concrete goals that they are expected to achieve, their motivation levels are higher (Gómez-Miambres, 2012). In a study that backs up the goal hypothesis, Bipp and Dam (2014) highlight that when employees have clear, difficult goals, their performance increases.

On the other hand, the goal theory and the feedback theory are very similar. Its supporters contend that, similar to setting precise goals, offering feedback aids in making clear what the employee must perform (Pat-el et al, 2012). But unlike goal theory, where feedback occurs both during and after a work, goals are established before the task even begins (Hon, Wilco and Chan, 2013). There is evidence from numerous research that there is a beneficial relationship between employee performance and feedback. Due to this, the Feedback Theory will now serve as the foundational theory for our investigation. Most of the findings of the reviewed literatures and empirical review show consistency that performance management system (PMS) has a great effect on employee performance.

In terms of training and development, remuneration, feedback, and performance appraisal on employee performance, the research of the literature brought to light a variety of performance management principles. However, the majority of the studies did not aim to evaluate how the Federal Colleges of Education in North Eastern Nigeria and other public institutions in the region were affected by the Performance Management System. None of the earlier studies used feedback theory as the guiding theory for their research. Further education is therefore required at a few Federal Colleges of Education in North East Nigeria. The effects of the Annual Performance Evaluation Report, 360^0 Feedback Appraisal Technique, and Management by Objective Appraisal Technique on employees' performance in public institutions were

not explained in earlier researches. Although some public sector organizations in Nigeria assert to have a practice of annual performance review, the majority of them lack an idea about effective performance appraisal technique to evaluate personnel. Researchers and other interested persons should be concerned about this.

It is clear that no research has looked at the relationship between employee performance and the performance management system in North Eastern Nigeria; this study is intended to close that gap.

Methodology

This section outlines and explains the methodological issues relating to the study. It gives an explicit explanation in respect to the basic research design, population and sampling techniques, sources and method used in the collection of data, variables measurement, and the techniques used in analysing data as well as the justification for methods used.

Research design is a well-developed plan that gives a guide on how data should be interpreted, analysed and gathered results via a dialect and inference on data relations (Mugenda, 2012). The study adopted a descriptive survey design. It is aimed at collecting data and describing the characteristic and feature of facts, about a given population in their natural setting using questionnaire, as instrument for data collections.

The study was conducted in selected Federal Colleges of Education in north east Nigeria (Federal College of Education (T) Gombe, Jama'are, Potiskum, and Yola), using academic and non-academic staff as target population.

The population of this study constitute all staff of the selected Federal Colleges of Education. The actual population of these Federal Colleges of Education is 3153 as given by statistics and record units of the institutions. Mugenda (2012) stated that right population involves all set of people, elements, and groups or items that have certain characteristics and the researcher wants to generalize the information about them.

To accurately determine a good sampling size, Krejcie and Morgan table developed in (1970) was used for this study. From Krejcie and Morgan table, if the population strength is between 3000-3500, the sample size is 346. Therefore, the staff strength of all selected institution is 3153, the sample size is 346. One of the advantage of using Krejcie and Morgan table is that there is no need of using the formula since the table

has all the provisions one required to arrive at the sample size. The copy of Kreicie and Morgan table is attached as appendix.

The study used probability sampling technique. This is a technique of selecting the respondents from the target population. Specifically, cluster, and simple random sampling techniques were used to select respondents to answer the questionnaire. probability sampling technique was used because it gives each element in a population equal chance of being been selected.

Distribution of sample size in Federal Colleges of Education in north eastern Nigeria

Table 2: Distribution of sample size in Federal Colleges of Education in north eastern Nigeria **(**Federal College of Education (T) Gombe, Federal College of Education Jama'are, Federal College of Education (T) Potiskum and Federal College of Education Yola).

Table 1: Distribution of Population and sample size in Federal Colleges of Education in north east Nigeria

Institutions	Population of Target Respondents	Percentage of population	Sample Size(Number of Questionnaire)
FCE(T) Gombe	1402	$\frac{1402}{3153} \times 100 = 44.47$	$\frac{346}{100} \times 44.47 = 154$
FCE (T) Potiskum	794	$\frac{794}{3153} \times 100 = 25.18$	$\frac{346}{100} \times 25.18 = 87$
FCE Jama'are	233	$\frac{233}{3153} \times 100 = 7.39$	$\frac{346}{100} \times 7.39 = 26$
FCE Yola	724	$\frac{724}{3153} \times 100 = 22.96$	$\frac{346}{100} \times 22.96 = 79$
Total	3153	100%	346

Source: Field survey,2024

From the above table, the population strength for the study constitutes 3153. Percentage of population is arrived at by dividing the population strength of each institution by the total population of the respondents of all institutions and multiply by 100. While total questionnaire distributed among the respondents is arrived at by multiplying the sample size by the percentage divided by 100. Cluster sampling was used to group respondents, while respondents were randomly selected for the study.

The study used primary sources of data. The justification for using primary sources of data is that, it enables the researcher to generates first-hand information and have direct or indirect contact with the respondents compare to secondary data which has already been developed by other users and adopted in the research.

The study uses adapted questionnaire with little modifications that reflects the objectives of the study. Questions are adapted from previous literatures in line with the identified variables. The questionnaire comprises twenty-seven (27) questions and is divided into five (5) sections. Section A, containing demographic information of respondents such as sex, age, marital status, educational qualification and length of service. Section B, C and D consists of the five points Likert scale modified questions which focused on the research variables, Annual Performance Evaluation Report, 360-degree Feedback, Management by Objectives Appraisal Techniques and Employee Performance. The modified scale type measurements are adopted in this research work which tends to measure the thoughts of the respondents with respect to the information being sought for in the questionnaire. A five point modified rating scale consists of five options (5 = Strongly Agree, 4 = Agree, 3 =Moderately Agree, 2 = Disagree, 1 = Strongly disagree). Asika (2004) submits that the modified scale type is a rating technique used widely to measure personal characteristics and reflect the extreme positions on a continuum, which enable the respondents to freely indicate their opinion on the structured statement.

Ordinal logistic regression was used in answering research questions 1,2 and 3. In addition Spearman rank correlation was applied as a robustness check to the ordinal logistic regression. The coefficients of the variables in the ordinal logistic regression were subjected to hypothesis test at 0.05 level of significance. The ordinal logistic regression which is a type of logistic regression that used when the dependent variable has ordered categories, it is adopted in this study because the dependent variable is a five point Likert scale and the data generated from it is ordinal in nature.

Results and Findings

This section presents the demographic characteristics of the respondents and the research findings from the study. It analyses the data systematically focusing on the study objectives: Effect of the Annual Performance Evaluation Report (APER) on Employee Performance, Effect of 360-degree Feedback Appraisal Technique and Management by Objective Appraisal Technique.

The total number of questionnaire administered were four hundred (400) and only three hundred and forty-six (346) were retrieved and analysed.

Questionnaires were sent to 400 staff of the selected Federal Colleges of Education. Only 346 responded and retrieved. This translated to 86.5% response rate.

Descriptive statistics

The model fitting information in ordinal logistic regression presents the result of difference between the null model (intercept only) and the final model (containing all the independent variables), it is likelihood ratio Chi-Square test to examines whether model containing full set of predictors is a better fit than model with no predictors. It shows whether the final model is significant improvement on the null model. The result of the model fit is presented in table 2 below.

Model Fit

Table 2: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	2951.824			
Final	2623.517	328.307	3	000

Source: Field survey,2024

The Chi- Square value reveals the difference in the deviance an intercept only model (-2 log likelihood = 2951.824) and the final model containing all the independent variables (-2 log likelihood = 2623.517) after including the predictors the deviance is reduced by 328.307 which is the Chi-Square value that is use to test whether Change in intercept only is significantly greater than 0. A statistically significant result of this test is an indication that final model is a better fit to the data than the intercept only model. The result above reveals that the full model containing the research predictors

represent a significant improvement in the fits relative to the intercept only model. The likelihood ratio Chi-Square (X^2 = 328.307and P-Value <0.01).

Goodness of Fit

The Deviance and Pearson Chi-Square are test used in ordinal regression in determining whether the model fit the observed data well with a null hypothesis that the model fits the data. The result of the test is presented in table3 below

Goodness-of-Fit

Table 3: Goodness-of-Fit

	Chi-Square	df	Sig
Pearson	**23196.652**	**17277**	**1.000**
Deviance	**2600.310**	**17277**	**1.000**

Source: Field survey,2024

A non-statistically significant result under this test is means accepting the null hypothesis which indicates that the model fits the data. The result from the above table revealed that both Pearson and Deviance and Pearson Chi-Square (X^2 = 23196.652 and P-Value = 1.000) and Deviance Chi-Square (X^2 = 2600.310 and P-Value = 1.000) are non-statistically significant indicating a well fitted model.

Pseudo R-Square

Pseudo R-Square fit statistic for logistic regression is conceptually similar to the R-Square used in ordinary least square regression analysis. The Pseudo R-Square is calculated by taking the ratio of the maximized log likelihood under the final model to the maximized log likelihood under the intercept only model then multiply by 100. In general, the Higher the value of the Pseudo R-Square, the better the fit of the model. The result of the Pseudo R-Square is presented in table 4 below.

Pseudo R-Square

Table 4: Pseudo R-Square

Cox and Snell	**.613**
Nagelkerke	**.613**
McFadden	**.110**

Source: Field survey,2024

The table above reveals the result of the Pseudo R-Square for the model, which shows how much better the model fits the data in comparison with the intercept only model. For instance, the Nagelkerke and McFadden represent the proportionate reduction in the error of final model that containing all the predictors. Based on the result, the Nagelkerke Pseudo R-square value of 0.61, it means the model containing all the predictors exhibit 61% improvement in the fits relative to an intercept only model. While, McFadden Pseudo R-Square exhibit 11% improvement in the fits.

Test of Parallel lines

The test of parallel line in ordinal logistic regression is used to determine whether the slope coefficients of the predictors are equal across all response categories. the test is based on Wald statistics which is applied to check the assumption of proportional odds in ordinal logistic regression. Violation of this assumption implies that predictors variables are not consistent across all response categories and this affect the model efficiency.

The result of this test is summarized in the table below.

Test of Parallel Lines

Table5: Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	2659.989			
General	2413.504[b]	246.485[c]	267	.811

Source: Field survey,2024

The null hypothesis of proportional odds states that the location parameters (slope coefficients) are the same across response category, failure to reject this hypothesis implies that assumption of proportional odds is made, meaning that effect of independent variable on the cumulative probability of falling in a higher category does not vary across categories on the dependent variables. The result from the above table shows an insignificant P-Value 0.811 and therefore the null hypothesis cannot be rejected, hence the assumption of proportional odd model is met

Parameter Estimate

The parameter estimate reveals the effect of independent variables/predictors (Annual Performance evaluation report, 360-degree feedback appraisal technique and Management by objective) on the dependent variable (employee performance) using odd ratio.

Table 6: Parameter Estimates

	Estimate		Std..Error	P-Value	95% C.I.	
					Lower Bound	Upper Bound
Threshold						
[EMP =1.0]	5.272		1.049	0.000	3.216	7.327
[EMP =2.0]	8.149		0.935	0.000	6.316	9.982
[EMP =3.0]	12.237		1.018	0.000	10.242	14.232
[EMP =4.0]	15.120		1.104	0.000	12.957	17.284
Location						
APERS	1.162	2.279	0 .216	0.000	0 .738	1.585
FAT_360^0	0.365		0.172	0.000	0 .028	0.701
MBO			0.160	0.034	1.966	2.593

Source: Field Survey, 2024

The standard interpretation of the ordinal logistic regression coefficients is that for every one-unit increase in the independent variable/predictor the dependent variable/response variable is expected to increase in the ordered logit odds holding other independent variables in the model constant. In other words, the coefficients are interpreted as the estimated or predicted change in the log odds of being in a higher (as opposed to lower) category on the dependent variable per unit increase on the dependent variable holding other predictors constant.

The result of parameter estimates for annual performance evaluation report (APERS) shows that it is statistically significant and positive predictor of employee performance, where for every one-unit increase in the APERS, there is a predicted increase of 1.16 in the log odds of being at a higher level of employee performance.

360-degree appraisal technique was found to be positive and statistically significant predictor of employee performance, where for every one-unit increase in the 360^0 appraisal technique there is a predicted increase of 2.28 in the log odds of being at a

higher category on the employee performance scale. This means it has a positive influence on performance of employee.

Finally, Management by objective also shows a positive but less significant result. Implying that MBO is a positive predictor of employee performance. For every one-unit increase in MBO there is a predicted increase of 0.38 in the log odds of being at a higher category on the scale of employee performance.

Objective one: the effective of annual performance evaluation report (APER) in selected federal colleges of education in North eastern Nigeria. The study revealed that the federal colleges of education in North eastern Nigeria have annual performance evaluation report (APER) and this was largely acknowledged by the majority of the respondents. The analysis of the study rejects the null hypothesis which says that annual performance evaluation report (APER) has no significant effect on employee's performance thereby accepting the alternate hypothesis which says annual performance evaluation report (APER) has significant effect on employee's performance because the significance level is 0.000. the beta value here means that for every one-unit increase in the APERS, there is a predicted increase of 1.16 in the log odds of being at a higher level of employee performance.

Objective Two: the effect of 360 Feedback appraisal technique in selected federal colleges of education in North eastern Nigeria. In terms of effectiveness the study shows that the 360^0 Feedback appraisal technique is quite effective in offering a comprehensive analysis of the employees' performance at the selected federal colleges of education in North eastern Nigeria. The analysis of the study rejects the null hypothesis which says 360^0 Feedback appraisal technique has no significant effect on employees' performance thereby accepting the alternate hypothesis which 360^0 Feedback appraisal technique has significant effect on employee's performance because the significance level is 0.000. the beta value here means that for every one-unit increase in the 360 feedback appraisal technique, there is a predicted increase of 2.279 in the log odds of being at a higher level of employee performance.

Objective Three: the effect of Management by objective in selected federal colleges of education in North eastern Nigeria. As one of the appraisal techniques is defined as a result based evaluative programme (Choon & Embi, 2012). The result of the study is contrary to the above assertion, because the finding of the study shows that Management by objective appraisal technique has little or less impact on employees' performance. Again, it was noted that the process has not adequately helped in

identifying systematic factors that are barriers to the effective performance in the selected federal colleges of education in the north eastern Nigeria. The analysis of the study rejects the null hypothesis which says Management by objective has no significant effect on employee's performance thereby accepting the alternate hypothesis which Management by objective has significant effect on employee's performance because the significance level is 0.034. the beta value here means that for every one-unit increase in Management by objective there is a predicted increase of 0.365 in the log odds of being at a higher level of employee performance.

Conclusion

From the findings, the researcher concludes that, performance management system has a significant relationship with employees' performance in selected Federal Colleges of Education in north east Nigeria. This is because, Annual Performance Evaluation (APER) and 360-degree feedback appraisal techniques which are the components of performance management system was realized to have a significant and positive effect on the employees' performance in the selected Federal Colleges of Education. On the other hand, the study revealed that Management by Objectives which is another component of Performance Management System has less or little effect on Employee Performance.

Recommendations

From the empirical review, summary of findings and conclusions it was established that Performance Management System has a significant and positive effect on Employee Performance. In view of the above findings. It is therefore recommended that Federal Colleges of Education and other public organisations. should adopt performance management system to replace the existing annual performance evaluation report which is very narrow in scope, too formal and emphases on annual evaluation, but it is an important part of performance management system, in itself it is not Performance Management system, but it is one of the ranges of tools that can be used to enhance employee performance. There is a need for public organizations to start focusing on other remedial actions such counselling and training, once a poor performance is identified during appraisal instead of focusing much on imposing disciplinary actions as a remedial action. The three independent variables explain up to 61% of the variability in dependent variable (employees' performance) in the

selected federal colleges of Education based on Nagelkerke Pseudo R-square, other studies should explore more variables to fill the remaining gap of 39% of the remaining variability found in the dependent variable (employee's performance). This will further reveal more interesting finding that will improve on the general administration and management of the colleges and other public sector organisations. Besides, the study was limited to three variables; annual performance evaluation, 360-degree feedback appraisal technique and management by objective appraisal technique in selected Federal Colleges of Education in north east Nigeria. These are the construct that are explored in the research so it cannot be generalised to other construct with similar effect on employee performance.

The research is carried out in the selected Federal Colleges of Education in north east Nigeria, therefore might not be effective in other public organisations as they may have different characteristics and variability.

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REFERENCES

Adekoya, A.O., Oluseye S.A, & Kingsley, K.A. (2014). Performance Appraisal in The Nigerian Banking Sector: The Individual and Joint Variables Analyses. European Journal of Business and Management 6(5) 201-216

Afshan, S., Sobia, I., Kamran, A., & Nasir, M., (2012). Impact of training on employee performance study of telecommunication sector in Pakistan. Interdisciplinary Journal of Contemporary Research in Business, vol. 4 No. 6

Almawali, H., Adha Hafit, N. I., & Hassan, N. (2021). Motivational Factors and Job Performance: The Mediating Roles of Employee Engagement. International Journal of Human Resource Studies, 11(3), 67. https://doi.org/10.5296/ijhrs.v11i3.18856.

Alvi, M., Surani, M., & Hirani, S. (2013). The Effect of Performance Evaluation on Employee's Job Satisfaction in Pakistan International Airlines Corporation. Iqra University, MPRA Paper No. 46415. pp 69

Amiri, Mohammad, & Alireza Nobakht (2016). "Performance Management: An empirical study of selected manufacturing organisations in Pune, India." Training and development pp 81.

Ayandele, I. A. & Isichei, E. E. (2013). Performance management system and employee job commitment: An empirical study of selected listed companies in Nigeria. International Journal of Management, 2(1) 1 – 13.

Bipp, T. & Dam,K. (2014) Extending hierarchical achievement motivation models: The role of motivational needs for achievement goals and academic performance', Personality and Individual Differences, 64(7), 157-162.

Bridger, E. (2014). Employee engagement. London: Kogan pp 23-34

Bruce, J. (2014). Risky business: How social psychology can help improve corporate risk management. Business Horizons, 57(4), 551-557.

Caruth, L. D., & Humphreys, H.J. (2008). Performance appraisal: essential characteristics for strategic control. Measuring business excellence, 12 (3), 24-32.
Clake, R. (2011). Chartered Institute of Personnel and Development Annual Conference and Exhibition, Manchester, UK, November 9-10. Strategic HR Review, 10(2). 92.
Cyril, O.I. & Christopher O.C (2012). Workers' Perception of Performance Appraisal in Selected Public and Private Organisations in Lagos Metropolis, Nigeria. International Journal of Human Resource Studies ISSN 2162-3058. pp 217-356
Denby S, (2010). The importance of training needs analysis. Industrial and commercial training, 42 (3), 147-150.
DeNisi, A. S., & Sonesh, S. (2010). The appraisal and management of performance at work. In S. Zedeck (Ed.), APA handbook of industrial and organisational psychology: Selecting and developing members for the organisation, 2(2), 255–279.
Drucker, P. (2013) People and Performance. London: Routledge. pp 32
Fatile, J.O. (2012). Principles of Public Personnel Management, *Monograph Series,* Lagos: Department of Public Administration, Lagos State University, Ojo. pp 69-72
Gold, J., Thorpe, R., & Mumford, A. (2010). Gower handbook of leadership and management development. Burlington, VT: Gower. pp 27-36
Gómez-Miñambres, J. (2012) _Motivation through goal setting Journal of Economic Psychology, 33(6), 1223-1239.
Grund, C. & Przemeck, J. (2012) _Subjective performance appraisal and inequality aversion ', Applied Economics, 44 (2), 2149–2155.
Güngör, P. (2011). The Relationship between Reward Management System and. Procedia Social and Behavioural Sciences, 1510–1520.
Hon, H., Wilco W. & Chan, L. (2013) Overcoming work-related stress and promoting employee creativity in hotel industry: The role of task feedback from supervisor, 'International Journal of Hospitality Management, 33(2), 416-424.
Idowu, A. (2017). Effectiveness of Performance Appraisal System and Its Effect on Employee Motivation. Nile Journal of Business Economics, vol. 3(5). DOI:10.20321/nilejb. v3i5.88
Idowu, A. (2017). Effectiveness of Performance Appraisal System and Its Effect on Employee Motivation. *Nile Journal of Business Economics*, vol. 3(5). DOI:10.20321/nilejb. v3i5.88
Kuranchie-Mensah, E. B., & Amponsah-Tawiah, K. (2016a). Employee motivation and work performance: A comparative study of mining companies in Ghana. *Journal of Industrial Engineering and Management*, 9(2), 255–309. https://doi.org/10.3926/jiem.1530.
Kuswati, Y. (2020). The Effect of Motivation on Employee Performance. *Budapest International Research and Critics Institute* (BIRCI-Journal): Humanities and Social Sciences, 3(2), 995–1002. https://doi.org/10.33258/birci.v3i2.928.
Madison, J. (2016). Performance Management Revolution. Harvard Business review: October 2016 issue. pp 33
Maley, J. (2013) Hybrid purposes of performance appraisal in a crisis ', *Journal of Management Development*, 30(10), 1093 – 1112.
Mollel E. R., Mulongo L. S. and Razia M (2017). The influence of performance appraisal practices on employee productivity: A case of Muheza District, Tanzania. *Issues in Business Management and Economics* 5 (4), 45-59
Mugenda, A & Mugenda, O. (2012). Research Method Dictionary, Nairobi, Kenya arts Press 2012
Mwema, N. W. & Gachunga, H. G. (2014). The influence of performance appraisal on employee productivity in organisations: A case study of selected WHO offices in East Africa. *International Journal of Social Sciences and Entrepreneurship*, 1 (11), 324-337.
Newstrom, J. (2011). Organisational behaviour. Boston: McGraw-Hill/Irwin. Page 13
Nilasari, B. M., Nisfiannoor, M., & Devinta, F. R. M. (2021). Changes in Motivation That Affect Employee Performance During the Covid 19 Pandemic. *Jurnal Aplikasi Manajemen*, 19(2), 435–447. https://doi.org/10.21776/ub.jam.2021.019.02.19.
Odhiambo, E. (2015). The Effect of Performance Management Practices on Employee productivity: A case study of Schindler Limited. *United States International University – Africa*.USIU-A Digital Repository pp 234-260

Odunayo P., Salau O., Fadugba O., Oyinlola C. O.& James O. A. (2014). Modelling the relationship between performance appraisal and organisational productivity in Nigerian public sector. *Economics Management Innovation*, 6(1), 2-16.

Okumu, B. O. (2012). Effects of Employee Performance Management Practices on Employee Productivity in Kenya Airways. Degree in Masters of Business Administration (Aviation), *School OF Business and Economics*, Moi University. pp 234-267

Oluwatosi (2015). The impact of performance management on productivity of public sector organisations. International journal of Social Sciences, 1(11), 1 - 13.

Osabiya, B. J. (2014). Effectiveness of performance appraisal as a tool to measure employee productivity in organisations. *Journal of public administration and governance*, 4(4), 135148

Parker, D., Waller, K., & Xu, H. (2013). Private and public services: productivity and performance migration. *International Journal of Productivity and Performance Management* 62(6), 652-664.

Pat-el, R., Tillema, H. and Sabine W. (2012) Effects of formative feedback on intrinsic motivation: Examining ethnic differences, 'Learning and Individual Differences, 22(4), 449-454.

Petiho Numbu, L., & Bose, U. (2019). The Impact of Motivation On Employee's Performance: Case of South Ural State University. *International Journal of Research and Analytical Reviews* (IJRAR) Www.Ijrar. Org, 825. www.ijrar.org.

Puhakka, M. (2018). Performance Management in a Public Sector Organisation: Creating.

Raza, M. Y., Akhtar, M. W., Husnain, M., & Akhtar, M. S. (2015). The Impact of Intrinsic Motivation on Employee's Job Satisfaction. *Management and Organizational Studies*, 2(3). https://doi.org/10.5430/mos.v2n3p80.

Sahoo, C. and Mishra, S. (2012) Performance management benefits organisations and their employees, '*Human Resource Management International Digest*, 20(6), 3 –5.

Salau, P. O., Olumuyiwa, F. O., & Esther, O. A. (2015). Modelling the relationship between performance appraisal and organisational productivity in Nigerian public sector. *Journal of global Economic*, 3(2), 129-145.

Sapru, R.K. (2013): Administrative Theories and Management Thought. Delhi, India. PHI Learning Private Limited. pp 23

Sillup G P, Klimberg R (2010), „Assessing the ethics of implementing performance appraisal systems", *Journal of Management Development*, 29(1) Page 44-61

Singh, V.K., Kochar, B. and Yüksel, S. (2010). An Empirical Study on the Efficiency of Performance Appraisal System in Oil and Natural Gas Commission (ONGC), *India İşletme Araştırmaları Dergisi* pp 65-78

Sparrow, P. (2012). Human Resource Management in Context: Strategy, Insights and Solutions, 3Â edition, By David Farnham, London: *Chartered Institute of Personnel and Development*, 2010, 506Â., ISBN: 978-18439-8259-3. Relations Industrielles, 67(1), 163-170

Tuytens, M. and Devos, G. (2012) Importance of system and leadership in performance appraisal ', Personnel Review, 41(6), 756 – 776

Vukotich, G. (2014). 360° Feedback: Ready, Fire, Aim-Issues with Improper Implementation. Performance Improvement., 53(1), 30-35.

Yadav, S. (2021). Changing scenario of business and management. Retrieved from https://www.bookrivers.com

Zamani, N. F. M., Ghani, M. H. M., Radzi, S. F. M., Rahmat, N. H., Kadar, N. S. A., & Azram, A. A. R. (2021). A Study of Work from Home Motivation among Employees. *International Journal of Asian Social Science*, 11(8), 388–398. https://doi.org/10.18488/journal.1.2021.118.388.398.

Zhang, Y. Y. (2012). The impact of performance management on employee performance. MSC Thesis, University of China. pp 210-222