

**EFFECT OF SELECTION PROCESS ON LABOUR TURNOVER AND
PRODUCTIVITY OF EMPLOYEES
(A STUDY OF NIGERIA BOTTLING COMPANY PLC)**

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Abstract

This research study is primarily based on the “Effect of Selection Process on Labour Turnover and Productivity of Employee of Nigeria Bottling Company, Ikeja Branch. Questionnaire were examined on 120 employees of the company’s human resources department and empirical analysis of the research study shows that adopted measures of Selection Process was found to be statistically significant towards achieving Labour Turnover and Employees Productivity as evidenced from the two models fitted. This indicates that selection process do actually influenced Labour Turnover and Productivity of Employees in an organization. In addition, analysis also revealed that the effectiveness of selection process on labour turnover could lead to job satisfaction. However, training also improves the performance of employee and gives more job security to improve productivity as opined by majority of the participants.

Keywords: staff turnover, employee performance, labour costs, resignation, productivity, selection

Introduction

Employees turnover refers to the proportion of employees who leave the department over a set period (often on a year-to-year basis), expressed as a percentage of total workforce numbers at its broadest. According to Grobler, Warnick, Carrel, Elbert, & Hartfied, (2006) and Nel, Werner, Haasbroek, Poisat, Sono, & Schultz, (2008), the term is used to encompass all leavers both voluntary and involuntary including those who resign, retire, or are made redundant. This scenario may be described as overall or crude employee turnover (Lee, 2011). It is also possible to calculate more specific breakdowns of turnover data such as redundancy related or resignation levels. In the view of Abbasi and Hollman (2000), employee turnover is the rotation of workers around the labor market between firms, jobs and occupations and between the states of employment and unemployment.

Productivity is a very important issue for every organization and is thus mostly affected by several factors including employee turnover. Employee turnover is considered to be one of the

challenging issues in business nowadays and it is becoming a major problem among most companies in the world, especially in low paying jobs.

Employee turnover has some significant effects on organizations; new employees must be hired and trained, it is also needed to consider the time required for a new employee to be effectively productive. Turnover is a costly problem that has adverse effect on productivity. The problem of turnover can be understood by the popular phrase nowadays that they no longer stay in any job for life, suggesting that the length of time employees spend working for others has reduced very drastically in recent years. Turnover equally increases where employees have relatively poor relations with their employers or managers. The employees who feel that manager is unfair or unfriendly will always feel like quitting the job. Employees are concerned with the development and use of appropriate technology for the achievement of enterprise goal. Also, people in their various endeavors in life directly or indirectly examine, manipulate or exploit their immediate environment, the consequence of which are later translated to either challenges or prospect of their enterprises. Controlled turnover can be healthy because it copies away non-performers and brings in new hires with fresh blood, ideas and approach to an entrepreneur.

Selection and recruitment is a step in management development, which help fundamentally to find and attract potential employees who will eventually fill vacant positions. In management, professionalism developed the states of selection and recruitment when employed in conjunction with other tools of personal assessment as well as complaining input of sound job design program may significantly facilitate the development and maintenance of efficient work force and indeed the utilization and conservation of human resources. In fact, in a firms working life, abundant evidences clearly proved that these all the things being equal, are creditable predictors of employee's job performance.

However, the Nigerian societal immorality and political influence have created discrepancies in selection procedures through such vices as favouritism, tribalism, and nepotism. These mostly constitute part of the problems arising from vague description of the job by these personnel.

In the light of these problems, the needs for a close up examination of the whole selection process on labor turnover in Nigerian bottling company plc becomes necessary. This research shall focus on determining the magnitudes of effect labor turnover has on productivity and ascertain the extent to which the company's ownership structure with its attendant bureaucratic red tape of selection process has affected the company's productivity.

To effectively carry out this research, the following research questions are raised and hypothesized: Is there exist relationship between selection process and labour turnover in Nigerian companies, is there any relationship between selection process and workers' productivity?

Literature Review

Employee turnover relates to the numbers of workers leaving employment and being replaced within a given period against the ratio of the average labour force maintained at a time. People leave employment for many reasons, some of which are outside the power of the employer to influence, known as outside factors, and unrelated to work, such as people moving away when a spouse or partner is relocated.

Functional turnover includes all resignations which are welcomed by both employers and employee alike. The major examples are those which stem from an employee's poor work performance or failure to fit in comfortably with an organizational or departmental culture. Others are the push factors and the pull factors leading to unwanted turnover.

The issue of bad relationships was most commonly mentioned according to Taylor (2014), lending support to the often stated point that people leave their managers and not their organizations.

According to Armstrong (2004), employers should try to understand what employees want to hear and plan its communication strategy to suit it.

Daisy, Muathe, and Nzulwa, (2013) argue that organizations that put in place practices like effective and equitable compensation structure, appropriate promotional scales, enhanced development and training opportunities, will motivate their employees to stay.

Sutherland (2012) further explains that proficiently planned and well-executed employee retention strategy will significantly enhance productivity and reduce employee turnover. According to Middleton, Ziderman, and Adams, (2014) “Both common sense and economic research support the idea that the gravity of a nation’s workforce is important to economic growth and social development. Two factors are generally considered to be the prime determinants of the quality of a work force.

One is labour productivity, or the value of the goods and services produced by a worker. The second is the flexibility of the work force or the ability of workers to move across sectors of the economy and between industries as the structure of the economy changes”. This can better be achieved through turnover reduction in organizations. Productivity is a critical determinant of organizational profit ability and survival.

The level of productivity in an organization depends on two major factors, namely human performance and technology. Human performance is directly related to employee productivity. In the context, productivity is an index that measures output relative to the input used to produce them. This is often expressed as the ratio of output to input. Productivity has important

implication for the business organization and for the entire nation. Productivity increases add value to the economy while keeping inflation in check (Stevenson, 2002).

According to Shaw, Marwin and Wright (2010) employee turnover is a much studied phenomenon, but there is no universally accepted account for why people choose to leave organizations. Hom and Griffeth (2009) reviewed many studies on employee turnover and posit that predominantly, there are instances where the employee makes the decision rather than in the cases of involuntary turnover.

Morrell, *et al.*, (2004) believe that there is no accepted theoretical framework for clearly understanding the turnover characteristics and processes completely, but that factors such as job satisfaction and dissatisfaction, labour market situation, equity variables, the question of psychological contract, are among the important factors that influence employee turnover (Hom; Kinicki, 2008). (Sungmin 2009). Herzberg (2010) in furtherance to his earlier works, differentiated factors leading to satisfaction from those leading to dissatisfaction as Hygiene and motivation factors.

According to two-factor theory the presence of hygiene factors does not result in satisfaction but however their absence certainly leads to dissatisfaction in employees. In contrast the presence of motivation factors in an organization leads to higher satisfaction and their absence results in no satisfaction in employees (Sungmin 2009).

Basing on this theory, Coetzee and Schreuder (2013) argue it is therefore important that organizations have both hygiene factors and motivation factor to keep their employees satisfied so that they will not leave the organization. Motivation factors are often said to lead to high

retention but the absence of hygiene factors may result in increased turnover (Coetzee and Schreuder 2013).

Consequences of turnover may be at both either organizational or personal levels having both positive and negative consequences. Negative consequences to organizations includes, cost both tangible like recruitment and selection, training and development, low productivity and intangible cost like moral impact, stimulation of further turnover, impact of work load , disruption of team , and distraction of job performance. Positive consequences include dislocation of poor performer, improvement, flexibility, adaptableness, conflicts resolutions, and a reduction in other withdrawal behaviors (Mobley, 2000). Negative consequences to individual include high expectation which might not materialized, losing seniority, and disruption of social life (Mobley, 2000; Roseman, 2004). Positive consequences include higher income, job challenge, escape from stress environment. (Mobley, 2000). Generally, turnover is very costly especially at the executive levels. A study had estimated the cost of replacing an executive by 64,000 American Dollar and the cost of unscheduled absence averaging as high as 757 American Dollar per employees (Greenberg and Baron, 2003).

Research also indicates that investments in training employees in problem-solving, decision-making, teamwork, and interpersonal relations result in beneficial to firm level outcomes (Russell, Terberg, and Powers, 2005; Bartel, 2010; Cianni and Wnuck, 2007; Ettington 2009; Barak, Maymon, and Harel, 2015). Training also has a significant effect on employee performance. Firms can develop and enhance the quality of the current employees by providing comprehensive training and development. Indeed, research indicates that investments in training employees in problem-solving, teamwork and interpersonal relations result as beneficial to firm

level outcomes (Russell, Terberg, and Powers 2005; Bartel 2010; Cianni and Wnuck 2007; Ettington 2009; Barak, Maymon, and Harel 2015).

Methodology

Empirical data are collected by examining questionnaire on the staff of the company. This research considered questionnaires that covered list of employees provided by the Human Resource Department of Nigerian Bottling Company PLC, Ikeja. Thereafter, a Cronbach's Alpha reliability test was carried out on the responses gathered and this gives a statistic of 0.901 which implies 90.1% reliability on the survey.

Data Analysis

The analytical technique adopted for this research is Multinomial Logistic regression. Basically, under logistic regression analysis, we employed the following procedures:

- Fitting logistic regression model
- Wald Test of significance
- Goodness of fit, which are of
 - i. Cox and Snell's test goodness of fit
 - ii. Hosmer and Lemeshow Chi Square test of goodness of fit.
 - iii. Negel kerke Goodness of fit test

The specified multinomial logistic model from the research is expressed as;

$$Y = \pi(X) = \frac{e^{\beta_0 + \beta_1 X_1}}{1 + e^{\beta_0 + \beta_1 X_1}} + e_i(1)$$

Where β_0 = the constant value (intercept) which predicts the level of employees productivity when variable of work life balance is kept constant.

β_1 is the coefficient of predictor variable selection process?

X_1 is the measures of selection process

Y is the measure of employees' productivity and Labour turnover

Table 1: Multinomial Logistic Regression Model Result

(Dependent variables = Labour Turnover (Q3) and Productivity (Q21))

MODELS	VARIABLES	ESTIMATOR	ESTIMATES	SIGNIFICANCE
			(-2log Likelihood)	
LT = $f(\text{SP})$	Constant	Final (β_0)	23.290	0.000
	Selection Process	β_1	76.633	0.000
P = $f(\text{SP})$	Constant	Final (β_0)	21.109	0.000
	Selection Process	β_1	91.286	0.000

Source: Extracted from SPSS, Version 20 Output

Table 2: Pseudo R-Square

Models	Cox and Snell	Nagelkerke	McFadden
LT = $f(\text{SP})$	0.317	0.345	0.153
P = $f(\text{SP})$	0.394	0.430	0.201

Source: Extracted from SPSS, Version 20 Output

Table 3: Test of Hypothesis Relating Selection Process and Labour Turnover

Predictor	Wald value	DF	Significance Value
Selection Process	303.424	1	.000

Source: Extracted from SPSS, Version 20

Table 4: Test of Hypothesis Relating Selection Process and Employee Productivity

Predictor	Wald value	DF	Significance Value
Stability of Wealth	8.460	1	.004

Source: Extracted from SPSS, Version 20

Table 1 specified the multinomial logistic model results for labour turnover and productivity under study. The final model information value of 49.281 with significance value of $0.000 < 0.05$ signifies that the overall model fitted is significant at 5% significance level based on the predictor variable of “Selection Process” considered under study.

Thus, the fitted model from the result in table 4.3 can be expressed as;

$$\pi_{Labour\ Turnover} = \frac{e^{\beta_0 + \beta_1 X}}{1 + e^{\beta_0 + \beta_1 X}} \quad (4.1)$$

$$\pi_{Productivity} = \frac{e^{\beta_0 + \beta_1 X}}{1 + e^{\beta_0 + \beta_1 X}} \quad (4.2)$$

Where β_0 = the constant value (intercept) which predicts the level of LabourTurnover when variable measuring the scales of “SelectionProcess” cannot be accounted for.

β_1 is coefficient of the predictor variable of average response on “Selection Process”.

X = Average responses on Selection Process

Substituting the estimates of equation 4.1 and 4.2 into the model, we have;

$$\pi_{Labour\ Turnover} = \frac{e^{23.290 + 76.633X}}{1 + e^{23.290 + 76.633X}} \quad (1)$$

$$\pi_{Productivity} = \frac{e^{21.109 + 91.286X}}{1 + e^{21.109 + 91.286X}} \quad (2)$$

The intercept β_0 of 23.290 and 21.109 represents the multinomial logistic estimate for the rate of Labour Turnover and Employee Productivity of Nigeria Bottling Company. The multinomial logit estimate of 76.633 shows a unit improvement in predicting the Labour Turnover through the company's selection process while the logit estimate of 91.286 also shows a unit improvement in predicting the employee productivity through the same selection process. The significance value of the measure of "Selection Process" as reported indicates that the estimates of the regression models coefficient are significantly different from zero and this shows that the variable of "Selection Process" considered significantly predict both the Labour Turnover and Employee Productivity since its respective significance values (p-value=0.000) are less than 1%, 5% , and 10% significance value. This implies that "Selection Process" is one of the major determinants of "Labour Turnover" and "Employee Productivity" in a manufacturing company taking Nigeria Bottling Company of Nigeria into cognizance.

The Nagelkerke Pseudo R-Square value of 0.345 implies that 34.5% variation in "Selection Process" of an organization can be assumed on the Labour Turnover. In addition, Pseudo R-square value of 0.430 also implies that 43% variation in "Selection Process" can also be assumed on Employee Productivity. Though the fitted models can be said to have captured goodness of fit by these results, their low values however indicate that there are many other germane factors within the organization that influenced Labour Turnover and Productivity and selection process can only be considered as just one of them.

Hypotheses Testing

The hypotheses of this research work were tested using Wald test of significance of the Multinomial logistic regression model extracted from the parameter estimates.

Decision rule:

Reject H_0 if $\alpha=0.05$ level of significance is greater than the probability value (P-value) generated for the Wald statistic value. Otherwise, accept H_0 . For the purpose of this research work, the hypotheses was tested at 95% confidence level i.e. $\alpha=0.05$.

Hypothesis One

H₀₁: There is no significant relationship between the selection processes employed and Labour Turnover.

H₁₁: There is significant relationship between the selection processes employed and Labour turnover.

Average response of Question 1, 2,7,8,11,13 and 16 were used to test the significance of the hypothesis on Labour Turnover.

From the results presented in table 3 above, the Wald test statistic of 303.424 with degree of freedom 1 and a corresponding p-value of 0.000 where $\alpha = 0.05$ level of significance indicates that since P-Value of $0.009 < 0.05$, we reject the null hypothesis and thereby conclude that there is significant relationship between the selection process employed by various sectors and Labour Turnover.

Hypothesis Two

H₀₂: The selection process employed does not significantly help organization achieve productivity.

H₁₂: The selection process employed does significantly help organization to achieve productivity.

Question 21 was used to test the significance of the hypothesis.

From the hypothesis tested in table 4 above, the Wald test statistic is 8.460 with degree of freedom 1 and a corresponding p-value of $0.004 < 0.05$ level of significance. Since P-Value of $0.004 < 0.05$, we fail to accept H_{02} and thereby conclude that the selection process employed do significantly help organization to achieve productivity.

Conclusion and Recommendations

Many factors influence employee turnover such as the pay structure, work conditions which in turn impair productivity. Based on a wealth of research on the employee turnover phenomenon there is evidence that the much relevant issue of voluntary depends highly on human performance and where this is inadequate the obvious result will be low productivity.

Employees are concerned with the development and use of appropriate technology to achieve organizational goals, therefore, efforts to attract and retain a desired level of employees at any time is critical in enhancing organizational productivity.

In order to reduce the negative effects of employee turnover on productivity among the Nigerian bottling company plc, the following recommendations were made, based on the results of this study:

From the employees' point of view, pay is very critical for their retention. Nigerian bottling company plc, no matter how big, should benchmark their pay in terms of minimum wage act. This will help in attracting and retaining good employees.

In addition, good managerial supervision is important, promoters should avail themselves of basic management and leadership improvement courses usually run in business schools to keep

abreast with current managerial and leadership techniques. Sensitivity training will be very helpful.

More so, Nigerian bottling company plc should put proper structures in place that will ensure a rise through the leader of employees. This will enable them avoid serving as training grounds for their competitors by losing their good employees to them at frequent intervals.

Furthermore, government should direct the Nigerian bottling company to formulate – friendly policies to enable employees, particularly women - balance their work and family roles.

In conclusion, Nigerian bottling company plc should have employee hand book, a document showing their rules and regulations for the guidance of their employees. Absenteeism is often an indication that there are problems and is used to escape. Proper training will afford employees reasonable opportunity to perform satisfactorily and avoid attitudinal failures.

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