Assessing the Impact of Work Environment on Employee Engagement among Non-Academic Staffs of the University

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Abstract

Aim of the Study - The objective of this study was to access the impact of work environment on employee engagement among the non-academic staffs of the university in Nigeria. Social exchange theory (SET) was utilized in developing the research framework. Methodology - A total of 150 non-academics staff from l University, representing a response rate of 63.3% participated in this study. Data were collected through a self-administered questionnaire. The correlation and the hypothesis were tested using the statistical package for social sciences (SPSS 2.0). The Cronbach’s Alpha value for the variables ranging from 0.724 to 0.804 indicates very good reliability of the research instrument.

Findings - The findings indicate a moderate relationship between the work environment and employee engagement, and the hypothesis is not supported.

Practical Implications - The study will provide direction to both the management and the university staff for them to proactively focus on providing a healthy and comfortable working environment that will boost engagement, which lead towards enhancing the performance of university staff, and also the university administrators in various ways.

Keywords
Work Environment, Employee Engagement

How to cite?

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Introduction

Employee engagement has grown into a key business priority for top leaders, highly engaged workers in a competitive market can intensify innovation, productivity as well performance while minimizing costs related to recruitment and retention (Sibanda & Ncube, 2014). Engaged employees are individuals that offer full discretionary effort while working, and are tremendously enthusiastic and committed to their work, whereas not engaged employees are those who are motivationally detached from work, as well lacks the vigour to labour hard as well not thrilled at work (Perrin 2009; Bakker et al., 2008).

Frauenhiem (2006) found that satisfaction scores with all major categories of work in the United States have dropped, and a little over half of the responded employees in the study rated themselves as engaged or highly engaged. This issue of disengagement has an effect on big and small organizations globally, causing them to incur excess costs, affect the perform on essential tasks, and to bring about widespread customer dissatisfaction (Rampersad, 2006). Similarly, Nathan (2004) observed that for decade’s poor levels of engagement and employees’ dissatisfaction influence performance. Employee disengagement is still a common problem in the Federal University of Technology in Nigeria and it significantly affects the bottom-line performance level.

Furthermore, Chandrasekar (2011) was of the view that work environment in most of the industry is risky and not healthy, these consist of badly designed workstations, inappropriate furniture, shortage of ventilation, unsuitable lighting, unnecessary noise, inadequate measure of security. Individuals operating in such surroundings are exposed to occupational disease and it has an influence on the employee's engagement. It has been perceived that employees that operates in a helpful and supportive place of work are inspired to be productive and efficient in discharging their duties (Clements, 1997). Furthermore, Akinyele (2010) reported that 86% of output problems stem directly from the institution’s work environment, and as such among the problems that call for this study is lack of enough offices, unsupportive working environment for employees to do their work effectively. Based on the above, it comes to reason that negative behaviour at work in the Federal University of Technology could be associated with the work environment.

Previous studies that investigated some of the factors predicting employee engagement include: reward and recognition, job characteristics, supervisor support and organizational justice (Hackman & Oldham, 1980; Hakanen et al., 2006; Saks, 2006); pay and benefits (Buckingham & Coffman 2005); align efforts with strategy (Development Dimensions International DDI, 2005); and feeling valued and involved (Robinson et al., 2014). Furthermore, Saks (2006), Macey & Schneider (2008) stated that research on work environment and employee engagement are still lacking which means that more research on employee engagement needs to be conducted. All these literatures are limited and shows the need to investigate the influence of work environment and employee engagement. The aim of this study is to assess the impact of work environment on employee engagement among non-academic staff of university.

Literature Review

Previous literatures were reviewed based on the variables for this study; employee engagement and work environment.

Employee Engagement

Fleming and Asplund (2007) considered employee engagement as “the capability to arrest the heads, hearts, and souls of your employees to infuse an intrinsic desire and enthusiasm for excellence”, hence adding a spiritual element to Gallup’s reputable cognitive and emotional aspect of an engagement. Song et al. (2012) found that employee engagement has a positive effect on individual performance, knowledge creation and financial returns. Given the various benefits of employee engagement in organizations, it is unsurprising that
Employee engagement has sparked human resource development scholars’ interest. Susi & Jawaharani (2011) was of the view that Work-life balance is key driver of employees to employee engagement. Ram & Gantasala (2011) examined the antecedents and consequences of employee engagement. Hence, engaging both managers and workers are responsible to achieve organizational objectives and goals (Metha & Metha, 2013). Employee engagement is the process for employees and how their presence can improve the work efficiency and progress of the organization in totality (Bhatla, 2011). He further emphasis on the challenges faced by the human resource managers to improve employee engagement for the survival of the organization.

As indicated by Gallup (2002), that there are three types of individuals: engaged workers, disengaged workers and actively disengaged workers. Hence the need to study employee engagement.

**Work Environment**

Working environment is considered as a different characteristic of work like the way job is done and completed, involving the tasks like task activities, training, control on one’s own job-related activities, a sense of achievement from work, variety of tasks and the intrinsic value for a task (Sousa-Poza & Sousa-Poza, 2000).

Kohun (1992) describe work environment as an entity which involves the entirety of powers, activities and other compelling elements that are currently and or possibly contending with the worker’s activities and performance. The working environment is the sum of the interrelationship (Rich et al., 2010). Harter et al. (2002) viewed work environment as an environment that attracts individuals into organization, encourages them to remain in the organization workforce and enables them to perform effectively. Work environments provide conditions for workers high and effective performance, making the best use of their skills, competence, knowledge and the available resources for the provision of high-quality services (Leshabari et al., 2008). Meaningful workplace environment is regarded as a key determinant of employee engagement (Popli & Rizvi, 2016; Anitha, 2014).

Work environment was observed to be one of the important factors that decide the level of engagement of a worker (Miles, 2001). Several studies by Harter et al. (2002); Holbeche and Springett (2003); May et al., (2004) and Rich et al. (2010) exhibit that employee engagement is the outcome of different features of the work environment. Deci and Ryan (1987) states that management which develops an encouraging work environment normally exhibits concern towards workers needs and thoughts, offers constructive feedback and urges employees to voice their worries, to build up new skills and to tackle issues that are work-related. As a result, work environment that influence employees to focused on their job and interpersonal agreement, is measured to be a key determinant of employee engagement (Yu, 2013).

Furthermore, previous study by Islam and Shazali, (2011) demonstrated that physical workplace prompts to healthier service to clients and accomplish higher production. In addition, the study states that work environment include good culture, working with a good team, good boss, physical surrounding, job safety, sustainable compensation package, availability of food and drink in the place of work encourages greater performance in the organization (Islam and Shazali, 2011).

**Work Environment and Employee Engagement**

Working environment is the needs to consider variety of issues, creating improved and higher performing work environment requires a consciousness of how work place affects behaviour and how behaviour itself drives workplace performance (Rich et al., 2010). Barry (2007) argued that in a relationship involving job, working environment and apparatus of work, work environment turns into essential part of work itself. Therefore, increasing understanding of work environment is based on recognition that space has diverse characteristics, it executes various functions and there are distinctive ways individuals work.
Lockwood (2005) discovered that most of the employees in an organization trusted healthier working environment, result into an improved general employee engagement. Furthermore, a study by Anitha (2014) found a significant relationship between work environment and employee engagement. Earlier studies have shown work environment as a significant factor that determine the level of employee engagement. Studies by Miles (2001) and Harter et al., (2002) found that different aspects of place of work can amount to different levels of employee engagement. Hence, this view was supported by scholars (e.g., Holbeche & Springett 2003; May et al., 2004; Rich et al., 2010). According to Deci and Ryan (1987) organizations that take part in their roles and demonstrate their concern about worker’s needs and feelings, provide positive feedback and allow employees to make known their concerns, develop new skills and solve work-related problems are considered as management that fosters a supportive working environment.

Kahn (1990) found that helpful and trusting interpersonal relationships as well helpful administration promotes psychological safety. Employee feel secured in a work environment that was characterized by honesty and supportiveness (Miles, 2001). Supportive place of work permit members to test and try out new things and even fail without fear of the consequences (Kahn, 1990). In similar vein, studies by Popli and Rizvi, (2016), Anitha (2014) also showed that meaningful working environment is considered as important determinant of employee engagement.

In another study by American Society of Interior Designers (ASID,1996) found that a working environment permits a resourceful work by the employee and further, asserts that issues of privacy and adaptable workspaces, integrated personal comfort and visual appeal as important aspect of working environment. Furthermore, Morrison (1996) was of the view that working environment plays an essential part in inspiring workers to carry out the work assigned to them. Skills required comprises the capacity to engage workers in common objective setting, make clear role expectations and present normal performance feedback (Taufek, Zulkifle, & Sharif, 2016). Similarly, Spector (1997) noted that workplace consist of well-being of workers, job security, excellent relationship with co-workers, acknowledgment for a fine performance as well involvement in the decision-making process of the organization. Chandrasekar (2011) argued that time and vigour will also be needed to provide pertinent performance incentives, managing processes, providing adequate resources and work surroundings coaching.

However, Spector (1997) observed that, majority of businesses disregards the workplace inside their organization bringing about the unpleasant outcome on the performance of their workers.

**Underpinning Theory**

High level integrated work environment encourages employee engagement Khan (1990), while an increase in the degree of work environment provide conditions for workers high and effective performance, making best use of their skills, competence, knowledge and the available resources for the provision of high-quality services (Leshabari et al., 2008). From a social exchange perspective, employees seem to express more appreciation on the organization’s investments and support by exhibiting in return positive behaviours toward the organization. Scholars have argued that employees aim to reciprocate in kind (e.g., Morrison, 1996; Snape & Redman, 2010). Similarly, Morrison (1996, p. 503) argues that to the extent that the development of a long-term relationship with employees will be more engaged in their contextual behaviours.

In defining work environment with employee engagement, the current study will rely heavily on social exchange theory (SET) (Blau, 1964). In the current study, social exchange theory provides opportunity in explaining the relationship between work environment and engagement of the non-academic staff of the Federal University of Technology.
Framework

Figure 1: Framework

Hypotheses
Depiction upon the social exchange theory (Blau, 1964) and preceding empirical studies (Joarder & Sharif 2011; Huang et al., 2003) hypothesis will be developed for empirical testing and validation as regards to this study. The study contained two variables which are: employee engagement (dependent variable), all conceptualized as one-dimensional, while (work environment) as independent variable. Thus, in this study, one hypothesis was developed, tested and validated.

H1: There is a significant relationship between work environment and employee engagement

Methodology
A quantitative approach was used in this study, the adoption of cross-sectional design was also considered. following Alderfer (1972) a simple random sampling technic was employed. A structured survey questionnaire was administered to the non-academic staffs of the university in Nigeria for data collection. Following previous literature, the items were adapted, the items for measuring work environment adapted from Chandrasekar (2011) and employee engagement adapted from Gallup Organization (2008). A five-point Likert scale ranging from 1. = “strongly disagree,” 2. = “disagree,” 3. = “neutral,” 4. = “agree,” and 5. = “strongly agree was employed in this study to measure all the variables. The statistical package for social sciences (SPSS) was used for the data screening and analysis. In this study one hundred and fifty (150) questionnaires were duly completed, returned and retained for the analysis out of (237) two hundred and thirty-seven questionnaires administered, hence, representing 63.34% response rate.

Results
In this study data screening and analysis was carried out by employing the statistical package for social sciences (SPSS), the normality test, linearity, reliability analysis, descriptive statistics of the variables, correlation analysis and regression analysis on the relationship between work environment and employee engagement as the variables for this study.

Normality Test
The study employed the assessment of the skewness and kurtosis to examine the normality of the data collected. Following the suggestion of Hair et al. (2010) the acceptable threshold for skewness and kurtosis is below ±3 and below ±8 for kurtosis. The findings in table 1 shows that the values of skewness and kurtosis for the variables are below the threshold. As such, this result shows the data collected for this study is normally distributed. Furthermore, the histogram with normality plot presented in Figure 1 depicts that the data collected in this study is neither negatively nor positively skewed. Rather, the data converged at the centre which explained why the normality plot is bell-shaped.
Table 1 - Results of Normality

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Skewness Statistic</th>
<th>Kurtosis Statistic</th>
<th>Std. Error Statistic</th>
<th>Std. Error Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOE</td>
<td>3.09</td>
<td>.487</td>
<td>-.103</td>
<td>.198</td>
<td>-.403</td>
<td>.394</td>
</tr>
<tr>
<td>EPE</td>
<td>2.96</td>
<td>.580</td>
<td>.473</td>
<td>.198</td>
<td>.076</td>
<td>.394</td>
</tr>
</tbody>
</table>

Note: WOE= Work Environment; EPE= Employee Engagement

Figure 2. Normality curve

Figure 3. Linearity Graph

Linearity

The linearity assumption is confirmed on normal probability plot of the regression-standardized residual, according to the suggestion of previous studies. The result of linearity for both dependent variable; employee engagement and independent variable; work environment shows that all the points’ line in a reasonably straight diagonal way. Therefore, it indicates that, the assumptions of linearity are met and there are no major deviations in the dataset as shown in Figure 3.

Reliability Analysis

The table 2 below indicated that the Cronbach alpha were calculated which served as the instrument used in an attempt to find out internal reliability. The Cronbach alpha for the dependent and independent variable (employee engagement, work environment) scale were .724, .804, respectively. The table below shows the result which indicated the range of Cronbach alpha which are between .724 and .804. According to Robinson et al. (1991) he recommends 0.60 to be the minimum accepted value, hence the Cronbach alpha of the
variables in this study are reliable. Furthermore, according to Hair et al., (2014) he suggested that items that are below the loading of .40 should be deleted. For this reason, only one item was deleted for employee engagement the loading falls below the threshold value of .04.

Table 2 Reliability coefficients for the study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of items</th>
<th>Item Deleted</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Engagement</td>
<td>11</td>
<td>1</td>
<td>0.806</td>
</tr>
<tr>
<td>Work Environment</td>
<td>8</td>
<td>-</td>
<td>0.724</td>
</tr>
</tbody>
</table>

Descriptive Statistics for the Variables

The most common measure of central tendency is the mean, which is referring to the average value of the data set (Alderfer, 1972; Hain & Francis, 2004). Standard deviation is a measure of spread or dispersion, which provides an index of variability in the data set and it is the square root of variance. Both mean and standard deviation are fundamental descriptive statistics for interval and ratio scale. Five-point Likert scale was used in this study, and also adapted the interpretation of Nik et al. (2010) level of score. In their recommendation they are of the view that scores of less than 2.33 are low level, 2.33 to 3.67 are moderate level, and 3.67 and above considered as high level. Table 3 below shows the mean and standard deviation of the variables used in this study. The table below shows the statistic of the independent and dependent variable with the mean ranging from 2.96 - 3.09, and standard deviation from .487 - .580, this means that the statistics of the variables for this study are high level.

Table 3 Mean and Standard Deviation of Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOE</td>
<td>3.09</td>
<td>.487</td>
</tr>
<tr>
<td>EPE</td>
<td>2.96</td>
<td>.580</td>
</tr>
</tbody>
</table>

Correlation Analysis

In establishing the weight and direction of relationships between multiple variables correlation analysis statistical technique is used (Pallant, 2013). This is established using correlation coefficients to determine both the positive and negative. Moreover, in determining the weight of relationship (r), value of the Pearson Product Moment Correlation Coefficient (r) was used. The r value often ranges between +1 and -1. An r value that is close to +1 indicates a strong positive relationship while an r value close to -1, can be interpreted as a strong negative relationship. However, when r value is equal to zero there is no relationship.

Hair et al. (2011) recommends that several assumptions must be considered in using the r to investigate the correlations between the variables of the study thus. The assumptions include, “the data must be in an interval or ratio data. This assumption is met in this study as the data collected is in interval using the Likert-type scale. Secondly, the relationship under examination should be linear. This assumption is also met, as this study aim to examine the direct relationship of independent variables on dependent variable. The final assumption that must be met before conducting a correlation analysis is to ensure the data is normally distributed”. Clearly, this assumption has also been met as the result presented in section 1 revealed that, the data used for the analysis in this study is normally distributed. Therefore, this study considered conducting
correlation analysis using the Pearson Product Moment Correlation Coefficient. The Cohen’s guideline for correlation strength is presented in Table 4 to interpret the weight of the relationship in this study.

Table 4 Cohen’s Guideline of Correlation Strength

<table>
<thead>
<tr>
<th>R-values</th>
<th>Strength of Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>r = +.10 to .29 or r = -.10 to -.29</td>
<td>Low</td>
</tr>
<tr>
<td>r = +.30 to .49 or r = -.30 to -.49</td>
<td>Moderate</td>
</tr>
<tr>
<td>r = +.50 to 1.0 or r = -.50 to -1.0</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: Cohen (1988)

The result of the correlations among the variables including the independent variable and the dependent variables are presented in table 5. The result is interpreted with regards to the strength of the independent and dependent variable in Table 5.

Table 5 Inter Correlation of Study Variables

<table>
<thead>
<tr>
<th>WOE</th>
<th>EPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOE</td>
<td>1</td>
</tr>
<tr>
<td>EPE</td>
<td>.491**</td>
</tr>
</tbody>
</table>

Inter Correlation of Study Variable **Correlation is significant at the 0.01 level (2-tailed).

The above table 5 explain the correlation between the dependent variable that is employee engagement and the independent variable which is work environment as shown above. The result presented in table 5 shows that, the relationship between work environment is moderate (r = .491).

Regression Analysis

The analysis of testing the hypothesis formulated in this study is presented in this section. A standard multiple regression was employed in testing the rejection or acceptance of the hypothesis. Based on the objective of this study the results of the multiple regression are discussed. Three steps to interpret the results of multiple regressions established by Hair et al. (2010). First is to check the F value to determine the statistical significance of the model. Second is to check for R² value. Provided the categorization of acceptable R² value based on the number of independent variables and sample size provided by Hair et al. (2010) as presented in Table 5 below. Finally, the last step for interpreting the result of multiple regression is to examine the regression coefficients and their Beta coefficient (b) to determine the role of independent variables that have statistically significant coefficients.

Table 6 Regression Analysis of Study Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta (b)</th>
<th>T Value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Environment</td>
<td>0.086</td>
<td>1.122</td>
<td>0.05</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td>.617</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td></td>
<td></td>
<td>.607</td>
</tr>
<tr>
<td>F Change</td>
<td></td>
<td></td>
<td>58.444</td>
</tr>
</tbody>
</table>

Dependent Variable: Employee Engagement

As shown in table 6 above the R² is 61.7% of the total variance in work environment. This means that the exogenous latent variable, work environment explains 61.7% of the variance of the employee engagement.
Hence, following Chin (1998), Falk and Miller criteria (1992), the acceptable level of $R^2$ value of the endogenous latent variable has been achieved and this was considered as substantial. Also, the recommendation of minimum threshold of 0.67, 0.33 and 0.19 as substantial, moderate and weak respectively by Hain, & Francis (2004). Hair, et al. (2014) agreed that minimum threshold for $R^2$ value of 0.75, 0.50 and 0.25 as strong, moderate and weak respectively.

At the outset, Hypothesis 1 predicted that the work environment is significantly related with the employee engagement. The result show insignificant relationship between Work Environment and Employee Engagement ($\beta = 0.086, t = 1.122, p > 0.05$), thus the hypothesis is not supported.

**Discussion and Conclusions**

The correlation analysis result for this study shows a moderate relationship between work environment and employee engagement. One hypothesis was formulated and tested using the SPSS. The hypothesis stated that work environment is significantly related to employee engagement. The result is not supported, which is not in line with past studies of (Anitha 2014; Miles et al., 2000; Harter et al., 2002; Holbeche & Springett 2003; May et al., 2004; Rich et al., 2010; Nasidi, Kamaruddeen and Bahauden 2016). The findings of the study indicate that work environment is not a predictor of employee engagement. The possible reason is that employees of the university in question don’t get distracted by the environment setting when it comes to discharging their duties, or rather the settings of the university environment does not call for any special attention. Therefore, this independent variable has no any significant bearing on the engagement of employees in the University. Both theoretical and practical contributions have been made by this study, the theoretical contribution of this study is the extension of the existing literature about work environment and employee engagement while the practical implications will provide direction to both the management and the university staff for them to proactively focus on providing a healthy and comfortable working environment that will boost engagement, which lead towards enhancing the performance of university staff, and also the university administrators in various ways. Finally, a larger sample should be used for the future research using the Smart PLS-SEM 3.0 so the model will be re-validated as has been suggested.

**References**


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