Correlation between Team and Co-worker Relationship and Employee Engagement

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ARTICLE INFO	ABSTRACT
	The objective of this study was to examine the correlation between team and co-worker relationship and employee engagement in Federal University of Technology, Nigeria. Social exchange theory (SET) was utilized in developing the research framework. A total of 150 non-academics staff from Federal University of Technology, representing a response rate of 63.3% participated in this study. Data were collected through self-administered questionnaire. one hypothesis was tested using SPSS 2.0. The findings indicated that the relationship between team and co-worker relationship and employee engagement is low (r = .252). Theoretical and practical implications of the study as well as suggestions for future research were discussed.

1. Introduction

Over the past years, there has been an eruption of research activity and elevated enthusiasm in employee engagement among consultants, associations and management scholars. According to Crawford *et al.*, [1] employee engagement has turn out to be one of the most significant concept in the management field as most organizations find it difficult to engage employees. Many scholars claimed that employee engagement is an important aspect intended for organization's accomplishment along with competitive advantage [2-3]. A study by Gallup [4] found that actively disengaged workers are 10 times more likely to say they will leave their organizations within a year 48 % than engaged staff 4%. The result further revealed that from 1000 workers in United States and Canada, only one third are actively "engaged" in their work with a huge group of between 56% and 60% not engaged and 17% actively disengaged. Furthermore, actively disengaged (uncommitted) workers cost United States businesses between $270 to $343 billion a year due to low productivity.

The dwindling rate of performance in the Federal University of Technology in Nigeria demands some attention to the curious minded individuals. Some of the issues that are of concern are poor

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performance, declining productivity, low rate of employee engagement and the behavioural attitude of the bureaucratic system. In spite of various government intervention and efforts, the Nigerian universities score-card is still a subject of discussion among the management as well as the curious minded citizens as a result of poor performance and inefficiency. There is massive purge or dismissal of university employees that were alleged inefficient, declining productivity, and doubtful probity [5-6].

Team and co-worker relationship affect the withdrawal or resignation of the employee from the place of work. This is attributed to the rules and formal policies that lead to lack of communication in the Federal University of Technology Withdrawal or resignation can arise because of structural situations. When the relationship among co-workers is high, the workers benefit from the relationship [7]. Similarly Sharing goals and knowledge probably makes workplace more satisfying and therefore, more enjoyable. These types of interactions keep employees engaged by facilitating communication and networking opportunities [8]. Hence the need for this study, aimed at assessing the correlation between team and co-worker relationship and employee engagement.

Fig. 1. Framework

3. Employee Engagement

Hewitt [9] described employee engagement as the position whereby individuals are emotionally and intellectually dedicated to the association or group, as considered by three key behaviours. Schaufeli and Bakker [10] defined job engagement as "the psychological position that comes with the behavioural investment of personal energy". The determinants of employee engagement above description of the concept shows that engaged employee is intellectually and psychologically attached to the organization, feels enthusiastically concerning the organizational objectives as well dedicated to stand by its values. Fleming and Asplund [11] further explain 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. Munish and Agarwal [12] defined of engaged employee as one who is highly dedicated, ambitious motivated, strive to for an extra edge and always lead by example to others and align his goals toward organizational goals.

The study by Hong, Hao, Kumar, Ramendran and Kadiresan [13] revealed that there is highly significant relationship between compensation and appraisal, the factors of training, and employee engagement. Furthermore, the family influence on the firm have a positive impact on employee engagement [14]. The employee engagement positively and significantly affected job satisfaction [15]. Hamid *et al.,* [16] revealed that employee engagement is corelated with many desirable variables such as customer satisfaction, high productivity, job satisfaction, intention to stay and job performance. The high-level training and development, leadership and organizational justice, compensation and benefits, will lead to the higher level of employee engagement. Nasidi, Makera, Kamaruddeen and Jemaku [17] found a moderate relationship between the work environment and

employee engagement. Abusive supervision and negative gossips have a positive effect on emotional exhaustion which in turn has a negative relationship with employee engagement [18].

4. Team and Co-worker Relationship

Team and co-worker relationship is referred to as the relatedness need individuals possess and having rewarding interpersonal interactions with their co-workers [19]. Team and co-worker is a different phase which highlight plainly the interpersonal synchronization aspect of employee engagement. Kahn [20] found that helpful and trusting interpersonal relationship, as well a supportive group, encourages employee engagement. An open and helpful surrounding is vital for workers to feel secured in the place of work and engage fully with their duty. Helpful surrounding makes individuals to try and attempt new things and even fail without the apprehension of the consequences [21]. Furthermore, May *et al.*, [22] found that the relationship in the place of work had a considerable impact on meaningfulness, one of the mechanisms of engagement. Janssen *et al.*, [23] shows that coworkers believe that mentoring relationships affect their workgroup's functioning by influencing both their workgroup's performance and climate. Avci [24] confirmed that team and coworker support does have effect on employee wellbeing.

5. Team and Co-worker Relationship and Employee Engagement

According to Fiedler *et al.*, [22] co-worker's relation is like friendship, acceptance, and loyalty developed among the members of a group, which also refer to the stage of confidence of the employees, trust, and respect in their leaders. Furthermore, if the leaders can succeed in getting the support and trust from the subsidiaries and the co-worker, the leader's capability to persuade will be greatly improved than the unsupported leaders [22]. Also, Ariani [25] found a significant relationship between supervisor relations, team and coworker relations and employee engagement.

Several studies (e.g. Tsao [26]; Ducharme and Martin [27]; Hackett and Guion [28]; Bass [29]; Robbins [30] revealed that team and co-worker relationship influence employee engagement. For example, a study by Tsao [26] showed that the quality of the co-worker's relationship discloses the efficiency of communication between the two parties, as well are presentation of how well the two parties synchronize with each other. Colleagues conduct also influence the rapport among co-workers. The study additionally highlighted on how well organize co-workers are with one another; that is, the better the co-coordinative relationship between the managers and workers, the better the employee engagement. Ducharme and Martin [27] found that the element of team exchanges and co-worker's relationship has a momentary positive connection with employee engagement.

Similarly, Driscoll [31] and Liou [32] pointed out that employee's trust and co-workers influences the rate of engagement of workers. In similar vein, Weng *et al.*, [33] argued that belief in the managers and co-workers improves the rate of employee engagement, while the confidence, respect and trust from the employees to the managers clearly comes from the relationship between the leaders and the subordinates. From the above discussion, this research infers that team and co-worker's relationship influence employee engagement. Thus, in line with prior empirical studies, the following hypothesis was postulated:

H1: There is significant relationship between team and co-worker relationship and employee engagement.

6. Objective of the Study

The objective of this study is to assess the correlation between team and cow-worker relationship and employee engagement.

7. Methodology

In this study a cross- sectional design and quantitative approach was adopted. We also employed a simple random sampling following [34]. Data collection was achieved by means of a structured survey questionnaire administered to the non-academic staffs of the university in Nigeria. Based on previous literature the questions were adapted whereas the items for measuring team and coworker relationship were adapted from Hain and Francis [35] and employee engagement adapted from Gallup Organization [4]. 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. One hundred and fifty (150) questionnaires were duly completed, returned and retained for the analysis out of two hundred and thirty-seven (237) questionnaires administered for this study, thus, representing 63.34% response rate.

8. Analysis and Result

The statistical package for social sciences (SPSS) was employed for data screening, analysis, the normality test, descriptive statistics of the variables, correlation analysis and regression analysis on the relationship between team and co-worker relationship and employee engagement as the variables for this study.

8.1 Normality Test

One of the difficulties face as regards to inferential statistics is the normality of how the data collected was distributed. In order to examine the normality of the data collected, the study employed the assessment of the skewness and kurtosis. As suggested by Hair *et al.*, [26] the acceptable threshold for skewness and kurtosis is below ±3 for skewness and below ±8 for kurtosis. The result presented in table 1 reveal 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

Variables	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TCWR	2.98	.393	.247	.198	.109	.394
PE	2.96	.580	.473	.198	.076	.394

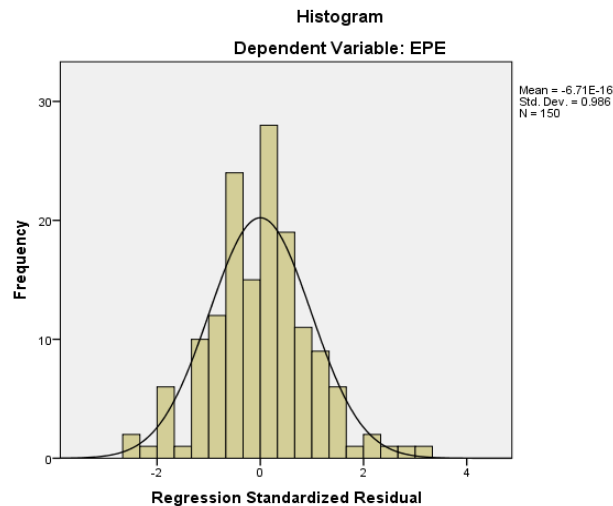Note: TCWR= Team and co-worker Relationship; EPE= Employee Engagement

Fig. 2. Normality curve

8.2 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 [36,37]. 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. This study used five-point Likert scale, and the interpretation of Nik *et al.*, [38] level of score was adapted. They recommended that scores of less than 2.33 are low level, 2.33 to 3.67 are moderate level, and 3.67 and above regarded as high level. Table 2 below presents 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 - 2.98, and standard deviation from .393 - .580.

Table 2
Mean and Standard Deviation of Study Variables

Variables	Mean	Std. Deviation
	Statistic	Statistic
TCWR	2.98	.393
EPE	2.96	.580

8.3 Correlation Analysis

Correlation analysis is a statistical technique that is used to establish the direction and weight of relationships between two or more variables [39]. This is established using correlation coefficients where both the positive and negative can be determined. Furthermore, the weight of relationship can be determined with the value of the Pearson Product Moment Correlation Coefficient (r). 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, there is no relationship to consider when r value is equal to zero.

According to Hair *et al.*, [40], several assumptions must be met if the researcher wants to use r in investigating the correlations between the variables of the study as follows. These 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 Liker-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. Evidently, 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 3 to interpret the weight of the relationship in this study.

Table 3
Cohen's Guideline of Correlation Strength

R-values	Strength of Relationship
r = +.10 to .29 or r = -.10 to -.29	Low
r = +.30 to .49 or r = -.30 to -.49	Moderate
r = +.50 to 1.0 or r = -.50 to -1.0	High

Source: Cohen [45]

The result of the correlations among the variables, the independent variable and the dependent variable are presented in table 4. The result is interpreted with regards to the strength of the independent and dependent variable in table 4.

Table 4
Inter Correlation of Study Variables

	TCWR	EPE
TCWR	1	
EPE	.252[**]	1

The above table 4 explain the correlation between the dependent variable that is employee engagement and the independent variable which is team and co-worker relationship as shown above. The result presented in table 4 shows that, the relationship between team and co-worker relationship is low (r = .252).

8.4 Correlation Analysis

This section presents the analysis of testing the hypothesis formulated in this study. This is very important because the above analysis is the preceding analysis to ensure the hypothesis in this study is tested correctly. In the present study, a standard multiple regression is employed to test for the acceptance or rejection of the formulated hypothesis. The results of the multiple regression are discussed in relation to the objective of the study. Hair *et al.,* [44] established three steps for interpreting the results of multiple regressions. The first of the steps is checking F value to determine the statistical significance of the model. The second step is checking for R^2 value. Hair *et al.,* [40] provided the categorization of acceptable R^2 value based on the number of independent variables and sample size 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 5
Regression Analysis of Study Variables

Model	Beta (b)	T Value	Sig
Team and Co Worker Relationship	.029	-.465	.643
R^2			.617
Adjusted R^2			.607
F Change			58.444

Dependent Variable: Employee Engagement

Table 5 above shows R^2 is 61.7% of the total variance in employee engagement. This means that the exogenous latent variable, team and co-worker relationship explain 61.7% of the variance of the employee engagement. Therefore, following Chin [41], Falk and Miller [37] criteria, the acceptable level of R^2 value of the endogenous latent variable has been achieved and this was considered as substantial. Furthermore, Hair *et al*., [42] recommended minimum threshold of 0.67, 0.33 and 0.19 as substantial, moderate and weak respectively. Hair, *et al*., [30] prescribed 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 team and co-worker relationship is significantly related with the employee engagement. The result show insignificant relationship between Team and co-worker relationship and Employee Engagement (β = -0.29, t = -.465, p> 0.05), thus the hypothesis is not supported.

9. Discussion and Conclusions

This study proposes that team and co-worker relationship have significant relationship with employee engagement. The result of multiple regression analysis showed no significant relationship between team and co-worker relationship and employee engagement. Therefore, it was not supported. The result is inconsistent with past studies that found significant relationship between team and co-worker relationship and employee engagement e.g., Fiedler *et al*., [22-24,43]. The findings of this study indicate team and co-worker relationship is not a good factor of employee engagement in the Federal University of Technology. Therefore, it can be said that the employees in the university doesn't need to be in group before they can discharge their duties effectively. In other words, they might end up been distracted as a result, which is detrimental to the organization. From the above possible reasons mentioned, it can be said that this independent variable has no relationship with employee engagement and such is not important. The study can provide policy makers and private organizations an instrument to assess how team and co-worker relationship could affect adoption of a good management system. Underpinned by the social exchange theory, this study provided empirical evidence for bridging the knowledge gap with regards to measuring employee engagement among non-academic staff of the universities in Nigeria.

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