



Good Working Environment and Work Performance Across Higher Institutions in Buea

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Authors' contributions

This work was carried out in collaboration among all authors. Author NATL designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Authors HMSO and LMP managed the analyses of the study. Author LMP managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

The objective of this study was to examine how good working environment on work performance of teachers across private higher institutions in Buea. The sample size included a total of one hundred and seven (107) teachers drawn from one hundred and eighty seven (187) teaching staff of the selected institutions. Nine (9) schools were first selected purposely base on their staff strength. Then four schools were further selected using the simple probability random sampling technique. Respondents were then selected proportionately to the size of the various teaching staff. Data was analysed using both descriptive and inferential statistics. The researcher used a multiple regression model that predicted effects of work environment on employee commitment in the Buea municipality. Findings from the study showed that employer/employee relations, working condition and reward and compensation were positive and significantly affect the commitment of teachers in private higher institutions of learning in Buea. It was therefore concluded that work environment positively affects employee commitment in private higher institutions in Buea.

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1. INTRODUCTION

1.1 Background of the Study

The success of any organization is closely tied to the job performance of its employees. The quality of the employees' workplace environment impacts their motivational level and hence commitment [1]. When employees have the desire, physically and emotionally to work, then their commitment shall be increased [2]. They also stated that having a proper workplace environment helps in reducing the number of absenteeism and as a result can increase the performance in today's competitive and dynamic business world. The workplace environment that is set in place impacts employee morale, productivity and engagement - both positively and negatively [3]. She adds that factors of workplace environment play an important role towards the employees' performance. The factors of workplace environment give an immense impact on the employees' performance either negatively or positively in terms of outcomes. The working environment of Private higher institutions of learning in Cameroon is characterized by poor and ineffective communication, poor interpersonal relationship, excess workload, and low pay, the absence of incentives, harsh rules/work policies and poor physical work conditions that affect teachers' performances. A proper work environment helps in reducing the number of absenteeism and thus can increase the employees' commitment which leads to increased productivity at the workplace [2].

As far as employee commitment is concerned, reward system is an important tool for management to improve on employees' commitment in desired ways. Reward is defined by Minden [4] as any strengthened behaviour followed immediately by a positive reinforcement. Currently, either public or private sectors are implementing the reward programmes. According to Vroom (1964), it clearly stated that employee's effort is increased when rewards are offered. How well employees engage with factors in their working environments influences to a great extent their error rates, level of innovation and collaboration with other employees, absenteeism and ultimately, how long they stay in the job [3] which is a function of their commitment towards work. Chandrasekar identified twelve factors in

workplace environments which either lead to engagement or disengagement of workers. These factors include: goal-setting, performance feedback, role congruity, defined processes, workplace incentives, supervisor support, mentoring/coaching, opportunity to apply new skills, job aids, environmental factors, and physical factors. Globally, there is an increasing expectation for better private sector services comparable to the public sector. By 1998 enrollments into higher education in Cameroon had increased and were almost equivalent to what they had been before the higher education budget was trimmed in 1993. At the start of the new millennium, Cameroon had six publicly supported universities—the Universities of Yaoundé I and Yaoundé II, plus the Universities of Buéa, Douala, Dschang, and Ngaoundéré. In addition, specialized institutions and schools of higher education offered students higher-level degrees and diplomas in various professions and occupations, with a gradually increasing emphasis on linking training opportunities to conditions in the labour market. The Catholic University Institute, established in 1990, was the main private university in the country.

The higher education law of 1993 accorded recognition to private initiatives in providing higher education service up to degree level. Since then, the government has embarked on a series of transformational initiatives to respond to the needs of teachers and administrators of higher education. It includes the following; provide a more conducive environment for teaching and research by creating a better atmosphere for teachers, teaching and research; revive and maximize inter-university and international co-operation; motivate staff and improve living conditions of staff and students through better remuneration, conditions for staff promotion and upgraded student conditions.

The management of Cameroon has put the interest on the development of human capital especially their administrators in preparation to accomplish the mission of establishing world class universities. The challenge for administrators and teachers of higher education especially the private higher institutions of learning are providing high quality services. High motivation is also related to achieving the quality, quantity, cooperation, dependability and creativity. The top management usually expects

administrators to follow the rules and regulations, and perform the task assigned to them according to the standard set for them. However, teachers and administrators expect good working conditions, fair pay, fair treatment, secure career, power and involvement in decision making [5]. Since these expectations vary between managements of private higher institutions, teachers and administrators, it is important to understand what type of work environmental factors motivates the workers, [6]. The main objective of this study was to examine the effects of work environment on employee commitment in private higher institution in Buea. A critical look at Universities in Cameroon in general and Buea in particular reveals that work environment is a factor that needs to be looked into. This is necessitated by the various murmurs, go slows and strikes that occur occasionally owing to unequal remuneration packages compared to relevant others. A good number of these Universities have poor or no reward management structures that often result to uncommitted employees [7]. Moreover, workers work in hot and noisy working environments, unsafe work conditions, dirty work environment, insufficient resources, old technology and old machinery (Kyko, 2005). This means that a proper workplace environment (proper reward management and good working condition) will help to reduce the number of absenteeism and thus can increase the employees' performance which leads to increased commitment at the workplace [2]. Nonetheless, although many studies have investigated on the effects of work environment on employees' performance, only a few have focused on how good working environment on work performance in institutions of learning [8,9](Hartinah et al 2020). Therefore, it is evident that there is a knowledge gap to be filled. This paper is aim at investigating how good working environment affects work performance in selected private higher institutions of learning in the Buea municipality.

2. LITERATURE REVIEW

2.1 Work Environment

According to Tripathi (2014), good work environment can be defined as the environment in which people work that includes physical setting, job profile, and culture and market condition. Each aspect is inter linked and impacts on employees' overall performance and productivity. It is the quality of the employees' workplace environment that most impacts on

their level of motivation and subsequently performance. Work environment can be thought of simply as the environment in which people work (Briner, 2000) as such; it is a very broad category that encompasses the physical setting (e.g. heat, equipment), characteristics of the job itself (e.g. workload, task complexity). He adds that it also encompasses broader organizational features (e.g. culture, history) and even aspects of the external organizational setting (e.g. local labour market conditions, industry sector, work life balance). Employees will always be contented when they feel that their immediate environment states are in tandem with their obligations [10,11] asserts that the type of workplace environment in which employees operate determines whether or not organizations will prosper. The workplace environment consists of physical factors which include the office layout and design among other factors; while the psychosocial factors include working conditions, role congruity and social support. Employees' comfort on the job, determined by workplace conditions and environment, has been recognized as an important factor for measuring their productivity [12].

In today's dynamic and competitive business world, a healthy workplace environment makes good business sense. Organizations deemed as a positive place to work will have a competitive edge over the others. Work environment involves the physical geographical location as well as the immediate surroundings of the work place. Typically, it involves other factors relating to the place of employment, such as the quality of communication flow, secure environment, manageable work load and other additional perks and benefit of employment. Onuka [13] observed that aside from the job scope itself, one factor that significantly influences employees' commitment is the work environment. Accordingly, Ali and Zia (2010) noted that a positive work environment makes employees' feel good about coming to work and this provides the motivation to sustain and increase productivity. Akintayo (2010) posits that keeping employees happy and productive requires frequent and open communication. Environmental factors such as temperature, lighting and ventilation can have direct impact on health. For example, Chandrasekar [3] maintained that very high temperature can lead to heat stress and heat exhaustion. Also, Physical factors in the work place such as poor layout or overcrowding can lead to common

types of accidents such as tripping or striking objects.

Finally, performance of teachers working in a conducive school environment and motivation to affiliate, to grow and develop in the direction of achieving common goal may arise through implementation of leadership styles of the principal (Hartinah et al 2020)

2.2 Employer Employee Relation

The relationship between the employer and the employee is important, therefore business owners need to pay attention to this relationship if they want their businesses to grow and succeed [14]. Particularly, in the education section, teachers plays very vital role and therefore they should be recognised highly, as low performance might lead to a huge loss in the field education (Madrid et al., 2019; Jirangkul, 2017; Ikhwandra, 2016). The Institute of Leadership and Management (2007) outlines a number of issues that can cause the downfall of the employer-employee relationship. Some of these issues include: The High Rate of Inflation - the increment of the inflation rate in an economy results in an increased standard of living [15]. When this happens, workers start to demand higher salaries to complement the increased cost of living. This situation possesses the potential for the breakdown of the employer-employee relationship. Lack of trust and respect: according to Hunt et al. (2009: 71-77) trust and respect are earned by an employer through open communication, consistent feedback and delegation of responsibilities to the staff. An employer who fails to abide by these elements of trust and respect will eventually also put a negative strain on the relationship (Chiaburu and Stoverink 2013).

Good communication skills will enable business owners to convey important information. They should never be tongue tied, know what to say, and say it. IV. The ability to persuade others and influence their behaviours, attitudes, opinions and beliefs (Kehoe and Wright 2013). Business owners are encouraged to use the authority and systems they have in their organisation to persuade and influence staff to work efficiently and effectively to ensure that the organisational goals are met and good relationships are maintained. V. The ability to use power (Pfeffer 2009). Business owners must use the power they have to influence staff but must not act in an intimidating manner. However, Andriani et al.

(2018) address that teacher management is a very important factor in any institution that can positive affect their performance. The authors believes that a good teacher is a good leader because he/she is leading a team of students in a smooth way.

2.3 Empirical Literature

Sawithri (2017) studied the impact of employer-employee relations on employee commitment: a case from Sri Lanka. The study is deductive in nature. Primary data was collected through a structured questionnaire using a random sample of CEB including 86 assistant level employees where data were obtained from 54 respondents. According to the results of the study, it shows a high positive impact of the line manager relationship and trust in senior management on employee commitment atCEB which directly relates to productivity.

Another research by Sequeira (2015) focused on Employee relations and its impact on employee performance: a case study descriptive approach was adopted for this research in the beginning to describe the existing relations practiced at Kavya Systems while at the later stage of study Causal approach was applied in order to link the employee relation factors to performance of employees. The study also revealed that improving the employee relations practices inan organization can improve the performance of employees and thereby the overall productivity of the organization. Milgo [16] researched on Reward and Compensation as a Determinant of Employee Commitment: A Survey of KTDA Tea Factories in Kenya. To achieve this objective a survey was conducted to canvas the opinions of respondents in public KTDA tea factories in Kenya. Analysis of data showed low paying factories had a lower average mean in all aspects of reward and compensation (54.93%) compared to high paying at average mean 71.60%.Further analysis using Spearman's rank correlation test revealed significant relationship ($P=0.00<0.01$) between reward and compensation and commitment. The study confirmed the significance of reward and compensation as a determinant of employee commitment.

A similar research was conducted in Kenya by Korir [17] on the Effect of Reward Management on Employees Commitment in the Universities in Nakuru County-Kenya. A descriptive research method was used. The analyzed data was

presented using graphs, charts and tables. Results indicated that there was a moderate significant positive relationship between financial rewards and affective commitment ($r = 0.344$, $p < 0.000$) and a weak significant positive relationship between financial rewards and normative commitment ($r = 0.249$, $p < 0.008$). The study found that financial reward management practices collectively have significant effect on organizational commitment. The study recommended that universities in Nakuru County should carry out salary reviews in order to develop a reward management structure that is externally competitive, internally fair and consistent with the current acceptable international rates.

Tarus (2016) investigated on Compensation strategies and employee commitment in Kenya: a quantitative analysis on public sector. The study employed a case study research design that was conducted at Moi Teaching and Referral Hospital. The findings indicated that there was a significant positive correlation between employee compensation and their commitment for Ho1, results indicated that there was a significant positive correlation between employee Compensation ($r=0.194$, $p< 0.01$) and Empowerment ($r=0.231$, $p<0.01$). This implies that the perceived empowerment of employees by the hospital was likely to impact positively on their commitment to the hospital.

Gitahi (2014) investigated the effect of workplace environment on performance of commercial banks Employees in Nakuru Town. The researcher made use of questionnaires to collect data. The population of the study was 736 non-managerial staff from which a sample of 173 respondents were drawn from employees using stratified random sampling with probabilities proportional to the size of the firm was used to allocate samples within the Banks. To achieve the objectives of the study, a survey design was employed. A sample of 173 employees participated in the study as respondents. Descriptive statistics and multiple regression models were used to analyze the data. The study findings showed that the physical aspects did not have a significant effect on employee performance while the psychosocial and work life balance factors were significant.

Manu (2015), investigated the effects of work environment on employees' productivity in government organisations in Obuasi Municipality. The research design for this study was the survey research design used to assess the

relationship between work environment and employee's productivity at Obuasi Municipal Assembly. In order to ensure that all the strata of the population were fairly represented and all cases within each stratum had equal chances of being selected, stratified random sampling was used to select a sample of 100 employees for this research. A response rate of 78% was achieved. The data collected from the employees was analyzed using multiple regression and descriptive statistics. It was found that each of the components that define work environment were statistically significant to productivity of the Municipal Assembly. However, the social work environment of employees of Obuasi Municipal Assembly was the most conducive and the psychological environment of the Assembly was least conducive. In the end, work environment at Obuasi Municipal Assembly was statistically significant to the productivity of employees at the Municipal Assembly. Kiberenge and Nambuswa (2015) evaluated the effect of working environment on employee's performance in Teachers Service Commission in Kenya. A descriptive research design was used since it was concerned with describing the characteristics of employees' performance with regards to working environment. Data analysis was done both quantitatively and qualitatively and was reported in the form of frequency distributions, tables, percentages and Analyses of variance. The result of the findings was that leadership styles and organisational culture positively affect employee performance at the Teachers Service Commission Trans Nzoia County. The study's findings have portrayed that the Teachers Service Commission has offered its employees satisfaction through communication, leadership styles and its organisational culture; hence good performance by its employees.

Patil and Kulkarni (2017), studied on Work Environment and Its Impact on Employees' Performance in Hospitality Industry. The stratified disproportionate random sampling method was chosen. The questionnaire was framed using the 5 point likert scale. The findings were quantified using excel. The paper contains factors of work environment that influence the employees' performance such as physical environment factors and social environment factors. After doing the survey it was found that work environment is more important for employees to stay loyal to their organisations. It helped to understand the measures that can be taken to improve the work environment to positively promote employees' performance.

Sukdeo (2017) examined the effect of the working environment on employee satisfaction and productivity: a case study in a clothing manufacturing factory. A questionnaire was developed and validated using Cronbach's Alpha Coefficient ($\alpha = 0.928$). Data was collected using simple random sampling to select employees from middle and lower management levels. A total of 212 questionnaires were distributed. Multiple regression analysis and structural equation modeling were used to predict the correlations. The findings of the study indicated that there is a very strong casual effect between the work environment and employee satisfaction which leads to increased productivity.

AL- Omari and Okasheh (2017) investigate on the Influence of Work Environment on Job Performance: A Case Study of Engineering Companies in Jordan. A quantitative methodology implying a cross-sectional survey was used to meet the study objectives in addition to the literature review. The collected data was analysed using (SPSS, Version 22). Findings revealed that the situational constraints constituted factors such as noise, office furniture, ventilation and light which are the major work environment conditions that have negative impact on job performance and should gain more attention.

Duru and Shimawua (2017) carried out a research on the effect of work environment on employee productivity using Edo City Transport Service. Descriptive statistics were used. From the research findings, if a good office environment is provided for employees, it will go a long way to enhance their morale and performance. Also, if the office is neat, noiseless, properly arranged well lighted and ventilated, employees will feel a sense of belonging and this will make them to work efficiently and effectively. Good physical working environment inspires workers to spend more time in their various offices, employees responded emotionally better towards the provision of good office environment by not absents themselves unnecessarily from work, lateness to work and other negative attitudes will be drastically reduced. Good working environment increases individual output therefore leading to the growth of the organization.

Another research by Hafeez et al. (2019) viewed the impact of workplace environment i.e. Physical Environmental Factors and Behavioural Environmental Factors on employee productivity

(EP) through mediating role of employee health (EH). This study adopted the questionnaire survey method and data was collected from 250 employees working in software houses in Pakistan. Data was analysed using SPSS and AMOS software. Reliability and correlation analysis was performed by using SPSS while; path analysis was performed using AMOS. Findings – Results revealed that one unit variance in PEF incorporates 35% change in EH, 33% change in EH is caused by one unit increase in BEF and one unit increase in EH leads to 80% increase in EP. Physical and Behavioural Environmental Factors are positively affecting EH and EH is positively affecting EP. Results of the study revealed that: employee health is mediating the relationship between workplace environment factors and employee performance.

Few studies which have attempted studying the African workplace environmental factors on staff related variables were done in workplaces other than campuses and those studies conducted in universities fail to show the empirical link between workplace environmental factors and either teaching and nonteaching staff of higher institutions of learning (see Ajayi et al., 2011; Adeyinka, Ayeni&Popoola, 2007; Zainudin&Junaidah, 2010). The dependent variable in the study of Ajayi et al. (2011) was job satisfaction while workers' morale and perceived productivity in industrial organisations was the dependent. Job commitment among staff of tertiary institutions of learning is seriously lacking and begging for empirical probing especially since it may be influenced by factors in campus environment. Palpably, the effect of work environment on employees' commitment therein is not well established in our framework of knowledge. It is on this ground that the researcher intended to close this gap by examining how good working environment affects work performance across private higher institutions of learning in Buea?

3. METHODOLOGY

The study focused on employees of Private higher institutions in the Buea Municipality, South West Region of Cameroon. four (4) of these higher institutions (Fomic Polytechnic university Institute (FPUI), Higher Institute of Management Studies (HIMS), and Biaka University Institute of Buea (BUIB) were considered for the study. The study investigated the effect of work environment employees' commitment. Moreover, the study

was limited to three (3) main independent variables and two control variables. These variables include; employer/employee relations, work condition, reward and compensation, co-worker relationship and job security.

3.1 Area of Study

Buea (Bakweri: Gbea) is the capital of the Southwest Region of Cameroon. The town is located on the eastern slopes of Mount Cameroon and has a population of 300,000 (as at the 2013 Census). It is a highly complex community caught between a blend of urban, semi urban, rural and traditional settings. Buea Municipality is bounded to the north by tropical forest on the slope of Mount Cameroon (4100m above sea level). The mountain range extends to the beautiful sandy beaches of the Atlantic Ocean.

3.1.1 The Higher education sector in Cameroon

In Cameroon, the University of Yaoundé I and few professional institutions monopolised higher education from 1961 to 1993. Understandably, the platform for discourse was very limited. However, features around Yaoundé and Bonamoussadi in particular changed dramatically in terms of new culture including the visibility of 4 of these cultures and the formation of new pressure groups through student unions. Young Cameroonians became exposed to new learning and greater possibilities for action. This was manifested through the influence they exerted on political manifestations during the reintroduction of multi partism in the early 1990s. The creation of five state universities in 1993 (University of Yaoundé I, University of Douala, University of Dschang, and the University of Ngaoundéré) was a major breakthrough. Prior to the introduction of university education in Cameroon, only a handful of government and mission secondary schools existed and majority of the students had to leave their families and villages to travel hundreds of kilometers to be educated. Many children got separated from their cultures and immediate family. This sometimes had little impact on their contributions to the community and the promotion of individual community values. Behavioural changes were influenced by cultural perspectives that were either considered superior or simply accepted because of the absence of supportive structures.

Also, many children did not make it to these far away schools because their parents had no

means to support such an elaborate journey. For those who made it, it was an agreed fact that they were superior in mannerisms and knowledge. These flashbacks are necessary in view of the current situation in Cameroon. There are seven state universities and over 200 professional institutions of learning. The presence of these universities and professional institutions has witnessed massive construction of student hostels, hotels, restaurants, internet centers and office structures. There has been great generation of capital through the influx of business persons who have in turn increased the population. The major question becomes: How does university learning manage this cross section of individuals to the extent that the values of the community are respected and the resources are used in a sustainable manner? - Indigenous and traditional knowledge.

3.2 Research Design

The research study was a descriptive survey. This research design was used because the population size is large and it ensures a more accurate sample to gather targeted results in which to draw conclusions and make important decisions. Primary data were collected through the use of survey questionnaires by drop and pick strategy to ensure high response rate. The use of questionnaires was adopted because it ensured that data collection was standardized such that each respondent got the same question and in the same format. The use of questionnaires also enabled the researcher to collect original data from the sample of the population within a short time and at low cost for purposes of describing the entire population. The questionnaire was structured according to the research questions and was organized in sections. Section A explored the population demographics such as gender, age, position, and religion, section B constituted questions related to Employer/employee relation, working condition and reward and compensation.

3.3 Data Collection

Primary data was collected using a Work Environment Assessment Questionnaire (WEAQ). The population of the study was one hundred and eighty seven (187). The survey was completed during working time at the employees' desk and collection of the questionnaires was undertaken by the Research and Development Officer in Biaka and the Director of Student Affairs in HIMS, Landmark Higher Institute, and Fomic Polytechnic respectively. The study

population was exclusively Staff members from Biaka University Institute of Buea, Fomic Polytechnic, Landmark Higher Institute, and Higher Institute of Management Studies (HIMS). Participants from the various institutions were as follows; Biaka University Institute (37), HIMS (26), Fomic Polytechnic (26) and Landmark Higher Institute (18) making a total of one hundred and seven (107) participants.

3.4 Sample and Sampling Techniques

The sample of this study comprised of one hundred (107) teachers, (males and females) selected using stratified random sampling from five schools in Buea with a total teaching staff of one hundred and eighty seven (187). Out of the seventeen registered private higher Institutions found in Buea, Nine (9) schools were first selected purposely base on their staff strength and the size of the student population. Then four schools were further selected using the simple probability random sampling technique. To do this, the researcher wrote the names of all the private higher institutions of learning found in Buea on wrapped pieces of papers, shuffled them and then picked. Each school selected automatically served as a sample. The researcher made use of stratified random sampling techniques to select respondents from the various schools. To do this, lecturers of the various higher institutions were grouped according to the various schools they teach in the different higher institutions. Respondents were then selected proportionately to the size of the total school population.

The sample size (no) was calculated based on the formula proposed by Cohran

$$No = \frac{Z^2 p}{e^2}$$

Where:

- No = the minimum sample size required for an infinite population
- Z = standard normal variant given as
- Z = 1.55 for a given confidence level of 95%
- p = assumed Pre - study estimate of the population given p = 0.5 and q = 1 - p, therefore,
- q = 0.5
- e = sampling error that can be tolerated (0.1)

$$\text{Therefore, No} = \frac{(1.55)^2 \times 0.05 \times (1 - 0.5)}{(0.1)^2}$$

$$No = 107$$

3.5 Instrument for Data Collection

A single instrument was used to collect data for the study. The construction and validation of the instrument was done using a Work Environment Assessment Questionnaire (WEAQ). The (WEAQ) questionnaire was used as instrument or technique for data collection. The researcher used closed ended questions which consist of five point Likert scale as follows: Strongly disagree (SD), Disagree (D), Neutral (U), and Agree (D), strongly agree (SD) answers. The questionnaires comprised of four sections; Section A contained the bio data of the respondents. I.e. it explored the population demographics such as gender, age, position, and religion, section B constituted questions related to employer/employee relationship, working condition and reward and compensation.

3.6 Variables on Which Data is Collected and their Measurement

Since our study uses primary data, questionnaires were structured to suit variables used in the study including both dependent and independent variables. The dependent variable (work performance) is captured using employer/employee relation, working condition, reward and compensation co-worker relation and job security. Employer/employee relation, working condition, and reward and compensation being the main independent variables while co-worker relation and job security are the control variables.

3.7 Method of Data Analysis

Cooper and Schindler (2000), described data analysis as the process of editing and reducing accumulated data to a manageable size, developing summaries, seeking for patterns and using statistical methods. The questionnaires were coded and then entered in software called statistical package for social sciences (SPSS) for analysis Data gathered from the responses of the above questions permitted the researcher establish a multiple regression model that predicted effects of work environment on work performance in the Buea municipality. Mugenda and Mugenda (1999) described a survey design as an attempt to collect data from members of a population to determine the current status of that population with respect to one or more variables. Specifically tables, frequencies percentages, averages, standard deviations and bar charts,

were used to represent responses from questions on work environment and employees commitment. The independent variables selected for the study were employer/employee relations, working condition and reward and compensation. The dependent variable was work performance while the controllable variables were co-worker relationship and job security.

3.7.1 Model specification

Based on the literature reviewed, there is no unanimous conclusion as to which variable has the most significant and positive effect on work performance. Based on the specific objectives of this study, different aspects of the work environment were hypothesized to affect work performance in private higher institutions of learning in Buea; the following model was employed linking work environment and work performance:

$$Y(P) = f(\text{Work Environment}) \quad (1)$$

$$Y = f(X_1, X_2, X_3, X_4, X_5) \quad (2)$$

The study applies the following equation

$$\text{Work Performance} = f(\text{EE/R, WC, RC, COW, JS}) \quad (3)$$

Where P is Work Performance (affective commitment, continuance commitment and Normative commitment), EE/R(x1) is employee/employer relation, WC(x2) is working condition, RC(x3) is Reward and compensation, JS(x4) is Job security and COW(x5) is Co-worker relationship. Employee/employer relation, working condition, and Reward and compensation are the main independent variables used in the research objectives while job security and co-worker are control variables.

By applying econometric form, and specifying the function in log-linear form with an error term U_i , the following equation is taken;

$$\text{Work Performance} = B_0 + B_1 \text{EE/R}_i + B_2 \text{WC}_i + B_3 \text{RC}_i + B_4 \text{COW}_i + B_5 \text{JS}_i + U_i \quad (4)$$

3.8 Reliability and Validation Techniques

3.8.1 Validation of instrument

The validation of the instrument was done in three faces:

After the researcher had constructed the instrument, he discussed the items with some classmates and friends who made some

criticisms and corrections, after which a copy of that questionnaire was given to the Supervisor where further corrections were made to improve on the face validity of the questionnaires. The content validity of the instrument was done by the Supervisor who ensured that the questionnaire items covered what it intended to measure, made corrections in the organisation and gave a go ahead for administration of the instrument. For this study to achieve construct validity, the questionnaire was constructed following the research objectives which reflected the research hypotheses. This was done and submitted to the Supervisor for scrutiny and approval of the instrument.

3.8.2 Test of convergent validity

Convergent validity is a facet of construct validity which is established if two similar constructs correspond with one another. According to Campbell and Fiske (1959), the multitrait-multimethod matrix is used to assess the construct validity of a set of measures in a study. This means demonstrating both convergence and discrimination is needed. Hence convergent validity can be estimated using correlation coefficients. This means convergent validity will indicate how concepts are related. Hence a high value indicates high relationship while low value indicates a fear relationship. In this study, we are going to test the variables to determine how they are related to each other.

3.8.3 Goodness of Fit Test

3.8.3.1 Heteroscedasticity test

This test is carried out on the error term. The Lagrange Multiplier test-LM was used which is the same approach in the orthodox Breusch-Pagan test for heteroscedasticity in a linear model with normality.

3.8.3.2 Test of multicollinearity

Referring to Gujarati (2005), multicollinearity occurs when there is a linear relationship or near linear relationship among the explanatory variables as it violates the Ordinary Least Squares (OLS) assumption in a regression function. It can be caused by misspecification of the model, the use of lag variables in the regression model since economic variables tend to move together hence multicollinearity. The Variance Inflation Factor test (VIF) was used. It stipulates that when VIF is less than 2.5, there is no multicollinearity among the variables and true if otherwise.

Table 1. Sample population

Private university	Strata	Population	Sample size
BUIB	School of Business	25	12
	School of Health Sciences	40	20
Total		65	$65/187 * 107 = 37$
HIMS	School of Business	30	15
	School of Engineering	15	7
Sub Total		45	$45/187 * 107 = 26$
Fomic polytechnic	School of Business	28	14
	School of Engineering	17	8
Sub Total		45	$45/187 * 107 = 26$
Landmark Higher I	School of Business	20	10
	School of Engineering	12	6
Sub Total		32	$32/187 * 107 = 18$
Grand Total		187	107
Private University	Strata	Population	Sample Size
BUIB	School of Business	25	12
	School of Health Sciences	40	20
Fomic polytechnic	School of Business	28	14
	School of Engineering	17	8
Sub Total		45	$45/187 * 107 = 26$
Landmark Higher I	School of Business	20	10
	School of Engineering	12	6
Sub Total		32	$32/187 * 107 = 18$
Grand Total		187	107
Private University	Strata	Population	Sample Size
BUIB	School of Business	25	12
	School of Health Sciences	40	20
Total		65	$65/187 * 107 = 37$
HIMS	School of Business	30	15
	School of Engineering	15	7
Sub Total		45	$45/187 * 107 = 26$
Fomic polytechnic	School of Business	28	14
	School of Engineering	17	8
Sub Total		45	$45/187 * 107 = 26$
Landmark Higher I	School of Business	20	10
	School of Engineering	12	6
Sub Total		32	$32/187 * 107 = 18$
Grand Total		187	107
Private University	Strata	Population	Sample Size
BUIB	School of Business	25	12
	School of Health Sciences	40	20
Total		65	$65/187 * 107 = 37$
HIMS	School of Business	30	15
	School of Engineering	15	7
Sub Total		45	$45/187 * 107 = 26$
Fomic polytechnic	School of Business	28	14
	School of Engineering	17	8
Sub Total		45	$45/187 * 107 = 26$

Source: Field survey(May,2020)

Table 2. Main variables and their measurements

Variables	Indicators	Measurement
Affective Commitment	loyalty, dedication to work, team work culture	Questionnaire employing Likert scale
Continuance Commitment	job satisfaction, relationships, skills developed, feelings about current job	Questionnaire employing Likert scale
Normative Commitment	scholarships, job experience, motivation and communication	Questionnaire employing Likert scale
Employer/ employee relation	Trust, acceptance, transparency, course distribution and level of understanding	Questionnaire employing Likert scale
Working condition	hours of work, didactic materials, lecture halls, offices and staff rooms	Questionnaire employing Likert scale
Rewards and compensation	Method of payment, pay rate and benefits	Questionnaire employing Likert scale
Co-worker Relation	participation, conflict, Communication and respect	Questionnaire employing Likert scale
Job security	Employee turnover, Employee loyalty, Bankruptcy, Contract of employment and workforce	Questionnaire employing Likert scale

Source: Author's computation based on literature reviewed

Table 3. Variables used for multicollinearity

Employer/employee relations	ava
Working condition	bva
Reward and compensation	cva
Co-worker relationship	dva
Job security	eva
Affective commitment	xva
Continuance commitment	yvar
Normative commitment	zvar
work performance	ydep

Computed by author (Aug, 2020)

3.9 Reliability of Instrument

The reliability of a test instrument is the ability of the individual to take the test, it is the consistency with which it measures what it intended to measure .It gives an indication of the extent to which a particular measurement is consistent and reproducible. Reliability was further tested using test re-test method, where by the questionnaires were administered to some twelve (12) teachers of Biaka University Institute. A week later, the same questionnaires were administered to twelve (12)

teachers of HMS Buea and a similar result was obtained.

3.10 Ethical Considerations

In carrying out the research, the researcher took into consideration some ethical issues; to begin with, the researcher obtained an authorisation letter from the Department of Economics and Management in order to carry out the study. Secondly, the researcher presented the introductory letter to Dean and Directors of the various schools to obtain permission to

administer questionnaires in their institutions; thirdly respondents were assured of confidentiality of responses or information provided. The researcher administered the questionnaires and test scores very strictly complying with the ethics of research as there was coercion. The right to the respondents' privacy was respected.

4. DATA ANALYSIS AND RESULTS

The presentation of results was based on the data obtained from questionnaire administered to teachers so as to answer the research questions raised in chapter one and meet the objectives of the study. This section of the research constitutes information from descriptive statistics on the effects of work environment on work performance in selected private higher institutions in Buea. One hundred and seven (107) staff from four (4) private higher institutions (Biaka university institute, HIMS, Fomic Polytechnic and Landmark Higher institution) were selected to participate in the study. A total of one hundred and seven (107) questionnaires were established and one hundred and five (105) were recovered giving a return rate of 98.13%.

4.1 Demographic Characterization

Table 4 below contains information on demographic characteristics of employee in private higher institutions of learning in Buea. Majority 69 (65.71%) of the participants were male. Majority participants sixty one (61) were from the age of (26-35) years, 20 (19.05%) were from the age of (36-45), 16 (15.24%) were from the age of (16-25) years, while only a few 3 (2.86%) and 5 (4.76%) were from the age of (56-65) and (46-55) years respectively. Majority 63 (60%) of the participants had served as employee in the private higher institution of learning from (1-5) years, 33 (31.43%) had serve the company from (5-10) years and a few participants 6 (5.71), 1 (0.95), and 2 (1.9) had served the company from (10-15), (15-20) and above 20 years respectively. Majority seventy four (70.48%) of respondents were full time workers of private higher institutions of learning in Buea. Majority 37 (35.23%) of participants were teachers of BIAKA, 26 (24.76%) from HIMS, 25, (23.81%) were from LUC, and 17 (16.91%) were from FOMICPOLYTECHNIC.

Information from table 4 indicates that majority of the teaching staff in private higher institutions in Buea are male and are of the active age group. Moreover, majority of the teaching staff has served their institutions for a maximum of five (5) years which is an indication of a high employee turnover in private higher institution of learning in the Buea Municipality. Majority of the participants of this study were full time employee from Biaka University institutes, and had served their institutions from at least (1-5) years. Also, Majority respondents served their institutions as full time teachers, mostly male from (26-35) years of age. This shows that private higher institutes of learning in Buea discriminate upon gender in their employment.

4.2 Description of Employer/Employee Relations

Table 5 below contains information on employer/employee relations of employees in private higher institutions of learning in Buea. Majority 49 (46.67%) of respondents disagreed with the fact that they can trust their employers. 46(49.67%) strongly disagreed while a few 4(3.81%), 3(2.6%) and 3(2.86%), were neutral, agreed and strongly agreed respectively. More than half 55(52.38%) of respondents disagreed with the fact that they get along with their employers. 40(38.1%) strongly disagreed, few 4(3.81%) were undecided and 6(5.71%) agreed. A greater percentage 46(43.81%) of respondents disagreed with the statement that their employers has a good level of transparency with them and their team. 32(30.48%) strongly disagreed while a few 8(7.62%), 14(13.33%) and 5(4.76%) were undecided, agreed and strongly disagreed respectively. Close to half 47(44.76%) of respondents disagreed with the statement that their employers distributes courses objectively. 23(21.9%) strongly disagreed, 23(21.9) agreed and 12(11.43) were undecided. A good number of respondents 43(40.95%), disagreed with the statement that their employers understands if they have a "bad" day. 13(12.38) strongly disagreed, 25(23.81%) were undecided, 17(16.19) agreed while few 7(6.67%) strongly agreed. Majority 65(61.9%) of respondents disagreed with the statement that their employers treats them like any other employee. While few participants 21(20%), 6(5.7%), 11(10.48%) and 2(1.2%), strongly disagreed, were undecided, disagreed and strongly disagreed respectively.

Table 4. Demographic characteristics of the respondents

Variable	Categories	Frequency	Percentage
Gender	Male	69	65.71
	Female	36	34.29
Age	16 – 25years	16	15.24
	26-35years	61	58.1
	36-45years	20	19.05
	46-55years	5	4.76
	56-65years	3	2.86
Longevity in Service	0-5 years	63	60
	5-10 years	33	31.43
	10-15 years	6	5.71
	15-20years	1	0.95
	above 20 years	2	1.9
Nature of job	Full time	74	70.48
	Part time	31	29.52
Name of school	BLAKA	37	35.23
	LUC	25	23.81
	HIMS	26	24.76
	FOMICPOLITECHNIC	17	16.19

Source: Field survey (June, 2020)

Table 5. Employer/Employee relations

NB	Employer/employee relation	SD	D	U	A	SA
1	You feel like your employer is someone you can trust	46 43.81%	49 46.67%	4 3.81%	3 2.86%	3 2.86%
2	I get along with my employer at work	40 38.1%	55 52.38%	4 3.81%	6 5.71%	0 0%
3	your employer has a good level of transparency with you and your team	32 30.48	46 43.81	8 7.62	14 13.33	5 4.76
4	Your employer distributes courses objectively	23 21.9	47 44.76	12 11.43	23 21.9	
5	your employer understands if you have a "bad" day	13 12.38	43 40.95	25 23.81	17 16.19	7 6.67
6	Your employer treats you like any other employee	21 20	65 61.9	6 5.71	11 10.48	2 1.9

Source: Field survey (June, 2020)

4.3 Description of Work Condition

Table 6 below contains information on Work Condition of employees in private higher institutions of learning in Buea. Majority 61(58.1%) of respondents disagreed with the statement that their job does not require them to work intensively. 16(15.24%) strongly disagreed while a few 7(6.67%), 13(12.38%) and 7(6.67%), were neutral, agreed and strongly agreed respectively. More than half 57(54.29%) of respondents disagreed with the statement that they always feel strong and ready to work during daytime. 32(30.48%) strongly disagreed, few 3(2.86%), 9(8.57) and 4(3.81%) were undecided, agreed and strongly agreed respectively. A greater percentage 37(35.24%) of respondents

agreed that their employers pays or compensates for extra hours of work per week. 27(25.71%) strongly agreed, 28(26.67%) disagreed, while a few 10(9.52%), strongly disagreed and 3(2.86%) were neutral. A good number of respondents 45(42.86%), disagreed with the statement that their employers provides all the necessary didactic materials for teaching on time. 19(18.1%) strongly disagreed, 10(9.52%) were undecided, 24(22.86%) agreed while few 7(6.67%) strongly agreed. More than half 52(49.52%) of respondents disagreed with the statement that Lecture halls are spacious and well ventilated. 23(21.9%) strongly disagreed, 8(7.62%) were undecided 13(12.38) agreed and 9(8.57) strongly agreed. Close to half 47(44.76%) of respondents disagreed with the

statement that their institution has well ventilated and spacious offices and staff room, 32(30.48%), 7(6.67%), 16(15.24%) and 3(2.86%), strongly disagreed, were undecided, disagreed and strongly disagreed respectively.

4.4 Reward and Compensation

Table 7 below contains information on Reward and Compensation of employees in private higher institutions of learning in Buea. A good number of participants 31(29.52%) disagreed with the statement that their employer rewards committed workers after compensation. 23(21.9%) strongly disagreed 15(24.29%) were undecided, 22(20.95%) agreed, while 14(13.33%) strongly agreed About one quarter 26(24.76) of participants disagreed with the statement that their employer often reviews compensation.17 (16.19%) strongly disagreed, 24(22.86%) were undetermined, 25(23.81) agreed, and 13(12.38 strongly agreed Close to half 40(38.1%) of participants disagreed with the statement that their employer pays in line with the industry. 14(33.33%) strongly disagreed, 22(20.95%) were undetermined, 20(19.05%) agreed and 9(8.57%) strongly agreed. A good number of respondents 31(29.52%) agreed that their employer compensates workers base on output. There same number of participants 31(29.52%) disagreed, 22(20.95%) were undetermined while a few participants 11(10.48%) and 10(9.52%) strongly disagreed and strongly agreed respectively.

About half of participants 53(50.48) disagreed with the statement that their employer is fair with payment. 18(17.14%) strongly disagreed, 10(9.52) were undetermined, 19(18.1%) agreed while only a few 5(4.76) strongly agreed. A good number of respondents 39(37.14%) disagreed with the statement that their employers maintains or increases pay as benefit increases. 20(19.05%) strongly disagreed, 13(12.38%)were undetermined, 26(24.76%) agreed while a few participants 7(6.67%) strongly agreed.

4.5 Co-worker Relationship

Table 8 below contains information on Co-worker relationship of employees in private higher institutions of learning in Buea. About half 51(48.57%) of participants disagreed with the statement that they work well together with co-workers to accomplish their organization's goals. 39(37.14%) strongly disagreed, 4(3.81%) were undecided, 7(6.67%) agreed and 4(3.81%) strongly agreed A good number of respondents

47(44.76%) disagreed with the statement that their department staff meetings are filled with open and honest participation. 25(23.81%) strongly agreed, 7(6.67%) were undecided, 25(23.81%) agreed and only 1(0.95%) of participants strongly agreed. Majority 43(40.95) of participants disagreed with the statement that conflict are resolved honestly, effectively and quickly in their institutions.18 (17.14%) strongly disagreed, 31(29.52%) agreed, while few participants 10(9.52%) and 3(8.57%) were undecided and strongly agree respectively.

Majority 44(41.9%) of respondents disagreed with the statement that there is perfect communication amount workers. 23(21.9) agreed, 21(20.0%) strongly disagreed, 9(8.57%) strongly agreed while 8(7.62%) were undecided. A good number of respondents 36(34.29%) of respondents disagreed with the statement that Monthly meeting are scheduled to ensure workers' continually aligned in their approach and objectives to avoid potential problems in the work place.29(27.62%) agreed, 19(18.1%) were undecided, 11(10.48%) strongly disagreed while 10(9.52%) strongly agreed. Majority 55(52.38%) of respondents disagreed with the statement that Co-workers respects each other values. 19(18.1%) strongly disagreed, 17(16.19%) agreed, 12(11.43%) were undecided while 2(1.9%) strongly agreed.

Table 9 below contains information on Job Security of employees in private higher institutions of learning in Buea. About half 37(35.24) of respondents disagreed with the statement that their institution is experiencing a low employee turnover. 28(26.67%) agreed16 (15.24%) strongly disagreed, 12(11.43%) were undecided and 12(11.43%) strongly agreed Majority 51(48.57%) of respondents disagreed with the statement that they feel that they will remain employed with their current institution for the next two years.. 28(26.67%) strongly disagreed, 18(17.14%) agreed, 6(5.71%) were undecided while 2(1.9%) strongly agreed.

Majority 41(39.05%) of respondents disagreed with the statement that they plan to be working for the Company a year from now. 24(22.86%) were undecided, 20(19.05%) strongly disagreed, 14(13.33%) agreed while (5.71%) strongly agreed Majority 45(42.865%) of respondents strongly disagreed with the statement that their institutions may not experience bankruptcy in the next 5 years.39 (37.42%) disagreed, 13(12.38%) agreed, 7(6.67%) were undecided, while 1(0.95) strongly agreed.

Table 6. Working condition

NB	Working condition	SD	D	U	A	SA
1	your job does not require you to work intensively	16 15.24	61 58.1	7 6.67	13 12.38	7 6.67
2	You always feel strong and ready to work during daytime	32 30.48	57 54.29	3 2.86	9 8.57	4 3.81
3	Your employer pays or compensates for extra hours of work per week	10 9.52	28 26.67	3 2.86	37 35.24	27 25.71
4	Your employer provides all the necessary didactic materials for teaching on time	19D 18.1	45 42.86	10 9.52	24 22.86	7 6.67
5.	Lecture halls are spacious and well ventilated	23 21.9	52 49.52	8 7.62	13 12.38	9 8.57
6	Your institution has well ventilated and spacious offices and staff room	32 30.48	47 44.76	7 6.67	16 15.24	3 2.86

Source: Field survey

Table 7. Reward and compensation

NB	Reward and compensation	SD	D	U	A	SA
1	Your employer rewards committed workers after compensation	23 21.9	31 29.52	15 14.29	22 20.95	14 13.33
2	Your employer often reviews compensation	17 16.19	26 24.76	24 22.86	25 23.81	13 12.38
3	Your employer pays in line with the industry	14 13.33	40 38.1	22 20.95	20 19.05	9 8.57
4	Your employer compensates workers base on output	11 10.48	31 29.52	22 20.95	31 29.52	10 9.52
5	Your employer is fair with payment	18 17.14	53 50.48	10 9.52	19 18.1	5 4.76
6	Employer maintains or increases pay as benefit increases	20 19.05	39 37.14	13 12.38	26 24.76	7 6.67

Source: Field survey

Table 8. Co-worker relationship

NB	Co-worker relationship	SD	D	U	A	SA
1	My co-workers and I work well together to accomplish our organization's goals	39 37.14	51 48.57	4 3.81	7 6.67	4 3.81
2	Our department staff meetings are filled with open and honest participation.	25 23.81	47 44.76	7 6.67	25 23.81	1 0.95
3	We resolve conflict honestly, effectively and quickly.	18 17.14	43 40.95	10 9.52	31 29.52	3 2.86
4	There is perfect communication among co-workers	21 20.0	44 41.9	8 7.62	23 21.9	9 8.57
5.	Monthly meeting are scheduled to ensure workers' continually aligned in their approach and objectives to avoid potential problems	11 10.48	36 34.29	19 18.1	29 27.62	10 9.52
6	Co-workers respects each other values	19 18.1	55 52.38	12 11.43	17 16.19	2 1.9

Source: Field survey

Table 9. Job security

NB	Job Security	SD	D	U	A	SA
1	My institution is experiencing a low employee turnover	16 15.24	37 35.24	12 11.43	28 26.67	12 11.43
2	I feel that I will remain employed with my current institution for the next two years	28 26.67	51 48.57	6 5.71	18 17.14	2 1.9
3	I plan to be working for the Company a year from now	20 19.05	41 39.05	24 22.86	14 13.33	6 5.71
4	My institution may not experience bankruptcy in the next 5 years	45 42.86	39 37.14	7 6.67	13 12.38	1 0.95
5	My institution always sign contract of employment with newly recruits, at least, after 6 months of work	19 18.1	31 29.52	13 12.38	24 22.86	18 17.14
6	Over the past 12 months, the workforce has been strongly increasing	17 16.19	42 40	10 9.52	24 22.86	12 11.43

Source: Field survey

Above one third 31(29.25%) of participants disagreed with the statement that their institutions always sign contract of employment with newly recruits, at least, after 6 months of work. 24(22.86%) agreed, 19(18.1%) strongly disagreed 18(17.14%) strongly agreed while 13(12.38%) were undecided.

4.6 Work Performance

Table 10 below contains information on affective commitment of employees in private higher institutions of learning in Buea. About one quarter 26(24.76) of respondents disagreed with the statement that they have a strong desire to remain in their current institutions. 25(23.81%) strongly agreed, 24(22.86%) agreed, 19(18.1%) were undecided while 11(10.48%) strongly disagreed. Majority 35(33.33%) of respondents disagreed with the statement that they have the willingness to input high effort. 32(30.84%) agreed, 28(26.67%) strongly agreed, 5(4.76%) strongly disagreed and 5(4.76%) were undecided. Majority 60(57.14%) of participants disagreed with the statement that they believe in the values of their organizations. 23(21.9%) strongly disagreed, 13(12.38%) agreed, 5(4.76%) strongly agreed while 4(3.81) were undecided. Majority 68(64.76%) of participants disagreed with the statement that their institutions has a strong teamwork culture. 23(21.9%) strongly disagreed, 10(9.52%) agreed, 3(2.86%) were undecided while 1(0.95%) strongly agreed. Majority 56(53.33%) of respondents disagreed with the statement that their job gives them enjoyment. 28 (26.67%) strongly disagreed, 13(12.28%) agreed while 8(7.62%) were undecided.

Table 11 below contains information on continuance commitment of employees in private

higher institutions of learning in Buea. About half 48(45.71%) of respondents disagreed with the statement that leaving your institution will have disastrous consequences on them. 34(32.38%) strongly agreed, 16(15.24%) agreed, 4(3.81%) while 3(2.86%) strongly agreed. About half 48(45.71%) of participants disagreed with the statement that they feel they are well paid in their current job. 45(42.86%) strongly disagreed, 9(8.57%) agreed while 3(2.86%) were undecided. Majority 45(42.86%) of respondents disagreed with the statement that they will like to continuously improve on the skills developed while working in their current position. 41(39.05%) strongly disagreed, 9(8.57%) were undecided, 8(7.62%) agreed while 2(1.9%) strongly agreed. Majority 48(45.71%) of participants disagreed with the statement that they will like to maintain friends developed in their institutions. 32(30.48%) strongly disagreed, 15(14.29%) agreed 8(7.62%), were undecided, while 2(1.9%) strongly agreed.

Table 12 below contains information on normative commitment of employees in private higher institutions of learning in Buea. A good number of participants 34(32.38%) of respondents disagreed with the statement that they feel a sense of guilt about the possibility of leaving your institution. 21(20%) strongly agreed, 22(20%) agreed 18(17.145) strongly disagreed, 11(10.48%) were undetermined.

Majority 35(33.33) agreed that their institution have invested on them monetarily and they feel they have to pay back. 33(31.43%) strongly agreed, 19(18.1%) disagreed, 9(8.17%) strongly disagreed and 9(8.17%) were undecided. A good number of respondent 38(36.19%) disagreed with the statement that their current experience in teaching is thanks to their institutions.

Table 10. Work performance

NB	(Affection for your Job)	SD	D	U	A	SA
1	You have a strong desire to remain in your institution	11 10.48	26 24.76	19 18.1	24 22.86	25 23.81
2	You have the willingness to input high effort	5 4.76	35 33.33	5 4.76	32 30.48	28 26.67
3	You believe in the values of the organization	23 21.9	60 57.14	4 3.81	13 12.38	5 4.76
4	Your institution has a strong teamwork culture	23 21.9	68 64.76	3 2.86	10 9.52	1 0.95
5	Your job gives you enjoyment	28 26.67	56 53.33	8 7.62	13 12.38	

*Source: Field survey***Table 11. Continuance commitment**

	Fear of loss	SD	D	U	A	SA
1	Leaving your Institution will have disastrous consequences on you	34 32.38	48 45.71	4 3.81	16 15.24	3 2.86
2	You feel you are well paid in your current job	45 42.86	48 45.71	3 2.86	9 8.57	
3	You will like to continuously improve on the skills developed while working in your current position	41 39.05	45 42.86	9 8.57	8 7.62	2 1.9
4	You will like to maintain friends developed in your institution	32 30.48	48 45.71	8 7.62	15 14.29	2 1.9
5	You have positive feelings about your employment	22 20.95	59 56.19	8 7.62	10 9.52	5 4.76

*Source: Field survey***Table 12. Normative commitment**

No	Sense of obligation to stay	SD	D	U	A	SA
1	You feel a sense of guilt about the possibility of leaving your institution	18 17.14	34 32.38	11 10.48	21 20	21 20
2	Your institution have invested on you monetarily and you feel you have to pay back	9 8.57	19 18.1	9 8.57	35 33.33	33 31.43
3	Your current experience in teaching is thanks to your institution	21 20	38 36.19	10 9.52	22 20.95	14 13.33
4	Your institution provide constructive feedback and not criticisms	21 20	50 47.62	8 7.62	15 14.29	11 10.48
5	Your institution is transparent and encourage open communication	24 22.86	52 49.52	7 6.67	11 10.48	11 10.48

Source: Field survey

22(20.95%) agreed, 21(20%) strongly disagreed, 11(10.48%) strongly agreed while 8(7.62%) were undecided. Majority 52(49.52%) of respondents disagreed with the statement that their institutions are transparent and encourage open communication. 24(22.86%) strongly disagreed, 11(10.48%) agreed, 11(10.48%) strongly agreed while 7(6.67%) where undecided.

5. SUMMARY RESULTS

Table 13 above presents the summary statistics of the variables in terms of their means, standard

deviations, minimum and maximum values. From the table above, work performance is 2.48 on average with a deviation from this average value by 0.58. The variable has a minimum and maximum value of 1.5 and 4.3 respectively. Normative commitment is 2.82 on average with a deviation from this average value by 0.83. It is observed that the variable has minimum and maximum values of 1 and 5 respectively. Also, the mean value of continuance commitment is 2.59 with a deviation from this mean by 0.65. The minimum and maximum values of these variables are 1 and 4.4

respectively. It is further observed that affective commitment is 2.04 on average, with a deviation from this average by 0.77. It has a minimum and maximum value of 1 and 4.2 respectively. The mean value of employer/employee relations is 2.13 on average, with a deviation from the average by 0.66. It has a minimum and maximum value of 1 and 4.17 respectively. Working condition has an average of 2.53 with a standard deviation of 0.78. Its minimum and maximum values are 1.17 and 6.83 respectively. Reward compensation is 2.73 on average with a deviation from this average value by 0.83. It is observed that the variable has minimum and maximum values of 1 and 5 respectively. Co-worker relationship has a mean value of 2.44 with a deviation of 0.76 from this mean value. The variable has a minimum and maximum value of 1 and 4.5 respectively. Job security is 2.5 on average with a deviation of 0.56. its minimum and maximum values are 1.3 and 3.67 respectively.

Table 14 above presents the pairwise correlation results acting as pre-test for multicollinearity. It is observed that the leading diagonals of all the variables give the values 1 showing perfect collinearity between each variable and itself. It is

seen that the correlation coefficients between all pair of variables is positive, implying a positive or direct relation between these pair of variables. This positive relationship implies that an increase in the independent variables will be accompanied by an increase in the dependent variable and vice versa. The VIF test is conducted to ensure that multicollinearity is a problem or not.

Table 15 above shows the VIF result which is used to further test for multicollinearity. If the VIF of a coefficient of a variable exceeds 10, then that variable is highly collinear, and multicollinearity becomes a problem (Gujarati, 2004). The VIF result shows that individually, none of the VIF exceeds 10, thus it can be concluded that there is no problem of multicollinearity among the independent variables.

Table 16 present the result for the heteroscedasticity test. Based on the Breusch-Pagan / Cook-Weisberg test for heteroscedasticity presented above, the p-value of chi2 is 0.9025 which is greater than 10%, hence insignificant. Thus, we do not reject the null hypothesis of constant variance and conclude that heteroscedasticity is not an issue in this model.

Table 13. summary statistics of variables; means, standard deviations, minimum and maximum values

Variable	Observation	Mean	Std. Dev.	Min	Max
work performance	105	2.483175	0.580361	1.533333	4.333333
Normative commitment	105	2.819048	0.830905	1	5
Continuance commitment	105	2.590476	0.645923	1	4.4
Affective commitment	105	2.04	0.772309	1	4.2
Employer/employee relations	105	2.131746	0.656043	1	4.166667
Working condition	105	2.525397	0.78473	1.166667	6.833333
Reward and compensation	105	2.734921	0.82938	1	5
Co-worker relationship	105	2.44127	0.761304	1	4.5
Job security	105	2.511111	0.562953	1.333333	3.666667

Table 14. Pre-Test for multicollinearity

	Ydep	zvar	Yvar	xva	ava	bva	cva	dva	eva
ydep	1								
zvar	0.7727	1							
yvar	0.7446	0.3429	1						
xva	0.8003	0.3794	0.4734	1					
ava	0.6433	0.4922	0.3955	0.5898	1				
bva	0.4211	0.1895	0.3148	0.4822	0.3322	1			
cva	0.5545	0.4199	0.423	0.4445	0.3996	0.3067	1		
dva	0.5634	0.4051	0.3528	0.5393	0.4461	0.3718	0.2568	1	
eva	0.3349	0.2188	0.2365	0.3219	0.2347	0.2327	0.3708	0.2415	1

Table 15. VIF result

Variable	VIF	1/VIF
ava	1.43	0.70058
dva	1.36	0.73423
cva	1.35	0.739891
bva	1.26	0.793851
eva	1.2	0.832271
Mean VIF	1.32	

Table 17 above shows the regression result of "Effects of work environment on work performance". From the results; the coefficient of employer/employee relations is positive for all the four models. This means that employer/employee relation positively affects the affective commitment, continuance commitment, normative commitment and work performance. That is, increase in (healthy) employer/employee relation increases the dependent variables. Specifically, from the result, a unit increase in employer/employee relation increases dependent variable 1 (affective commitment) by about 0.382. This result is statistically significant at 1% level of significance. A unit increase in employer/employee relation increases dependent Variable 2 (continuance commitment) by about 0.172 and this result is statistically significant at 10% level of significance. A unit increase in employer/employee relation increases dependent variable 3 (normative commitment) by about 0.395 and this result is statistically significant at 1% level of significance. A unit increase in employer/employee relation increases dependent variable 4 (work performance) by about 0.316 and this result is statistically significant at 1% level of significance. It is thus seen that employer/employee relation contributes greatly to dependent variable 3 than to the other dependent variables. Working condition is seen to positively affect affective commitment, continuance commitment and work performance as its coefficient is positive; and is seen to negatively affect normative commitment as its coefficient is negative. That is increase (improvement) in working condition increases affective commitment, continuance commitment and work performance while it reduces commitment. Specifically, a unit increase in working condition will increase affective commitment by about 0.210. This result is statistically significant at 1% level of significance. A unit increase in working condition increases continuance commitment by about 0.089; increases work performance by about 0.071 and reduces normative commitment by about 0.085. However, all these are statistically insignificant.

The coefficient of reward and compensation is positive for all the four models. This means that reward and compensation positively affect the dependent variables. That is, increase in reward and compensation increases the dependent variables. Specifically, from the result, a unit increase in reward and compensation increases affective commitment by about 0.144. This result is statistically significant at 10% level of significance. A unit increase in reward and compensation increases continuance commitment by about 0.208 and this result is statistically significant at 1% level of significance. A unit increase in reward and compensation increases normative commitment by about 0.257 and this result is statistically significant at 1% level of significance. A unit increase in reward and compensation increases work performance by about 0.203 and this result is statistically significant at 1% level of significance. It is thus seen that reward and compensation contributes greatly to normative commitment. Co-worker relationship is seen to positively affect dependent normative commitment, continuance commitment, normative commitment and work performance as its coefficient is positive for all four models. That is, increase in Co-worker relationship increases the dependent variables. Specifically, from the result, a unit increase in Co-worker relationship increases affective commitment by about 0.261. This result is statistically significant at 1% level of significance. A unit increase in reward and compensation increases continuance commitment by about 0.134 however, this result is statistically insignificant. A unit increase in Co-worker relationship increases normative commitment by about 0.247 and this result is statistically significant at 5% level of significance. A unit increase in Co-worker relationship increases work performance by about 0.214 and this result is statistically significant at 1% level of significance. It is thus seen that among the significant results, Co-worker relationship contributes greatly to affective commitment.

Table 16. Result for the heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity
Ho: Constant variance
Variables: fitted values
chi2(1) = 0.01
Prob> chi2 = 0.9025

The coefficient of job security is positive for all the four models. This means that job security positively affects the dependent variables. That is, increase in job security increases the dependent variables. Specifically, from the result, a unit increase in job security increases affective commitment by about 0.105, increases dependent continuance commitment by about 0.038, increases dependent variable 3 by about 0.022, and increases work performance by about 0.055. However, all these results are insignificant. Regarding the adjusted R-squared, it is 0.5025 for model 1, which means that 50.25% variation in affective commitment is explained by the independent variables in this model. It is 0.2434 for model 2, which means that 24.34% variation in continuance commitment is explained by the independent variables in this model. It is 0.3076 for model 3, which means that 30.76% variation in normative commitment is explained by the independent variables in this model. It is 0.5877 for model 4, which means that 58.77% variation in work performance, is

explained by the independent variables in this model.

6. DISCUSSION OF THE FINDINGS

In this study, we examined the effect of work environment on work performance in private higher institutions of learning in Buea. We found strong evidence that work environment positively affect affective, continuance and normative commitment of employee in private higher institutions of learning in Buea.

The first objective of the study was to investigate if employer/employees relations improve workers commitment in private higher institutions of learning in Buea.

Regression result shows that, a unit increase in employer/employee relation increases affective commitment by about 0.382, continuance commitment by about 0.172%, normative commitment by about 0.395 and work performance by about 0.316. The above results are statistically significant at 1%, 10%, 1% and 1% respectively. It is thus seen that employer/employee relation contributes greatly to normative commitment than to affective, continuance and work performance. Thus the study rejected the first null hypothesis and retains the alternative thereby concluding

Table 17. Regression results

	(1) Affective commitment	(2) Continuance commitment	(3) Normative commitment	(4) work performance
Variables	Model 1	Model 2	Model 3	Model 4
ava	0.382*** (0.0973)	0.172* (0.100)	0.395*** (0.123)	0.316*** (0.0665)
bva	0.210*** (0.0764)	0.0892 (0.0788)	-0.0851 (0.0970)	0.0714 (0.0523)
cva	0.144* (0.0749)	0.208*** (0.0772)	0.257*** (0.0950)	0.203*** (0.0512)
dva	0.261*** (0.0819)	0.134 (0.0845)	0.247** (0.104)	0.214*** (0.0560)
eva	0.105 (0.104)	0.0380 (0.107)	0.0215 (0.132)	0.0548 (0.0711)
Constant	-0.600** (0.294)	1.007*** (0.304)	0.832** (0.374)	0.413** (0.201)
Observations	105	105	105	105
R-squared	0.526	0.280	0.341	0.608
Adjusted R-Square	0.5025	0.2434	0.3076	0.5877
F(5, 99)	22.21	7.69	10.24	30.65

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

that employer/employee relation positively affect employee's commitment in private higher institutions of learning in Buea.

This implies, if employers of private higher institutions in Buea establishes a cordial relationship with their employees such that there is increased levels of participation and involvement as means of increasing perceived control, there will be an increase in affective, continuance, normative as well as work performance. However, a greater increase will be realized with normative commitment. This finding is in line with that of Amusa, Iyoro and Olabisi [18] whose finding revealed that the work environment in terms of physical facilities, open communication, motivation and much is fairly favourable while personnel involvement was considered not to be favourable at all. Another result from previous research reveals that a high positive impact of the line manager relationship and trust in senior management on work performance at CEBis directly related to productivity (Sawithri, 2017).

Findings further revealed that Setting targets and the organization of regular team events may promote greater employee connection within the organization and increase work performance level as previous research has indicated that perceived control leads to decreased stress levels and improved employee health (Heaney et al., 1993; Israel et al. 1989). Fostering a supportive organizational culture with good relationships among staff is also integral to greater work performance. These relationships can also assist employees in coping with ever-increasing levels of organizational change. Again research indicates that a supportive culture can reduce employee stress levels and increase work performance (Wayne, Shore, & Liden, 1997).

The second objective of the study was to evaluate the effect of working conditions on workers commitment in private higher institutions of learning in Buea.

Regression results shows that a unit increase in working condition will increase affective commitment by about 0.210, continuance commitment by about 0.089, increases work performance by about 0.071 and reduces normative commitment by about 0.085. It is observed that working condition has a greater positive effect on continuance commitment than on affective and work performance. These results are statistically significant at 1%, level of significance. However, all these are statistically

insignificant. Thus the study rejected the second null hypothesis and retains the alternative thereby concluding that working condition positively affect employee's commitment in private higher institutions of learning in Buea.

This confirms the findings of previous research that favourable working conditions encourage greater interaction, collaboration and innovation (Ilozor, Love, & Treloar, 2002; Nenonen, 2004) and employees are more likely to experience higher job satisfaction and greater intention to stay with the organization (Weiss, 1999; Wise, Darling-Hammond, & Berry, 1987). Furthermore, the positive effect of work environment on work performance confirms research by Sutherland and Cooper (1990) that poor working conditions may lead to poor mental health amongst employees thereby leading to low work performance.. It suggests that organizations need to invest resources in ensuring that the work environment is pleasant and amenable to employees. By ensuring equipment is functioning correctly and that there is adequate work space, employees will feel more secure and settled in their surroundings and will become more committed to the organization. It proves that a pleasant and amenable work environment can be an effective tool in reducing stress and promoting work performance. The third objective of the study was to examine the effect of reward and compensation on work performance in private higher institutions of learning in Buea. Regression results show that, a unit increase in reward and compensation increases affective commitment by about 0.144, continuance commitment by about 0.208, normative commitment by about 0.257 work performance by about 0.203. This result is statistically significant at 10%, 1%, 1% and 1% level of significance respectively. It is thus seen that reward and compensation contributes greatly to normative commitment. Meaning a fair, equitable, and consistent reward and compensation package will attract, retain and motivate employees. This is in line with previous research which indicates that reward and compensation is a measure determinant of work performance (Milgo, 2014).

7. SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 Summary of Major Findings

This study set out to investigate the effect of Work Environment on work performance;

evidence from selected private Higher Institutions of Learning in Buea. The study used primary data collected through self-administered questionnaires directed to one hundred and seven (107) staff from four (4) private higher institutions of learning in Buea (Biaka University Institute, Fomic Polytechnic University Institute, Higher Institute of Management Studies and Landmark Higher Institute). In data analysis, means and standard deviations were used. A multiple regression model was established that predicted effects of work environment on work performance in the Buea municipality. Findings were as follows; Majority of the participants of this study were full time employee from Biaka University institutes, and had served their institutions from at least (1-5) years. Also, Majority respondents served their institutions as full time teachers, mostly male from (26-35) years of age. This shows that private higher institutes of learning in Buea discriminates upon gender in their employment.

Regarding employer/employee relations, the researcher found out that majority of respondents was not satisfied with the relationship they have with their employers in the various institutions. More than half of the respondents don't get along with their employers. A good number of respondents don't trust their employers and were not satisfied with their employers' approach of course distribution. Regression results shows that Employer/employee relation positively affects the dependent variables (Affective, continuance, Normative and work performance). That is, an increase in (healthy) employer/employee relation increases the dependent variables. Thus the study rejected the first null hypothesis and retains the alternative thereby concluding that employer/employee relation positively affect employee's commitment in private higher institutions of learning in Buea.

As concern working condition, the researcher found out that the sizes of most lecture halls in private higher institutions of learning in Buea are inappropriate, and poorly ventilated. Majority respondents indicated that they are over loaded and do not receive didactic materials on time. Regression results shows that working condition positively affects affective commitment, continuance commitment and work performance but negatively affects normative commitment. That is an improvement in working condition will increase work performance. Thus the study rejected the second null hypothesis and retains the alternative thereby concluding that working

condition positively affect employee's commitment in private higher institutions of learning in Buea. In another aspect, the researcher also found out that, majority private higher institutions of learning do not rewards workers after compensation. They do not review compensation and do not paying line with the industry. Regression results shows that, Reward and compensation positively affect the dependent variables (Affective, continuance, Normative and work performance). That is, increase in reward and compensation increases the dependent variables. Thus the study rejected the third null hypothesis and retains the alternative thereby concluding that reward and compensation positively affect employee's commitment in private higher institutions of learning in Buea. Regarding the adjusted R-squared, it is 0.5025% for model 1, which means that 50.25% variation in dependent variable one (1) is explained by the independent variables in this model. It is 0.2434 for model two (2), which means that 24.34% variation in dependent variable two (2) is explained by the independent variables in this model. It is 0.3076 for model three (3), which means that 30.76% variation in dependent variable three (3) is explained by the independent variables in this model. It is 0.5877 for model four (4), which means that 58.77% variation in dependent variable four (4), is explained by the independent variables in this model.

8. CONCLUSION

The most important resource for an organization is the human resources who are the employees. They make sufficient contribution to an organization; attention should therefore be paid to them. Organizations can only realize their goals and objectives through its employees' commitment. Employees will strive to commit their services in an organisation when they feel that their immediate environment state corresponds with their obligations. The type of work environment in which they operate will determine whether they perform or not, it's through their commitment that organizational performance can be realized. The workplace conditions will determine the employees' comfort to work and increase their commitment. Employees' commitment is deemed as a function of ability and motivation. From the study it can be concluded that the reward package contributes a lot to employees' motivation to work. The employee wants to be recognized for their work through fair compensation. Fair

compensation will motivate employees to work harder and improve their performance. The reward systems at the private higher institutions of learning in Buea are financial and extrinsic.

Employer/ employee relation can highly affect commitment of employees, from the study; poor relationship between employer and employee could highly affect employees' commitment. However, the employees appreciate the effort their organizations put through training and development in order to attain the desired skills and knowledge needed to perform their duties. From the study findings, it can be concluded that for an organization to have a competitive edge over others, it must provide a positive work environment in which all factors that affect work performance are in tandem with their obligations.

9. RECOMMENDATIONS

The study findings support the Two Factor Theory which points out that the environment in which the job is performed motivates the employees to perform better. The study recommends that private higher institutions of learning need to set in place better reward systems that motivate the employees to work. Following dissatisfaction in reward and compensation approach by respondents, the institutions should come up with a compensation and reward approach that will improve on the commitment of teachers in private higher institutions of learning. Such an approach may involve rewarding efficient and effective employees, pay for extra hours, maintain salary as benefit increases, and introduce a salary increase scheme for deserving workers. Private higher institutions of learning should also ensure that the workplace environment is comfortable enough to support work performance by improving the working conditions. Institutions should improve the lighting, Make the offices and classrooms comfortable, and provide teachers with the right didactic materials on time and assigning the appropriate work load to workers. Moreover, to improve employer/employee relationship, employers of private higher institutions of learning should improve on their communication with employees and endeavour to be more transparent with their activities. Head of departments should be involved in the recruitment of new staff and the distribution of courses to ensure objectivity in the recruitment and distribution of courses among staff. In

addition to that, to improve co-worker relationship, employers of private higher institutions of learning should make a policy for departmental meetings to hold three (3) times in a year to ensure workers' continually aligned in their approach and objectives to avoid potential problems. Also, they should ensure conflicts are resolved honestly, effectively and quickly and encourage perfect communication among co-workers. By improving the work environment, employees' becomes more commitment. When the work environmental supports are sound, employees are better equipped to do what is expected of them. Through this, private higher institutions of learning will achieve their goals.

10. LIMITATIONS OF THE STUDY

The study has certain limitations. The selection of work environment variables that affects work performance is not exhaustive. There may be other variables that may affect work performance that might provide more insight on work performance. The used variables might not provide a clear image of "the effects of work environment on work performance". Another limitation to the study is the vast nature of the private higher institutions of learning across the country. The researcher would have wished to carry out the study across the country but that was not possible due to constraints in time, finances and other related resources. The study also limited itself to information and details that could be discussed without compromising any part of the institutions' business aspects due to the competitive and dynamic nature of the industry. However these limitations did not affect data collected for study.

10.1 Suggestions for Future Research Endeavors

Due to limited time and resources, this study was restricted to only Buea. It is important for further studies to be carried out across the country for a broader perspective on the effects of work environment on work performance. A replication of this study in other contexts like the public sector would demonstrate the significance of work environment and employee performance in general. Future researchers would further review existing literature on relation between work environment factors and employee performance. This would enable them identify more work environmental factors not covered in this study for insight

DISCLAIMER REGARDING CONSENT/ ETHICAL APPROVAL

As per international standard or university standard guideline participant consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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