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Using Principal Components Regression (PCR) to Predict the Nexus between Institutional Training and Development Programs and Employer Performance in Private Universities in Ghana

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Abstract

This study examined the nexus between institutional training and development and employee performance from private universities in Ghana using Principal Components Regression (PCR). The study employed exploratory design through the quantitative and cross-sectional survey methods for data collection. The questionnaires were administered 384 respondents from the private universities. The study revealed that training on leadership behaviour and development modules is more prevalent in the private universities in Ghana ($M=3.2669$, $SD=0.6918$, $Skewness=-0.8262$, $p\text{-value}=0.0000$). The correlation results revealed a significant positive relationship between on-job training ($r=0.3570^$, $p\text{-value}=0.000$), off-job training ($r=0.2893^*$, $p\text{-value}=0.000$), training on leadership behaviours ($r=0.4019^*$, $p\text{-value}=0.000$) and training on development modules and employee performance ($r=0.5917^*$, $p\text{-value}=0.000$). Using PCR, the results revealed that there is a significant combined effect of on-job training, off-job training, training on leadership behaviour and development modules on employees' performance ($F\text{-statistic}=54.512$, $p\text{-value}=0.000<0.05$). It is recommended that private universities intensify more efforts to train their employees. Also, institutional training and development programmes at the private universities in Ghana should emphasized more on-job training and off-job training and further improve their activities of development modules training and leadership*

Keywords: Training, Development, Employer, Performance

Introduction

Institutional training and development are important activities for all companies, no matter their size or location. Training is a structured method of equipping individuals with the necessary knowledge, skills, and behavior to perform effectively in their jobs. Through training, employees gain information, skills, and abilities that can help them change their behavior and attitudes, resulting in high-quality outputs, which ultimately leads to increased organizational performance. The development of employees involves preparing them for various roles within the company and enhancing their ability to transition into different occupations. Therefore, development entails preparing workers for new responsibilities, roles, or expectations, and improving their capacity to move into other jobs.

Organizations worldwide use various means such as periodic job training, in-service training, capacity development training, workshops, seminars, and conferences to enhance the efficiency and productivity of their personnel (Osiesi, 2020; Klein et al., 2019). Some companies even provide financial support such as scholarships and sponsorships to enable their employees to attend universities and advanced training programs in foreign countries to boost their intellectual capacity (Osiesi, 2020; Nassazi, 2013).

Human resources management oversees institutional training and development, which aims to improve an organization's performance by enhancing the quality and performance of its personnel ([Amegayibor, 2021](#); [Kaya & Akdemir, 2016](#); [Osiesi, 2020](#)). Employees who participate in appropriate training are more likely to remain in their positions for a longer period than those who do not. For education to fulfill its role in strengthening individuals' capabilities and educating them about critical decisions that affect their well-being, it must meet certain quality requirements ([Ukaegbu & Ekpeyong, 2017](#)). It is strongly suggested that universal education quality goals be accompanied by quality instruction achieved through the training of lecturers and other related staff to enable them to perform their duties effectively.

According to [Annan \(2020\)](#), educational employees in Ghana must be reflective to meet the demands for quality education from the government and the public. [Annan \(2020\)](#) emphasizes the importance of continuous institutional training and development to improve the quality of the learning process and education in general. Although there are several private colleges in Ghana that offer courses comparable to those offered by regular universities, their primary objective is to maximize profits at the expense of quality. Therefore, it is essential for these institutions to invest in the institutional training and development of their workforce to the same degree as conventional educational institutions.

Several studies have highlighted the importance of continuous institutional training and development of employees in educational institutions to enhance the quality of both formal and informal education and meet students' needs ([Ampomah-Mintah, 2017](#); [Ataş Akdemir & Akdemir, 2019](#); [Ayık & Atas, 2014](#)). Consequently, teachers and other educational staff are expected to take responsibility for planning and executing their ongoing professional training and development to remain competitive amidst rapid global changes. In addition, continuous institutional training and development is viewed as a form of professional growth that employees achieve by gaining experience and systematically evaluating their performance ([Abdullah, 2019](#)) throughout their employment.

Institutional training and development should be viewed not just as an opportunity for growth, but also as an investment that can provide significant returns and benefits to both organizations and their employees. Institutional training and development processes are put in place to contribute to the overall goals of the organization. These processes provide benefits not only to the organization as a whole, but also to individual employees. Institutional training and development can increase a firm's profitability and foster a more positive attitude towards a profit-oriented mindset. Additionally, it helps employees to enhance their work expertise and better identify with the goals of the organization.

Participation in training and professional development activities is essential for employees in a working environment to enhance their job performance and overall productivity. The success of an organization not only relies on the quantity and quality of its material resources, but also on the caliber and expertise of its workforce ([Ataş Akdemir, 2019](#); [Mahmud et al, 2011](#); [Faraj, et al., 2021](#)). Hence, it is crucial for leaders of firms to ensure that there are continuous institutional training and development programs for their employees to improve the quality of their personnel. There is a significant correlation between institutional training and development and the success of a company. [Sandamali et al., \(2018\)](#) conducted a study on the relationship between institutional training and development opportunities and the performance of executive-level workers in the apparel business in Sri Lanka. The findings revealed a positive and significant connection between executive-level employee performance and institutional training and development programs.

[Asare \(2021\)](#) and [Amegayibor \(2021\)](#) undertook research on the outcomes of institutional training and development. Asare's research concentrated on the effect of training on employees at the Cocoa Research Institute of Ghana, while Amegayibor's research examined the association between institutional training and development tactics and organizational performance in a local government organization. Both studies concluded that institutional training and development could result in enhanced skills and knowledge for employees, leading to improved organizational performance.

Despite some studies finding a positive correlation between institutional training and development and employee performance, other researchers have found contrasting results. For example, [Agyei \(2014\)](#) found no relationship between institutional training and development programs and employee performance in rural banks in the Ashanti region. Similarly, [Sommahmi \(2020\)](#) discovered that not all training methods have a significant impact on employee performance. This was found after investigating the impact of institutional training and development on organizational performance in the Bolgatanga Municipal Assembly.

The issue of staff retention and quality is a common challenge faced by private universities in Ghana. [Amponsah and Onuoha \(2013\)](#) have suggested that reduced staff performance and inability to retain quality staff are some of the challenges faced by private universities in Ghana. In response to these challenges, training programs have been implemented in many private universities in Ghana to enhance the efficiency and effectiveness of their employees. However, it is unclear whether there is a correlation between the training programs offered in private universities and the efficiency and effectiveness of their employees compared to traditional universities. Further research may be needed to investigate this correlation.

The literature on institutional training and development studies in Ghana has primarily focused on public sector institutions and specific industries, such as mining, banking, insurance, agriculture, and communication. Very little research has been done on the institutional training and development of employees in private universities. Therefore, conducting a study on the correlation between institutional training and development and employee performance in private universities would not only add to existing knowledge but also shed light on the training methods utilized by these institutions. Hence, the study investigated the nexus between institutional training and development and employees' performance among the private universities in Ghana using Principal Components Regression (PCR).

Research Questions

In order to achieve the above objectives, the study was driven by the following questions.

- What institutional training and development programs exist for employees at Private Universities in Ghana?
- What is the relationship between institutional training and development and employee performance?
- What is the effect of institutional training and development on performance of the employees of private universities in Ghana?
- What are strategies to improve institutional training and development programs in private universities in Ghana?

Research Hypothesis

To address research question 2 and 3, the study hypothesizes that:

- H_0 : There is no significant effect of institutional training and development on employee performance.
- H_1 : There is significant relation or effect of institutional training and development on employee performance.

Conceptual Framework

Conceptual framework is developed from the interrelated views gathered from previous researchers on institutional training and development in relation to organizational performance. The researcher conceptualized institutional training and development latent variables as independent and employee's performance as dependent variables. All independent and dependent variables were measured with Likert scale items rating. Figure 1 show the conceptual framework relating independent variables institutional training and development to the dependent variable dependent variable.

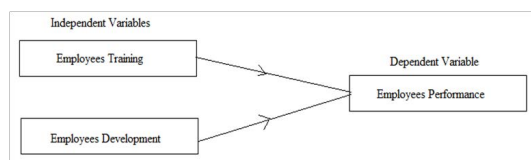


Figure 1 Diagrammatical Representation of Conceptual Framework

Methodology

Research Design

The study adopted exploratory research design which has the power to test the hypothesis on the nature of certain relationships with an aim to differentiate between, and measure, the relative influence of the factors and explain the cause-and-effect relationship between them. Additionally, the design has advantage to investigate the causes of particular phenomena, not simply to describe them but provides an understanding of the relationships that exist between variables. Quantitative approach was used for the study in the sense that it is more objective and provide observed facts on a problem as they are. Moreover, the study used survey design and structured questionnaire that will be less in-depth and in breadth using information across a large number of respondents.

Population

Population of this study comprised all the staff members of private universities in Ghana. The study used purposive sampling techniques to select Christian Service University College and Garden City University College to form the accessible population. According to human resource department of both universities many of their lecturers are on part time bases from their affiliated universities. They sometimes engage them base on when the need arises on request from the administrative section, hence their staff strength are not static as traditional or public universities. However, they stated that their workforce to be approximately 345 and 200 respectively totaling 545.

Sample and Sampling Procedure

The study used a sample size formula developed by, Cochran (1963) in estimating the sample size for the $[n=1.96^2 \times 0.5(1-0.5)/0.05^2] = 384$, where 1.96² is the abscissa of the normal curve that cuts off an area α at the tails ($1 - \alpha$) equals the desired confidence level of 95%), e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population. Based on stratified sampling techniques, the study selected a proportion of 243 employees from Christian Service University College and a proportion of 141 employees from

Garden City University College to form the sample size. In all, the study employed 384 respondents from the private universities.

Data Collection Instrument

The study adopted primary sources of data collection techniques. Primary data were collected through questionnaires related to the variables in the research objectives. The questionnaires were designed into sections. Section A of the questionnaire consist of personal characteristics of respondents. Section B through E contain Likert-scale items relating to training operationalizes as on-job-training, of-job-training and training of employees (Kibibi, 2011) and development was operationalized as formal education programs, behavioral and self-assessment programs, enrich job experience etc, while employee performance was operationalized as an increase in quality services as a result of potentially fewer mistakes, accuracy efficiency, effectiveness, good work, safety practices. The use of questionnaire as a method of collecting data helps the researcher to collect the view of a large number of respondents in a short period of time. All items were on a scale rating from 1 to 5 to assess respondent's opinions.

Data Collection Procedure

Questionnaire were administered personally and distributed to the respondents. The researcher took advantage and brief the respondents on the objective of the study and also explain each item on the questionnaire, as well as offer any assistance needed by the respondents. A time lapse of five days was used to enabled respondents to complete the questionnaires. The respondents were assured the confidentiality of the information they provided. In all 384 questionnaires were sent to the identified respondents and 380 questionnaires were able to retrieved given a response rate of 98.95%.

Validity and Reliability

The researcher employed the following to access questionnaire trustworthiness, that is first experts looked at the items in the questionnaire and agree that the test is valid to measure the concept which it is being measured. Questionnaires were given to respondents within shorter period of time (4 days) to

avoid mortality and maturation problem in order to minimize the treat of internal validity.

Reliability is the degree to which the results obtained by a measurement and procedure can be replicated so that the result of test items scores is the same upon several measures. Reliability of questionnaire items were established using a pre- test by collecting data from subjects not included in the sample. Data collected from pre- test were analyzed to test the reliability of internal consistency. Cronbach-alpha of all Likert type questionnaires after the pre-test were computed and Cronbach-alpha values of all items leading to latent variables were checked and items with alpha values less than 0.7 were remove. In the sense that Cronbach’s alpha value for Likert scale question acceptable value is at least 0.7 ([Keech, et al., 2020](#); [Babbie, 2010](#)). Table 1 shows construct reliability alpha values.

Table 1 Reliability of Constructs

| Construct | Items | Cronbach’s Alpha (α) |
|--|-------|-------------------------------|
| On Job Training | 09 | 0.799 |
| Off Job Training | 09 | 0.793 |
| Training Employees on Leadership Behaviour | 08 | 0.796 |
| Development Modules | 15 | 0.820 |
| Employees Performance | 05 | 0.754 |
| Strategies | 10 | 0.760 |

Variables and Measurement

Variable is a property that takes on different values. It is attributes or characteristics that describe an object. It is ant characteristics that assumes different values among subjects. It’s also any characteristic that shows variability or variation ([Kaur, 2013](#)). The independent variable is the predictor while the dependent variable is the criterion. The dimensions of institutional training and development programs used for the independent variables used for this study are on job training, of job training and training of employees on leadership behaviours and development modules. The independent variable is employee performance.

Data Analysis

Data collected was checked to rectify errors before analyzing. Data collected was analyzed using Statistical Package for Social Sciences (SPSS) version 26. Descriptive statistics analysis was used to identify the institutional training and development programs and strategies to improve institutional training and development. Correlation analysis was used to examine the relations between institutional training and development on employee’s performance, while multiple regression was used to examine of effect institutional training and development on employee performance.

Results

Socio-Demographic Characteristics of Respondents

This section discusses the socio-demography characteristics of respondents and the variables were, gender, age qualification and average number of years in business. Table 2 shows the distribution of gender age and qualifications of respondents.

Table 2 Socio-Demographic Characteristics of Respondents

| Variables | Category | Frequency | % |
|----------------|-------------|-----------|------|
| Gender | Male | 234 | 61.6 |
| | Female | 146 | 38.4 |
| Age | <25 years | 17 | 4.5 |
| | 25-35 years | 75 | 19.7 |
| | 36-46 years | 200 | 52.6 |
| | 46+ years | 88 | 23.2 |
| Marital Status | Single | 48 | 12.6 |
| | Marred | 280 | 73.7 |
| | Others | 52 | 13.7 |
| Qualification | Diploma | 8 | 2.1 |
| | Degree | 30 | 7.9 |
| | Masters | 218 | 57.4 |
| | PhD | 124 | 32.6 |

Results in Table 2 show that 234 (61.6%) of the respondents are male and 146 representing (38.4%) are female. Also, majority of the respondents are married totaling 280 constituting 73.7%, 48 representing 12.6% are single while 52 representing 13.7% are on the other variables of married. On age

distribution, the results indicate that the majority of the respondents 200, representing 52.6% are within the age bracket 36-46 years, 88 representing 23.2% are within the age bracket 46 and above years representing, 75 representing 19.7% are within the age bracket of 25-35 years and 17 representing 4.5% of the respondents are less or equal 25 years. On the qualification of the respondents, the results indicate 218, representing 57.4% had second degree, 124 representing 32.6% had their PhD, 30 representing 7.9% had first degree and 8 representing 2.1% had diploma certificates.

Institutional Training and Development Programs for Employees in Private Universities in Ghana

To assess respondents' opinions on the training development programs at their universities, the research categories institutional training and development programs into four constructs, on-job training [OJT], off-job training [OFJT], training on leadership behaviour [TELB] and development modules [DM]. Items were used to measure all the constructs based on respondents' agreement of such institutional training and development programs in their establishment. Items were rated 1 as least agreement and 5 highest agreements. Means, standard deviation skewness and p-values of all items were computed and analysed with respect to their initials as shown in Table 3, 4, 5, and 6.

Table 3 On-Job-Training [OJT]

| Variables | Mean | SD | Skewness | p-Value |
|-----------|--------|--------|----------|---------|
| OJT1 | 3.4605 | 1.1421 | -0.6156 | 0.0000 |
| OJT2 | 3.2578 | 1.0205 | -0.4422 | 0.0016 |
| OJT3 | 3.2842 | 1.2060 | -0.2240 | 0.0014 |
| OJT4 | 3.3710 | 1.1120 | -0.4805 | 0.0004 |
| OJT5 | 3.1868 | 1.0673 | -0.2596 | 0.0226 |
| OJT6 | 3.3473 | 1.0653 | -0.2014 | 0.0833 |
| OJT7 | 2.9763 | 1.1356 | 0.2241 | 0.0028 |
| OJT8 | 3.2657 | 1.1302 | -0.2601 | 0.0125 |
| OJT9 | 3.2526 | 1.1710 | -0.2632 | 0.0022 |
| Mean | 3.2669 | 0.6918 | -0.8262 | 0.0000 |

**significant at 5% (p<0.05), 2 tailed

Table 3 summarizes the means, standard deviations, skewness and p-values of nine items

used in identifying the present of on-job training at the universities. Results indicated that advice and guidance are given to staff [OJT1] as a form of coaching was rated high [M=3.4605, SD=1.1421, Skewness=-0.6156, p-value=0.0000], which revealed respondents' opinions on the item relatively disperse from the mean value. The negative skewness value indicates that respondents' responses are skew towards highly rated values and the significant p-value shows opinions of respondents on the measured item are equally preferred. Employees monitoring and evaluation are always done to achieve the objectives of institutions using in- service training [OJT4] was rated second [M=3.3710, SD=1.1120, Skewness=-0.4805, p-value=0.0004], which revealed respondents' opinions to be heterogenous.

The skewness value indicates that respondents' responses are skew towards highly rated values and the significant p-value shows opinions of respondents on the measured item are equally preferred. There was training lecturers on educational policy through in-service training [OJT6] which was identified as the third variable [M=3.3473, SD=1.0653, Skewness=-0.2014, p-value=0.0833], which revealed respondents' opinions to be heterogenous. The skewness value indicates that respondents' responses are skew towards highly rated values and the insignificant p-value shows opinions of respondents on the measured item are not equally preferred.

The fourth rated variable is the university authorities assess lectures effectiveness in achieving its learning objectives through mentoring [OJT3] [M=3.2842, SD=1.2060, Skewness=-0.2240, p-value=0.0014] indicating heterogenous opinions with high and equal rated values of opinions. The moderate rated items measuring on-job training at the universities are; training on project management skills are taught through coaching and mentorships [OJT8] [M=3.2657, SD=1.1302, Skewness=-0.2601, p-value=0.0125], employees are train on job to resolve/handle conflicts when disputes occur [OJT2] [M=3.2578, SD=1.0205, Skewness=-0.4422, p-value=0.0016], in service training are organized to enhanced in response to new knowledge, new ideas and changing circumstances [OJT9] [M=3.2526, SD=1.1710, Skewness=-0.2632, p-value=0.0022]

and problems that affect learning and teaching at the school are identify during in service training for correction [OJT5] [M=3.1868, SD=1.0673, Skewness=-0.2596, p-value=0.0226]. All the moderate measure items of on-job training at the universities indicates heterogenous opinions of respondents with high and equal rated values of opinions due to their significant p-values.

The least measured items of on-job training at the universities were training of employees to establish a good work climate at the universities periodically [OJT7] [M=2.9763, SD=1.1356, Skewness=0.2241, p-value=0.0028], which revealed respondents' opinions to be heterogenous. The positive skewness value indicates that responses were minimally skewed. The overall mean [M=3.2669, SD=0.6918, Skewness=-0.8262, p-value=0.0000] were highly rated with values indicating that on-job training is prevalence in the universities.

Table 4 Off-Job-Training [OFJT]

| Variables | Mean | SD | Skewness | p-Value |
|-----------|--------|--------|----------|---------|
| OFJT1 | 3.0210 | 1.2326 | -0.0569 | 0.0019 |
| OFJT2 | 2.9315 | 1.1961 | 0.1274 | 0.0027 |
| OFJT3 | 3.1921 | 1.0663 | -0.2964 | 0.0199 |
| OFJT4 | 3.3500 | 1.1514 | -0.3061 | 0.0050 |
| OFJT5 | 2.9052 | 1.2796 | 0.0949 | 0.0001 |
| OFJT6 | 3.1000 | 1.0428 | -0.3681 | 0.0095 |
| OFJT7 | 3.4026 | 1.0057 | -0.3710 | 0.0125 |
| OFJT8 | 3.4842 | 1.0588 | -0.5260 | 0.0001 |
| OFJT9 | 2.9921 | 1.3944 | 0.1496 | 0.0000 |
| Mean | 3.1532 | 0.7150 | -0.6264 | 0.0000 |

**significant at 5% (p<0.05), 2 tailed

Table 4 shows the means, standard deviations, skewness and p-values of nine items used in identifying the present of off-job training at the universities. Results revealed that orientation an induction are perform to usher in new recruit lecturers in the institution [OFJT8] was rated high [M=3.4842, SD=1.0588, Skewness=-0.5260, p-value=0.0001], which revealed respondents' opinions on the item relatively disperse from the mean value. The negative skewness value indicates that respondents' responses are skew towards highly rated values and the significant p-value shows opinions of respondents on the measured item are equally preferred. Remedial training programs are also organized in my institution

to enhance lecturers' capabilities[OFJT7] was rated second [M=3.4026, SD=1.0057, Skewness=-0.3710, p-value=0.0128], which revealed respondents' opinions to be heterogenous, skewed towards highly rated values and opinions on the measured item are equally preferred.

Promotional and advancement courses are introduced for lectures to refresh their mind on the need to strive for promotion by expect [OFJT4] was identified as the third variables [M=3.3500, SD=1.1514, Skewness=-0.3061, p-value=0.0050], which revealed respondents' opinions to be heterogenous. The skewness value indicates that respondents' responses are skew towards highly rated values and opinions of respondents on the measured item are equally preferred. Refresher training programs are intermittently introduced from expects to enhance new and existing employees' idea [OFJT3] was rated fourth [M=3.1921, SD=1.0663, Skewness=-0.2964, p-value=0.0199] indicating heterogenous opinions with high and equal rated values of opinions. Employees are sponsored to learn on financial management skill in other jurisdictions was rated fifth [OFJT1] [M=3.0210, SD=1.2326, Skewness=-0.0569, p-value = 0.0019] with heterogenous opinions, high and equal rated values of opinions.

The least measured items of off-job training at the universities are; study tours, presentation, exhibition and vacation are organized for employees in the institutions [OFJT9] [M=2.9921, SD=1.3944, Skewness=0.1496, p-value=0.0000], technical training programs are organized for new employees [OJT2] [M=2.9315, SD=1.1961, Skewness=0.1274, p-value=0.0027], field training programs are sometime organized to enable lectures to assess information during the trips [OFJT5] [M=2.9052, SD=1.2796, Skewness=0.0949, p-value=0.0001]. All the least rated items used in measuring off-job training at the universities revealed respondents' opinions to be heterogenous, low rated values and responses are equally preferred. The overall mean [M=3.1532, SD=0.7150, Skewness=-0.6264, p-value=0.0000] skewed towards highly rated average responses indicating respondents homogeneously have the view that off-job training is moderately practiced in the universities.

Table 5 Training on Leadership Behaviour [TELB]

| Variables | Mean | SD | Skewness | p-Value |
|-----------|--------|--------|----------|---------|
| TELB1 | 3.5105 | 1.0336 | -0.2506 | 0.0834 |
| TELB2 | 3.5500 | 0.9773 | -0.3780 | 0.0106 |
| TELB3 | 3.7000 | 0.9773 | -0.4503 | 0.0013 |
| TELB4 | 3.5210 | 1.0784 | -0.0607 | 0.8890 |
| TELB5 | 3.5289 | 0.9916 | -0.2347 | 0.0645 |
| TELB6 | 3.3657 | 0.9909 | -0.0814 | 0.4248 |
| TELB7 | 3.4289 | 0.9974 | -0.0751 | 0.1686 |
| TELB8 | 3.3315 | 1.1373 | -0.2217 | 0.0177 |
| Mean | 3.4921 | 0.6579 | -0.0963 | 0.4382 |

**significant at 5% (p<0.05), 2 tailed

Table 5 shows the means, standard deviations, skewness and p-values of eight items used in identifying the present of training on leadership behaviour at the universities. Results revealed that the university act in accordance with the constitution and relevant laws, rules, regulations, service codes, and codes of conduct for schools [TELB3] was rated high [M=3.7000, SD=0.9773, Skewness=-0.4503, p-value=0.0013], which revealed respondents' opinions on the item relatively close to the mean value, skewed towards highly rated values and respondents' opinions on the measured item are equally preferred. University initiate and manage changes necessary for the development of the school [TELB2] was rated second [M=3.5500, SD=0.9773, Skewness=-0.3780, p-value=0.0106], which revealed respondents' opinions to be homogeneous, skewed towards highly rated values and opinions on the measured item are equally preferred.

University train employees to maintain guidance and counselling programs in the school [TELB5] was identified as the third variables [M=3.5289, SD=0.9916, Skewness=-0.2347, p-value=0.0645], which revealed respondents' opinions to be slightly homogeneous. The skewness value indicates that respondents' responses are skew towards highly rated values but respondents' opinion on the measured item are not equally preferred. Effectively cope with crises and emergencies [TELB4] was rated fourth [M=3.5210, SD=1.0784, Skewness=-0.0607, p-value=0.8890] indicating heterogenous opinions with high and unequal rated

values of opinions. Strategies for influencing people during training was rated fifth [TELB1] [M=3.5105, SD=1.0336, Skewness=-0.2506, p-value=0.0834] with heterogenous opinions, high and unequal rated values of opinions.

The moderately rated measured items of training on leadership behaviour at the universities are; university train employees to enforce school plans and objectives are achieved [TELB7] [M=3.4289, SD=0.9974, Skewness=-0.0751, p-value=0.1686] with homogenous opinions, high and unequal rated values of opinions. University train employees to promote achievement of the school's mission and vision statement [TELB6] [M=3.3657, SD=0.9909, Skewness=-0.0814, p-value=0.4248], with homogenous opinions, high and unequal rated values of opinions. University train employees to effectively cope with crises and emergencies [TELB8] [M=3.3315, SD=1.1373, Skewness=-0.2217, p-value=0.0177], with heterogeneous opinions, high and equal rated values of opinions. The overall mean [M=3.4921, SD=0.6579, Skewness=-0.0963, p-value=0.4382] skewed towards highly rated average responses indicating respondents homogeneously have the view that training on leadership behaviour is practiced in the universities, but average responses are equally distributed.

Table 6 Developing Modules [DM]

| Variables | Mean | SD | Skewness | p-Value |
|-----------|--------|--------|----------|---------|
| DM1 | 3.2842 | 0.9817 | -0.0228 | 0.2072 |
| DM2 | 3.3000 | 1.0270 | -0.0684 | 0.3185 |
| DM3 | 3.3578 | 1.1128 | -0.4051 | 0.0014 |
| DM4 | 3.4026 | 1.0057 | -0.2620 | 0.0614 |
| DM5 | 3.2500 | 1.0691 | -0.1988 | 0.0221 |
| DM6 | 3.3421 | 1.0061 | -0.2497 | 0.0701 |
| DM7 | 3.5447 | 0.9695 | -0.4308 | 0.0022 |
| DM8 | 3.5894 | 1.0626 | -0.4594 | 0.0006 |
| DM9 | 3.6078 | 0.9780 | -0.3037 | 0.0204 |
| DM10 | 3.3973 | 1.0104 | -0.3026 | 0.0459 |
| DM11 | 3.4894 | 1.0234 | -0.4669 | 0.0009 |
| DM12 | 3.3789 | 1.0767 | -0.2883 | 0.0271 |
| DM13 | 3.3526 | 1.0308 | -0.2525 | 0.0849 |
| DM14 | 3.3526 | 1.0660 | -0.3060 | 0.0258 |
| Mean | 3.3932 | 0.5495 | -0.2623 | 0.0028 |

**significant at 5% (p<0.05), 2 tailed

Table 6 summarizes the means, standard deviations, skewness and p-values of fourteen items used in identifying the present of development modules at the universities. Results indicated university assist employees to enrich job experience for the university [DM9] was rated high [M=3.6078, SD=0.9780, Skewness=-0.3037, p-value=0.0204], which revealed respondents' opinions on the item slightly close to the mean with highly rated values equally preferred. University assist personnel to develop and, enable them to achieve their potential and contribute to the provision of excellence [DM8] was rated second [M=3.5894, SD=1.0626, Skewness=-0.4594, p-value=0.0006], which revealed respondents' opinions to be heterogenous with highly rated values equally preferred. University encourages us to observe visiting lectures and expects in the institutions [DM7] was rated third variables [M=3.5447, SD=0.9695, Skewness=-0.4308, p-value=0.0022], which revealed respondents' opinions on the item slightly close to the mean with highly rated values equally preferred.

The fourth rated variable is the university assign us in membership of work and professional committees [DM11] [M=3.4894, SD=1.0234, Skewness=-0.4669, p-value=0.0009] indicating heterogenous opinions with high and equal rated values of opinions. Behavioral and Self-assessment programs are organized was rated sixth [DM4] [M=3.4026, SD=1.0057, Skewness=-0.2620, p-value=0.0614] indicating heterogenous opinions with high and unequal rated values of opinions. University assists us in career development and progression programs was rated seventh [DM10] [M=3.3973, SD=1.0104, Skewness=-0.3026, p-value=0.0459]. Promoting visiting and observing other effective university administrations and conferences was rated eight [DM12] [M=3.3789, SD=1.0767, Skewness=-0.2883, p-value=0.0271]. indicating heterogenous opinions with high and equal rated values of opinions. Job rotation and challenging job transfers are been organized at the university was rated ninth [DM3] [M=3.3578, SD=1.1128, Skewness=-0.4051, p-value=0.0014] indicating heterogenous opinions with high and equal rated values of opinions. Contributing to a professional publication (Educational Journals) [DM13] and giving administrative study tours at local

and international levels [DM15] were rated tenth with [M=3.2526, SD=1.0308, Skewness=-0.2525, p-value=0.0849] and [M=3.2526, SD=1.0660, Skewness=-0.3060, p-value=0.0258].

The moderate rated items measuring development modules at the universities are; university encourage observing effective management techniques used by highly qualified lecturers [DM6] [M=3.3421, SD=1.0061, Skewness=-0.2497, p-value=0.0701], enhancement and job satisfaction programs are been organized [DM2] [M=3.3000, SD=1.0270, Skewness=-0.0684, p-value=0.03185], career development and progression programs are been organized [DM1] [M= 3.2842, SD =0.9817, Skewness = -0.0228, p-value = 0.2071], effective participation in setting development programs [DM5] [M= 3.2500, SD = 1.0691, Skewness = -0.1988, p-value = 0.0221]. The overall mean[M= 3.3932, SD = 0.5495, Skewness = -0.2623, p-value = 0.0028]skewed towards highly rated average values indicating respondents homogeneously have the view that development modules is prevalence in the universities

Employees Performance (EP)

This section assesses employee's performance, respondents' opinions on performance were obtained from rated variables on their performance in relation to institutional training and development programs. Means, standard deviation skewness and p-values of all items were computed and analysed with respect to their initials as shown in Table 7.

Table 7 Employees Performance [EP]

| Variables | Mean | SD | Skewness | p-Value |
|-----------|--------|--------|----------|---------|
| EP1 | 3.3447 | 0.9962 | -0.3043 | 0.0437 |
| EP2 | 3.3289 | 1.1275 | -0.2175 | 0.0104 |
| EP3 | 3.3289 | 1.1369 | -0.2803 | 0.0173 |
| EP4 | 3.3631 | 1.0575 | -0.2546 | 0.0512 |
| EP5 | 3.4605 | 1.0507 | -0.4969 | 0.0000 |
| Mean | 3.3657 | 0.7634 | -0.6106 | 0.0000 |

**significant at 5% (p<0.05), 2 tailed

Table 7 shows the means, standard deviations, skewness and p-values of five items used in assessing employee performance at the university. Results revealed that institutional training and development improved working conditions and

improve institutional image [EP5] was rated high [M= 3.4605, SD = 1.0507, Skewness = -0.4969, p-value = 0.0000], which revealed respondents' opinions on the item relatively disperse from the mean value, skewed towards highly rated values and are equally preferred. There is high reduction of staff turnover and absenteeism due to institutional training and development [EP4] was rated second [M= 3.3631, SD =1.0575, Skewness = -0.2546, p-value = 0.0512], which revealed respondents' opinions to be heterogeneous, skewed towards highly rated values and opinions on the measured item are unequally preferred. Institutional training and development in my institution enable me to be efficient and effective in carrying out my duty as employee/lecturer accurately[EP1] was rated third [M= 3.3447, SD =0.9962, Skewness = -0.3043, p-value = 0.0437], which revealed respondents' opinions to be slightly homogeneous, skewed towards highly rated values and opinions on the measured item are equally preferred.

Institutional training and development in my institution enable me to predetermine standards accurately, completeness and cost effective in my activity base [EP3] and institutional training and development in my institution enable me to be able to apply concepts and instrument in my work [EP2] were rated fourth[M= 3.3289., SD = 1.1275, Skewness = -0.2175, p-value = 0.0104] and [M= 3.3289., SD = 1.1369, Skewness = -0.2803, p-value = 0.0173] which revealed respondents' opinions to be heterogeneous, skewed towards highly rated values and opinions on the measured item are equally preferred. The overall mean [M= 3.3657, SD = 0.7634, Skewness = -0.6106, p-value = 0.0000]skewed towards highly rated average values indicating respondents homogeneously have the view that institutional training and development programmes at the university improves performance among employees.

Relationship between Institutional Training and Development and Employee Performance

In order to find out the relationship between institutional training and development and employees' performance, four dimensions of training development were used to relate to employee's performance. The dimensions of institutional

training and development used are; on-job training, off-job training, training of employee's leadership behaviour and development modules. Pearson's moment correlation coefficient technique was used to determine the relationship and the results of the analysis are shown in Table 8.

Table 8 Correlation between Institutional Training and Development and Employees Performance

| Variables | Employees Performance | | |
|----------------------------------|-----------------------|-----------|---------------------|
| | N | Pearson's | Coefficient p-Value |
| On-Job Training | 380 | 0.3570* | 0.000 |
| Off-Job Training | 380 | 0.2893* | 0.000 |
| Training on Leadership Behaviour | 380 | 0.4019* | 0.000 |
| Development Modules | 380 | 0.5917 | 0.000 |

*Correlation is significant at 5% 2 tailed

Table 8 shows correlation coefficients of on-job training and employees' performance [N = 380, r = 0.3570*, p-value = 0.000] shows a positive relationship between "on-job training" and employees' performance indicating an increase in on-job training among employees at the selected universities will lead to an increase in employees' performance. The correlation coefficient of "Off-job training" and employees' performance [N = 380, r = 0.2893*, p-value = 0.000] shows a significant or positive relationship between "off-job training" and employees' performance indicating and that an increase in "off-job training" among employees of selected universities will lead to an increase in employees' performance.

The correlation coefficient of training on leadership behaviour and employees' performance [N = 380, r = 0.4019*, p-value = 0.000] shows significant or positive relationship between training on leadership behaviours and employees' performance indicating an increase in training on leadership behaviour among employees in the selected universities will lead to an increase in

employees' performance. Finally, the correlation coefficient of training on development module and employees' performance [N = 380, r = 0.5917*, p-value = 0.000] shows significant, direct or positive relationship between training on development modules and employees' performance indicating an increase in training on development modules among employees in the selected universities will lead to an increase in employees' performance.

Model Diagnosis

The assumptions of the ordinary least regression such as multicollinearity (variance inflation factor [VIF]), autocorrelation and normality test were checked. Results of the test statistic of the assumption are shown in Table 8 and 9.

Table 8 Test of Autocorrelation

| Breusch-Godfrey LM Test | | | |
|-------------------------|----------|---------------------|--------|
| F-statistic | 1.126750 | Prob. F(1,374) | 0.2892 |
| Obs*R-squared | 1.141387 | Prob. Chi-Square(1) | 0.2854 |

**significant at 5% (p<0.05), 2 tailed

Breusch-Godfrey LM test was used to test the autocorrelation. Results on autocorrelation test in Table 8 indicates p-values > 0.05, that there is no autocorrelation among the residuals in the regression model hence the regression model that will be generated from the data that this test result is obtained from is correctly specified. Again, the Durbin-Watson statistic value in Table 8 is 1.8838 which is within the threshold range of 1.5 to 2.5.

Table 8 Test of Autocorrelation

| Variance Inflation Factors | | | |
|----------------------------|-------------|------------|----------|
| Date: 03/07/22 Time: 08:03 | | | |
| Sample: 1 380 | | | |
| Included observations: 380 | | | |
| Variable | Coefficient | Uncentered | Centered |
| Variable | Variance | VIF | VIF |
| C | 0.047953 | 48.92618 | NA |
| On_Job_Training | 0.003054 | 34.74198 | 1.487367 |
| Off_Job_Training | 0.002766 | 29.50199 | 1.439221 |

| | | | |
|--------------------|----------|----------|----------|
| Training_Employee | 0.003929 | 50.61312 | 1.730708 |
| Developing_Modules | 0.006008 | 72.42188 | 1.846464 |

**significant at 5% (p<0.05), 2 tailed

The variance inflation factor (VIF) values in Table 8 indicates that the independent variables [on-job training, off- job training, training on leadership behaviour and development modules] are fairly related to each other and their VIF values are less than 10.No issues of multicollinearity among them and hence they can predict the dependent variable employee performance independently.

Effect of Institutional Training and Development on Employee Performance

Multiple regression technique was employed to examined the effect of four construct, on-job training, off-job training, training on leadership behaviour and development modules at the universities on employee's performance. The results of the regression model and coefficients are shown in Table 9.

Table 9 Multiple Regression Coefficients

| Dependent Variable: Performance | | | | |
|---------------------------------|-------------|-----------------------|-------------|--------|
| Method: Least Squares | | | | |
| Date: 03/07/22 Time: 08:03 | | | | |
| Sample: 1 380 | | | | |
| Included observations: 380 | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 0.302700 | 0.218981 | 1.382312 | 0.1677 |
| On_Job_Training | 0.145545 | 0.055261 | 2.633782 | 0.0088 |
| Off_Job_Training | 0.021492 | 0.052595 | 0.408636 | 0.6830 |
| Training_Employee | 0.017571 | 0.062679 | 0.280327 | 0.7794 |
| Developing_Modules | 0.724538 | 0.077510 | 9.347648 | 0.0000 |
| R-squared | 0.367676 | Mean dependent var | 3.365789 | |
| Adjusted R-squared | 0.360931 | S.D. dependent var | 0.763403 | |
| S.E. of regression | 0.610278 | Akaike info criterion | 1.863266 | |

| | | | |
|--------------------|-----------|----------------------|----------|
| Sum squared resid | 139.6647 | Schwarz criterion | 1.915110 |
| Log likelihood | -349.0206 | Hannan-Quinn criter. | 1.883838 |
| F-statistic | 54.51264 | Durbin-Watson stat | 1.885482 |
| Prob (F-statistic) | 0.000000 | | |

**significant at 5% (p<0.05), 2 tailed

Variables are statistically significant if (p-value<0.05). Results shown in table 9 indicates the coefficient and p-value of on-job-training are ($\beta = 0.1455$, p-value = 0.0088) indicating that when other factors are held constant a unit increase in on-job training increases employees' performance by 0.1455. Coefficient and p-value of off-job training are ($\beta = 0.02149$, p-value = 0.6830) indicating that if other factors are held constant a unit increase in off-job training increases employees performance by 0.02149 but not statistically significant. Coefficient and p-value of training on leadership behaviour are ($\beta = 0.01757$, p-value = 0.7794) indicating that if other factors are held constant a unit increase in training on leadership behaviour increases employees performance by 0.01757 but not statistically significant. Coefficient and p-value of development modules are ($\beta=0.7245$, p-value=0.000) indicating that if other factors are held constant a unit increase in development modules increases employee's performance by 0.0.7245 and is statistically significant.

The Adjusted R-square value of 0.3609 in Table 9, indicating 36.09% of variation of employee's performance is explained by the variation of independent variables [on-job training, off-job training, training on leadership behaviour and development modules]. The overall F-statistic = 54.512, p-value =0.000<0.05 indicating overall combined effect of independent variables [on-job training, off-job training, training on leadership behaviour and development modules] significantly predict employees' performance.

Strategies to Improve Institutional Training and Development Programmes in Private Universities

This section examines the strategies to improve institutional training and development programmes

in private universities. The study used ten items to examined respondents' opinions on the strategies to improve institutional training and development in the selected universities in Ghana. Means, standard deviation skewness and p-values of all items were computed and analysed with respect to their initials as shown in Table 10.

Table 10 Strategies to Improve Institutional Training and Development [STITD]

| Variables | Mean | SD | Skewness | p-Value |
|-----------|--------|--------|----------|---------|
| STITD1 | 3.3526 | 1.0308 | -0.2525 | 0.0849 |
| STITD2 | 3.2473 | 1.0308 | -0.3343 | 0.0259 |
| STITD3 | 3.3527 | 1.0660 | -0.3060 | 0.0258 |
| STITD4 | 2.8631 | 0.8790 | 0.2441 | 0.0241 |
| STITD5 | 2.8815 | 0.9411 | 0.4092 | 0.0005 |
| STITD6 | 2.8184 | 1.0045 | 0.3189 | 0.0003 |
| STITD7 | 3.1315 | 1.1363 | -0.2485 | 0.0082 |
| STITD8 | 3.2921 | 1.0203 | -0.3537 | 0.0083 |
| STITD9 | 3.1973 | 1.0604 | -0.2133 | 0.1327 |
| TITD10 | 3.4295 | 1.0545 | -0.2326 | 0.1926 |
| Mean | 3.1532 | 0.7150 | -0.6264 | 0.0000 |

**significant at 5% (p<0.05), 2 tailed

Table 10 summarizes the means, standard deviations, skewness and p-values of ten items used to examine strategies to improve institutional training and development at the universities. Results indicated institutional training and development programmes should be able to enrich lecturers and other employees to counsel students on educational, psychological, social, and professional needs [STITD10] was rated high [M=3.4295, SD=1.0545, Skewness=-0.2326, p-value=0.1926], which revealed opinions disperse from the mean with highly rated values but unequally preferred. Orientation should focus on getting new employees familiarize with new roles and modern technology[STITD3] was rated second [M= 3.3527, SD = 1.0660, Skewness = -0.3060, p-value = 0.0258], which revealed respondents' opinions to be heterogenous with highly rated values equally preferred. Training service should embrace all services that facilitate employee's performance [STITD1] was rated third variables [M= 3.3526, SD =1.0308, Skewness = -0.2525, p-value = 0.0849], which revealed respondents' opinions on the item disperse from mean with highly rated values unequally preferred.

The fourth rated variable is institutional training and development programmes should be in line to renewing the organization through innovations and strategic changes [STITD8] [M=3.2921, SD=1.0203, Skewness=-0.3537, p-value=0.0083] indicating heterogenous opinions with high and equal rated values of opinions. Career planning should assist individual in their professional way for promotion was rated fifth [STITD2] [M= 3.2473, SD = 1.0308, Skewness = -0.3343, p-value = 0.0259] indicating heterogenous opinions with high and equal rated values of opinions. Institutional training and development should tailor and improve capacity of employees to provide student orientation on career services, financial support and students advocacy was rated sixth [STITD9] [M= 3.1973, SD = 1.0604, Skewness = -0.2133, p-value = 0.1327]. Institutional training and development programs should be continuous improvement of working practices regardless of individual's performance issues was rated seventh [STITD7] [M= 3.1315, SD = 1.1363, Skewness = -0.2485, p-value = 0.0082]. indicating heterogenous opinions with high and equal rated values of opinions.

The least rated strategies to improve institutional training and development at the universities are; institutional training and development strategies should be resolving problems that are focused on individuals' performance [STITD5] [M=2.8815, SD=0.9411, Skewness=0.4092, p-value=0.0005], job rotation and transfers should focus on international universities acquire knowledge about diverse operations [STITD4] [M=2.8631, SD=0.8790, Skewness=0.2441, p-value=0.0241] and best methods, approaches, strategies, programs assessment the institutions and select individuals to undertake to enhance institutional image [STITD6] [M=2.8184, SD=1.0045, Skewness=0.3189, p-value = 0.0003] indicating slightly homogeneous opinions with low and equal rated values of opinions. The overall mean [M= 3.1532, SD = 0.7150, Skewness = -0.6264, p-value = 0.0000] skewed towards highly rated average values indicating respondents homogeneously have the view that there is the need to adopt strategies to improve institutional training and development at the universities.

Discussion

The aim of the study was to identify institutional training and development programs for employees in private universities in Ghana. Four constructs were examined: on-the-job training, off-the-job training, training on leadership behavior, and development modules. The study found that training on leadership behavior and development modules were the most prevalent methods of institutional training and development programs at these universities. For training on leadership behaviour respondents assert that; universities act in accordance with the constitution and relevant laws, rules and regulations and also initiate and manage changes necessary for the development of the school. Universities train employees to maintain guidance and counselling programs and also effectively cope with crises and emergencies and developed strategies for influencing people during training. These findings are consistence to [Gerber et al. \(2004\)](#) which indicate that investing in institutional training and development is imperative for any organization, which will certainly realize a return on investment in institutional training and development.

Respondents suggested that development modules in institutional training and development programs should involve enriching job experience, developing and achieving potential, observing visiting lecturers and experts, assigning membership to work and professional committees, offering behavioral and self-assessment programs, assisting in career development and progression, promoting visiting and observing effective university administrations and conferences, contributing to professional publications (educational journals), and providing administrative study tours at local and international levels.

It appears that on-job and off-job training programs have received relatively little attention in the literature on institutional training and development. According to [Abdullah and Afshar \(2019\)](#) and [Abdullah \(2019\)](#), respondents in their study reported that various types of on-job training programs exist, including advice and guidance, monitoring, evaluation, in-service training, coaching, and mentorship. Additionally, training on project management skills is taught through coaching and mentorship. These findings

are consistent with Michael's view that in-service training contributes to an individual's professional competence and satisfaction. Moreover, [Andavar et al. \(2020\)](#) argue that in-service training satisfies students' learning needs and promotes personal and career development among academic staff, which can also positively impact employee performance by changing attitudes and skills.

It is important to note that both on-job and off-job training have their own advantages and disadvantages. On-job training provides practical experience and allows employees to apply what they learn immediately to their work. However, it can also be disruptive to the workplace and may not cover all areas of training needed. Off-job training, on the other hand, can provide a more comprehensive and specialized training experience, but can also be expensive and time-consuming. Therefore, organizations need to carefully consider which type of training is most appropriate for their employees and their organizational goals.

It is promising to see that the respondents rated highly the items related to the impact of institutional training and development on employee performance in private universities in Ghana. This suggests that institutional training and development programs can indeed improve working conditions, reduce staff turnover and absenteeism, enhance efficiency and effectiveness in carrying out duties, and enable employees/lecturers to apply concepts and instruments in their work. These findings support previous research that highlights the positive relationship between training and development programs and employee performance ([Agyei, 2014](#); [Sommahmi, 2020](#); [Sandamali et al., 2018](#)).

The findings of the study are also consistent with other previous studies that have established a positive relationship between institutional training and development and employee performance ([Mahmud et al., 2011](#); [Sandamali et al., 2018](#); [Andavar et al., 2020](#)). The results suggest that training programs not only improve employee knowledge and skills, but also positively impact their behavior, leading to increased efficiency and effectiveness in their job performance.

Overall, the study provides evidence that institutional training and development programs

have a significant positive impact on the performance of employees in private universities in Ghana. It highlights the importance of investing in employee training and development as a means of improving organizational performance and achieving the objectives and goals of the institution.

On the objectives to examine the effect of institutional training and development on employee performance in private universities in Ghana. Multiple regression results indicate that there is positive effect of on-job training, off-job training, training on leadership behaviour and development modules on employee's performance. Results further established that among the training programmes in the selected universities in Ghana, on-job institutional training and development modules have significant effect on employee's performance while off-job training and training on leadership behaviour have no significant effect on employee's performance.

The Adjusted R-square value indicates 36.09% of variation of employees' performance is explained by the variation of independent variables [on-job training, off-job training, training on leadership behaviour and development modules] while F-statistic is significant indicating overall combined effect of independent variables is significantly in predicting employee's performance. Finding of the study support [Rothwell and Kazanas \(2016\)](#) as they indicated in their study that effective employee institutional training and development leads to an increase in quality services as a result of potentially fewer mistakes, accuracy efficiency, effectiveness, good work, safety practices and good customer service.

The findings of this study support [Aklilu \(2021\)](#), who found that training practices have a positive effect on employee performance in the Addis Ababa City Government Plan and Development Commission using a quantitative approach. However, the findings contradict those of [Ampomah-Mintah \(2017\)](#), who studied the assessment of management training and development needs in Libyan industrial companies through questionnaires and interviews. It was discovered that administrative functions were practiced without regard to acceptable standards of training decisions but were mostly dependent on personal relations, family ties, tribalism, nepotism among others rather than established procedures.

The results of this study support Aflakpui findings, which indicate a significant relationship between training and its impact on workers' performance in Ghana. The analysis also confirms that the workers at CWSA received quality and appropriate training, which made them efficient and effective in their respective areas of operation, according to the respondents.

On the objectives to identify strategies to improve institutional training and development programs in private universities in Ghana. Out of ten strategic variables used in examining respondents' opinions of which to be the best improve institutional training and development in private universities. Seven of the strategies were rated above the midway level [Mean > 3], such as, institutional training and development programs should be able to enrich lecturers and other employees to counsel students on educational, psychological, social, and professional needs, orientation should focus on getting new employees familiarize with new roles and modern technology, training service should embrace all services that facilitate employee's performance, institutional training and development programs should be in line to renewing the organization through innovations and strategic changes. Results collaborate with [Nassazi \(2013\)](#) who identified three categories of employee institutional training and development needs and concluded that they are resolving problems that are focused on individuals' performance, continuous improvement of working practices regardless of individual's performance issues, and renewing the organization through innovations and strategic changes.

Results again revealed that career planning should assist individual in their professional way for promotion, institutional training and development should tailor and improve capacity of employees to provide student orientation on career services, financial support and students advocacy and institutional training and development programs should be continuous improvement of working practices regardless of individual's performance issues. The overall mean of the strategies indicates that respondents homogeneously have the view that there is the need to adopt strategies to improve institutional

training and development at the private universities in Ghana. Results support [Jehanzeb and Bashir \(2013\)](#) as they stated that orientation of workers is focused on getting new employees familiarized and trained on the new roles, responsibilities, systems, technology, workplace layout, culture, benefits, working conditions, processes, and procedures, conferences include presentations from the same or diverse topics to a group of individuals.

Conclusions

The study provided an overview and relevant discussions on important areas of institutional training and development, dimensions of institutional training and development and theories relating to institutional training and development in academic literature reviewed. It has also provided literature on effect of institutional training and development, staff development indicators, staff training indicators, employees performance and strategies to improve institutional training and development. The study has also brought to bear some relevant empirical findings of previous studies in line with the study topic. In addition, the study used probability and non-probability sampling techniques to achieved the sample size of the study. From the findings it can be concluded institutional training and development programmes use among the private universities in Ghana are training on leadership behaviour and development modules.

The study also concluded that the most prevalent institutional training and development practices are universities act in accordance with the constitution and relevant laws, rules and regulations and also initiate and manage changes necessary for the development of the school, universities train employees to maintain guidance and counselling programs and effectively cope with crises and emergencies, developed strategies for influencing people during training, university assist employees to enrich job experience, assist them to develop and achieve their potential, encourages them to observe visiting lectures and expects, assign them into membership work and professional committees, assists employees in career development and progression programs. The study also concluded that off-job training practice well at the private universities.

Another conclusion that can be drawn from the study is that there is relationship between institutional training and development and employee performance in private universities in Ghana. The study concluded that there is significant positive relationship between on-job training, off-job training, training on leadership behaviours and training on development modules and employees' performance indicating an increase in any of the institutional training and development programs will generally lead to an increase in employees' performance in the selected universities in Ghana. It was concluded that on-job institutional training and development modules have significant effect on employee's performance while off-job training and training on leadership behaviour have no significant effect on employee's performance.

Finally, the study can again be conclude that most identified strategies to improve institutional training and development programmes at the private universities in Ghana are; training programmes should be able to enrich lecturers and other employees to counsel students on educational, psychological, social, and professional needs,orientation of employees should focus on getting new employees familiarize with new roles and modern technology, training service should embrace all services that facilitate employee's performance,training programmes should be in line to renewing the organization through innovations and strategic changes.

Recommendations

It is recommended that institutional training and development programmes at the private universities in Ghana should emphasized more on on-job training and off-job training and further improve their activities of development modules and training and leadership.

It is also recommended that since the multiple regression model depict insignificant effect of off-job training and training on leadership behaviour on employee's performance, management and stakeholders of the selected private universities should intensify more effort to train their employees by using the practices that relate to those constructs of training to improve employee's performance. Again,

it is recommended that the significant effect of on-job institutional training and development modules coefficient are not very large enough, therefore the universities should also improve on the practices related to the construct to enhance their coefficients.

It is also recommended that the private universities training programs should be able to enrich lecturers and other employees to counsel students on educational, psychological, social, and professional needs and orientate employees to focus on getting new employees familiarize with new roles and modern technology. It is further recommended that training service should embrace all services that facilitate employee's performance and should be in line to renewing the organization through innovations and strategic changes.

Data Availability

The data (primary) used to support the findings of this study are available from the corresponding author upon reasonable request and further perusal.

Declaration

Conflicts of Interest

No conflict of interest exists in the study. I wish to state categorically that there are no known conflicts of interest associated with this paper. Also, there has been no any financial support for this work that could have predisposed the results of the study.

Ethics Approval and Consent to Participate

Not applicable

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