



Mediating effect of employees' commitment on the nexus between training-development and employees' performance: A study of tertiary educational institutions

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Abstract

The progress of the performance of any organization is greatly influenced by employee commitment. This study investigates the impact of training and development on employees' performance in tertiary educational institutions using mediating effect of employees' commitment. The population of the study will be all permanent the staff, which drawn from four universities in Kano state. Thus, the population of the study is 3167 staff drawn from all sections and departments of the schools as at month end June, 2022. Furthermore, to narrow the focus of the study on smaller fraction of the population of the study, the sample size of the study will be 498 employees. This study used Partial Least Squares (PLS) Structural Equation Modelling (SEM) and test the formulated hypotheses, as well as a mediating effect test. training and development were found to be positively and significantly influenced by Employee performance, as well as employee commitment. Employee commitment found to mediate the impact of training and development on employee performance. Based on these findings, theoretical and practical implications, as well as future research suggestions, were presented.

Keywords: Employee commitment, Employee performance, Training and development

1. Introduction

The tertiary educational institutions serve as facilitators to providing skilled manpower required to lubricate the engine of economic and technological advance and development. Employees in these institutions contribute to manpower training and development, as they demand an atmosphere that allows for improved performance outcomes. The education sector plays an important role in any nation, developed or developing; thus, educational institutions, particularly at the tertiary level, are expected to generate a highly skilled workforce for society. Hence, these educational institutions should draw in and keep top talent personnel both academic and non-academic staff. Thus, to attract this category of employees a mix of effective Human Resource Management Practices (HRM Practices) is required to provide the requisite enabling operational environment. These HRM procedures can differ across

employees and between organizations (Nasurdin, Hemdi, & Guat and Chen, Wang and Yang, 2009).

Dessler (2007) viewed HRM Practices as the procedures and guidelines for handling management aspect of human resource (HR) components, including planning, hiring, orientation, training, development, remuneration, job analysis, labour relations, and performance evaluation. Also, Noe, Hollenbeck, Gerhart and Wright (2007) opined that HRM Practices is Policies, processes, and practices that influence employee attitudes, behaviour, and performance. Training and development is a key HRM practice that educational institutions have used to improve staff performance. Despite being used interchangeably, the notions of development and training can be distinguished from one another and are complementary. Training is intended for specific job purposes, whereas



development is more comprehensive. Development includes not only job performance-enhancing activities but also personality development activities. According to Goldstein (2002), training is the methodical process of acquiring and developing the knowledge, abilities, and attitudes that workers need in order to carry out a task or job satisfactorily or to perform better in an office setting.

Employee training and development constitutes one of the major HRM practices used by management in Nigerian schools, and it is anticipated to lead into improved employee performance. As a mechanism to facilitate training and development of employees in tertiary educational institutions, government and international organisations have evolved varying intervention measures such as conferences and training facilitated by Tertiary Education Tax Fund (TETFUND). The study will focus on some Human Resources Practices that will be drawn from body of literature and its application by tertiary educational institutions on their employees. The issue of training and development has been a big challenge that has fuelled industrial conflict between responsibilities holders (Deans and Head of Departments) and their subordinates in many tertiary institutions in Nigeria. This difficulty is partly driven by suspicions of favouritism in the assignment of training and development slots, which are primarily enabled by TETFUND intervention money. The attitude of the employee towards work may be affected through either of two main channels. Firstly, the employee may become half-hearted or indifferent towards carrying out assigned tasks, which may consequently lead to decrease in performance. Secondly, the employee may be impelled by perceived exclusion to diligently put in the best in carrying out assigned tasks, on the premise that efforts put in the work may be rewarded. However, it has been observed that the relationship between staff and management of

institutions of learning is frequently fraught with conflict. This often arises due to high turnover of trained employees to the detriment of benefactor employers, mostly in preference for universities, which tends to promise prospects of career progression (Jouda, Ahmad & Dahleez, 2016). Thus, these are often preceded by drop in work commitments, which consequently result in decline in work performance. In contrast to some post training and training period that provides them the latitude to exert additional effort to carry out assigned tasks to showcase the training acquired, which may consequently significantly increase their efforts towards work. Based on inconsistent findings, this study aims at determining the extent to which an organization's training and development practices influence employee performance. Additionally, there is a paucity of studies on the effect of training and development on employees' performance in educational institutions in Nigeria, most studies in these areas focused on financial services and small-scale enterprise sectors in Nigeria. Employee loyalty is incredibly significant. An organization's ability to function well is greatly influenced by commitment. Highly committed workers will identify with the organization's objectives and core values, feel more akin to being a part of it, and be inclined to act as better organisational citizens—that is, to go above and beyond the call of duty. For these reasons, highly committed workers should be viewed as an organisational competitive advantage. The purpose of this study is to demonstrate how work motivation and leadership style can influence employee performance through mediation by the employee commitment variable. Consequent upon that the need for a study on the impact of training and development on employee performance among tertiary institutions in Nigeria is timely. It is against this backdrop that this study sought to empirically investigate the impact of training and development on employees' performance in tertiary



educational institutions using mediating effect of employees' commitment.

2. Literature Review

2.1 Concept of Human Resources Practices

Human Resource Management (HRM) is a strategic approach to managing an organization's most valuable asset: its people. It involves the effective utilization of human resources to achieve organizational goals and objectives Garengo et al. (2022). HRM encompasses various functions aimed at maximizing employee performance, engagement, and satisfaction while ensuring legal compliance and alignment with the organization's overall strategy.

Divergent opinions exist about the implementation of HRM techniques, but there is consensus that the right mix and application do enhance employee's motivation. To shed light on what the concept entails, Manzoor, Sadozai and Jan (2016) opined that Human Resource Management (HRM) is a comprehensive set of administrative tasks that improve the potential of employees' human resources, hence increasing the effectiveness of the organisation. HRM methods have a direct impact on staff motivation, behaviour, and skill development, which leads to improved organisational performance. HRM practices vary by organisation and are utilised to achieve certain aims. Reward ceremonies, performance appraisal, selection, training, involvement, and employee empowerment are some of the key activities that enable proper human resource management in an organisation.

2.2 Concept of Training and Development

Training and development is a fundamental Human Resource Management approach that has been embraced by academics and corporate management. The concept of training has interchangeably be used to mean the same thing, they can be differentiated from another but are

complimentary. Fanibuyan (2001) reported that training is the methodical process of changing an employee's behaviour or attitude in order to further organisational goals. It is also a programme that is primarily designed to educate supervisory employees beyond the immediate technical requirements of their jobs, with the goal of enhancing all managers' ability to perform effectively. Applying acquired knowledge and experience is what is meant by training (Punia & Saurabh, 2013). An organised activity that aims to impart knowledge and/or instructions to assist the recipient reach a necessary level of knowledge or competence or to improve performance is called training (Appiah *et al.*, 2013).

Therefore, According to Shitsama (2011), some of the most fundamental advantages of training could be providing professional and technical education, supervisory training, executive education, developing desired skills, preventing accidents through safety training, and orientation and onboarding of new hires. Siddiqui and Asghar (2008) identified that organisations should view training expenditures as investments in human resources, thereby adding value. This view was supported by Kaveri et al. (2013), who concluded that appropriate employee education and training offers significant benefits to the employer in the form of increased productivity, knowledge, loyalty, and contribution to the overall growth of the company. These authors were trying to establish a direct correlation between training effectiveness and employee performance. One of the primary HR functions in the organisation is training, which aids in the company's goal-achieving. Grossman and Salas (2011) define training as an organised activity of knowledge, abilities, and attitudes that improve performance in a specific circumstance. Therefore, staff training and development come after recruiting and selection. Both newly hired staff and current staff members should be involved in



this process. However, cautious hiring does not ensure that new hires will carry out activities efficiently; as a result, businesses should develop and implement appropriate training programmes for new hires to ensure that they complete the tasks that have been delegated to them. (Dessler, 2009).

To establish the connection between training and development as stated differently, both have been viewed as intended to raise competency levels and staff performance, which in turn promotes organisational performance. Furthermore, according to Goldstein and Ford (2002), training is a methodical approach to learning and development that aims to increase the effectiveness of individuals, teams, and organisations. Organisations can adapt, compete, innovate, develop, improve worker safety, increase service, and accomplish company objectives through training and development initiatives (Salas et al., 2012). As a result, in order for any business to compete in the global economy and differentiate itself based on the abilities, knowledge, and drive of its personnel, it must acknowledge the significance of training and development and how it affects both employee performance and organisational success (Aguinis & Kraiger, 2009).

Furthermore, the primary objective of training and development are to build personnel for future difficulties and to get them ready to function as effectively as possible in the circumstances at hand. Employees become more aware of the use of new technologies through training and development programmes (Imran et al., 2014). Considering everything mentioned above, it is obvious that mobile operator businesses will face intense competition both domestically and internationally when it comes to offering high-quality services, charging competitive prices, and using innovative technologies. Therefore, in these conditions, employees ought to receive adequate training, particularly in the use of

new and advanced technologies, to enable them to tackle these problems. In addition to providing training, managers must demonstrate their concern for their staff members in order to win over their loyalty and increase performance, both of which will provide their business an advantage over competitors.

2.3. Concept of Employees' Performance in Organisation

Measuring employee's performance helps the organisation to identify practices that boost employees job satisfaction. Numerous elements, including the company's overall practices, workplace conditions, employee training and development, and the relationship between the employer and employee, among others, have an impact on employee performance (Aktar et al., 2012). There are several approaches to improve employee performance. Task performance and contextual performance are the two categories of employee conduct that Borman and Motowidlo (1993) identified as essential to organisational effectiveness. Task performance includes actions that assist the organization's primary technical processes indirectly as well as behaviours that are directly related to the production of goods or services (Borman and Motowidlo, 1997; Werner, 2000). Contextual performance, on the contrary, refers to individual efforts that are unrelated to their primary task functions. Nonetheless, these actions are significant because they mould the social, psychological, and organisational environments, acting as a vital stimulant for task-related activities and procedures (Werner, 2000). According to Kaplan and Norton (1992), an organisation should base the combination of criteria it uses to evaluate the performance of its employees on four distinct perspectives: First, financial metrics such as increased market share, profitability, cash flow, and growth in sales. Second, customer measurements, or the customer's point of view, consider things



like service quality, product quality, and delivery time. Thirdly, internal company metrics, such as labour turnover, productivity, employee skills, and cycle time. The last perspective is on innovation and learning, which includes aspects like the capacity for creativity and development.

Employee task performance is viewed as an integrated, effective method of achieving strategic goals and bolstering the mission and core values of an organisation. (Ringim, and Abdulmalik, 2016). It has typically been assumed that what constitutes employee work performance differs from job to job. As a result, countless measures of work performance have been used. So far, the assessment of employee work performance has primarily focused either on objective measures of work productivity (such as the number of days absent, counts of specified acts, or output maintained in organizational records). The subjective entails judgments of quantity and quality of work from the employee him- or herself, peers, or supervisors (Linda, Claire, Vincent, Wilmar, Henrica & Allard, 2011).

Employee performance can be measured by various ways like productivity, absenteeism and employee satisfaction (Osunde, 2015). Employee performance is based on individual factors, such as: capabilities, expertise, competencies, background, and character (Vroom, 1964). Employees' performance can be demonstrated through increased productivity, proficiency in utilizing new technologies, and high levels of motivation among workers. Typically, employee performance is assessed based on results. Nevertheless, it can also be considered in relation to conduct (Armstrong 2000). Kenney and colleagues (1992) mentioned that employees' performance is evaluated based on the performance criteria established by the organization. Various factors can be considered when evaluating performance, such as productivity,

efficiency, effectiveness, quality, and profitability measures (Ahuja 1992). In the upcoming section, empirical research on how human resources management practices impact employees' performance will be examined.

2.4 Employee Commitment

Numerous studies have been describing employee commitment as employees' strong motivation to work in order to sustain themselves in the company for the long term. Employee commitment is the mental state that defines an employee's connection with the company and influences their choice to stay with the organization. Organizations reach their goals when capable employees demonstrate a high level of dedication (Meyer & Allen 2017; Khan et al, 2013). Thus, this paper examines how employee commitment is demonstrated through attitudes and behaviors in order to reach organizational objectives. The researcher utilized the following indicators to measure employee commitment: 1. Employee readiness; 2. Employee loyalty has been a major focus. Pride of employees

2.5 Review of Empirical Studies

The first part of this section encompasses review of studies on HRM practices on employee's performance in an organisation, with the aim of projecting the connection between the variables as arrived by management scholars. The second part deals with the review of studies which isolates the relationship between training and development on one part and employee's performance on the other. The goal of the literature review is to pinpoint knowledge niche that this study could fill in order to enhance previously published researches in the following areas:

Ampomah (2016) examined the impact of training and development on employee performance in Ghana's private tertiary institutions, using Pentecost University College as a case study. The respondents selected at management level using simple random sampling technique. The study



found that employees are motivated through training; and training and development resulted into higher performance. Eze (2016) examined the impact of training and retraining on teachers' productivity in Enugu State. Based on the result, the productivity of teachers was considerably increased by training and retraining. It also showed that opinions on how training and retraining affect teachers' productivity varied among men and women. It was determined that in order to increase their efficiency at work, teachers must undergo frequent training and retraining.

Khan, Abbasi, Waseem, Ayaz and Ijaz (2016) examined the influence of training and development on employee performance with the mediating effect of job satisfaction. One hundred and fifteen (115) questionnaires were distributed among employees i.e. managers and executives of Telecom companies in Abbottabad, Haripur and Mansehra of which one hundred and five (105) were returned. The study found that training and development, as well as job satisfaction, have a favourable impact on employee performance.

Manzoor, Sadozai and Jan (2016) assessed the impact of Human Resource Management (HRM) practices on employee's performance, incorporating employee empowerment as a moderating variable. The study employed selection, training, and participation as HRM practices variables. One hundred and thirty (130) sample size was drawn from the selected population employing proportional allocation sampling approach. Administrative staff and teaching professors from two public institutions were among the sampled responses. Cronbach's Alpha Coefficient was used to calculate scale dependability, and it was discovered that all scales had good reliability. Regression analysis was used for data analysis and hypothesis testing. The study concluded that all of the selected HRM Practices have a substantial and favourable effect on job performance.

Furthermore, the moderating variable, employee empowerment, is identified as a significant factor in improving the link between HRM practices and job performance.

Salah (2016) investigated the connection between employee productivity and performance in specific Jordanian private sector transport enterprises situated in the country's southern region and training and development. Data for the study was collected using structured questionnaire, administered on sample of two hundred and fifty four (254) respondents drawn from population of four hundred and twenty (420) employees', two hundred and twelve (212) questionnaires were retrieved, of which 188 were utilised in the analysis. To ascertain whether there was a statistically significant positive link between the independent factors (training and development) and dependent variables (performance and productivity), inferential statistics such as linear regression and Pearson product moment correlation coefficient (r) were used. The results showed a statistically significant positive correlation between employee performance and productivity and training and development. Analysis and interpretations were performed at a significance level of 0.05. The study came to the conclusion that staff productivity and performance are significantly impacted by training and development.

Tanoli (2016) examined the connection between employee performance and mentorship and training. Data from 250 employees will be gathered from various Islamabadi universities in the public and private sectors. The outcome demonstrated that employee performance is positively and significantly impacted by employee training. In addition to honing an employee's skills, timely and efficient training equips them to handle difficult tasks both now and in the future. Employees who are paired with older or highly skilled specialists in their industry retain their skills



and receive correction for errors made during regular tasks. A work environment that prioritises training and mentoring fosters a sense of commitment among employees, who then take on the role of propagating these practices to their junior colleagues, less seasoned group members, and new hires.

Usoroh, Umoren, and Ibang (2016) assessed at how education and training affected librarians' job productivity in Akwa Ibom State's university libraries. The study's ex-post factor research design was employed. The Pearson Product Moment Correlation was used to examine the data. The analysis's findings showed that there is a substantial correlation between academic librarians' employment productivity and their training. The outcome also showed that there is a strong correlation between academic librarians' employment productivity and their level of education. The study's conclusions led to the conclusion that education and training had a major influence on academic librarians' employment productivity.

Adenuga (2015) assessed the effect of staff development and training on Nigeria Plc, the first bank, and to determine whether employee productivity differed before and after the training. The research employed a descriptive survey design that was designed ex post facto. Four Hundred and Twenty Four (424) samples were selected for the study through random sampling techniques. Questionnaires were used for data collection which applied Pearson Product Moment Correlation Co-efficient(r) and t-test statistical tools to analyse and test hypotheses at 0.05 level of significance. The findings indicate a strong correlation between employee training and development and organisational performance, as well as a strong correlation between training and development offerings and skill gain among staff members. Additionally, the outcome demonstrates a noteworthy disparity in

worker productivity before to and following the training.

Asfaw, Argaw and Bayissa (2015) determined the influence that staff performance and effectiveness receive from training and development at the District Five Administration Office in Addis Ababa, Ethiopia. A quantitative research approach based on cross-sectional institutional analysis was utilised. On a sample of one hundred (100) employees chosen through a systematic random sampling procedure, data were gathered using the Likert scale tool. For analysis, 94 full surveys with a 94% response rate were taken into account. Employee performance and effectiveness showed a statistically significant positive correlation with training and development. Ekundayo (2015) examined the effect of training and development practices of selected oil services companies in Port Harcourt on workers' productivity. A total of 109 questionnaires were given out to the staff members of the ten oil service firms that were chosen. The survey discovered that a few oil services companies only partially satisfied their employees' training needs. The study finds a strong positive correlation between employee productivity and training and development. Additionally, there is a strong correlation between employees' job security and training and development.

Emeti (2015) evaluated how Rivers State paint manufacturing companies performed in relation to training and development. The 312 operational staff members of the three paint manufacturing companies in Rivers State were sampled using the cross-sectional survey study method. Data was collected via a questionnaire, and Pearson product moment correlation was employed for analysis. According to the report, paint manufacturing companies in Rivers State that made significant investments in training and development managed to weather the operational challenges.

Hafeez and Akbar (2015) evaluated the effect of training on worker performance in Pakistan's Karachi pharmaceutical industry. Training was used as an independent variable in the study, and its levers were employee motivation, job satisfaction, process efficiencies, new technologies, and innovative strategy. Employee performance was measured by performance areas, such as demonstrating teamwork, communication skill, customer service, interpersonal relationships, and reduced absenteeism. Three hundred and fifty-six (356) respondents who were chosen by random sample technique were given questionnaires. Regression, correlation, and descriptive analysis were employed in the analysis. The analysis's conclusion demonstrates a strong positive correlation between workers' performance and training.

Dabale, Jagero and Nyauchi (2014) determined the relationship between staff performance and training in Zimbabwe's Mutare City Council. The study's research design was correlational. Purposive sampling, a structured questionnaire, and 132 respondents were chosen from the population to participate in the data gathering process. Inferential statistics and other quantitative methods were used to analyse the data. It was determined that employee performance and training had a significant positive correlation.

There is evidence in the literature that there is a positive relationship between employee commitment and performance. For example, studies by Jogdand & Magar, 2023; Bandula, Lakmini, Jayatilake, 2016; and Tiyanto & Faizin, 2022) have found that employee commitment significantly affects employee performance. According to Anthony Andrew (2017), there is a positive correlation between the three commitments and organisational performance. It also demonstrates how strongly the three independent variables and organisational performance are correlated. This is in accordance with the research

of Yudha Adhary (2018), Stefanie Inggried Gorap, Siti Haerani, and Wardhani Hakim (2019), Jung (2020), Irvan Trang, Armanu, Achmad Sudiro, and Noermijati (2013), and Yudha Adhary (2018), organisational commitment significantly improved employee performance (Tiyanto & Faizin, 2022).

Based on the above reviewed empirical studies, the following hypotheses are developed:

H₀₁: Training and development significantly affect employee performance in tertiary educational institutions.

H₀₂: Employee commitment significantly affect employee performance in tertiary educational institutions.

H₀₃: Employee commitment significantly mediate the relationship between training and development and employee performance in tertiary educational institutions

2.7 Theoretical Framework

Expectancy and needs theories will be employed as the foundational theoretical framework of the study, to determine how staff development and training affect employees' performance in the workplace. The reason people select one course of action over another is explained by the expectation theory of motivation. According to expectation theory, an individual's behaviour is modified based on their estimate of anticipated consequences, and work motivation is contingent upon the perceived relationship between performance and outcomes (Torrington, 2009). The foundation of this theory is the notion that motivation arises from a person's belief that they will be rewarded or achieve their goals. The theory's central tenet is that people are driven to act when they think their choices will result in the outcomes they want (Redmond, 2010). The focus of expectation theory is on how people perceive their surroundings and the interactions that follow that result from their own expectations. According to the notion, people become more motivated

when they think their efforts will result in the results they want. Expectancy theory is a cognitive approach to motivation, explaining how individuals will modify their behaviour (motivation) if they believe their efforts will lead to results that meet their expectations.

Need theory explores the depth to which results inspire individuals to provide significant contributions to a task and perform at high levels, which is a complementary approach to expectation theory. The foundation of need theory is the knowledge that a person's motivation originates from their desire to satisfy or realise a need or want. Humans are motivated, nevertheless, by unmet needs, and in order to meet greater demands, some lesser needs must first be met. The fundamental tenet of the need theory is that workers are driven to produce results at work that will meet their needs. Likewise, employees won't be motivated to work if

they don't have needs, or if organisations don't have anything to give them that will meet their needs, which will lead to low employee performance and ultimately low organisational performance.

When an employee performs well and aids the organisation in achieving its objectives, management must ascertain what needs the employee is attempting to satisfy at work and make sure the employee obtains results that help to satisfy those requirements. Employees are motivated by both internal and external stimuli to satisfy their demands. Workers who are internally driven are impacted by things that make them feel good about themselves and their work, whereas externally motivated workers are typically impacted by things that are under the control of others, like money or recognition (Deci, 1985). Below is the formulation of the conceptual framework in accordance with the suppositions of the theories outlined above.

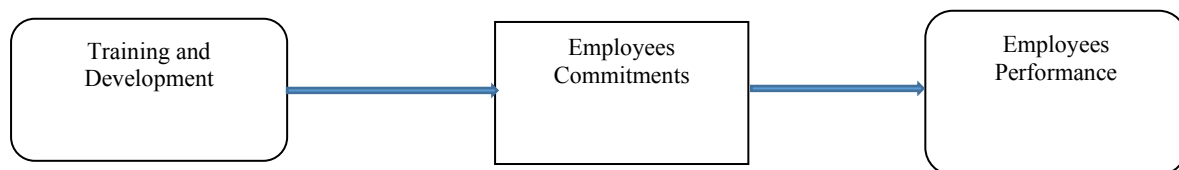


Figure 1: Conceptual Framework

3. Methodology

The study is aimed at establishing the effect of the independent variables on dependent variables; therefore, survey research method will be employed for analysis in the study. The study will utilise Human Resources Management Practices (HRM Practices) proxy of training and development as independent variables while employees' performance proxies will be applied in the study as dependent variables and employee's commitment will serve as the mediating variable. The population of the study will be all permanent the staff, which comprises of both academic and administrative staff on both senior and junior cadres, drawn from

four universities in Kano state. Thus, the population of the study is 3167 staff drawn from all sections and departments of the schools as at month end June, 2022, while respondents will be drawn using simple random sampling within the groups. Furthermore, to narrow the focus of the study on smaller fraction of the population of the study, the sample size of the study will be 498 employees derived using Guilford and Flruchter 's (1973) formula for estimating sample size was applied to determine the study sample.

$$S = \frac{N}{1 + \alpha^2 N}$$

Thus: $S = \frac{1167}{1 + 0.05^2 (1167)} = 497.89 \neq 498$



Where:

S = required sample size

N = the population Size

α = precision level at 0.05

Measurements

Sekaran and Bougie (2013) clarified “a pre-formulated composed set of questions to which respondents record their answers inside nearly characterised options”. Hence, estimations have vital influence in any exploration, as without fitting estimations the capacity to test the created speculation that gets from the variables was not possible precisely. At the end of the day, estimation permits one to give a remark on a business behaviour or occasion (Sekaran & Bougie, 2013).

Employees' Performance

Job performance represents behaviours that are formally evaluated by the organisation as part of the employees' responsibilities and duties” (Jex & Britt, 2008). The researchers also classified the employees' performance as an individual level variable, meaning that it was something that each individual did. The measuring of employee performance is based on prior research by Williams and Anderson (1991), which used a five-point Likert scale ranging from strongly agrees to strongly disagrees on work performance ratings. William and Anderson (1991) reported that the measurement had a reliability of approximately 0.91. Employees were prompted to assess their job performance on the specific issues.

Training and Development

Organisational performance or Authoritative performance is straightforwardly identified with employee training (Delaney & Huselid, 1996). Fitting training encourages correspondence and enhances the nature of work (Fussell *et al.*, 2000). They also mentioned that fitting training enhances the information and attitudes of employees, which ought to enhance their benefit in assignments and ultimately enhance the performance. In social organisations, the association

between training and employee performance is particularly strong (Huang, 2001). Hansson (2007) used a universal data set compiled from 26 countries to examine the degree of training and development that boosts performance and training resources, with the crucial variable eventually improving performance. Training measurement is based on Hansson (2007). The training and development measurement is based on Hansson (2007). The researcher used a five-point Likert scale: 1 - strongly agrees, 2 - agreed, 3 - neutral, 4 - disagreed, and 5 - strongly agreed.

Employee Commitment

Employee commitment was assessed using Allen and Meyer's (1990) scale, which is widely used in the social sciences and has high psychometric qualities for cross-cultural studies (Schmidt, 2007). Employee commitment will be handled as a single entity in this study, as previously stated, and tested using nine of the fifteen elements from (Mowday, Porter, & Steers, 1982). The items will be chosen based on their perceived face validity by the researcher (Ahmad *et al.*, 2011; Huang *et al.*, 2005). The sample items were changed and modified to fit the study's requirements. The following items were used to measure employee commitment “My organization is willing to put effort normally expected on the issue of employee.

The data to be used for the study were drawn from primary sources only, using questionnaires administration to respondents. The questionnaire will be distributed by hand delivery to the respective respondents., In addition, five-point Likert scale structured questionnaires will be employed for collection of data. To ensure validity and reliability of the research outcomes diagnostic and specification test such as factor analysis to test construct validity, composite reliability and discriminant validity will be conducted. Data were analyzed using Partial Least Squares

(PLS) Structural Equation Modelling (SEM) version 3, to test the hypotheses formulated for the study. SEM PLS will be used because it is suitable for a relatively complex model, with a large number of indicators or latent variables (Hair, Hult, Ringle, & Sarstedt, 2013). The hypotheses will be tested at 5% level of significance and the decision rule is that, if the t-value is less than the critical value, the hypothesis will be accepted and if equal or greater than the critical value, it would be rejected.

4. Results and Discussion

4.1 Data Preparation and Analysis

The owners-managers of SMEs were given a total of 498 questionnaires in this study. 411 questionnaires were returned out of that total. However, 20 surveys had an unengaged response, thus they were all removed, bringing the total number of questionnaires to 391 for analysis. In addition, when looking for missing data, 30 cases were discovered with fewer than 10% missing values, and they were discarded based on Hair, Black, Babin, and Anderson's recommendations (2014). To fill in the missing data, mean substitution

method was utilized (Tabachnick & Fidell, 2007; Hair *et al.*, 2014). The researchers employed 391 questionnaires in total for their final study. To calculate the measurement and structural model, the study used SmartPLS version 3.0. (Anderson & Gerbing, 1988). Some of the advantages of employing PLS are as follow; at the same time, it may estimate the links between variables as well as indicators and their link with other variables, It uses a bootstrapping approach to generate statistically reliable estimates of interaction effects, which may lower the potential relationship while boosting the theory's validity (Allard, Henseler, Ildikó, & Zuzana, 2016; Hair *et al.*, 2014).

4.1 Measurement Model Results

According to Hair et al (2019), the evaluation of measurement model begins with the size and significance of the loadings, reliabilities, and then convergent and discriminant validity. According to Hair et al. (2017) average variance extracted is 0.5 and composite reliability is 0.7, while the indicator reliability depends on what improve the AVE or CR. Therefore, the validity and reliability result is presented in figure 2 and table 1 below.

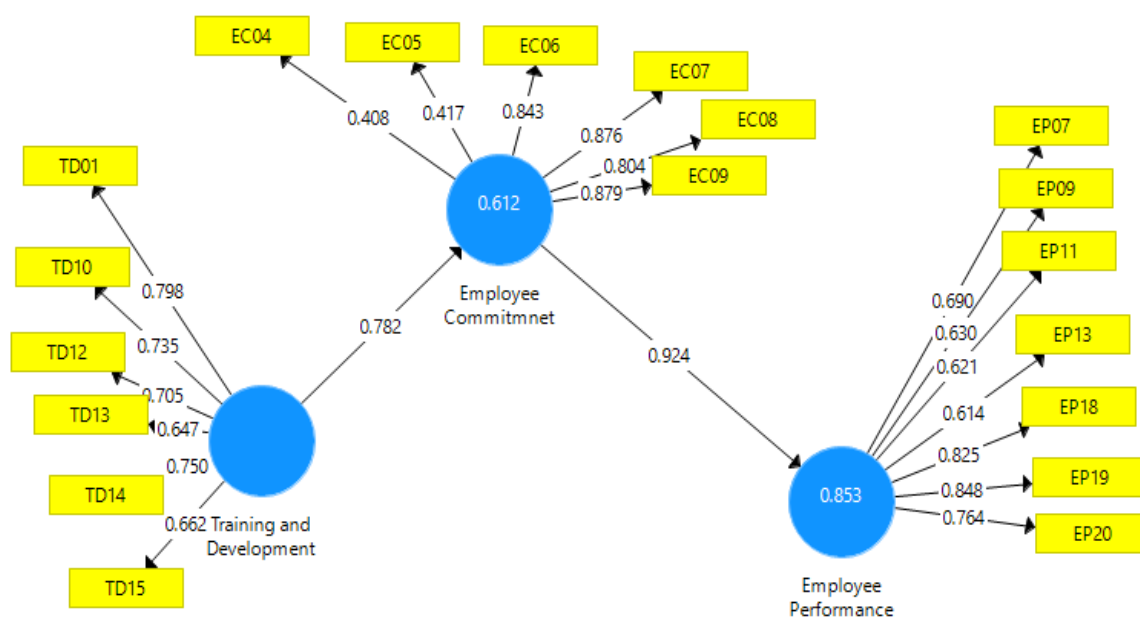


Figure 2: Measurement Model



Table 1: Internal consistency reliability and convergent validity for reflective construct

Constructs	Item	Loading	AVE	CR			
Employee commitment	EC04	0.408	0.539	0.886			
	EC05	0.417					
		0.843					
	EC06	0.876					
	EC07	0.804					
	EC08	0.879					
	EC09						
	Employee Performance	EP07			0.690	0.517	0.881
		EP09			0.630		
EP11		0.621					
EP13		0.614					
EP18		0.825					
EP19		0.848					
EP20		0.764					
Training and Development		TD01	0.798	0.510	0.864		
	TD10	0.35					
	TD12	0.705					
	TD13	0.647					
	TD14	0.750					
	TD15	0.662					

Note: EC=Employee commitment, EP=Employee Performance, TD=Training and Development; AVE= Average Variance Extracted and CR = Composite Reliability

As revealed in Table 1 above, the indicator reliability was achieved for all the constructs because deleting any item will not increase the AVE or the CR as suggested by (Hair et al., 2017). Also, the AVE values of all the constructs range from 0.510 to 0.539, with consistent composite reliability values also ranging from 0.864 to 0.886 interprets that the items employed in the study measure the constructs and as well show an attainment of convergent validity. Therefore, indicator loadings, AVE and CR in this study are achieved as recommended by Hair et al. (2017).

Furthermore, to determine the discriminant validity, Duarte and Amaro (2018) proposed the use of Heterotrait-Monotrait Ratio (HTMT) method as the best for evaluating discriminant validity compared to Fornell-Larcker criterion and cross-loading. Therefore, the recommended thresholds of HTMT value should be 0.85, 0.9 or 1 (Hair et al., 2017; Henseler et al., 2015; Kline, 2011). Thus, the discriminant validity of this study had achieved as specifically indicated in table 2 that all the values are below the recommended thresholds.

Table 2: Discriminant Validity (Heterotrait-Monotrait Ratio (HTMT) (n=212)

	Employee Commitment	Employee Performance	Training and Development
Employee Commitment			
Employee Performance	0.901		
Training and Development	0.782	0.892	

4.2 Structural Model Results

After successfully validating the instruments in the measurement model, the next is to assess the structural model by applying bootstrapping technique with 5,000 samples to ascertain the significance levels of the direct and moderating relationships (Hair *et al.*, 2017). These include the hypotheses testing, evaluation of R-square, effect size and predictive relevance.

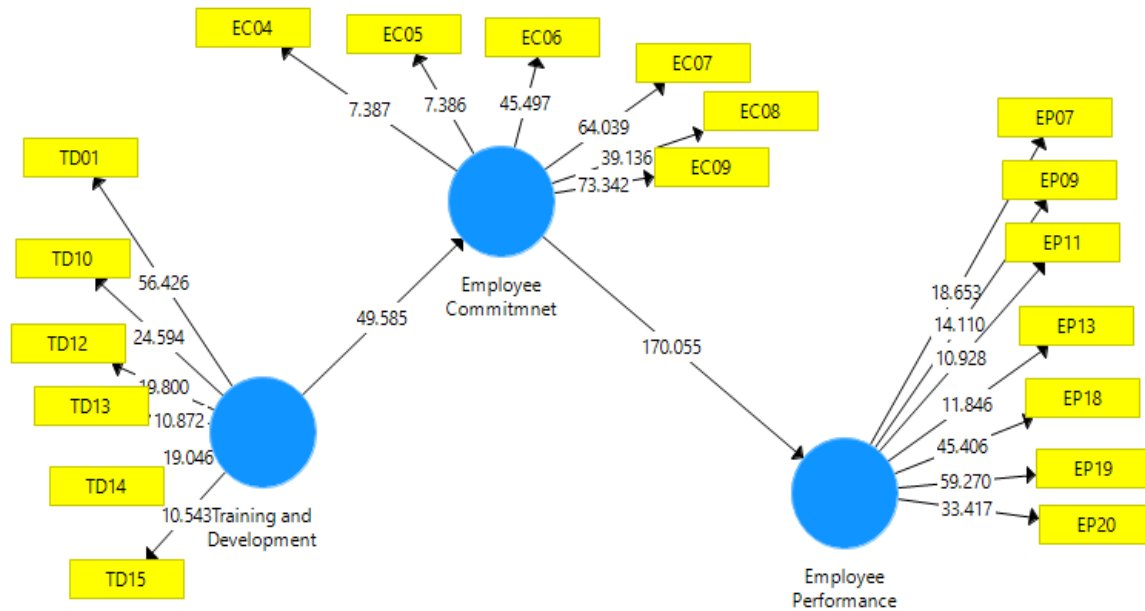


Figure 3: *Bootstrapping for Direct and Mediation*

Table 3: *Path Coefficient for Direct and Moderation Relationships*

Hypothesis	Relationship	Beta	Standard Deviation	t-value	p-values	Decision	Confidence Interval 2.5% 97.5%	
H ₀₁	TD -> EP	0.782	0.016	49.585	0.000	Rejected	0.754	0.815
H ₀₂	EC-> EP	0.924	0.005	170.055	0.000	Accepted	0.913	0.935
H ₀₃	TD->EC -> EP	0.723	0.016	45.163	0.000	Rejected	0.694	0.757

Note: EC=Employee commitment, EP=Employee Performance, TD=Training and Development;

Table 3 above presents the results of direct and moderation relationships of the study. Specifically, the finding for the direct relationship between TD -> EP, EC -> EP revealed a positive and significant with ($\beta = 0.782$ and $P=0.000$), ($\beta = 0.924$) respectively. This provides the basis for accepting all the direct relationship null hypotheses (H₀₁, and H₀₂). Equally, the finding of mediation relationship between TD-> EC -> EP demonstrated a positive and significant with ($\beta = 0.449$ and $P = 0.000$) and ($\beta = 0.148$ and $P = 0.000$). The result also provides evidence of rejecting the null hypotheses H₀₃. To further understand whether a path coefficient is significantly different from zero, Hair *et al.* (2017) stated the important of reporting bootstrap confidence interval which provides additional information on the stability of a coefficient estimate at 2.5% lower level (LL) and 97.5% upper level (UL). As presented



also in table 3, there is no zero between the confidence intervals of the significantly rejected null hypotheses except the accepted hypothesis.

The coefficient of determination (R²) of endogenous constructs is another criterion for evaluating structural models (Hair et al., 2017). The R² values of 0.19, 0.33, and 0.67 are considered weak, moderate, and substantial (Chin, 1998).

Table 4: Coefficient of Determination (R²) for direct and Moderation Relationships

Construct	R-Square (R ²)	
Employee Performance	0.853 (85.3%)	
Constructs	F ²	Effect Size
EC	0.061	Large
TD	0.005	Small
EP	0.158	Large

Note: EC=Employee commitment, EP=Employee Performance, TD=Training and Development;

As presented in Table 4 above, the cumulative result of exogenous constructs explains 85.3% of the total variance on the endogenous construct (Employee performance). Following Chin's (1998) recommendations, the R-squared (R²) value explained by these exogenous constructs and the moderator on the endogenous construct (Employee performance) is Substantial.

After determining the coefficient of determination (R²), the next step is to determine the effect size (f²). The f² value provides an overview of the potential effect or impact of a particular exogeneous variable on the endogenous variable. Keny

Table 5:

Predictive Relevance for Moderation Relationships: Q-Square/ Importance-Performance Matrix Analysis (IPMA)

Total	SSO	SSE	1-SSE/SSO
SMEs Performance	435.583	250.346	0.425
Constructs	Importance	Performances	
EC	0.924	68.677	
TD	0.723	76.164	

Note: EC=Employee commitment, EP=Employee Performance, TD=Training and Development;

As shown in Table 5, the Q² value for the endogenous latent construct is more than zero (0.425), as confirming the model's predictive relevance (Hair et al., 2014; Hayes, 2009; Chin, 1998).

(2016), proposed that 0.005, 0.010 and 0.025 as more realistic thresholds for small, medium, and large effect size respectively.

Table 4 above, show that EC and EC have large effect size on Employee performance, while TD exert a small effect on Employee performance.

In addition, to assess the results of predictive relevance (Q²), blindfolding process was used. According to Geisser (1974), any model above "0" has predictive relevance; it has the ability to predict relationship and if the value is "0" and below means the model has no any predictive influence.

4.3 Assessment of the Importance-Performance Matrix Analysis (IPMA)

The Importance-Performance Matrix Analysis (IPMA) compares the overall effects (importance) of the structural model



with the average value of the latent variable scores (performance). The goal is to identify antecedents that have a relatively high importance for the target construct but relatively low performance to highlight important areas of improvement that can receive high attention by owner-manager to boost the performance of their employee. Therefore, Table 5 presents the result of IPMA.

As can be seen from table 5 above, EC have a higher importance with a value of 0.924 representing 92.4% for the target construct (Employee performance) but show a moderate performance with a value of 68.677. Equally, TD have an average importance with a value of 0.723 representing 72.3% for the target construct (Employee performance) but show a higher performance with a value of 76.164.

4.4 Discussion of Findings

The study's main goal was to see if EC have a mediating effect on the link between TD and Employee performance. The study added to the body of knowledge by elucidating how EC interact with TD to affect Employee performance. The findings of the study revealed that EC, TD have a positive and significant effect with Employee' performance. The finding is in line with the findings of extant studies (*e.g.*, *e.g.*, Sothy, 2019; Ehijiele, 2018; Timoti, 2020; Jung, 2020; Stackhouse, et al. 2022; Tiyanto & Faizin, 2022; Jogdand & Magar, 2023. It also revealed that, EC is positive and significantly Mediated TD and Employee performance. This signifies that the essential prerequisites for driving employee performance depend on the ability of Institution to take proactive action and risk to implementing employee commitment incentives in their business in order to achieve higher performance. Employee commitment is the attitude or form of a person's behavior towards the organization in the form of loyalty and the achievement of the organization's vision, mission and goals, while training and development involve improving the

effectiveness of organizations and the individuals and teams within them directly and indirectly for employee contributions in doing a job, when employees receive compensation high, it will increase employee commitment. So, if the employee's commitment increases, it will increase the employee's performance

Conclusion

Theoretically, the study improved our understanding on the interaction of EC with TD to predict Employee performance. However, little or no extant study has been found that used EC as mediating variable for the association of TD and Employee performance. This proves that employee commitment as a mediating variable of the influence of training and development on employee performance. This proves that employee commitment as a mediating variable of the training and development on employee performance. Regarding the practically contributions, the findings of this study will help the management and higher institution, policy makers and academic researcher's in designing the policies and programs to promote Employee performance in Nigeria

A number of limitations ought to be considered in this study. First, the study adopted cross-sectional design that captures only responses of data collected over a single period of time. Therefore, future studies should consider a longitudinal approach that collects data over two or more particular period. Second, the present study focused on SMEs in Kaduna Metropolis. Future research is expected to cover other part of the state as well as the entire northern region. Finally, EC was used in this study to mediator TD and employee performance relationship. We therefore suggest to future researches to consider other potential moderator in their study.



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