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Training and Development on Employee Performance of Nigerian Universities in Northeast Nigeria

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Abstract

Training and development play a crucial role as organizations need to survive, excel, develop and diversify in this era of competition. Consequently, for organization to realize effective return from their investment there is need for organization to manage training and development programme with high degree of importance for the employee's performance to be actualized. This study investigated the effect of training and development on employee performance of Nigerian Universities in Northeast. The data wass collected using questionnaire administered to employees of the universities. The data was analysed using structural equation model (SEM) through Analysis of movement structure (AMOS). Base on the analysis the study revealed among others that that training and development have positive impact on employees' performance of HEIs in Northeast Nigeria. The study recommended that the Higher Educational Institutions (HEIs) in Northeast Nigeria should discuss training needs with their employees at the institutions through workshop training. The management of HEIs should ensure that the employees are offered equal opportunities for re-training to enhance their professional growth.

Keywords: Human resources management practices, Employee performance, Training and development, Nigerian Universities, Analysis of movement structure (AMOS).

Introduction

Background to the study

Employees are the most valuable asset of every company as they can make or crack a company's reputation, which may adversely affect its profitability. Without proper training, employees both new and current may not receive the essential information and skill needed to accomplish their tasks at their maximum potential (Lola *et al.,* 2017).Training and development are important component of human resource management practices (Ampomah, 2016). For employees to carry out their duties effectively and efficiently, they must have the relevant skills, knowledge, values, attitudes and competencies to understand their organization's culture. More often, newly employed do not have all the competencies usually required for excellent job performance (Innocent *et al.,* 2017). Employee training programs provide workers with information, new skills, or professional expansion opportunities. It can take place in numerous ways, on the job or off the job; in the organization or outside the organization (Lola *et al.,* 2017). Training and development is an aspect of human resource management practices that help in enhancing employee's skills, knowledge, and competence capable of improving employee's ability to perform more efficiently (Abdullahi *et al.,* 2018). Accordingly, this research is aimed to examine the effect of training and development on employee's performance of Nigerian universities in Northeast.

Statement of the research Problem

University employees are faced with enormous work to ensure students continuous patronize of the institution. Students who are trained in these universities are employed by the public and private sectors. Universities are undergoing a period of significance change as a result of political, economic, technological and cultural factors. They keep on expanding due to increase in student's enrolment, increased capacity in public institutions, a growing private sector, and more government investment in research and training. Numerous Universities in Nigeria are facing serious staff training problems, thus performance is affected. Performance is measured through increased productivity, higher generation of revenue, maximized profits and customer satisfaction (Leseiyo and Reuben, 2019).

The educational sector of Nigeria has experienced instability and other forms of industrial conflict and strike in recent time. This has results to low workers performance in the academic environment. Apparently most of these problems were encountered because of under-funding of the institutions, lack of employee involvement in decision making process, incessant industrial disputes, brain-drain, cultism, corrupt practices and abuse of trust which are major issues that lead to workers employee performance (Okpimah and Red-Well, 2022).

Despite the above problems, the Management of most Universities in Nigeria often set aside huge amount of money for training and re-training of their staff, so as to be able to improve the image of the university and also ensure the university survive the continuous competition among other similar educational institutions. However most of this training have not yielded the

expected result, because, significant number of staffs in these universities, still have challenges with operating computer, using the internet, handling of students records to mention a few (Lola *et al.,* 2017). This will leads to high job turnover then increase the cost to hire new employees which low down the organizational profitability. Past researches proved a positive link between training and employee performance, as training brings benefits for the employee along with for the firm by positively impacting employee performance through the enhancement of employee's competencies and behaviour (Abdullahi *et al.,* 2018).

Concept of Training and Development
Training enables employees to deal with the customer effectively (Lola *et al.,* 2017); while development is aimed at bringing employee up to another threshold of performance (Abdulrahman and Mshelia, 2022).Training and development has a vital role in bridging the gap that exists between knowledge and skills required for the job (Aliyu *et al.,* 2018). Trained employees have more ability to use up-to-date equipment optimally (Ajayi and Okhankhuele, 2019). Training programs are referred to as the process of bridging the gap between current performance and the desired performance levels (Sanusi *et al.,* 2021).

Training can be defined as a systematic process of acquiring knowledge, skills, abilities, and the right attitudes and behaviours to meet job requirements (Aliyu *et al.,* 2018). Training is a systematic process that enhances employee's skill, knowledge and competency, necessary to perform job effectively (Abdullahi *et al.,* 2018). Training refers to bridging the gap linking the current routine performance and the standard desired performance (Lola *et al.,* 2017). Training is the acquisition of knowledge, skills, and competencies as a result of the teaching of vocational or practical skills and knowledge that relate to specific useful competencies (Okpimah and Red-Well, 2022). Employees' training is described as programs that furnish employees with information, capabilities, new skills and professional development opportunities (Sanusi *et al.,* 2021). Training is not persuading people to do what is wanted but rather a process of creating organisational conditions that will cause employees to strive for better performance.

Ajayi and Okhankhuele (2019) and Lola *et al.* (2017) disclosed that training could be imparted via diverse methods such as peers' cooperation, coaching and mentoring and participation by the subordinates. Training could be imparted via on the job training, Induction/orientation, Apprenticeship, Demonstration, Vestibule and Formal Training, while development could be carried out through under-study, Job-rotation and Self-assessment. Abdullahi *et al.* (2018) argued that training can also take place in a number of ways, on the job or off the job; in the organization or outside organization. On the job training is required to improve the staff that had inadequate

academic qualification for his job performance, while off-the job training is a process of acquiring skill and knowledge at a location different from the employee office (Sanusi *et al.,* 2021). Therefore, it seems obligatory by the universities to plan for such training programs to improve their abilities and competencies that are needed in the organisation.

Employee performance

Employee performance has been a significant concern for organizations and researchers to enhance or improve it for decades. Wehrmeyer (2017) posited that employee performance enables the organisation to choose the quantity and quality of labour achieved, decide the competitive advantage gap, set the gap in goals achievement, and enhance the decision-making process. Mahfouz *et al.* (2021) defined employee performance as the limits of employees to direct occupation effectively and capably to deal with conveying the best results. When the employees are given an ideal preparation, they will be logically committed to their movement and improve their execution in affiliation.

Employee performance in Nigerian universities is a significant component that determines the achievement of teaching, research, and community service goals, which depends on the willingness and openness of the employees to do the job (Ekechi and Umar, 2020). The teaching roles of university employees involve delivering lectures, marking and grading scripts, and supervising students, among others. The research roles of university employees are carrying out investigations on the identified problem(s), presenting findings through conferences/seminars or publishing the results in journals and textbooks. The university employees also engage in community service to the universities and the community as the community impacts employee morale, productivity and engagement positively and negatively in Nigerian universities (Hussaini *et al.,* 2020). The measurement of employee performance in this research involves four dimensions (efficiency of the work, planning the work, making efforts, creativity and innovation) adopted by Tabouli *et al.* (2016).

Training and Development on Employee Performance

Babagana (2014) established that training and development has a positive impact on lecturers performances as their skills and knowledge are being updated to meet up with present day challenges. Gambo (2015) revealed that training and development programmes improve employees' skills and performance, enhance their technical knowhow to withstand the challenges of contemporary times, and serves as an effective tool for enhancing workers' productivity in the academia. Ampomah (2016) found out that employees are motivated through training; and training and development results into higher employee performance. Ankrah (2017) submits that

training programs have a positive impact on employee performance and job skills despite complained of the inadequate staff which burdened the work load of employees. Innocent *et al.* (2017) found that training and development had positive impact on employees' performance of the Polytechnic in Nigeria despite organizational issues which constrained such as lack of management support for training and development programmes. Lola *et al.* (2017) revealed that training has significant positive relationship with job performance at Redeemers University Ede, Osun State. Abdullahi *et al.* (2018) revealed that training method, training design and training delivering style has significant and positive effect on employee's productivity among academic staffs of Kano State Polytechnic, Nigeria. Aliyu *et al.* (2018) proved that training and development enhance employee performance and productivity in Abubakar Tatari Ali Polytechnic (ATAP) Bauchi. Ajayi and Okhankhuele (2019) revealed that training (On the Job and Off the Job) had a significant effect on the employee's performance of the Federal University of Technology Akure (FUTA), Ondo State, Nigeria. However, management did not release enough funds towards adequate training of the administrative staff. Shah *et al.* (2019) established a significant and positive impact of trainings and developments on employee's performance of colleges of Hyderabad, Pakistan.

Elijah (2020) revealed a significant relationship between training and employee's performance of Nasarawa State Polytechnic Lafia, College of Education Akwanga and Nasarawa State University Keffi. Sanusi *et al.* (2021) established that effective training programs in terms of on-the-job training and off-the-job training positively impacts employees' performance in terms of productivity and work quality in Kwara State Polytechnic, Ilorin. Abdulrahman and Mshelia (2022) revealed among others that that training and development have positive impact on employees' (lecturers) performance; in Nigerian polytechnics. Okpimah and Red-Well (2022) found that there is a positive association between training and employee performance of private Universities in Delta State, Nigeria. Oppong and Owusu-Acheaw (2022) revealed that there was significant positive relation between Training and Development and Employee performance at Koforidua technical university. Sackey *et al.* (2022) training and development improved staff performance and increased staff's efficiency on the job at the University of Mines and Technology, Tarkwa (UMaT). However, study leave with pay were not granted to staff which is likely to affect staff performance. Segbenya and Berisie (2020) revealed that Training and development significantly affect employees' performance at the University of Education, Winneba, Ghana. However, Kanyua (2021) revealed that Public Middle Level Technical Training Institutions in Kenya had ineffective training and development practices as majority of the institutions did not have staff training and development policy in place and majority of respondents had never been sponsored for training by their institution.

Underpinning Theory of the Study

The theory that guides this study is the human capital theory. The Human Capital Theory was developed by Smith (1776) which postulates that education and training are a form of investment in human beings. The underlying belief then is that education creates assets in the form of knowledge and skills, which in turn increases the productivity of the employee. The theory argued that employees acquire skills as a result of staff development programs or investment in the existing human resource through appropriate on-the job training both within and outside the organization such as seminars, workshops, conferences, and by creating conducive environment through appropriate welfare care like promotion. Human capital theory holds that employees should invest in specific training and further initiation of more promotion opportunities to enhance employees' career path prospects (Abdullahi *et al.,* 2018).

Methodology

Population of the Study

This study identified four HEIs (Federal University Gashua, Yobe State University Damaturu, Abubakar Tafawa Balewa University Bauchi, and Bauchi State University Gadau) in Northeast Nigeria with a population of three thousand nine hundred and two (3592) employees (Registry Department of the HEIs, 2022).

Table 1: Population of Employees Working in HEIs in Northeast Nigeria

S/No.	TEIs (Universities)	Academic Staff	Non-Academic Staff	Total Number of Employees
1.	Abubakar Tafawa Balewa University, Bauchi (ATBU)	891	772	1663
2.	Bauchi State University, Gadau (BSU)	329	224	553
3.	Federal University, Gashua (FUG)	318	331	649
4.	Yobe State University, Damaturu (YSU)	395	332	727
	Total	**1933**	**1659**	**3592**

Source: Registry Department of the Four Universities (2022).

Sample and Sampling Technique

The sample size of the study was calculated using the Yamane (1967) formula as follows:

$$n = N/1 + N(e)^2$$

$$n = N/1 + N(0.05)^2$$

$$3592/1 + 3592\,(0.05)^2$$

$$3592/1 + 3592\,(0.0025)$$

$$3592/10.7525)$$

n = 400

The study adopted stratified random sampling because it is best used when there is an accurate and readily available sampling frame (academic and non-academic staff).

Method of Data Collection and Analysis
The data were collected with the aid of questionnaires administered to the employees (Academic and Non-Academic staff) of the four HEIs in Northeast Nigeria. However, the study used inferential statistics through structural equation modelling (SEM) analyses using AMOS 24 software as a multivariate analysis developed due to some limitations in the ordinary least square (OLS) when dealing with latent constructs.

Results and Discussion
Demographic Result
Respondents were approached to give their demographic data, for example, gender, educational qualification, job specification, and number of years spent in the institution. Of 400 questionnaires distributed to the university employees, 371 were collected, and ten incomplete questionnaires were excluded from the analysis.

Demography		Frequency	Percentage
Gender	Male	219	60%
	Female	142	40%
Educational Qualification	SSCE	40	11%
	B.Sc/B.A/B.Tech	89	25%
	M.A/M.Sc/MTech	118	33%
	PhD	114	31%
Job Specification	Academic staff	235	65%
	Non-Academic staff	126	35%
Number of Years Spent In the Institution (NYSI)	2-10 years	193	53%
	11-20 years	91	25%
	21-30 years	38	11%
	31years and above	39	11%
Total		361	100%

           Source: Computed from Field Survey

The gender characteristics of the employees of HEIs in Northeast Nigeria show that of the 361 employees, 60% were male, while 40% were female. The educational status of employees comprises 11%, 31%, 33%, and 25%, for secondary school levers, graduates, masters and PhD respectively. The job specification also found that 65% are academic staff while 35% are non-academic staff. On the number years spent in the institutions, one hundred ninety-three of the respondents spent two (2) to ten (10) years in the services of the universities. Ninety-one spent eleven (11) to twenty (20)

years in service, 38 spent twenty-one (21) to thirty (30) years, and 39 spent thirty-one and above years in the service.

Validating the Pooled Measurement Model: Confirmatory Factor Analysis (CFA)
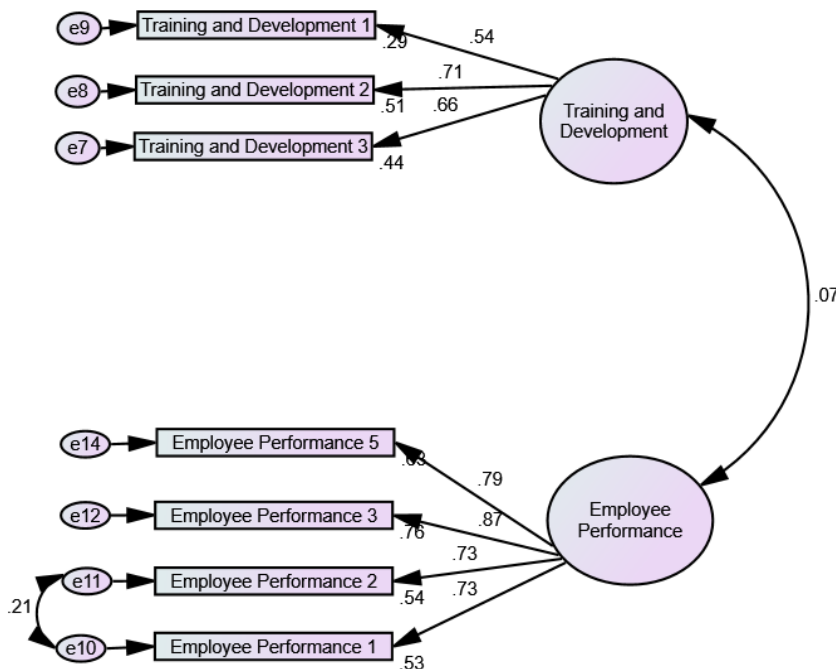
The Measurement Model of a Latent Construct

The CFA for pooled measurement models is more efficient and highly suggested. Thus, this procedure (Pooled-CFA) for assessing the measurement model of the latent construct will be explained below and shown in the SEM/AMOS pooled measurement fit in Figure 4.1 below:

Table 2: Result from the pooled measurement model from the path diagram below:

Fit indices	Authors	Recommended values	Values from the Current Model
CFI	Bentler (1990), Hatcher (1994	> 0.90	0.99
GFI	Yuan K.H (2005), Hair *et al.* (2010)	> 0.90 >.80	0.97
RMSEA	Byrne (2001), Hu & Bentler (1999)	< = 0.08	0.031
Relative Chi-Square	Marsh & Hocevar (1985), Bentler (1990)	< 5.0	1.34

Source: Recommended Threshold and Current Model Fitness

Figure 1: Pooled Measurement Model of all Constructs

Assessment of the Validity and Reliability of Measurement Model

In assessing the validity and reliability of the measurement model, unidimensionality, validity and reliability were done.

i. **Unidimensionality** is achieved when all factors loading must be greater than a cut-off of 0.5, as reported by Stevens (1992) or 0.5 by Awang (2015).

ii. **Validity:** The requirement for validity was fulfilled through the *Convergent Validity* which is achieved when all values of **Average Variance Extracted (AVE)** are greater than 0.5, but sometimes, AVE lower than 0.5 could be accepted (Fornell and Larcker, 1981). The *Construct Validity* is achieved as all the fitness indexes for a construct accomplish the required level. The *Discriminant Validity* is also achieved as is the correlation between exogenous constructs did not exceed 0.85.

iii. **Reliability Testing:** This was achieved through the Average Variance Extracted (AVE) which indicates the average percentage of variation explained by measuring items for a latent construct. The AVE for this study was achieved and calculated by typing the standardized loading on the (Colwell, 2016) online calculator. However, **Composite Reliability (CR):** Composite reliability is achieved as all the CR values are greater than 0.5. The CR for this study was achieved and calculated by typing the standardized loading on the (Colwell, 2016) online calculator.

**Table 3: The CFA Report for Every Construct in the Model**

Construct	Items	Factor Loading	Composite Reliability (Minimum 0.6)	Average Variance Extracted (Minimum 0.5)
Training and Development	TD 1	Deleted	0.678	0.5406
	TD 2	Deleted		
	TD 3	Deleted		
	TD 4	Deleted		
	TD 5	Deleted		
	TD 6	Deleted		
	TD 7	.61		
	TD 8	.66		
	TD9	Deleted		
	EP 1	.80		
	EP 2	.79		
	EP 3	.80		
	EP 4	Deleted		

	EP 5	Deleted		
	EP 6	Deleted		
	EP 7	Deleted		
	EP 8	Deleted		
	EP 9	Deleted	0.839	0.635
Employee Performance	EP 10	Deleted		
	EP 11	Deleted		
	EP 12	Deleted		
	EP 13	Deleted		
	EP 14	Deleted		
	EP 15	Deleted		
	EP 16	Deleted		
	EP 17	Deleted		

Source: Extracted from Measurement Model for Pooled Construct
Discussion of Findings

Structural Equation Modelling (SEM)
A SEM generated through analysis of movement structure (AMOS) was used to test the relationship between training and development on employee performance. The fit indices for the model, as shown in Table 4.3, fell within the acceptable range CMIN/df = 1.847, GFI = 0.96, AGFI = 0.94, IFI = 0.96, CFI = 0.96, RMSEA = 0.048 and SRMR = 0.345. The squared multiple correlation was 0.2% for employee performance; this shows that 20% variance in employee performance is accounted for by training and development, while the remaining 80% are the variables which are not included in the model (error terms). For this study, training and development were examined as an independent construct given its impact on employee performance.

CMIN/df = 1.847
GFI = 0.96
AGFI = 0.94
IFI = 0.96
CFI = 0.96
RMSEA = 0.048 and SRMR = 0.345
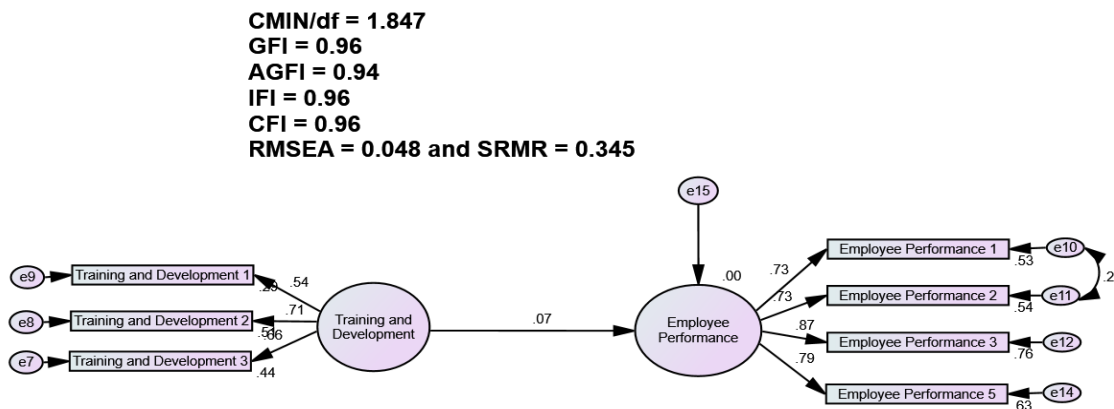
Figure 2: The Basic Structure Model

Table 4: The hypothesis statement for every path and its conclusion

Hypothesized Relationship	Standardized Estimate	p-value	Decision
Training and Development on Employee Performance	.137	.000	Supported
R-Square	20%		
Model fit: chi-sq/df =1.847	GFI= 0.96, AGFI = 0.94, IFI = 0.96 CFI= 0.96	SRMR=0.345	RMSEA=0.048

Note: EP = Employee performance, RS = Recruitment and selection, TD = Training and development, CR = Compensation and rewards.

H₀1: There is no significant effect of training and development on employee performance of higher educational institutions in Northeast Nigeria

The probability of getting a critical ratio as large as 0.331 in absolute value is 0.000. In other words, the regression weight for training and development in the prediction of employee performance is significantly different from zero at the 0.05 level (two-tailed). These statements are approximately correct for large samples under suitable assumptions. Thus, findings revealed a significant effect of training and development on employee performance of higher educational institutions in Northeast Nigeria. Consequently, training and development add substantial value to employee performance in higher educational institutions.

Conclusion and Recommendations of the study
Conclusion
The fit indices for the model fell within the acceptable threshold CMIN/df = 1.847, GFI = 0.96, AGFI = 0.94, IFI = 0.96, CFI =.96, RMSEA = 0.048 and SRMR = 0.345. Subsequently, establishing the relationship between training and development and employee performance of HEIs in Northeast Nigeria was the main aim. It was concluded that training and development positively and significantly influence employee performance in HEIs. In HEIs, Training and development assure higher motivation to perform better in HEIs in Northeast Nigeria.

Recommendations
The following recommendations were suggested based on the research findings; the HEIs in Northeast Nigeria should discuss training needs with their employees at the institutions through workshop training. The management of HEIs should ensure that the employees are offered equal opportunities for re-training to enhance their

professional growth. The management of HEIs should plan for the career and development of its employees. Thus, employees should be provided with the advancement of career opportunities like enrolling for their master's and Doctor of Philosophy (Ph.D.) as a reasonable percentage of the employees are graduates in the study area. This can include offering professional development programs, workshops, and training sessions to enhance their skills and knowledge.

References

Abdullahi, M.S., Gwadabe, Z.L., & Ibrahim, M.B. (2018). Effect Of Training And Development On Employee's Productivity Among Academic Staff Of Kano State Polytechnic, Nigeria. *Asian People Journal, 1*(2), 264-286.

Abdulrahman, A., and Mshelia, A.G. (2022), Impact of Training and Development on Employee Performance: A Case Study of Ramat Polytechnic, Maiduguri and Federal Polytechnic, Damaturu. *International Journal of Advanced Academic and Educational Research, 13*(6), pages 66 – 82.

Ajayi, M. O., and Okhankhuele, O.T. (2019). Effect of Training on the Performance of University Administrative Staff in Nigeria. *International Journal of Technology and Management Research, 4,* 1-10.

Aliyu, M. R., Bello, H.S., and Bello, M. (2018). Impact of Training and Development on Employee Performance in Abubakar Tatari Ali Polytechnic (ATAP) Bauchi, Bauchi State, Nigeria. *Kampala International University Journal of Humanities, 3*(1), 309–319.

Ampomah, P. (2016). The Effect of Training and Development on Employee Performance in a Private Tertiary Institution in Ghana" (Case Study: Pentecost University College (Puc) - Ghana). *Asian Journal of Social Sciences and Management Studies, 3(1*), 29-33.

Ankrah, D. T. (2017). Assessing the impact of training and development on employee performance in the tertiary education sector of Ghana. *JENRM, 4*(1), 70-80.

Awang, Z. (2015). *SEM made simple, a gentle approach to learning structural equation modelling.* MPWS Rich publication, Malaysia.

Babagana, S. A. (2014). Influence of Training and Development on Lecturers' Performance in Nigerian Polytechnics: A Case of Federal Polytechnic, Bauchi. *International Journal of Finance and Management in Practice, 2*(1), 11-20.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological bulletin*, *107*(2), 238.

Bentler, P.M. (1990). Comparative Fit Indexes in Structural Models. *Psychological Bulletin, 107*(2), 238-46.

Bentler, P.M. and Bonnet, D.C. (1980). Significance Tests and Goodness of Fit in the Analysis of Covariance Structures. *Psychological Bulletin, 88*(3), 588-606.

Byrne, B. M. (2001). Structural equation modelling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International journal of testing*, *1*(1), 55-86.

Colwell, C. (2016). Collaborative archaeologies and descendant communities. *Annual Review of Anthropology*, *45*, 113-127.

Ekechi, F.O., and Umar, A.I. (2020). Effect of Change Management on Employee's Performance in Nigeria Universities, *European Journal of Business and Management, 12*(20), 39-48.

Elijah, O.Z. (2020). Effect of Employees' Training on Performance of Academic Staff of Some Selected Tertiary Institutions in Nasarawa State (2011-2017). *African Journal of Social Sciences and Humanities Research, 3*(6), 65-77.

Fornell, C., & Lacker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 40-52.

Gambo, H.S. (2015).The Impact of Training and Development on Workers' Productivity In Some Selected Nigerian Universities. *International Journal of Public Administration and Management Research (IJPAMR), 3*(1), 10-16.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*. Harlow: Pearson.

Hatcher, R. (1994). Market relationships and the management of teachers. *British journal of sociology of education*, *15*(1), 41-61.

Hu, L. T., & Bentler, P. M. (1999). Cut off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modelling: a multidisciplinary journal*, *6*(1), 1-55.

Hussaini, U., Noma, I.A., a nd Rugga, S.F. (2020). Effects of Motivation on Higher Education Lecturer's Performance the Moderating Effect of Working Condition: A Proposed Conceptual Framework, *International Journal of Engineering, Business and Management (IJEBM),(4)*6, 109-115.

Innocent, I.E., Uzoamaka, E.V., and Levi, N.N. (2017). Effects of Training and Development on Employee Performance at Abia State Polytechnic, Aba. *International Journal of Economics and Business Management, 3*(9), 13-22.

Juneja, P. (2022). Management study guide content team. Retrieved from https://www.managementstudyguide.com/how-the-movie-yuva-explains-the-need-theory-of-motivation.htm

Kanyua, K.E. (2021).Effect Of Training and Development on Employee Performance in Public Middle-Level TIVET Institutions in Kenya. *International journal of innovative research and advanced studies, 8*(7), 62-68.

Leseiyo, M., and Reuben, J.M. (2019).Influence of Staff Training on Performance of Public Universities in Kenya: A Case Study of Moi University, Nairobi Campus. *International Journal of Research and Innovation in Social Science, 3*(5), 636-642.

Lola, O.J., Thank-God, O., and Philip, A.O. (2017). Impact of Training on Employee Performance at Redeemers University Ede, Osun State. *Internal Journal of Research in Economics and Social Sciences, 7*(5), 272-280

Madhani, P.M., (2020). Rewards Strategy: A Key Driver of Service–Profit Chain. *Compensation and Benefits Review*, *51*(4), 162-172.

Mahfouz, S., Bahkia, A.S., and Alias, N. (2021). The Impact of Human Resource Management Practices On Employee Performance And The Mediating Role Of Employee Commitment. *Journal of Governance and Regulation, 10*(4), 222–234.

Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher order factor models and their invariance across groups. *Psychological bulletin*, *97*(3), 562.

Okpimah, E.S.A., and Red-Well, E.E. (2022). Training and Employee Job Performance of Private Universities in Delta State, Nigeria. *International Journal of Management Studies & Entrepreneurial Development, 3*(2), 37-57.

Oppong, J. A. and Owusu-Acheaw, M. (2022). Relationship between Training and Development and Employee Performance of University Staff: a Study of Koforidua Technical University. *Africa Development and Resources Research Institute Journal, Ghana, 31*(8), 1-21.

Sackey, M.M., Bedu-Addo., P. K. A., Andoh-Robertson, T., and Asiedu, B. (2022). Influence of Training and Development on Non-teaching Staff Performance in the University of Mines and Technology, Tarkwa. *International Journal of Research and Innovation in Social Science, 6*(4), 727-733.

Sanusi, S. I., Adedoyin, I. S., and Ishola, J. A. (2021). Effects of Training on Academic Staff Performance in Kwara State Polytechnic, Ilorin. *Journal of Management Thought and Practice, 13*(1), 11-22.

Segbenya, M., & Berisie, T. (2020). The Effect of Training and Development on the Performance of Senior Administrative Staff at the University of Education, Winneba, Ghana. *International Journal of Business and Management; 15*(2), 49-61.

Shah, S.N.J., Shah, R.H., & Soomro, M. (2019).Training and Development Impact on Employees Performance: A Study of Government Colleges of Hyderabad-Pakistan. *Pakistan Journal of Humanities & Social Science Research, 02*(1), 129-136.

Steven, J. (1992). *Applied multivariate statistics for the social sciences*. (2ed.) Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Tabouli, E.M.A., Habtoor, N.A., and Nashief, S.M. (2016). The Impact of Human Resources Management on Employee Performance: Organizational Commitment Mediator Variable. *Asian Social Science; 12*(9); 176-192.

Wehrmeyer, W. (2017). Greening people: *Human resources and environmental management.* Routledge.

Yamane, T. (1967). A simplified formula to calculate sample size. *Google Scholar, California, CA, USA*.

Yuan, K. H. (2005). Fit indices versus test statistics.*Multivariate behavioral research*, *40*(1), 115-148.