

Analysis of the influence of training methods on employee performance: An empirical study on the Zanzibar Electricity Corporation

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ABSTRACT

This study analysed the influence of training methods on employee performance: an empirical study on the Zanzibar Electricity Corporation. This study was guided by Human Capital Theory. The study used a descriptive research design. Only a quantitative approach was used to collect data using questionnaires. The targeted population of the study was five hundred and ninety-three (593) staff. Both stratified and simple random techniques were used to select 197 participants. Data were collected through structured questionnaires, with 158 valid responses obtained, representing an 80.0% response rate. Quantitative data were analysed using descriptive statistics and multiple regression analysis with SPSS version 26. The study findings revealed that ZECO allow its employees to attend short courses to enhance their skills and knowledge, to attend workshops and seminars to improve productivity and increase employee performance. Multiple regression analysis shows that Adjusted R^2 was .810, equal to 81.0% of the variation in employee performance explained by seminars, workshops and short courses. Furthermore, the model summary shows that employee performance, seminars, workshops and short courses had a strong positive relationship ($R=.920^*$). The study concludes that ZECO employs a variety of training methods, the most popular being seminars, workshops, and short courses. The majority of employees think that these training methods enhance their work performance, knowledge, and abilities. The study recommends that ZECO should keep emphasising training methods like workshops and short courses, which are successful in developing skills, and ZECO ought to hold workshops and seminars more frequently in light of the positive feedback.

Keywords: Employee Performance, Seminar, Short Courses, Training Methods, Workshops

I. INTRODUCTION

Globally, employee training has emerged as a key element for organisations looking to increase employee productivity, flexibility, and creativity on a global scale (Muthama, 2023 as cited in Makombe & Rutenge, 2025). Organisations have realised the necessity of investing in ongoing employee development as organisations continue to change as a result of technological breakthroughs and shifting customer demands (Noe, 2020). On-the-job training, workshops, coaching, mentoring, and e-learning is common training methods. According to an empirical study by Smith and Brown (2021), as cited in Makombe & Rutenge (2025), organisations that use a range of training techniques, especially blended learning, which combines online and in-person instruction, report improved employee performance and retention rates in the United States. To gain a competitive edge and improve employees' capacity, knowledge, and desired skill set, organisations have worked to capitalise on the improved competencies, expertise, and potential of their skilled labour force (Makombe & Rutenge, 2025). Managers who oversee human resource training offer a variety of training courses and assign workers to their jobs. According to Abu Daqar and Constantinovits (2021), these training methods help employees become more familiar with their responsibilities and encourage them to become more dedicated to their work.

Thus, regardless of an organisation's size, employee performance is the best measure of its likelihood of success or failure. To ensure that the workplace is staffed with qualified individuals who have received professional training to carry out their duties (Gange & Barongo, 2024). Because of the high level of economic volatility, organisations are expected to produce more than they did in the past (Gange & Barongo, 2024). Public sector managers are forced to put pressure on their employees to perform better and produce at higher levels because of the stress this demand puts on them. However, employees must get the required training to have a productive workforce. In return, the organisation must implement updated employee training methods and programs on a regular basis to increase worker productivity (Bhatti et al., 2022).

In Africa, there is growing recognition that a skilled workforce is essential for organisational competitiveness and success. As a result, employee training practices are evolving across the continent. While traditional methods such as classroom training, seminars, and workshops remain widely used, countries such as South Africa, Kenya, and Nigeria are increasingly adopting digital training solutions. E-learning platforms have become popular because they help organisations overcome geographical barriers and provide cost-effective access to training resources (Muthama, 2023 as cited in Makombe & Rutenge, 2025). Despite these developments, challenges such as inadequate infrastructure, limited organisational support, and financial constraints continue to affect the effectiveness of training programs in many African countries (Kisasilla & Mutarubukwa, 2024). Nevertheless, organisations across Africa are continuing to embrace innovative training approaches to enhance employee skills and improve overall productivity.

In Tanzania, both public and private sector organisations have emphasised the value of employee training. Tanzanian organisations frequently employ mentorship programs, internal workshops, and classroom-based training as common training methods (Ngowi & Mboya, 2021 as cited in Makombe & Rutenge, 2025). However, because of financial and technological limitations, the adoption of technology-driven training, like e-learning and virtual training modules, has been sluggish (Njonge, 2023). Through a number of methods and policies, the Tanzanian government has promoted the use of ongoing training to boost employee proficiency and organisational effectiveness.

In Zanzibar, induction training receives limited funding and is often given less priority compared to other training methods. Most in-service training opportunities are financed through scholarships and support from development partners such as the governments of China, the Republic of Korea, and India. However, the Revolutionary Government of Zanzibar (RGoZ) continues to recruit many recent graduates who require adequate in-service training to perform their duties effectively. This highlights the need for greater investment in employee training and development. Public service colleges play a crucial role in improving employee performance, promoting ethical conduct, and strengthening accountability, which are key objectives of the RGoZ's Vision 2050 agenda (World Bank, 2023). Recruitment in Zanzibar's public sector has primarily targeted recent college and university graduates. This has the drawback of having insufficient skills to fit directly into government positions, even though it has significant advantages in terms of cost and maintaining the public sector's youth structure. This will become even more problematic when the RGoZ is focused on creating a workforce that satisfies future expectations. This calls for proper and effective training methods that would equip fresh college and university graduates who are employed in the Zanzibar government. Therefore, analysing training methods on employee performance in public sectors is vital to understand how public sectors in Zanzibar can optimize its employee career development strategies and improve performance.

1.1 Statement of the Problem

Employee performance continues to be a crucial determinant of service delivery effectiveness and quality. Public institutions in Zanzibar are expected to support national development objectives and the execution of Zanzibar Vision 2050 by offering effective and responsive services. The Revolutionary Government of Zanzibar (RGoZ) has continued to fund employee training and capacity-building initiatives targeted at enhancing employees' knowledge, abilities, and competencies to accomplish these goals. To improve employee performance and organisational productivity, a variety of public sector organisations have implemented training methods like induction training, on-the-job training, coaching, mentoring, workshops, seminars, and in-service training (Kikoti & Lameck, 2024).

Training is a systematic process to improve employees' abilities, competencies, and knowledge required to carry out their responsibilities. It is regrettable that many private and even some public organisations seem to be unaware of the significance of employee training, even though it is said to have a significant impact on employees' performance (Akida et al., 2021). In one way or another, this circumstance could result in high employee turnover as well as poor organisational performance and profitability prospects.

Empirical evidence has examined the influence of training methods. For instance, Mosha and John (2023), as cited in Makombe and Rutenge (2025), identified gaps in the integration of digital tools such as e-learning platforms, citing obstacles like inadequate digital literacy among employees, high implementation costs, and limited infrastructure. These training method gaps impede employees' ability to reach their full potential, especially in the public sector. A study by Makombe and Rutenge (2025) highlights that workshops and on-the-job training are the most successful methods, greatly enhancing worker productivity and skill levels. Employees preferred interactive and hands-on training methods, as evidenced by the lower satisfaction ratings given to e-learning platforms. Gange and Barongo (2024) revealed that employees received a variety of training, including orientation, refresher, on-the-job, promotional, and technological training.

However, there are relatively few studies on public organisations in Zanzibar that have looked at and evaluated the effects or relationship between employees' training and their performance, despite the abundance of literature on the significance of training for employees' performance. With a focus on Zanzibar Electricity Corporation (ZECO), this study aims to supplement current knowledge by critically analysing the influence of training methods on employee performance, particularly in the public sector of Zanzibar.

1.2 Research Objective

To analyse the extent to which training methods contribute to improving employee performance in the public sector. A case study of Zanzibar Electricity Corporation (ZECO) headquarters.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Human Capital Theory

The assessment of training methods and practices at Zanzibar Electricity Corporation (ZECO) is greatly influenced by the Human Capital Theory, which was created by economists Gary Becker and Theodore Schultz. According to this theory, investing in the education, training, and skills of employees boosts their output, which enhances organisational performance. Becker (1993) asserts that businesses that make investments in the development of their human capital are likely to reap greater benefits in the form of improved employee capabilities and productivity. A key component of human capital development is training, which gives employees the skills they need to innovate in their jobs, adapt to technological advancements, and completes tasks more efficiently. The application of Human Capital Theory emphasises the significance of structured and ongoing training methods to optimise workforce potential and propel organisational success in the public sector, where service quality and regulatory compliance are critical.

This theory becomes relevant to the study since it offers a theoretical framework for comprehending the importance of assessing training methods. According to the theory, the organisation invests in a variety of training methods, including workshops, e-learning platforms, and on-the-job training, to help employees improve their performance and expand their knowledge and skills base. Additionally, the theory suggests that ZECO could gain a competitive edge in the financial industry, provide a reliable and better service delivery, and employee retention as a result of efficient training methods. This study intends to evaluate how ZECO's investment in its employees affects their productivity and overall performance through the lens of Human Capital Theory (Mosha & John, 2023).

2.2 Empirical Review

A previous study by Makombe and Rutenge (2025) in their study titled “Evaluation of common employee training methods in improving TCB performance in Tanzania”. The study adopted a case study design. Out of the 174 TCB employees, including both administrative and non-administrative officers, a sample size of 64 respondents was selected. To reduce bias, the sampling technique used simple random sampling for non-administrative officers and purposive sampling for administrative officers. To determine the connection between training methods and employee performance, data was collected via structured questionnaires and interviews and analysed using descriptive analysis. The study found that workshops and on-the-job training are the most successful training methods, greatly enhancing employees' abilities and output. On the other hand, employees preferred interactive and hands-on training methods, as evidenced by the lower satisfaction ratings given to e-learning platforms. The study comes to the conclusion that ongoing investment in a variety of training methods is essential to meeting employees' changing needs in a cutthroat financial environment.

Dengeri and Singh (2024) examined the “Effect of employee training on employees' performance in manufacturing companies in Rwanda”. The study adopted a descriptive research design based on both qualitative and quantitative approaches. 142 employees from the industries were the target population. The population of 142 was selected using a census sampling technique. The Statistical Package for Social Science (SPSS) version 21 was used to analyse the gathered data using regression analysis, correlation, and descriptive statistics. The study findings show that training needs assessment, training delivery methods, and training evaluation account for about 67.1% of the variability in employee performance ($R^2=0.671$). This suggests that training needs assessment; training delivery methods, training evaluation and employee performance have a strong correlation. Additionally, the unstandardized coefficient for training delivery approaches is 0.383, meaning that an increase in training delivery approaches of one unit is linked to an increase in employee performance of 0.383 units ($\beta=0.383$; $t=4.840$; $p=0.000$).

Gange and Barongo (2024) assessed the “Effects of Training on Employee Performance in Tanzania Police HQ”. The study used a case design. Both probability and non-probability sampling techniques were useful in advancing the goal of the problem. Tanzania Police Force (TPF) headquarters employees in Dar es Salaam city were the target population. Using questionnaires, interviews, and literature reviews as data collection tools, 125 TPF employees were selected from three (3) designated departments to provide information for the study. The SPSS program was used for data analysis. The findings show that employees received a variety of training, including orientation, refresher, technological, on-the-job, and promotional training. Employees at TPF reported that training has raised employee morale, decreased attrition, enhanced job satisfaction, and improved skills, all of which have improved performance. Additionally, findings show that inadequate funding; outdated curricula, inadequate facilities, incompetent trainers, and a lack of training needs assessment were obstacles to training. The study concludes that

training has boosted employee morale, decreased employee attrition, enhanced job satisfaction, and improved skills, all of which have improved performance.

A study by Akida et al. (2021) in their study titled “Effect of Training Material and Methods on Employee Performance at Land Commission in Zanzibar”. The study used a quantitative approach. The sample size was chosen using both simple random sampling and purposive sampling techniques. A questionnaire was used as the data collection tool, and the sample size was 91 respondents. The data gathered was analysed using multiple regression. According to the study, the employee's performance was significantly impacted by two predictors: training material and training method. To put it another way, training material ($\beta=0.246$, $t=2.241$, $p<0.05$) and training method ($\beta=0.248$, $t=2.313$, $p<0.05$) are the outcomes of predictor variables. In general, employees' performance was positively impacted by training materials and methods. According to the study's findings, the Land Commission should plan and execute these two indicators (training materials and training methods) to run a cycle of improving employees' skills to boost performance.

III. METHODOLOGY

3.1 Research Design

A descriptive research design was employed in this study to determine the causal relationship between training methods and employee performance (Gray, 2022). The descriptive research design was relevant since this design allowed the study to use structured data collection techniques like a questionnaire, which provides quantifiable data suitable for a quantitative study.

3.2 Study Area

This study was conducted at ZECO in Unguja's Urban District, Urban West Region. ZECO is an appropriate study area to analyse the extent to which training methods contribute to improving employee performance, since ZECO has conducted intensive efforts to improve employee performance. Furthermore, in order to maintain current service standards at the highest possible level of quality and successfully meet new demands from the expanding population, employee performance must continue to be improved. Despite numerous institutional shortcomings in service delivery brought to the public's attention, ZECO continues to struggle to improve its operational performance, which can be attained by improving employee performance. These include delays in building new power poles for new customers and sporadic power outages. These can be caused by a variety of problems, such as a lack of worker training, a shortage of qualified employees, and generally insufficient labour (Hamid & Hamad, 2026).

3.3 Target Population

The target population consisted of all 593 ZECO employees in Unguja, Zanzibar, as of July 2024 (Hamid & Hamad, 2026). The study population was chosen because employees are essential to Zanzibar's energy supply, and efficient service delivery is becoming more and more important. ZECO still faces challenges with the technical proficiency of its employees and service reliability, which are closely related to employee training. Therefore, examining ZECO's training issues provides valuable insights into how proper training methods to develop employees can improve its performance for public utility providers.

3.4 Sampling and Sample Size

According to Mishra and Alok (2022), sample size is related to the number of participants or observations in a study. The sample size of the study is 197, determined using Kothari (2004) rule, which suggested that $1/3$ (0.333) of the population is suitable to be a sample size of the study. A sample size of 197 was selected using stratified and simple random sampling techniques. Therefore, sample size = $(0.333 \times 593) = 197$ as shown in Table 1 below

Table 1

Study Population

Department	Population (N)	Sample Size (n)
Commercial Department	100	$(33.3 \div 100) \times 100 = 33$
Operational Department	280	$(33.3 \div 100) \times 280 = 93$
Human Resource Department	90	$(33.3 \div 100) \times 90 = 30$
ICT Department	8	$(33.3 \div 100) \times 8 = 3$
Planning and Research Department	15	$(33.3 \div 100) \times 15 = 5$
Finance Department	100	$(33.3 \div 100) \times 100 = 33$
Total	593	197

3.5 Data Collection Methods

In this study, data were collected using questionnaires. To collect structured data from a wide range of respondents, including department employees, questionnaires were used. A thorough grasp of the participants' opinions was made possible by the closed-ended questions on these surveys (Kothari, 2004). The necessary data for this study were obtained using a Google link. Closed-ended questions were used.

3.6 Data Processing and Analysis

To ensure accuracy and completeness, the gathered data were edited, coded, categorised, and cleaned before the analysis process. Descriptive statistics were used to analyse quantitative data using SPSS (Pallant, 2010). Averages and percentages were used to display the findings. The procedure comprised tallying the responses, figuring out the percentage variations in responses, and analysing the information in light of the particular objectives and study theory. The variability of employee performance brought on by the workshop, seminar and short course was ascertained using multiple regression analysis (Saunders et al., 2023).

3.7 Ethical Consideration

Before beginning data collection, researchers obtained research permits from the appropriate authorities to ensure ethical considerations. In order to allow for voluntary participation and awareness when completing the survey instrument, respondents were provided with appropriate explanations related to the study. These protocols helped to guarantee ethical considerations (Drolet et al., 2023). Additionally, after obtaining research permits and gathering data, respondents gave their informed oral consent. This was explained by the way ZECO operated, which made getting respondents' oral consent very appropriate. Additionally, having research permits from the Office of the Chief Government Statisticians of Zanzibar and the Second Vice President's Office of Zanzibar expedited this process, making it inappropriate to request written consent.

IV. FINDINGS & DISCUSSION

4.1 Response Rate

The total sample size was 158 out of 197, equal to about 80.0% of the response rate. Generally, this response rate was excellent and representative of the entire population, as supported by Mugenda and Mugenda (2003) that a response rate above 70% is very good. The high response rate was due to physically approaching the respondents, as well as contacting them through mobile phones, including WhatsApp groups, and asking them to complete the questionnaire.

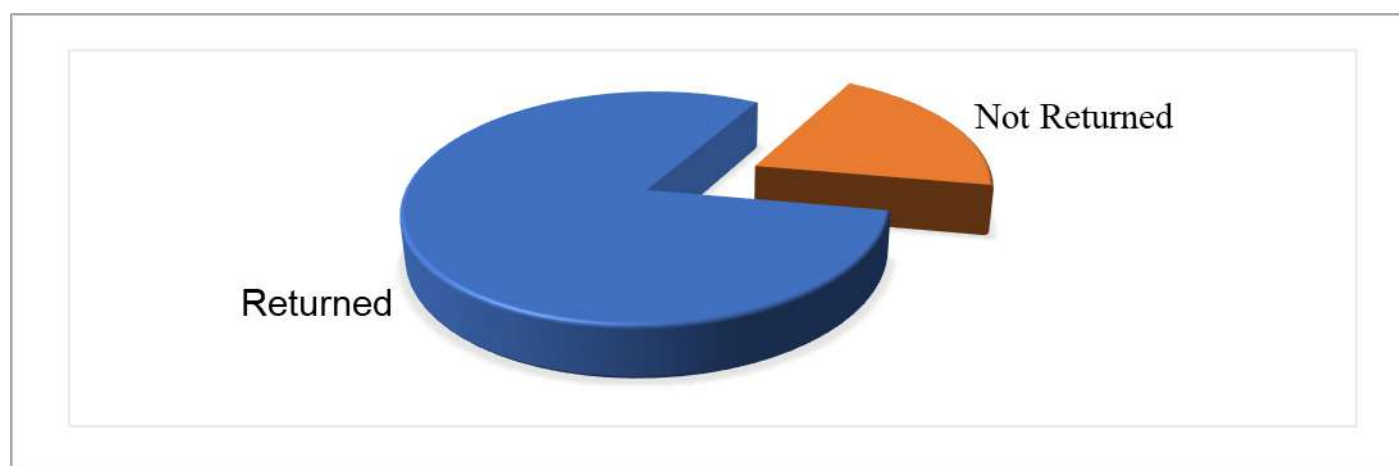


Figure 1
Response Rate

4.1.1 Influence of Training Methods on Employee Performance

Descriptive statistics of training methods on employee performance were used to measure the extent to which each of the questionnaire items of training methods influences the performance of the employees. The findings indicate that only three (3) questionnaire items out of nine (9) show a great influence on employee performance. However, short courses have enhanced skills and knowledge in organisation staff to embrace employee performance at an average mean score of 4.29 ($M=4.29$ & $SD=4.09$), the organisation assesses workshops to improve productivity and employee performance at an average mean score of 4.11 ($M=4.11$ & $SD=0.81$), and organization organizes different seminars on staff to increase employee performance at average mean score of 4.01 ($M=4.01$ & $SD=0.78$).

Based on the descriptive statistics, the study findings revealed that ZECO allow its employees to attend short courses to enhance their skills and knowledge, to attend workshops and seminars to improve productivity and increase employee performance. The outcomes are consistent with research by Mosha and John (2023), which highlights the effectiveness of interactive training techniques like workshops in meeting urgent employee needs and improving performance. The findings imply that ZECO should develop a policy and increase its training budget that allows its employees to attend several seminars, workshops and short courses to enhance their skills, experiences and productivity to promote employee performance.

Empirical studies indicate that brief training courses and workshops greatly increase employee productivity, creativity, and ability to adjust to shifting work environments, which eventually improves organisational performance (Salas et al., 2012). Additionally, seminars and workshops offer chances for networking, knowledge exchange, and exposure to best practices, all of which enhance employees' skills and motivation. Because employees are better equipped to meet job demands and organisational goals, organisations that actively support these learning opportunities typically obtain higher levels of performance, improved quality of work, and increased employee engagement (International Labour Organization [ILO], 2020). These findings are based on the fact that these training methods used by ZECO give employee the chance to learn new things, update their current skills, and develop the competencies needed to carry out their jobs well. Employees' performance eventually improves as they acquire pertinent knowledge and useful skills that help them manage job responsibilities, solve work-related issues, and adjust to organisational changes (Jonathan, 2024).

In relation to human capital theory, funding employee training and development improves performance and productivity by expanding their knowledge, skills, and abilities. The findings corroborate earlier empirical research by Dengeri and Singh (2024) showing that training initiatives greatly enhance employee competency, service delivery, job quality, and overall organisational performance. As a result, public sectors that spend money on workshops, seminars, and short courses are probably going to have a workforce that is more skilled and performs better.

Table 2

Influence of Training Methods

Attributes	N	Min	Max	Mean	Std. Dev.
Enhanced Skills and Knowledge	158	1.00	5.00	4.29	4.09
Productivity	158	1.00	5.00	4.11	0.81
Seminars on Staff	158	1.00	5.00	4.01	0.78
Product Quality Delivery	158	1.00	5.00	3.97	0.93
Communication Skills	158	1.00	5.00	3.97	0.96
Knowledge and Confidence	158	1.00	5.00	3.96	0.95
Build Competence	158	1.00	5.00	3.96	0.84
Workshops for Employees	158	1.00	5.00	3.92	1.09
Different Short Courses	158	1.00	5.00	3.92	1.06
Average Mean				4.01	

Employee Performance: Descriptive statistics were used to present findings based on employee performance, which is the dependent variable of this study. The participants were asked to show the level of agreement with aspects that determine employee performance at ZECO Zanzibar. The findings show that reducing skills gaps for employees contribute employee performance by average mean of 4.25 ($M=4.25$ & 0.59), improving work motivation contribute employee performance by average mean of 4.25 ($M=4.22$ & 0.63), increase employee efficiency on their job contribute employee performance by average mean of 4.09 ($M=4.09$ & 0.76), increased employee commitment at work contribute employee performance by average mean of 4.08 ($M=4.08$ & 0.84), and increased job skills contribute employee performance by average mean of 3.88 ($M=3.88$ & 0.95). These findings imply that employee performance at ZECO resulted from reducing skills gaps based on their specialisation, improving work motivation, employee efficiency, commitment and increased job skills.

According to the findings, ZECO employees believe that proper training methods generally lead employees to perform well. This implies that employees are capable of carrying out their responsibilities successfully. However, some factors, including training methods like workshops, seminars, and short courses, may have an impact on the performance level. These findings are consistent with Makombe and Rutenge (2025), who established that successful training methods greatly enhance employees' abilities and output. In the public sectors, where cooperation and communication are essential to operational success, employees may promote peer interaction and knowledge exchange to fill job skills gaps and improve employee motivation. Therefore, interactive training methods help employees learn from professionals and one another to improve job skills, which eventually improve their comprehension of changing public sectors, stimulate creativity, and enhance service delivery.

Table 3*Employee Performance*

Attributes	N	Min	Max	Mean	Std. Dev.
Reduce Skills Gaps	158	2.00	5.00	4.25	0.59
Working motivation	158	2.00	5.00	4.22	0.63
Efficiency and Performance	158	1.00	5.00	4.09	0.76
Employee Commitment	158	1.00	5.00	4.08	0.84
Job Skills	158	1.00	5.00	3.88	0.95
Average Mean				4.10	

4.2 Statistical Factor Analysis

Factor analysis conducted for the training method indicates that the KMO test of sampling size adequacy was .514, and Bartlett's Test of Sphericity for data appropriateness was .000, which is less than 5% (sig value<5%), implying that the study sample size was adequate to conduct multiple linear regression analysis. According to Pallant (2010), a KMO value greater than .50 is considered acceptable for factor analysis. With the hypothesis that the population's study variables were uncorrelated with the sample that generated the data, Bartlett's test of sphericity was employed to test it. The hypothesis was rejected at a 5% significance level, allowing for additional analysis to proceed.

Table 4*Factor Analysis*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.514
Bartlett's Test of Sphericity	Approx. Chi-Square	42.762
	df	36
	Sig.	.000

4.2.1 Data Normality Test

The p-value, which is the result of the Shapiro-Wilk test for normality, shows whether the probability estimation is distributed normally. According to Shapiro and Wilk (1965), the data are considered normal if the p-value (sig) is higher than .05. Based on findings, the significance values for seminars, workshops and short courses were .178, .394 and .333, respectively. Therefore, all sub-variables for training methods had significance values greater than 5%. These findings imply that the data of all sub-variables for training methods were normally distributed. This led to the conclusion that multiple linear regression analysis can be conducted.

Table 5*Normality Test*

	Shapiro-Wilk		
	Statistic	df	Sig.
Seminars	.948	158	.178
Workshops	.245	158	.394
Short course	.726	158	.333

a. Lilliefors Significance Correction

Multicollinearity Test

Based on the findings of the multicollinearity test for training methods, as can be seen by examining the VIF and Tolerance values of the Collinearity statistics, the total data exhibits a significance value above 0.1. Therefore, the study concludes that multicollinearity symptoms were absent.

Table 6*Multicollinearity Test*

Model		Collinearity Statistics	
		Tolerance	VIF
1	Seminars	.978	1.022
	Workshops	.984	1.016
	Short course	.993	1.007

a. Dependent Variable: Employee performance

4.3 Multiple Linear Regressions

In this study, multiple linear regression analysis was used to determine whether or not the training method's sub-variables influence employee performance. In this instance, what effects do the training method's sub-variables, namely: seminars, workshops and short courses, have on the dependent variable, which is the employee performance?

4.3.1 Simultaneous Test Significance F

The significance F test was carried out to test the influence of the training method's sub-variables, namely, seminars, workshops and short courses simultaneously on the employee performance (dependent variable). ANOVA test or F test was used to compare the significance level of 5% set for the study with the significance value of the study findings. Based on the test, the study findings indicate that the F test value was .463, which is greater than 5% significance value set for the study, while the calculated significance value was .008, which was less than 5% significance value set for the study. Therefore, the study decides to reject the null hypothesis (H_0) that the training method has no significant effect on employee performance. The study concludes that linear regression analysis was a viable method to use, and the training method has a significant effect on employee performance.

Table 7

Simultaneous Test Significance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.276	3	.425	.463	.008 ^b
	Residual	141.439	154	.918		
	Total	142.715	157			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Short course, Workshops, Seminars

4.3.2 Determination Coefficient for Training Methods

The R^2 test was employed to determine how the regression model explains the variable on dependent variable. The accuracy level of regression was expressed in the coefficient (R^2), whose value ranges between 0 and 1. Based on the regression model, the findings show that the Adjusted R^2 was .810, equal to 81.0% of the variation in employee performance explained by seminars, workshops and short courses. Furthermore, the model summary shows that employee performance, seminars, workshops and short courses had a strong positive relationship ($R=.920^a$). The fact that seminars, workshops, and short courses give employees current information and useful skills that are directly related to their job duties is one factor contributing to this strong explanatory power. Employees are able to carry out their jobs more effectively and efficiently by learning new methods, policies, technologies, and procedures through these training approaches. Employees' productivity, work quality, service delivery, and capacity to meet organisational objectives all greatly increase as they gain pertinent competencies (Gange and Barongo, 2024). These findings are in line with Akida et al. (2021), who established that employees' performance was significantly impacted by two predictors: training material and training method. To put it another way, training material ($\beta=0.246$, $t=2.241$, $p<0.05$) and training method ($\beta=0.248$, $t=2.313$, $p<0.05$) are the outcomes of predictor variables.

Also, these findings are consistent with Dengeri and Singh (2024), who established that 67.1% of the variation in employee performance is explained by delivery approaches and training evaluation. Additionally, the study found that a unit increase in effective training methods leads to improved employee performance by 38.3%. Makombe and Rutenge (2025) argue that workshops and on-the-job training are the most successful training methods, greatly enhancing employees' abilities and output. On the other hand, employees preferred interactive and hands-on training methods, as evidenced by the lower satisfaction ratings given to e-learning platforms. Therefore, employee performance is enhanced by effective training methods, which raise productivity, enhance service quality, and increase the possibility of reaching goals. Employee turnover and absenteeism are decreased by these strategies, which also increase employee engagement, productivity, morale, and creativity. The various factors that affect the selection of training methods should be carefully taken into account when designing training programs. This greatly increases the likelihood of reaching the intended objectives. Human factors, such as the availability or presence of a trainer, can influence the selection of appropriate methods.

These findings confirm the assumptions of the human capital theory since human capital acquired through training can be a source of employee performance, and an employee's value is based on how they present their ideas, submit arguments, or choose a more informed training method. The results are also in line with the Human Capital Theory, which contends that training expenditures improve employees' knowledge, skills, and abilities, which boosts output and enhances organisational performance. A study by Ng'wanakilala (2024) shows that employee performance and training are positively correlated. Therefore, employees who receive ongoing training typically exhibit greater levels of efficacy, efficiency, and service delivery than workers who have fewer training opportunities.

Table 8*Determination Coefficient*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.920 ^a	.900	.810	.25835

a. Predictors: (Constant), Short course, Workshops, Seminars

4.3.3 Regression Coefficients for Training Methods

The results in Table 9 show the relationship and contribution of short courses, workshops and seminars as training methods on employee performance. The findings show that a short course where $\beta = .499$ indicates that, when all other variables remain constant, employee performance should rise by .499 for every unit increase in short course. Additionally, the findings show a strong positive relationship between short courses and employee performance, as indicated by the standardised coefficient, Beta = .736. However, Sig. value = .000: At the 5% significance level, the short course has a statistically significant influence on employee performance. Further, findings show that workshops where $\beta = .130$ indicate that, when all other variables remain constant, employee performance should rise by .130 for every unit increase in workshops. Additionally, the findings show a moderate positive relationship between workshops and employee performance, as indicated by the standardised coefficient, Beta = .150. However, Sig. value = .007: At the 5% significance level, the workshop has a statistically significant influence on employee performance. Finally, findings show that seminars where $\beta = .430$ indicate that, when all other variables remain constant, employee performance should rise by .430 for every unit increase in seminars. Additionally, the findings show a strong positive relationship between seminars and employee performance, as indicated by the standardised coefficient, Beta = .470. However, Sig. value = .004: At the 5% significance level, the seminar has a statistically significant influence on employee performance.

Table 9*Regression Coefficients for Training Methods*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.334	.442		.756	.451
	Short Course	.499	.076	.736	13.152	.000
	Workshops	.130	.051	.150	.260	.007
	Seminars	.430	.054	.470	.784	.004

a. Dependent Variable: Employee Performance

V. CONCLUSION & RECOMMENDATIONS**5.1 Conclusion**

Based on the findings, ZECO employs a variety of training methods, the most popular being seminars, workshops, and short courses. The majority of employees think that these training methods enhance their work performance, knowledge, and abilities. Short courses are thought to be the most successful of them since they give employees real-world knowledge and abilities that they can use in their everyday jobs. Additionally, workshops and seminars are crucial because they encourage lifelong learning and keep employees abreast of industry advancements. These training methods also promote professional and employee interaction, teamwork, and experience sharing, all of which enhance learning and productivity at work. The importance of short courses, workshops and seminars underscores the necessity of ongoing investment in employee training and development. ZECO is likely to experience improvements in its employee performance if they promote a culture of learning and employee development. This study established that giving employees appropriate training using suitable training methods improved employee performance.

5.2 Recommendations

ZECO should keep emphasising training methods like workshops and short courses, which are successful in developing skills. The ZECO may think about designating mentors or coaches to help employees overcome obstacles in the real world to further incorporate hands-on learning experiences into their daily responsibilities. Through this mentorship, employee would be able to immediately apply newly learned skills to their jobs, enhancing both individual performance and overall productivity. ZECO can create a learning environment that is both useful and flexible enough to accommodate the changing demands of the public sector by bolstering training. ZECO ought to hold workshops and seminars more frequently in light of the positive feedback.

Employees can stay informed about emerging technologies, regulatory changes, and industry trends by attending workshops and seminars. These activities ought to be planned to guarantee that employees possess the most up-to-date information and abilities. Additionally, ZECO should concentrate on creating a cooperative atmosphere during these gatherings so that employees can learn from one another and from outside specialists, which can advance their professional growth and strengthen their competitive advantage.

Declaration of Interest

The authors declare that they do not have any known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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