HUMAN RESOURCE MANAGEMENT

The Effect of Training and Development on Employee Performance: Evidence from the National Housing Corporation, Tanzania

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Abstract

Background: Public organisations are under pressure to show results, yet little is known about how training practices affect staff performance in Tanzanian state-owned housing entities. This study examined the effect of training and development, on-the-job training methods and organisational support of career development on employee performance in the National Housing Corporation (NHC).

Methods: A quantitative cross-sectional descriptive and correlational design guided by Social Learning Theory was used. A structured five-point Likert questionnaire was completed by 204 permanent employees selected through stratified random sampling. Data were analysed with descriptive statistics, Pearson correlation and multiple linear regression.

Results: The model was significant, $F(3, 200) = 74.63$, $p < 0.001$, and explained 52.8% of the variance in employee performance. Training and development ($\beta = 0.378$), on-the-job training ($\beta = 0.278$) and organisational support of career development ($\beta = 0.241$) each had a significant positive effect ($p < 0.001$). Feedback after training (54.4% agreement) and clarity of promotion paths (49.1%) were the weakest areas.

Conclusion: Planned training, practical workplace learning and career support work together to improve performance. NHC should assess training needs annually, formalise post-training feedback and publish transparent promotion criteria.

Keywords: training and development; on-the-job training; career development; employee performance; National Housing Corporation; Tanzania

Introduction

Employee performance largely determines how well public organisations deliver services. Because these organisations depend on government funding and taxpayers' money, they face growing pressure to demonstrate results (Galli, 2018). Reforms such as staff cuts, heavier workloads and the assignment of duties to less qualified staff have often failed to improve service delivery (Gitonga, 2018), which turns attention to building the capability of existing employees. Training is a systematic effort to improve knowledge, skills and attitudes, and its history is tied to the industrial revolution, when new technology created a lasting demand for trained workers (Fejoh & Faniran, 2016). Development, by contrast, prepares employees for future roles by broadening their skills and their understanding of their duties (Armstrong, 2014). Many organisations nevertheless struggle to train effectively because training needs are unclear, funds are limited, trainers lack suitable skills or there is no sound way of evaluating programmes (Kihongo, 2011).

Social Learning Theory (Bandura & Walters, 1977) explains why training can raise performance. The theory holds that people acquire new behaviour by observing models, and that whether the behaviour is repeated depends on how the environment responds to it. In a housing corporation such as the National Housing Corporation (NHC), experienced supervisors, technical experts and project managers act as models of good practice in construction, budgeting and stakeholder engagement.

Formal training supplies the knowledge, on-the-job demonstration supplies the models, and rewards, recognition and career opportunities reinforce what has been learned. Where colleagues who apply new skills are visibly rewarded, others follow; where the environment ignores new skills, the benefit of training fades. The theory therefore links three factors to performance: training and development (the learning); on-the-job training methods such as coaching, mentoring and job rotation (the models); and organisational support of career development (the reinforcement), meaning the opportunities, resources, guidance and recognition an organisation gives for career growth (Eisenberger et al., 2020; Kraimer et al., 2011).

Evidence on training and development is generally positive. Hanson and Lee (2020) reported that software departments that assessed training needs before running coding workshops raised task completion by 28% compared with departments that did not. Mensah and Ofori (2021) found that Ghanaian factory workers trained after a needs assessment achieved 35% higher output in packaging accuracy and speed. In Tanzania, Mwita and Ngirwa (2022) found that municipal councils that identified skill gaps before training cut budget execution errors by 40% and had more committed and accurate staff, while Jonathan (2024) found that mentoring and coaching improved performance at TANESCO Iringa.

Studies of on-the-job training point the same way. Tkunimulongo (2016) found that on-the-job programmes improve staff capacity in a Kenyan company, and Ajeme (2017) reported a positive effect on employee performance in Ethiopian private commercial banks. In Songea Municipality, Ndunguru (2015) found that trained secondary school teachers were more likely to stay with their organisation, and that a clear career path helped them develop the skills their work required.

Career support and organisational backing add a further dimension. Bartlett (2001) found that nurses who could easily access training and received strong supervisor support held more positive attitudes and stronger commitment, and Ahmad and Bakar (2003) found that access to training increased affective commitment in a Malaysian public service organisation. In the Tanzanian public sector, Nyoni (2024) concluded that career development programmes improve job performance, commitment, efficiency and competence at Kondoa District Council, although weak implementation by management limited the benefits. Jaffu (2023) found, among 204 public procurement professionals in Dodoma, that both training and career development determine performance and that career development mediates the effect of training. Kraimer et al. (2011) likewise linked organisational support for development to job performance, especially where employees saw real opportunities for advancement.

These studies leave three gaps. First, most come from private technology, manufacturing, banking, education or administrative settings rather than the project-based housing mandate of a state-owned corporation, where land acquisition, construction delays and budget limits shape performance. Second, several relied on descriptive statistics and chi-square tests (Tkunimulongo, 2016; Ajeme, 2017), which cannot separate the effect of one variable from the others. Third, to the authors' knowledge, no earlier study has tested training and development, on-the-job training and career

development support together in a Tanzanian housing corporation. This paper addresses these gaps with a single multiple regression model of the three factors.

1 Problem statement

Employee performance at the NHC, a state-owned corporation mandated to provide affordable housing in Tanzania, is a continuing concern. Persistent worries about low productivity, skill mismatches and inconsistent output have been noted, and internal reports of the Corporation indicate that fewer than 45% of staff received formal task-specific training in the past three years, with only a small share of those trained showing sustained improvement. Most evidence linking training to performance comes from private organisations and may not transfer to a public corporation that works under bureaucratic constraints, limited budgets and public accountability.

If the gap is not addressed, the Corporation risks underperformance, delayed housing projects, wasted public resources and low staff morale, all of which weaken its mandate to serve citizens. This study therefore assessed the effect of training and development on employee performance at the NHC by examining (i) the effect of training and development, (ii) the effect of on-the-job training methods and (iii) the effect of organisational support of career development programmes on employee performance.

2 Conceptual framework and hypotheses

Figure 1 shows the framework of the study. Training and development, on-the-job training methods and organisational support of career development are the independent variables, and employee performance, measured through task performance, adaptability and commitment, is the dependent variable. The following hypotheses were derived from the objectives and the reviewed literature. **H1:** training and development has a significant positive effect on employee performance at NHC. **H2:** on-the-job training methods have a significant positive effect on employee performance at NHC. **H3:** organisational support of career development has a significant positive effect on employee performance at NHC. **H4:** the three independent variables jointly have a significant effect on employee performance at NHC.

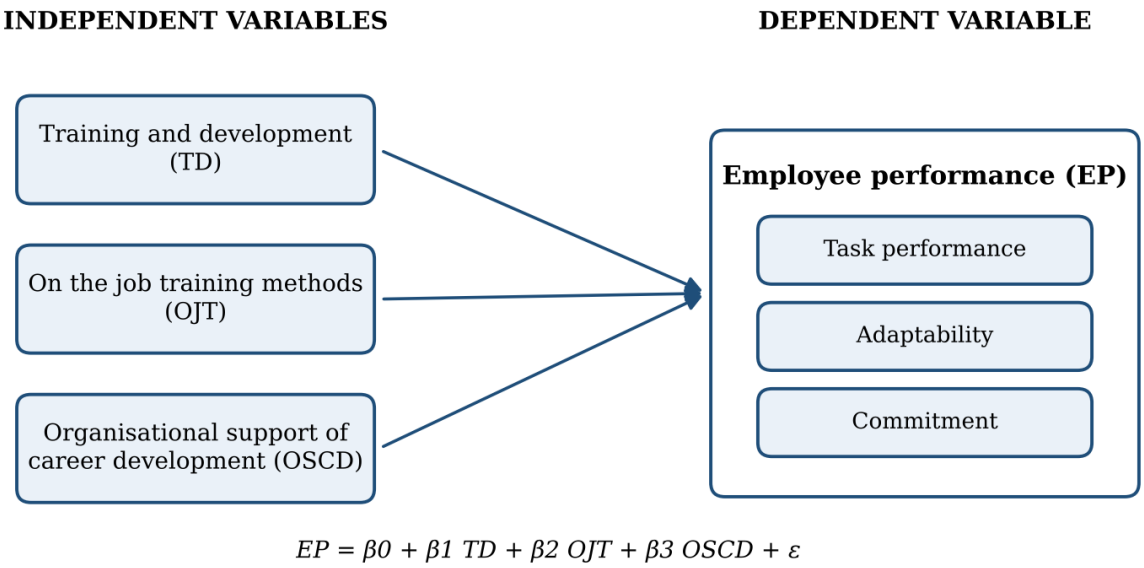


Figure 1. Conceptual framework. *Source:* Researcher's own construction (2026)

Methodology

The study followed a positivist philosophy, which treats knowledge as arising from observable and measurable facts that can be studied objectively (Saunders et al., 2019). A quantitative approach with a cross-sectional descriptive and correlational design was adopted, with the NHC as a single case. The design is descriptive because it describes current training practices and performance without manipulating any variable, and correlational because it examines the strength and direction of the relationships between the three independent variables and employee performance. The NHC was chosen because of the training concern noted above and because no earlier study had examined the issue in a Tanzanian housing corporation. The study covered permanent staff at the NHC headquarters and selected regional offices, and data were collected in 2026.

The target population was about 431 permanent employees working in Human Resources, Finance, Planning, Project Management, Land Acquisition, Construction, Administration and Customer Service, at managerial and non-managerial levels. Staff with at least six months of service were eligible, while temporary workers, consultants and interns were excluded because their training paths and performance measures differ. The sample size was calculated with $n = Z^2p(1 - p)/E^2$, using a 95% confidence level ($Z = 1.96$), $p = 0.5$ and a 5% margin of error, which gives 385. Applying the finite population correction, $n/[1 + (n - 1)/N] = 385/1.891$, gave a minimum sample of 204.

To allow for non-response, 235 questionnaires were distributed and 204 completed questionnaires (86.8%) were analysed. Stratified random sampling was used, with department and location (headquarters or regional office) as strata. Each stratum received a share of the sample in proportion to its size, and respondents were drawn at random from the staff list supplied by the NHC Human Resources department.

Data were collected with a self-administered structured questionnaire delivered on paper or electronically. Statements on the study variables used a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Items were adapted from earlier studies: training and development (three items; Hennessy & Hicks, 1996; Mwita & Ngirwa, 2022), on-the-job training methods (three items; Norhidayah et al., 2021; Ndunguru, 2015), organisational support of career development (three items;

Armstrong, 2014; Eisenberger et al., 2020; Kraimer et al., 2011) and employee performance (nine items covering task performance, adaptability and commitment; Meyer et al., 1993; Ployhart & Bliese, 2006; Williams & Anderson, 1991). Content validity was reviewed by two academics and one HR practitioner, and the instrument was pilot-tested with 10 to 15 NHC employees outside the main sample. Confirmatory factor analysis checked that items loaded on their intended constructs, and a Cronbach's alpha of at least 0.70 was the criterion for reliability. Institutional clearance and NHC permission were obtained before data collection, participation was voluntary and anonymous, no personal identifiers were collected, and responses were used only for academic purposes.

Data were screened and analysed with IBM SPSS Statistics version 26 (George & Mallery, 2024). Frequencies, percentages, means, standard deviations, skewness and kurtosis described the respondents and the variables, and the mean of the relevant items formed a composite score for each variable. Pearson correlation examined the relationships among the variables, and multiple linear regression tested the three independent variables together using the model $EP = \beta_0 + \beta_1(TD) + \beta_2(OJT) + \beta_3(OSCD) + \varepsilon$, where EP is employee performance, TD is training and development, OJT is on-the-job training methods, OSCD is organisational support of career development, β_0 is the constant, β_1 to β_3 are regression coefficients and ε is the error term. Regression was preferred to three separate simple regressions because it shows the unique effect of each predictor while holding the others constant. Linearity, normality (skewness and kurtosis within ±1), homoscedasticity, independence of errors and absence of multicollinearity (variance inflation factor below 5) were checked. Tests were two-tailed at $\alpha = 0.05$, and a null hypothesis was rejected where $p < 0.05$.

Findings and Discussion

Respondent profile and descriptive results

Of the 204 respondents, 56.9% were male and 43.1% female. Most were aged 26 to 45 years (58.3%), half held a bachelor's degree (50.0%) and the largest group had one to five years of experience at NHC (34.8%). Training was described as planned and systematic by 78.9% of respondents, yet 34.3% said it takes place rarely or only when required. Coaching and mentoring (54.9%) was the most used on-the-job method, followed by job rotation (33.3%) and shadowing or understudy (25.0%).

Table 1 shows that all variables had means above the scale midpoint of 3.00, so respondents generally agreed with the statements. Within the organisational support of career development composite, the career development items scored lowest (M = 3.52) compared with the organisational support items (M = 3.65). Skewness and kurtosis values were between −1 and +1, indicating approximately normal data. Each independent variable correlated moderately to strongly with employee performance ($r = 0.55$ to 0.62, $p < 0.01$), and the independent variables were moderately related to one another ($r = 0.45$ to 0.50), well below the 0.80 level at which multicollinearity becomes a concern. This overlap is why the variables were entered together in one regression.

Table 1. Descriptive statistics and Pearson correlations (N = 204)

Variable	Mean	SD	1	2	3	4
1. Training and development (TD)	3.68	0.87	1			
2. On-the-job training methods (OJT)	3.72	0.84	0.48	1		
3. Organisational support of career development (OSCD)	3.59	0.86	0.45	0.50	1	
4. Employee performance (EP)	3.74	0.72	0.62	0.58	0.55	1

Source: Field survey (2026). All correlations are significant at the 0.01 level (two-tailed).

Table 2 summarises the statements that matter most for each objective. Performance outcomes were rated highly, but the items on training based on skill gaps, feedback after training and a clear promotion path received the lowest agreement, which points to where the practices are weakest.

Table 2. Selected agreement rates (agree plus strongly agree, N = 204)

Variable	Statement	Agreement (%)
Training and development	I complete my assigned tasks within the required deadlines	73.5
	The quality of my work meets NHC performance standards	79.0
	Training programmes at NHC are based on identified skill gaps	61.2
	The training I received has positively changed my work habits and attitudes	71.1
On-the-job training	When facing unexpected problems, I quickly find alternative ways to perform my job	74.6
	On-the-job training methods have enhanced my adaptability to changing work demands	71.0
	I receive constructive feedback after training sessions	54.4
Organisational support of career development	I am willing to put in extra effort to help NHC achieve its goals	75.5
	Organisational support strengthens my commitment when career development programmes are available	67.7
	Career development programmes provide me with a clear path for promotion	49.1

Source: Field survey (2026).

Regression results and hypothesis testing

The three independent variables were entered together into one regression model (Table 3). The model was significant, $F(3, 200) = 74.63$, $p < 0.001$, and explained 52.8% of the variance in employee performance ($R^2 = 0.528$, adjusted $R^2 = 0.521$), leaving 47.2% to factors outside the study. All variance inflation factors were below 5, so multicollinearity was not a problem. The fitted equation was EP = 0.978 + 0.313(TD) + 0.238(OJT) + 0.202(OSCD). Training and development was the strongest predictor, followed by on-the-job training methods and organisational support of career development. All four hypotheses (H1 to H4) were therefore supported.

Table 3. Multiple linear regression coefficients (dependent variable: employee performance)

Predictor	B	SE	β	t	p	VIF	Decision
Constant	0.978	0.189		5.18	0.000		
Training and development (TD)	0.313	0.048	0.378	6.56	0.000	1.41	H1 supported
On-the-job training (OJT)	0.238	0.051	0.278	4.68	0.000	1.50	H2 supported
Organisational support of career development (OSCD)	0.202	0.049	0.241	4.13	0.000	1.44	H3 supported

Source: Field survey (2026). Model: $R = 0.727$, $R^2 = 0.528$, adjusted $R^2 = 0.521$, $F(3, 200) = 74.63$, $p < 0.001$ (H4 supported).

Training and development

Training and development had a significant positive effect on employee performance ($\beta = 0.378$, $p < 0.001$), and the effect held after on-the-job training and organisational support were controlled, so it contributes to performance in its own right. This agrees with Hanson and Lee (2020), Mensah and Ofori (2021) and Mwita and Ngirwa (2022), who found that needs-based training improves output, accuracy and commitment, with Abdullah and Al Azzawi (2024) in the Iraqi public sector, with Otoo et al. (2023) in Ghanaian banks, and with Jonathan (2024) in the Tanzanian public sector. In terms of Social Learning Theory, employees who learned new behaviour through training reproduced it at work. The potential is not fully used, however: 34.3% of staff are trained rarely or only when required, and only 61.2% agree that training is based on identified skill gaps.

On-the-job training methods

On-the-job training methods had a significant positive effect ($\beta = 0.278$, $p < 0.001$) that works largely through adaptability: 74.6% of respondents find alternative ways of working when problems arise and 71.0% say the methods improved their adaptability. The result is consistent with Tkunimulongo (2016), Ajeme (2017), Ndunguru (2015), Li and Wang (2024) and Mensah and Amankwah (2023), and with Social Learning Theory, since supervisors and experienced colleagues act as models whose behaviour employees copy. The smaller coefficient compared with training and development suggests that workplace learning adds to planned training rather than replacing it. The weak point is feedback: only 54.4% receive constructive feedback after training, so employees practise but do not always learn how well they are doing, and the learning cycle remains incomplete.

Organisational support of career development

Organisational support of career development also had a significant positive effect ($\beta = 0.241$, $p < 0.001$); although it was the weakest of the three predictors, it explained a significant part of performance when the others were held constant. This supports Nyoni (2024), Jaffu (2023) and Kraimer et al. (2011), and the view of Eisenberger et al. (2020) that employees respond with better work to an organisation that values them. Bartlett (2001) and Ahmad and Bakar (2003) similarly link access to training and support with commitment. Yet only 49.1% of NHC staff believe the programmes offer a clear path for promotion and only 50.9% intend to remain at NHC. Following Social Learning Theory, employees who see no reward for applying new skills have less reason to keep applying them, so unclear promotion paths limit the value of career development.

Combined effect

Together, the three variables explained more than half of the variance in employee performance, which is a large share for a single-organisation study, and each made a significant unique contribution. Training, on-the-job learning and career support should therefore be managed as one system rather than as separate activities. The remaining 47.2% of the variance is likely to reflect other factors, such as motivation, leadership style and organisational culture, which were outside the scope of the study.

3 Conclusion and recommendations

Training and development, on-the-job training methods and organisational support of career development each have a significant positive effect on employee performance at NHC, and together they explain 52.8% of it, with training and development as the strongest driver.

Delivering training is not enough: its effect depends on training being regular and based on skill gaps, on employees receiving feedback, and on a visible promotion path that reinforces new behaviour.

Each recommendation follows from a finding. NHC management should conduct an annual training needs assessment and make training regular, because training and development was the strongest predictor while about a third of staff are trained rarely. The Human Resources department should formalise on-the-job training with trained coaches and a feedback session after every training, because only 54.4% receive feedback, and should publish clear promotion criteria, because only 49.1% see a clear path for promotion. Supervisors should give employees time, resources and guidance to apply new skills and recognise those who do. Policy makers in the Ministry of Lands and Housing should protect training budgets in state-owned corporations, because the three factors together explain more than half of performance.

The study covered one organisation, relied on self-reported data collected at one point in time, and left 47.2% of the variance unexplained. Future studies should compare NHC with other state-owned corporations and private housing developers, use longitudinal designs with objective performance records and interviews, test factors such as motivation, leadership style and organisational culture, and analyse task performance, adaptability and commitment separately.

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