

THE INFLUENCE OF TRAINING NEEDS ASSESSMENT ON PUBLIC ORGANIZATIONAL PERFORMANCE

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Abstract

This paper examines the influence of training needs assessment on Public Organizational Performance. It employs the Human Capital Theory propounded by the economist, Gary Becker (1960s), who urges that human capital is a valuable asset in organizations that propels productivity. The multiple regression analysis was used to analyse data collected in Kinondoni Municipality, where 105 five-point Likert scale questionnaires were distributed to gather data from the respondents. Three hypotheses were tested, and the results demonstrate a significant relationship between Organisation Needs (ON), Skill Gap (SG), and Technological Impact (TI) on Public Organizational Performance (OP). Therefore, this article concludes that public and private organizations should place a serious emphasis on sharpening the skills, knowledge, and attitudes of employees, as well as considering technological changes to enhance organizational performance.

Keywords: *Training Needs, Organizational Performance, Skill Gap, Technological Impact, and Public Organizational Performance.*

INTRODUCTION

Training Needs Assessment (TNA) is a systematic and comprehensive process that organizations use to identify and evaluate gaps in employees' skills, knowledge, and competencies (Kazi, 2020). It determines the need for training and bridges gaps to enhance individual and organizational performance (Anon, 2023). The inefficiency of public and private organizations appears to be caused by inadequate skills, knowledge, and attitudes among employees (Ayodele & Kahilu, 2020). As Batinoluho (2022) puts it, organizational performance worldwide depends on well-trained employees. Thus, one of the important aspects for managers is to train employees. Despite the significant role that training plays in guaranteeing employees' performance, its implementation is hindered by improper training needs assessment, a crucial stage in sharpening employees' skills at the workplace (Cikarski & Reghep, 2019). The unsatisfactory organizational performance raises a question about the role of training needs assessment in improving organizational performance.

According to Bharti (2014), Denby (2010), Khan & Ali (2014), and Mahmud et al., (2014), training should be well designed to reduce or minimize the gap in individual performance and that of the organization as a whole. A training needs assessment is vital because it identifies the performance requirements and the knowledge, skills, and abilities needed by the organisation's workforce to achieve its objectives. Effective training needs assessment not only stimulates efficiency but also helps organizations to direct resources to the areas of greatest demand. Ferreira et al. (2014) contend that it is essential for managers to carefully review assessment reports to design effective training programs that meet employees' skill needs and enhance efficiency, ultimately achieving the organization's goals and objectives.

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Institute of Social Work Journal (ISWJ) pp 1-11 ISSN 2738-9057.

In the current development of science and technology, organizations are competing to achieve efficiency; therefore, managers and employees generally have to work hard to ensure organizational efficiency. Ejakait (2016) asserts that for the organization to meet its objectives, several key factors must be addressed, including the availability of talented human resources that can deliver for the organization. Technology, capital and assurance of market for production are also important for organization performance (Ayodele, & Kahilu 2020). Despite all these important aspects in realizing organizational performance, talented human resources seem to be the most important, as all activities require the involvement or presence of the human aspect in one way or another. Any organisation aiming to improve performance must invest in human resources (Batinoluho, 2022).

Ayodele and Kahilu (2020) argue that for an organization to achieve its optimal performance, it should invest in training and retaining its employees. Training employees at the workplace should be conducted carefully to meet the target of improving the organisation's performance (Khan & Ali, 2014; Mahmud et al., 2014). Among the essential considerations when planning to train employees is conducting a well-prepared training needs assessment to identify what is missing and what needs to be trained (Kim & Young, 2019). As Zhang and Madiha (2019) point out, training needs assessment confirms the knowledge and technology necessary for achieving organizational performance. Some organizational managers hesitate to conduct a training needs assessment, arguing that it is costly in terms of money and time for the organization. This argument overlooks the cost implications for the organization of not conducting a training needs assessment (Sibanda & Durrel, 2017). Despite criticisms leveled at Training Needs Assessments (TNAs), conducting a TNA offers several benefits, including confirming real problems within an organization, securing management support, and determining the costs and benefits of training.

There is an ongoing debate about the key elements of a well-designed training needs assessment, which aims to sharpen employees' skills and improve organisational performance. Kura & Kaur (2021) contend that the skills gap, technological innovation, and perceptions of trainees and managers are essential aspects in enhancing the effectiveness of training needs assessment within an organization. Kazi (2020) argues that to have good employees, training needs should include the organization's vision, well-trained trainers, and technological innovations. Other scholars, such as Ayodele & Kahilu (2020), Ejakait (2016), and Anon (2023), contend that budget, learning materials, skills gap, and customer satisfaction reports are important factors to consider when preparing a training needs assessment for organizations. This debate creates a knowledge gap in assessing training needs and organizational performance. Therefore, this article uses skills gap, technological impact and organizational needs as key factors to be tested in this study to fill the existing knowledge gap.

LITERATURE REVIEW

This study used the Human Capital Theory developed by the economist, Gary Becker (1960s), who explained the economic value of human capital as an important and valuable asset in the organisation's productivity. Backer argues that the people's skills, knowledge, and abilities to produce for an organization should be regarded as an important asset. Therefore, investment in education, training, and healthcare for employees should be prioritized because of their contribution to the organizational performance (Lajili, 2015). This theory is relevant to this study because it highlights the importance of technology and skills development as key factors in enhancing organizational performance.

Training Needs Assessment and Organisational Performance

According to Morrison et al. (2019), a training needs assessment is a systematic process of determining the type of training necessary for individuals to perform their jobs effectively. There is a relationship between organizational performance and employee training. Nurun et al., (2017) argue that organizational performance is how a member of staff fulfils the duties of their role, completes the required tasks, and behaves in the workplace. The performance includes the quality, quantity, and efficiency of work that well-trained employees can accomplish. Therefore, organizational performance depends on the quality of employees, which in turn depends on how they have been trained. As Morrison et al., (2019) argue, training needs assessment helps organizations to identify gaps in terms of skills and training in their existing employees to improve the organization's performance because the performance of the organizations depends on competent employees who are trained after identifying their skill gap during training needs assessment in the organization.

Organizational Needs and Organization Performance

Organizational needs are all aspects supporting the organisation to realize its objectives and finally enhance performance (Hongal & Kinange 2020). Talented employees are among the assets of the organization. They considered parts of the organizational needs because talented employees ensure organizational performance (Tabachnick & Fidell, 2007). Therefore, organizations are supposed to invest in talented employees to enhance their performance. Further, employees' knowledge has a great relationship with organizational performance (Anon, 2023). Organizational needs are incorporated into employee training, aiming to enhance knowledge and skills within the organization. The organizational needs align with organizational objectives, which ultimately enhance organizational performance (Pambreni et al., 2019). Therefore, the following hypothesis was developed.

H1: There is a positive relationship between the organizational needs and Organizational Performance

Skills Gap and Organization Performance

Skill gaps are crucial in determining the type and nature of employee training needed in an organization (Schlegel & Kraus, 2023). Failure to accurately identify these gaps may result in reduced competitiveness levels, which finally affect the organization's performance (McGuinness & Ortiz, 2016). Skills gap assessment is an important factor for the prosperity of the organization (Ayodele, Oladokun, and Kajimo-Shakantu, 2020). The demand for workers with the necessary skills and competencies has increased due to the global shift in the traditional skills required of real estate graduates. Kolding et al., (2018) argue that information management is among the challenging skills gaps in many organizations, as the faults of information management affect organizational performance. Dubey, Paul, and Tewari (2022) believe that the soft skills gap has a great relationship with organizational performance. Therefore, addressing the skills gap is a critical issue for enhancing organizational performance. Hence, the following hypothesis was developed.

H2: There is a positive relationship between the skills gap and Organizational Performance

Technology Innovation and Organizational Performance

According to Zhang et al., (2019), technological innovation has a significant influence on organizational performance. Lyytinen and Zyi (2017) argue that any organization seeking to maintain its prosperity should consider technological innovation in delivering services to the

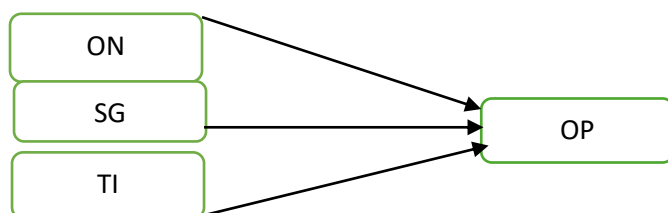
community or customers. Sibanda and Ramrathan (2017) argue that owner-managers of organizations should emphasize on technology innovation. Technological innovation significantly influences organizational performance; therefore, organizations must collaborate strategically to achieve better performance. As a result, the following hypothesis was developed.

H3: There is a positive relationship between technology innovation and Organizational Performance

Conceptual framework

The conceptual framework illustrates the relationship between the independent variable, which is the Training Needs Assessment (TNA), comprising constructs generated from the study, such as Organization Needs (ON), Skills Gap (SG), and the impact of Technology Innovation (TI). Additionally, there is a dependent variable, which is Organizational Performance (OP). Based on the description above, the conceptual framework of this study is illustrated as follows:

Figure 1: Conceptual framework



Source: Field Data (2025)

RESEARCH METHODOLOGY

The deductive research approach was adopted to guide the study. The study employed a descriptive research design. This scientific research was based on the predetermined assumptions of hypothetical relationships between the independent and dependent variables. Data collected in this study were used to verify the relationships. The correlation research design was selected because it recognizes the trends and patterns of the data collected (Frost, 2017). A five-point Likert scale questionnaire was used to gather information or data from human resource managers working at Kinondoni Municipal in Tanzania. Simple random sampling was used to obtain a total of 105 respondents, as the study sample, from a population of 568 employees who filled out the questionnaires. (alternative _Using simple random sampling, 105 respondents were selected from a population of 568 employees to complete the study questionnaires). The Statistical Package for Social Sciences (SPSS) version 21 was used to analyse the multiple regression. The reliability and validity of the collected data were tested using Cronbach's alpha.

FINDINGS AND DISCUSSION

The multiple regression analysis has been applied in this article to explore the predictive ability of independent variables on dependent variables (Prasad, 2018). It is about the comparison of independent variables and finding the best set of variables that predicts the occurrence of the dependent variable (Frost, 2017). This article intended to explore the relationship between Training Needs Assessment and Public Organizational Performance in Tanzania. The study focused on three variables: Organization Needs (ON), Skills Gap (SG), and the impact of Technology Innovation (TI) on Organization Performance (OP). The

predictive power of variables was assessed through multiple regression analysis to determine the strength of the relationship between variables. Here, data are determined by how well they fit the model and how much variance in the dependent variables (OP) is explained by the independent variables (training needs assessment) to indicate the relative contribution of each independent variable to determine the statistical significance of the results both in the model and for individual variables, to estimate the model coefficients, and tests the study hypotheses (Ochonogor & Amah, 2021).

The following are the results of the analysis conducted using multiple regression aimed at achieving the study objectives on the influence of training needs assessment on public organizational performance. The model summary provides useful information on how well the model fits the data. The table below presents the analysis results. The multiple correlation coefficients, represented by R, are considered to be the best measure of the quality of the prediction of the dependent variable. Frost (2017) provides a guideline on how to assess the degree of correlation between variables. He states that if R lies between 0.10 and 0.29, it indicates a small correlation; 0.30 and 0.49 indicate a medium correlation, while 0.50 and 1.0 indicate a significant correlation.

Table 1.0: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.813 ^a	.661	.623	.475

Source: Field Data (2025), a. Predictors: (Constant), ON, SG, TI

The results from the model summary indicate that the value of the correlation coefficient R is 0.813. This implies a significant correlation between the variables. The value shows that all training needs assessment factors are good indicators for the occurrence of Organisational Performance. The findings support Frost (2017), who argues that if the value of the correlation coefficient R is above 50 percent, it indicates that the data fit the model, implying a strong relationship between the variables. The coefficient of determination, presented by R-square, was used to determine the variance. The results from the analysis (Table 1.0) indicate that the value of R square is 0.661. This means that the proposed training needs assessment factors exactly predict organisational performance. The adjusted R square shows how much of the variance in the Organisational Performance is explained by the training needs assessment factors included in the model.

Frost (2017) argues that low discrepancy between R square and adjusted R square indicates a good fit of the model. Table 1.0 indicates R square which is 66.1 percent and adjusted R square which is 62.3 percent whose discrepancy is low at 4 percent which is less than 5 percent. This small deviation implies that they are closely related. Stephen (2018) argues that for a good model, adjusted R square should always be less or equal to the R square. The study aimed to test whether the independent variables (training needs assessment factors) significantly predict the dependent variable (Organisational Performance) statistically. The F-test was used to test whether the overall regression model was a good fit for the data at the selected probability level. The study aimed to determine whether the training needs assessment teaching factors (ON, SG, and TI) statistically predict Organisational Performance (OP). The predictor is considered statistically significant if its P value is less than 0.05; otherwise, it is deemed insignificant. The data in the ANOVA table show that the F-ratio is given by $F(3, 96) = 34.639$, $P = 0.000$. The good fit of data in this analysis of the regression model implies that the training needs assessment is statistically significant in predicting Organisational Performance, as indicated in the data below.

Table 1.2 : ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56.059	3	20.020	24.020	.002 ^b
	Residual	103.977	104	.829		
	Total	157.036	107			

Source: Field Data (2025), a. Dependent Variable: OPP, b. Predictors: (Constant), ONN, SGG, TII

It was important for the study to understand the contribution of each training needs assessment factor included in the model in predicting organizational performance. The study results provide an avenue for organizations to emphasize the assessment of training needs, which contribute significantly to improving organizational performance. The study suggests that each training needs assessment included in the model should contribute to organizational performance.

The study used standardized coefficients from Table 1.3, which compares different training needs assessment factors by considering the β values. Using standardized coefficients means that all values for each of the different training needs assessment factors have been converted to the same scale, allowing for simple comparisons. The coefficients table represents the standardized coefficient β values for each training needs assessment factor, along with their significance levels marked. The β values represent the contribution of each training assessment factor to organizational performance. Results from Table 1.3 show that the β values under standardised coefficients for ON, SG, and TI were 0.489, 0.415, and 0.360, respectively. Since the study aimed to compare the contribution of each training needs assessment factor by considering the β values, the results suggest that ONN has the largest β value, followed by SGG. This implies that ONN has a stronger or greater explanatory power for the organization's performance, followed by SGGI and TII.

Table 1.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.32	.5419		899	.000		
	ONN	.594	.480	.4892	.895	.010	.6372	.569
	SGG	.401	.349	.4152	.237	.042	.5732	.744
	TII	.372	.342	.3601	.591	.049	.6851	.456

Source: Field Data (2025), a. Dependent Variable: OPP

Multiple regression analysis was used to test the proposed hypotheses: H1, H2, and H3, related to organizational performance and training needs assessment-related factors. Results from the regression coefficient show that there is a significant relationship between ONN and OP ($\beta = 0.489$, Significant at 0.01). Another result from the regression coefficient indicates that there is a significant relationship between SG and OP ($\beta = 0.415$, Significant at 0.042). The last results from the regression coefficient indicate a significant relationship between TI and OP ($\beta = 0.360$, Significant at 0.049). The estimates model coefficients show the direction and size of effects for each training needs assessment factor on organisational performance.

DISCUSSION OF FINDINGS

The results show that ONN, SG, and TI have a positive influence on organizational performance. A training needs assessment is a process of determining what expertise needs to

be imparted to employees to improve organizational performance. The findings correspond with Hongal and Kinange (2020), who argue that for the organization to achieve efficiency, there is a need to consider the talents available in the organization. Employees' knowledge has a great relationship with the organization's performance (Anon, 2023). The results show that ON influences the organization's performance, thus supporting Ayodele, Oladokun, and Kajimo-Shakantu (2020), who urge that organizational needs should be given priority when designing employee training. Additionally, the findings revealed that SG influences organizational performance. This implies that identifying employees' skill gaps ensures improved organizational performance following the training. The results show that TI influences organizational performance. This argument is also supported by Zhang et al., (2019), who argue that every organization depends on technological advancement for its performance. Therefore, the findings generally suggest that for the organization to perform better, it should prioritize proper employee training, based on a thorough training needs assessment.

CONCLUSION AND IMPLICATIONS

The article investigated the influence of training needs assessment on organizational performance. The literature indicates that training needs assessment has an influence on organizational performance. A training needs assessment is measured by organizational needs, skill gaps, and the technological impact on organizational performance. Therefore, this article concludes that training needs assessment influences organizational performance. Thus, public and private organizations should place a serious emphasis on sharpening the skills, knowledge, and attitudes of their employees, while also considering technological changes to enhance organizational performance.

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