The International Journal of Business Management and Technology, Volume 6 Issue 5 September-October 2022
ISSN: 2581-3889

Research Article Open Access

Training Practices and Roads Construction Projects Performance of Kenya Nation Highways Authority, Western Region; Kenya

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Abstract: Growth of the economy relies on how successful the infrastructures in the country have developed. Globally, construction companies play crucial role in both developing and developed economies. Considerably Road construction industry provides returns to all stakeholders in every country through facilitation of means of transport. The output performance of construction projects is measured by how effective and satisfying the output from such projects benefits both the employer who is the contractor and the employee who is as well the consumer. The purpose of this study was to examine the effect of Training Practices on Performance of Road Construction Projects of Kenya Nation Highway Authority in western region; Kenya. Descriptive Survey research design was adopted for the study. The target population consisted of employees of Kenya Nation Highway Authority, Western Region; Kenya. Both descriptive and inferential statistics was focused on and the computation was done by use of SPSS version 24 in order to test the primary data that was collected to satisfy the objective of study. Further, regression equation model was developed to test the relationship between the variables. The results of the findings indicated Training Practices influenced Roads Construction Project Performance of Kenya Nation Highways Authority, Western Region; Kenya. The study recommends for Road Projects management to embrace the use of Training Practices since it improves the Projects' Performance. The study recommends for further studies on the same considering same variables but different methodologies.

Keywords: *Training Practices, Occupation Health and Safety Practices, Projects Performance*

I. Introduction

Globally, construction industry is very relevant for the growth of an economy; hence infrastructure development depends on the growth of construction industry performance. The levels of proper roads for transportation rely on the technological skill exposure of associated contractors and the priority of the government in valuing the infrastructure for her economy's success and development (Karem & Marosszeky, 2011). Construction industry takes up huge expenditure of the economies' income for easiness of inclusion of highly advanced technology, equipments and associated materials (Wambui, Ombui & Kagiri, 2015). European countries construction industry mainly relies on financially focused performance at the project level which leads to creation of philosophies; for example, concurrent construction and lean production. Others non-financial indicators considered include: Just in Time, Total Quality Management and Total Productive Maintenance (Yu, Kim, Jung, & Chin, 2007). Obelle (2012) suggested project performance is a way of accomplishing cost and time objectives while adhering to the product specifications.

According to Katsuro (2010), road construction companies incur heavy expenses that require management of financial capacity including planning, sourcing, and controlling the use of financial capacity during construction. The sufficiency of financial capacity depends on the correct composition and correct financing at all times during construction. According Mwangi (2017), it was observed that it requires a determined positive effort by the contractor to take care of project team's welfare in conjunction with finances, as mismanagement can weaken productivity and profit level. Kibe (2016) embraced management of financial capacity being very critical; hence, to ensure that the level of financial capacity

is maintained and that there is sufficient provision of funds to finance current assets to facilitate projects to be project completion within cost and time, there is need of establishing the optimum level of financial capacity needs of a project. Further there is need of continuous checking and monitoring the quantum of individual parts that comprise the financial capacity to ensure that the requirements are not exceeded.

According to Mulinge and Muiruri (2014), awards of major construction contracts in developing countries are skewed in favour of foreign counterparts against citizen contractors since the foreign firms are considered more technically and managerially advanced and well-organized in funds acquirement including competence. In comparison with this, citizen contractors have over the years had challenges related to inadequate financial capacity, poor project performance in terms of adhering to completion deadlines, poor work quality and capital management which has in many cases led to bankruptcy and in extreme cases, abandonment of projects. In other words, majority of citizen contractors usually do not complete construction contracts within initial contract sums and hardly within scheduled completion times.

Construction companies in developed economies are advanced with inclusivity of necessary information on direct and indirect costs on Training matters for the road construction companies; hence Performance of such companies encompasses the factors that could make the company successive with the consideration of employees' safety (Ballard, 2012). Training practices have dominated international agenda calling for support from the International Labour Organization to execute their mandate on behalf of the international community through regional and national governments (Andrew, 2010). Apart from the advantages of good infrastructure with good international roads network for economic growth activities, workers require better environment for labour delivery that corresponds to existing international standards (Ghalayini & Noble, 2011). In the study by Zhao *et al.,* (2015), it was established that Training that leads to employee wellbeing, reduced incidences at the workplace is promoted by safe and healthy work environment all over the world; hence, Trainings remains to be the most critical but highly criticized issues in many organizations; hence organizations providing safety measures through training are known to perform better globally. Alman (2010) stipulates Training practices entails protecting employees and other person affected by what the organization produces and does; hence aims at protecting employees against the hazards arising from their employment or their links with the organization. These days the human resource managers are faced with crucial issues of Training practices than before. The reason is that the workers just like any other resources require trainings against Hazards and unsafe environment in order to maximize their wellbeing and sound health free of harm.

Kreitner (2007) noted a survey conducted by British Safety Council revealed that positive organization performance which is as a result of employee's wellness is significantly influenced by health and safety of workers. More so, a study by Desler (2008) revealed that in the United States, the number of "cutback" days (on which less work is done than usual) attributable to a mental disorder averaged 31 per month per 100 workers. In annual terms, this represents 20 million working days on which employees are not fully productive because of a mental health problem caused by work-related health and safety problems.

In the study by Adeogun and Okafor (2013) on construction companies, the scholar observed that in many African countries' organizations should implement Training practices geared towards increasing the level of organizational commitment and motivation through reduced incidence at workplaces. It was noted that, Tools such as noise control, waste and hazard control, worker's fitness in the job, feedback, modeling appropriate working environment, increasing the quality of business life, and creating appropriate physical working environment will improve the performance of an organization. In Africa and Nigeria in particular, the construction industry is listed as one of the fastest growing industry due to demand in real estate, housing and the provision of infrastructure in support of a growing population (Manduku & Munjuri, 2017).

In Kenya, poor implementation of occupation health safety practices in the road construction industry has resulted to adverse effects on workplace incidences in the sector (Manduku & Munjuri, 2017). According to Vitharana (2015) a health workforce leads to health performance of the road construction company, according to this scholar, workers are exposed to acute health hazards like fall from height and electric shocks, while chronic health hazard like exposure to hazardous substances is common in the construction industry. Practices such as training on occupation health safety remains a major obstacle to success of occupation health safety practices at road construction companies.

Kibe (2016) found out that accidents and injuries sustained at construction sites had a high impact on workers absenteeism, disruption of work and resulted in low morale among the employees hence poor performance of the construction companies. Employers also faced costly early retirements, loss of skilled staff and high insurance premiums

due to work-related accidents and diseases. Road construction industry does not have a comprehensive policy framework. Ministry of Public Works (2011), though of recent, Kenya Nation Highway Authority has embraced harmonizing to enforce and monitor construction work to effectively curb malpractices in the construction sector while taking into consideration Training practices. Previous studies on Trainings on occupation health and safety practices have been undertaken in other sectors and hence the findings cannot be generalized to determine the effect of Training Practices on performance of road construction industry in Kenya. To this end, it is evident knowledge gap in the literature on the performance of building construction industry is brought into light.

Mulinge and Muiruri (2014) expressed prequalification being a process used to investigate and assess the capabilities of the contractors to carry out a job if it is awarded to them. One of the major factors that is key to the project completion of the road's construction project is the technical capacity of the contractor. Indicators for technical capacity include the education level, experience of the technical staff, plant and equipment and the class of registration of the contract firm according to the Ministry of Public Works evaluation criteria. According to Kibe (2016), different magnitudes of work in terms of complexity and cost, requires appropriate Training classes of registration of contractors as well as level of technical staff qualification; hence Contractor prequalification is a decision-making process involving a wide range of decision criteria as well as decision-making parties and has received the attention of several researchers and is normally carried out by a client's representative and eventually leads to be selection of a contractor to carry out implementation of a construction project.

Statement of the problem

In the study by Kibe (2016) on construction companies' performance in developing economies, road construction projects are essential components in the development of a country since they form part of the key drivers of economic growth and an important pillar towards achieving Vision 2030. Manduku and Munjiri (2017) contemplate that hardly contractors accomplish projects timely within cost and as per required quality; hence by the time the projects are completed the contractors face heavy court litigation cases for compensation to employees for the contractors having failed to honour protocols of occupation health and safety on the employees that maim employees physically and more so, failure on compliance of construction regulations by the government; hence, hampers performance of the projects.

Aziz et al. (2019) in Malaysia, did research on occupational health concept towards project performance. The zeroed in on the effects of accidents caused by negligence in OSHA compliance. They showed the factors of construction accidents affecting project performance. The contractors considered accidents only as their main factor leading to project performance. They did not consider that due to the overall effects of OSHA in a project affects the aspect of time, cost and quality. This including personnel losing lives or the ability to work on their specified sections leading to a decrease and loss of income and living standards of the individual, work interruption leading to delay of work activity progress and performance, time management in project execution is also affected, the accidents and deaths at some instances give a depleting reputation and image for the company executing the project, damages of plant and equipment, property and asset, increase of fine and legal expenses, and loss of productivity.

According to Kibe (2016) in his assessment of Training on occupation health and safety management on construction sites in Kenya, it was found out that accidents and ill health amongst workers are caused by poor training on handling situations that involve tools and equipments, slips, fall from heights and over extortion; hence this results in absenteeism from workers, loss of confidence by workers and the public, increased insurance premiums and proliferation of litigations which leads to poor performance of construction companies. In Kenya, issues of Training matters at workplaces are guided by acts of parliament and their subsequent amendments, for example, occupational safety and health act of 2007 and workplace injuries and benefit act of 2007.

According to International Labor Organization (ILO) in 2020 indicate that more that 2.78million workers around the world die per year as a result of occupational accidents and diseases, and some 374 million non-fatal work-related injuries take place. This equating it to human, social and economic cost on occupational perspective drastically affect the performance of projects involved both cost, time and quality

Most of the scholars among them; (Madukani, 2013: Chinyio and Olomolaiye, 2010: Kihara, 2012) among others studied on performance of construction projects but did not zero on effects resulting from Training practices on performance of road projects. These scholars focused on variables such as project management systems, procurement methods as well as project leadership skills and ignored the Training practices that care for employees on construction sites. This dispersion in studies by differing scholars; among them Kibe (2016) valuing Training Practices and others among them Madukani (2013) being inconsiderate, necessitates the research gap to raise an opportunity for this study of the effect of

Training practices on performance of road Construction Companies, a case of Kenya Nation Highways Authority in Western Region; Kenya.

Objective

To examine the effect of Training practices on performance of roads construction projects of Kenya Nation Highway Authority, Western Region; Kenya

Research Hypothesis

H_{01}: There is no significant effect of Training practices on Performance of roads construction projects of Kenya Nation Highway Authority, Western Region; Kenya

II. Literature Review

Theoretical review;

The Systems Theory

Dostal (2005) was the first proposer of this theory, explaining the organization being a system of subsystems interlinked. For the sake of this study, organization is viewed as a system comprising interconnected and mutually dependent sub-systems. Road construction of a high way is always managed by various stakeholders; some of the stakeholders are legal persons who may be local or foreign members from various companies. For decision making, all members should come up together and share ideas to form a system that would consist of subsystems. These sub-systems can have their own sub-sub-systems.

Daft and Armstrong (2009) were building on earlier studies by Dostal (2015) that perceived a system as composed of some components, functions and processes. This school of thought can be traced from Bakke's (2013) studies which viewed an organization as a system consisting of the following three basic elements: components, linking processes and organizational goals. As applied in some organizations today, especially those involved in manufacturing, proponents of system theory such as Baron and Byrne (2014) view the organization as a society or a social family with various sub-components within the whole.

Barzilai (2011) suggests that the systems approach views an organization to be in a state of equilibrium only if all its components are stable and perfectly interlinked to achieve organizational goals. For instance, if a member in a system, say, an employee, is dissatisfied, such an individual can negatively influence overall organizational performance. Thus, for an organization to achieve set objectives, the employees ought to believe in the performance of the organization in which they are a part of. Management therefore needs to involve employees in management and appreciate the influence they have towards organizational performance in all decision-making processes (Ryan, 2009).

The overall organizational performance is therefore a factor of the extent to which the horizontal logistics coordination is effective in the organization (Barzilai, 2011). For results to be achieved in an organizational system, Cummings and Worley (2008) suggest that processes therefore need to have a central coordination unit, usually the Chief Executive Officer (CEO) in a profit-making organization or a Principal Secretary (in the case of Government Ministries in Kenya) or a chief officer in county governments. Similarly, each sub-system, that is, a department, also needs to have a central coordination unit which is the nucleus upon which all elements in that sub-system revolves. The departmental head allocates duties commensurate to designated power and delegated authority from which performance is measured. Ryan (2009) argues that the systems approach was developed to enhance performance by allocating specific duties to every individual in the organization. This theory anchors the variables of occupation safety and health practices on performance of construction companies.

Contingency Theory

Contingency theory was put across by Woodward (1985), that formulate a broad generalization about the formal structures that are associated with various technologies adaptations. The Contingency Theory as described by Hersey and Blanchard (1969) revealed that there is no one definite strategy management which guarantees success of the strategy put in place by the organization. Management and firms are regarded as 'open systems' hence are affected by changes requiring different approaches to handle and solve emerging issues.

The contingency is a key tool in the recent past in identification, analysis and the evaluation of the factors that affect the design and adoption of information systems. The theory holds that, to operate and manage the systems it will require having the relevant resources and well-coordinated skills. Daft (1998) also revealed that each information system varies

based on the firm specification, environment, needs, capacity and a system that may work in one organization may not necessarily work in another. As such the Contingency Theory is built on three main aspects; auditing information, financial information, and managerial information. Proper utilization of information from these three major sectors is what is to bring about the success of the roads constructions performance. Thus, this theory is relevant to the research study in that it postulates that not one thing is independent on itself as they depend on other elements so as to be effective and efficient. The roads construction companies have different stakeholders to make decisions hence they have to be independent individually and then at the end depend on each other.

Agency Theory

According to Laffort and Martimost (2002) it was affirmed that the agency theory of strategic management is very important since the action chosen by an individual (the agent) affects not only one, but several other parties (the principals). The role of an agent in strategy and the overall strategic management process and practices cannot be underestimated. They say that the firm is often characterized as a nexus of both explicit and implicit contracts linking the management and its different stakeholders, including employees, customers, bondholders, suppliers, unions and the state among others.

Agency theory is a management approach where one individual (the agent) acts on behalf of another (the principal) and is required to advance the principal's goals (Jean, 2002). The agent is required to advance both the interests of the principal and his own interests in that particular organization. Normally, a balance of these interests should be combined so that the objectives of the organization can be achieved through the agent because he/she is in charge of the vast resources of the organization.

The Agency Theory holds that there should be proper synergy between the management and its stakeholders in order to work towards an achievable common goal. The Agency Theory has also been defined as the central approach to managerial behaviour. Ross (1987) stated that the Agency Theory is used in the managerial literature as a theoretical framework for structure and managing contract, which is among the emerging issues in strategic management. Hence, the behaviour of principals and agents' relationships in performance contracting in management is explained;

The agency theory tends to be more considered against other strategic management theories. Krueger, (2004) in his paper in strategic management and management by objectives postulates that the plethora of strategic management is the agency theory in practice at all levels of the strategic management process. He argues that starting from the corporate strategy to operational strategy the objectives designed at all these levels must be supervised by the agents or managers for an organization to achieve its organizational objectives.

For the organization to attain its objectives , management by objectives which observes that organization must formulate objectives at all strategic hierarchy levels according to the studies by Henry (2006) which upholds that, for these objectives to be achieved there has to be joined efforts between the managers as agents and the subordinate staff or team in the organization.

Top managers are required to provide clear and visible support to the strategic management Program. Without that support of the managers as the agent the synthesis between the individual and the organization goals does not develop. Krueger, (2004) upholds that strategic management depends upon a team approach that flows from the corporate level to the functional level of the organization. Therefore, the process depends on input from all levels of management both (top to bottom and bottom up). The Chief Executive Officer (CEO) as the agent should highly embrace synergy by searching for information resulting in an evaluation of the task to be carried out (strategy formulation) and also to proposes a strategy to the board (principals), for their agreement and then carry out the agreed task (strategy implementation) in order to gain competitive advantage and perform well in relation to other similar firms in the same field of operation.

In conclusion, the Agency theory of a construction company results from the synergy of various stakeholders coming together for a common objective of better performance of roads construction companies. Various chief executive officers will represent their companies as they join up Kenya nation highway authority on construction of highway roads.

Conceptual Framework

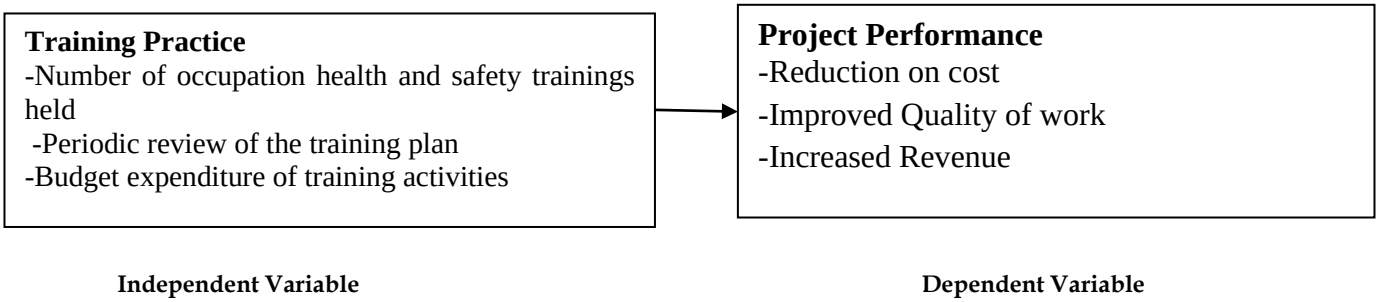

Figure 2. 1: Conceptual framework

Review of study variables;

Training practices on Performance of road Construction Projects

Human resource is main resource of the organization, because human resource is one of resource on live and animate than other resources of the organization, the effective use of human resource practices is generally considered as a source of capability advantage to an organization (Sanneh & Taj, 2015). One of the core functions of human resource is employee training since it directly influences on productivity of the organization and employee relation of the organization, more so, aware the employer/employee on occupation safety health practices; hence it has been long recognized that effective staff training allows an organization to improve its standard and quality of service to customers.

Success or failure of an organization generally depends on the quality of its human resources; hence human resource has played a significant role in the economic development in most developed countries such as Japan, Britain and United States of America. Globally, appropriate attention is given to the development and training of human resources (Otieno, Wangithi & Njeru, 2015).

An employee is a key element of the organization. The success or failure of the organization depends on employee's performance; hence, organizations investing huge amount of money on employees' training improves employee performance through training. This directly affects the performance of the organization; on the other hand mostly use of training methods for improving employee performance raises the output of the organization in terms of performance (Adeogun & Okafor, 2013).

Improved capabilities, knowledge and skills of the talented workforce prove to be a major source of competitive advantage in a global market (Ballard, 2012). Developing the desired knowledge, skills and abilities of the employees, to perform well on the job, requires effective training programs that may also affect employee motivation and commitment (Nawaz *et al*., 2014). According to Selvarasu and Sastry (2014), in order to prepare workers to do their job as desired, organizations provide training as to optimize their employee's potential. Most of the firms apply long term planning; invest in the building new skills by their workforce, enabling them to cope with the uncertain conditions that they may face in future, thus, improving the employee performance through superior level of motivation and commitment. When employees recognize their organization interest in them through offering training programs, they in turn apply their best efforts to achieve organizational goals, and show high performance on job. Amanda, Kerstin, Catherine, and Emma (2013) argued that through training, employee engagement is increased by promoting a positive attitude characterized by vigor, dedication and absorption. Ariani (2013) further fosters Job satisfaction and commitment to an organization since employees will feel that they are part and parcel of the organization and this will lead to increased performance.

Training enhances the psychological state of involvement, commitment, attachment, mood, which impacts an individual's performance. This could be in form of effort or observable behavior, including pro-social and organizational citizenship behavior (Sanneh & Taj, 2015). People who are highly engaged in an activity feel excited and enthusiastic about their role, say time passes quickly at work, devote extra effort to the activity, identify with the task and describe themselves to others in the context of their task. This therefore means that engaged employees are interested in the success of an organization and also identify with this success (Rashid, Asad, & Ashraf, 2011). Employee engagement can therefore be a predictor of employee performance since it leads to positive behavior, such as taking personal initiative, organizational citizenship behavior and employee effectiveness (Otieno *et al*., 2015).

A survey conducted by British Safety Council revealed that positive organization performance which is as a result of employee's wellness is significantly influenced by health and safety of workers (Kreitner, 2007). A study by Desler,

(2008) revealed that in the United States, the number of "cutback" days (on which less work is done than usual) attributable to a mental disorder averaged 31 per month per 100 workers. In annual terms, this represents 20 million working days on which employees are not fully productive because of a mental health problem caused by work-related health and safety problems.

Workers being exposed to acute health hazards like fall from height and electric shocks, while chronic health hazard like exposure to hazardous substances is common in the construction industry (Vitharana, 2015). Practices such as training on occupation, health safety, emergency response planning, occupation health safety on hazard control mechanisms, as well as workplace inspections, remains a major obstacle to success of occupational health safety practices at construction companies. Kibe (2016) found out that accidents and injuries sustained at construction sites had a high impact on workers absenteeism, disruption of work and resulted in low morale among the employees. Employers also faced costly early retirements, loss of skilled staff and high insurance premiums due to work-related accidents and diseases. Construction industry does not have a comprehensive policy framework.

III. Research Methodology;

Research design

Descriptive research survey design was therefore used to determine an association between the conceptualized independent and dependent variables as shown in the study's conceptual model.

Target Population

The study targeted 146 respondents from the 4 departments under study. These departments included Road Asset Management, Finance and Corporate, Survey, records and ICT and Procurement.

Sampling Frame

The sampling frame of this study comprised of Kenya Nation Highway Authority total staff from western region; Kenya.

Sample Size and Sampling Technique

The study employed stratified sampling technique. To determine the sample size, the study used Yamane's formula as below. Out of the 146 targeted staff, the sample size was approximately 107

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

N = Population, n = sample size, e = margin for error (0.05)

$n=146/1+146(0.05^2)$

=107

The study sample size was determined by taking up the use of both stratified and purposive samplings of top management of the institution.

Data collection Instruments

Primary data was collected by means of self-administered questionnaires. The questionnaires had structured questions. These questionnaires were structured to suit the study. Section one introduced the researcher, topic of research and its purpose to the respondent.

The researcher tested the research instruments to ascertain their validity and reliability.

Pilot Study

The researcher administered the questionnaire to 11 Kenya Nation Highway Authority staff at Nyanza region. The researcher settled on the above figures because they represent 10% of the sample population as proposed by Mugenda and Mugenda (2009). According to Orodho (2009), a pilot study should always be conducted among a different population that are not part in the study. The pilot study helps the researcher to test the research instruments and make the necessary changes in the research tools before going out to collect data.

Data Processing and analysis

Data collected from the field was coded, cleaned, tabulated and analyzed using both descriptive and inferential statistics with the aid of specialized Statistical Package for Social Sciences (SPSS).version 24 software. Descriptive statistics such as frequencies and percentages as well as measures of central tendency (means) and dispersion (standard deviation) was used. Data was also organized into tables for easy reference.

Further, inferential statistics such as regression and correlation analyses was used to determine both the nature and the strength of the relationship between the dependent and independent variables. Correlation analysis is usually used together with regression analysis to measure how well the regression line explains the variation of the dependent variable. The linear regression plus correlation analyses were based on the association between two variables. SPSS version 24 computer software was used to compute statistical data.

Study conceptualized Regression Model;

$y = \beta_0+\beta_1X_1 + \varepsilon$

y = Project Performance

β_0 = Constant

X_1= Training Practices

$\{\beta_1\}$ = Beta coefficients

ε = the error term

IV. Research Findings and Discussions

Response Rate

The study involved 107 questionnaires being dispatched for data collection, 98 questionnaires were returned completely filled, representing a response rate of 92% which was good for generalizability of the research findings to a wider population

Descriptive Statistics;

Descriptive Analysis for Training practices

These are summarized responses on whether Training Practices influences Project Performance of Kenya Nation Highways Authority, Western; Kenya. The descriptive results are presented in table 4.3.

Table 4. 1: Descriptive statistics; Training Practices

Statement	5	4	3	2	1	Mean	Std. Dev
1. The management supports trainings of construction works fully	16(16.3)	34(34.7)	29(29.6)	12(12.2)	7(7.1)	3.52	0.924
2. Training sessions are adequate and the coverage is sufficient	10(10.2)	27(27.5)	32(32.6)	12(12.2)	17(17.3)	3.37	0.926
3. New employees are taken through the induction training	13(13.3)	37(37.7)	29(29.5)	10(10.2)	9(9.2)	3.49	0.925
4. Trainings provide knowledge to work safely	9(9.2)	39(39.7)	30(30.6)	8(8.2)	12(12.2)	3.32	0.927
5. Trainings make the employee and employer understand their roles	11(11.2)	33(33.7)	32(32.6)	10(10.2)	12(12.2)	3.39	0.928
6. The organization provides refreshing courses to employees	13(13.2)	38(38.6)	29(29.6)	9(9.2)	9(9.2)	3.51	0.929
Valid list wise=98							
Grand mean =3.43							

From table 4.3, most respondents agreed (34.7%) that the management supports trainings of construction works fully while 12.2% disagreed to the statement, implying that there are respondents who have not been well trained which could hamper the effectiveness of the road project performance. More closely, only 27.5% agreed while 17.3% of respondents were uncertain that training sessions are adequately covered; thus, revealing existence of inefficiency of some training of the employees as they undergo the operations experienced of dissatisfaction.

Further, while 37.7% of respondents agreed that most of the new employees are taken through inductions while on entrance in the organization, 10.2% disagreed revealing existence of employees not being undertaken through induction. More so 39.7% of respondents agreed that the training undertaken makes the work taken up in proper way, while 33.7% of respondents also agreed that trainings make employees understand their roles properly.

Lastly, most respondents agreed (38.6%) and strongly agreed (13.2%) that generally, the organization provides refreshing courses to the employees; implying that the organization values the growth capability of working employees. Human resource is main resource of the organization, because human resource is one of resource on live and animate than other resources of the organization, the effective use of human resource practices is generally considered as a source of capability advantage to an organization (Sanneh & Taj, 2015). One of the core functions of human resource is employee training since it directly influences on productivity of the organization and employee relation of the organization, more so, aware the employer/employee on occupation safety health practices; hence it has been long recognized that effective staff training allows an organization to improve its standard and quality of service to customers

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Inferential Statistics;

Correlation Analysis

Correlation analysis is done in a study to find out the level to which two factors converge or diverge in relation to establishing significance of the relationship. In this case, positivity and negativity of the value of the correlation coefficient determines the relationship. A positive value of the correlation coefficient indicates that the two variables point in the same trend, negative value indicates that the variables move in opposite direction or trend. Essentially, correlation analysis portrays to a given degree, the element of variable influence on another although correlations do not imply a cause- effect relationship. The correlation matrix of the study is shown below.

Table 4. 8: Correlations

		Training Practices	Project Performance
Training Practices	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	98	
Project Performance	Pearson Correlation	.823**	1
	Sig. (2-tailed)	.000	
	N	98	98

**. Correlation is significant at the 0.01 level (2-tailed).

This assumption was tested using correlation analysis. Most researchers insist that correlation coefficient, (r) should be close to 1 or -1, and hence, the highest is .823.

Linear influence of Training Practices on Roads Project Performance

This tested the direct influence of Training Practices on Roads Project Performance of Kenya Nation High Authority, Western Region; Kenya. The results are shown table 4.9.

Table 4. 9: Direct influence of Training Practices on Roads Project performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.825[a]	.680	.676	.69397	.680	159.562	1	97	.000

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	**Sig.**
1	Regression	76.844	1	76.844	159.562	.000[a]
	Residual	36.120	97	.482		
	Total	112.964	98			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	**T**	**Sig.**
1	(Constant)	.682	.232		2.945	.004
	Training Practices	.919	.073	.825	12.632	.000

a. Dependent Variable: Roads Project Performance

From table 4.9, the model summary shows that $R^2 = 0.680$; implying that 68.0% variations in the Project Performance of Kenya Nation Highways Authority, Western Region; Kenya is explained by Training Practices while other factors not in the study model accounts for 32.0% of variation in Roads Project Performance of Kenya Nation Highways Authority, Western Region; Kenya. Further, coefficient analysis shows that Training Practices has positive significant influence on Roads Project Performance of Kenya Nation Highways Authority, Western Region; Kenya (β = 0.919 (0.073); *at p<.01*). This implies that a single improvement in effective Training Practices will lead to 0.919 unit increase in the Roads Project performance Kenya Nation Highways Authority, Western Region; Kenya. Therefore, the linear regression equation is;

(i) $y = 0.682 + 0.919X_1$

Where;
y = Roads Project Performance
X_1 = Training Practices

Testing of study hypotheses

First, **study hypothesis one (H_{01})** stated that Training Practices does not significantly influence Roads Projects Performance of Kenya Nation Highways Authority, Western Region; Kenya. Multiple regression results indicate that Training Practices significantly influence Roads Projects Performance of Kenya Nation Highways Authority, Western Region; Kenya (β = 0.919 (0.073) at *p<0.05*). **Hypothesis one is therefore rejected**. The results indicate that that a single improvement in effective Training Practices will lead to 0.919 unit increase in the Roads Projects Performance of Kenya Nation Highways Authority, Western Region; Kenya.

Misiurek and Misiurek (2017) presented an adoption of Training within industry; program-derived from manufacturing processes-in the construction industry as a means to improving occupational safety. The study relied on the statistics of fatal accidents in construction and manufacturing industries over several recent years in the UK. Choudhry *et al*. (2007) criticized reactive studies highlighting them as being poor measurement tools in assessing safety performance, due to its reliance on historical events regardless of current safety activities, hence it requires training.

V. Summary, Conclusions and Recommendations

Summary of study findings

Training Practices and Roads Projects Performance
This tested the influence of Training Practices on Roads Projects Performance of Kenya Nation Highways Authority, Western Region; Kenya. The study found that Training Practices had a significant effect Roads Projects Performance. The study results are consisted with earlier researchers that found that Training Practices had a significant influence on projects Performance; hence, training requirement for the employees and employers was necessary for the improvement of Projects Performance.

Conclusions

The objective of the study was to examine the effects Training practices on performance of roads construction projects of Kenya Nation Highway Authority, Western Region; Kenya. The study therefore, concludes that utilizing well Training Practices in road projects result into improvement in projects performance; hence, for such, leads to professional work done because of training sessions on the employees and employers of the construction roads.

Recommendations

The study recommends that Road Projects management team should embrace the proper use of Training Practices since it would improve the performance, through the management supporting trainings that are adequate and have enough coverage which should be sufficient to both continuing and new employees.

Areas for further research

Similar study can be done on other projects using similar variables, though using different methods.

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