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PROJECT PROCUREMENT MANAGEMENT PRACTICES AND PERFORMANCE OF ROAD CONSTRUCTION PROJECTS IN HOMA BAY COUNTY, KENYA

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ABSTRACT

This research examined the effect of project procurement management practices on performance of road construction projects in Homa Bay County, Kenya. The descriptive cross-sectional survey research design was employed to test the noncausal relationships between the study variables. The proportionate stratified random sampling technique was used to select a sample size 138 project management team from a target population consisted of 211 project management team in charge of road construction projects in Homa Bay County, Kenya. A self-administered structured survey questionnaire was used to collect primary data. A pilot study was conducted to test the validity and reliability of the constructed survey questionnaire. Through the drop and pick method, the cross-sectional survey-based approach was used to collect primary data. The collected data was processed and entered into the statistical package for social sciences (SPSS) version 26 to create a data sheet used for data analysis. Data analysis involved descriptive statistics and inferential statistics. The Pearson's product moment correlation results showed that project procurement planning practice and project procurement risk management practice had positive and significant relationship with performance of road construction projects in Homa Bay County, Kenya. The multiple regression results showed that project procurement planning practice and project procurement risk management practice had positive and significant effect on performance of road construction projects in Homa Bay County, Kenya. The study recommends that it is imperative for the project managers to improve on the project procurement practices to foster performance of road construction projects. The policy makers within the road construction industry should initiate policy review to motivate the project managers to improve on the project procurement practices to foster performance of road construction projects. Future researchers should examine the effect of project procurement management practices on performance of road construction projects in other regions or contexts.

Key words: *Project performance, Project procurement management practices, Project procurement planning, Project procurement risk management*

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INTRODUCTION

The construction industry has a significant impact on a country's economy. The construction industry is acknowledged as one of the industries of strategic economic importance (Joseph, Ralwala, Wachira-Towey, & Mutisya, 2023). The construction industry plays a vital role in the country's economic growth (Acheng *et al.*, 2023). The rural development has depended on the construction industry's success due to the high employment rate in the construction industry and its development role in the rural areas (Wu, Ma, Zhang, & Shi, 2023). The construction industry is essential to a nation's economic growth and the economic growth in any country is dependent on the planning, execution, and performance of buildings, roadways and bridges (Tummalapudi, Harper, Taylor, Waddle, & Catchings, 2022). However, as construction environments are relatively complicated, project managers may face significant challenges in delivering timely and effective project outcomes (Kermanshachi & Pamidimukkala, 2023). In Kenya, the construction companies have continued to struggle with the challenge of poor performance (Mwangi & Waithaka, 2023).

The construction industry is a major contributor to the gross domestic product of most economies. However, the industry is characterized by poorly performing projects, plagued with cost overruns, delays, with a relatively high-risk nature and marginal returns (Asare, Owusu-Manu, Ayarkwa, Edwards, & Martek, 2023). Project failure is undesirable yet common narrative resulting in financial and reputational losses for project managers (Zaman, Florez-Perez, Anjam, Ghani Khwaja, & Ul-Huda, 2023). The number and severity of stalled projects in the Kenyan public sector have been on the rise (Mwangi & Waithaka, 2023). Every construction project has three phases, namely engineering/ design, procurement, and construction, which must be completed on schedule and within the allocated budget to be considered successful (Kermanshachi & Pamidimukkala, 2023). However, the most salient issue faced in foreign funded projects is the project delays arising from procurement issues (Weerasekara *et al.*, 2023). The procurement-related issues, for instance, procurement delays, land acquisition, delayed approvals, scope changes, and administrative and management issues are experienced throughout foreign funded project implementation, ultimately affecting the development of the country (Sayyed, Hatamleh, & Alaya, 2023).

Project procurement management encompasses the processes used for making sure project procurement is successful (Owiti, 2022). In project management, procurement is used to explain how a business may work with other external organizations (Chen, Chen, Huang, & Chen, 2023). Procurement is the process of obtaining goods, supplies and/or other services (Ashkanani & Franzoi, 2023). However, project procurement is the process of obtaining all the materials and services required for a project (Del Pico, 2023). Project procurement management is the business process by which projects are contracted, outsourced, and finished while the necessary products to complete the projects are selected, coordinated, and maintained (Venkataraman & Pinto, 2023). Project procurement management ensures that goods and services from outside the performing organizations are acquired (Venkataraman & Pinto, 2023). However, the link between project procurement management and project performance is rarely addressed in the existing literature.

Statement of the Problem

Despite the construction industry being a major contributor to the gross domestic product (GDP) of most economies, the construction industry is currently confronted with project performance challenges which contribute to the decline of the national GDP (Unegbu, Yawas, & Dan-Asabe, 2022). The construction industry is characterized by poorly performing projects, plagued with cost overruns, delays, with a relatively high-risk nature and marginal returns (Asare *et al.*, 2023). In Kenya, the

construction industry is acknowledged as one of the industries of strategic economic importance (Joseph, Ralwala, Wachira-Towey, & Mutisya, 2023). However, the construction companies have continued to struggle with the challenge of poor performance (Mwangi & Waithaka, 2023).

The project managers face significant challenges in delivering timely and effective project outcomes (Kermanshachi & Pamidimukkala, 2023). The number and severity of stalled projects in the Kenyan public sector have been on the rise (Mwangi & Waithaka, 2023). The poor performance of construction projects is retrogressive in most developing economies. Undoubtably, project procurement management encompasses the processes used for making sure project procurement is successful (Owiti, 2022). However, cost, time, and quality are three main concerns of project procurement management (Del Pico, 2023). The poor procurement practices are often blamed for subsequent cost overruns in construction, especially with conventional procurement methods leading to outrageous cost overruns (Sheamar, Wedawatta, Tennakoon, Palliyaguru, & Antwi-Afari, 2023).

Project procurement management practices and performance of road construction has been widely discussed in the literature from various perspectives (Emuchay, 2023). However, there are still many gaps in the research on project procurement management, such as the differentiated conceptualization of complexity and disjointed operationalization in the measurements (Bakhshi, Mani, Ahmadi Eftekhari, & Martek, 2023; Zulu *et al.*, 2023). Majority of the studies have focused on developed countries with a paucity of studies within the developing countries (Unegbu, Yawas, & Dan-Asabe, 2022). The existing empirical literature has produced mixed and inconclusive results regarding the relationship between project procurement management practices and performance of road construction projects. While some studies suggest an indirect relationship between project procurement management practices and project performance (Unegbu *et al.*, 2022), other studies suggest a direct relationship between project procurement management practices and project performance (Sayyed *et al.*, 2023).

Research Objectives

This quantitative non-experimental correlational research was guided by a general and two specific objectives.

Objectives of the Study

The general objective of the study was to examine the effect of project procurement management practices on performance of road construction projects in Homa Bay County, Kenya. The study was guided by the following specific objectives

- To assess the effect of project procurement planning practice on performance of road construction projects in Homa Bay County, Kenya.
- To establish the effect of project procurement risk management practice on performance of road construction projects in Homa Bay County, Kenya.

In this study, two null hypotheses were tested;

- $H_0$1: Project procurement planning practice has no significant effect on performance of road construction projects in Homa Bay County, Kenya.
- $H_0$2: Project procurement risk management practice has no significant effect on performance of road construction projects in Homa Bay County, Kenya.

LITERATURE REVIEW

Theoretical Framework

Theoretical framework is the lens through which the researcher uses to connect the literature with the study results and methodology (Bingham, Mitchell, & Carter, 2024). The theoretical framework is anchored on the contingency theory, enterprise risk management theory and systems theory.

Contingency Theory

The contingency theory (Fiedler, 1958; Sahal, 1979; Singh, Bohra, & Dalal, 1979) proposes that leaders adopt styles that best suit the situation (Sugianto, Pujawan, & Purnomo, 2023). The contingency theory predicts that a leader's effectiveness lies in a "match" situation (Huang, Zhang, Wang, Bodla, & Zhu, 2023; Okong'o, 2022). The contingency theory of leadership tailors a leader's performance to the circumstances (Cheng & Fisk, 2022). Therefore, the contingency theory helps in understanding the effect of project procurement management practices on performance of road construction projects in Homa Bay County, Kenya.

The contingency theory of leadership is based on the idea that the proper type of leadership is determined by an environmental circumstance that manifests itself in the form of a specific event or behavior (Monehin & Diers-Lawson, 2022; Fragapane, Hvolby, Sgarbossa, & Strandhagen, 2023). The contingency theory of leadership was advanced to explain how certain personal characteristics made a leader effective in certain situations (Cheng & Fisk, 2022; Shonhadji & Maulidi, 2022). Despite the project organization's very best effort to a void, prevent, mitigate and control them, uncertainty still do occur (Thakur & Hale, 2022). Therefore, the contingency theory helps in understanding the effect of project procurement planning practice on performance of road construction projects in Homa Bay County, Kenya.

The contingency theory is a major theoretical lens used to view organizations and support organizations to see the relation between risk management and project performance (Xing, Cao, & Cao, 2023). The main fundamental base of the contingency theory of leadership is that since all risks in a project environment cannot be totally eliminated, residual risks always remain (Amegayibor, 2022; Shenkar & Ellis, 2022). The contingency theory of leadership suggests that contingency buffers are set up to cover for project risk that may hinder project performance especially in situations of diverse events or anticipated threats (Zheng, Feng, Xie, Zhao, & Wu, 2023). The contingency theory posits that there is a need to create a linkage between risk management and performance management, moving towards integrated risk management (Castellini & Riso, 2023). Therefore, the contingency theory helps in understanding the effect of project procurement risk management practice on performance of road construction projects in Homa Bay County, Kenya.

METHODOLOGY

Research Philosophy: The research was guided by the positivist research philosophy which regards the world as made up of observable and measurable facts and assumes that there is an objective reality out there. The positivist research philosophy regards the world as made up of observable and measurable facts and assumes that there is an objective reality out there (Ma & Xie, 2023).

Research Design: Drawing on a quantitative non-experimental research methodology, the research utilized the descriptive cross-sectional survey research design to examine the non-causal relationship between study variables. The descriptive survey design was justified as it enables the researcher to identify the study problem and seek to find out the particular facts about it (Saunders, Lewis, & Thornhill, 2023).

Target Population: The target population consisted of 211 project management team in charge of the 15 road construction projects in Homa Bay County, Kenya. The project management team in charge of the 15 road construction projects consisted of 211 professionals including the regional manager, resident engineers, inspectors, surveyors and project team members in Homa Bay County, Kenya.

FINDINGS

Response Rate

Out of the 138 survey questionnaires distributed for the main study, only 107 valid responses were obtained. Therefore, there was a valid response rate of 77.54% which was adequate for data

processing and analysis. Table 1 presents the response rate results.

Table 1: Response Rate

Strata	Frequency	Percentage
Response	107	77.54%
Non-Response	31	22.46%
Total	**138**	**100%**

Correlation Results

The Pearson's product moment correlations analysis was performed to confirm or deny the relationships between the study variables. The correlation results showed that project procurement planning practice had a moderate strong positive and significant relationship with performance of road construction projects ($r = 0.570$, $p \leq 0.01$) in Homa Bay County, Kenya. The correlation results showed that project procurement risk management practice had a strong positive and significant relationship with performance of road construction projects ($r = 0.710$, $p \leq 0.01$) in Homa Bay County, Kenya. Table 2 presents the Pearson's product moment correlations analysis results.

Table 2: The Pearson's Correlation Results

		X_1	X_2	Y
Project Procurement Planning Practice (X_1)	Pearson Correlation	1		
	Sig. (2-tailed)			
	n	107		
Project Procurement Risk Management Practice (X_2)	Pearson Correlation	.374**	1	
	Sig. (2-tailed)	.000		
	n	107	107	
Performance of Road Construction Projects (Y)	Pearson Correlation	.570**	.710**	1
	Sig. (2-tailed)	.000	.000	
	n	107	107	107

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

Multiple Regression Results

A standard multiple linear analysis was performed with project performance as the dependent variable and project procurement planning practice and project procurement risk management practice as the predictor variables. The multiple regression analysis was performed to test to what extent, if any, the linear combination of the predictor variables (project procurement planning practice and project procurement risk management practice) was able to significantly predict the performance of road construction projects in Homa Bay County, Kenya.

Model Summary

From the model summary in table, it is clear that the value of coefficient of correlation (R) was 0.782, while the value of coefficient of determination (R^2) was 0.612, while the value of the adjusted R^2 was 0.604. Additionally, the value of the std. error of the estimate was 0.231 and the value of the Durbin-Watson test was 2.230. The R value of 0.782 suggested that there was a strong positive correlation between the project procurement management practices and the performance of road construction projects in Homa Bay County, Kenya. The R^2 value of 0.612 suggest that the overall model as a whole (the model involving constant, project procurement planning practice and project procurement risk management practice) was able to significantly predict and explain approximately 61.2% of the variance in the performance of road construction projects in Homa Bay County, Kenya.

The Adjusted R Square value of 0.604 suggest that the overall model as a whole (the model involving constant, project procurement planning practice and project procurement risk management

practice) significantly predicted and explained 60.4% of the variance in the performance of road construction projects in Homa Bay County, Kenya. The std. error of the estimate value of 0.231 suggest that there could be other factors not included in the model in the current study that could also predict and explain the remaining 39.6% of the variance in the performance of road construction projects in Homa Bay County, Kenya. Therefore, there is in need for future research to discover the other variables not included in the model in the current study that also predict the remaining variance in the performance of road construction projects in Homa Bay County, Kenya.

From the model summary table, the Durbin-Watson test statistic had a value of 2.230, falling within the optimum range of 1.5 to 2.5, suggesting that there was no severe autocorrelation detected in the in the residual values in the datasets. Generally, Durbin-Watson statistics falling within the optimum range of 1.5 to 2.5 indicates that there is no severe autocorrelation detected in the in the residual values in the datasets (Hair *et al.*, 2021). Table 3 presents the model summary results.

Table 3: Model Summary[b] Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.782[a]	.612	.604	.231	2.230

a. Predictors: (Constant), Project Procurement Risk Management Practice (X_2), Project Procurement Planning Practice (X_1)

b. Dependent Variable: Performance of Road Construction Projects (Y)

Analysis of Variance

From the Analysis of Variance (ANOVA) table, the overall model as a whole (the model involving constant, project procurement planning practice and project procurement risk management practice), achieved a high degree of fit, as reflected by $R^2 = 0.612$, adj. $R^2 = 0.604$, $F(2, 101) = 81.925$, $p < 0.05$. The null hypothesis was that the linear combination of predictor variables (project procurement planning practice and project procurement risk management practice) was not able to significantly predict the performance of road construction projects in Homa Bay County, Kenya. However, the alternative hypothesis was that the linear combination of predictor variables (project procurement planning practice and project procurement risk management practice) was able to significantly predict the performance of road construction projects in Homa Bay County, Kenya. The standard multiple linear regression results showed that the linear combination of predictor variables (project procurement planning practice and project procurement risk management practice) significantly predicted the performance of road construction projects in Homa Bay County, Kenya. The null hypothesis was rejected in favor of the alternative hypothesis. Therefore, the decision was that the linear combination of predictor variables (project procurement planning practice and project procurement risk management practice) significantly predict the performance of road construction projects in Homa Bay County, Kenya. Table 4 presents the ANOVA results.

Table 4: ANOVA[a] Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.769	2	4.385	81.925	.000[b]
	Residual	5.566	104	.054		
	Total	14.335	106			

a. Dependent Variable: Performance of Road Construction Projects (Y)

b. Predictors: (Constant), Project Procurement Risk Management Practice (X_2), Project Procurement Planning Practice (X_1)

Multiple Regression Coefficients

From the coefficients table, when the unstandardized regression coefficients (B) were substituted to the multiple regression model specified for the study, the final predictive equation was:

$Y = 1.660 + 0.209X_1 + 0.377X_2$

The final predictive equation suggested that holding all factors in to account constant (project procurement planning practice and project procurement risk management practice), constant at zero, the performance of road construction projects in Homa Bay County, Kenya would be 1.660. Additionally, the final predictive equation postulated that with all other factors held constant, a unit increase in project procurement planning practice would lead to 0.209 unit increase in the performance of road construction projects in Homa Bay County, Kenya. Moreover, the final predictive equation suggested that with all other factors held constant, a unit increase in project procurement risk management practice would lead to 0.377 unit increase in the performance of road construction projects in Homa Bay County, Kenya. Based on the magnitude of the unstandardized regression coefficients (B) of the independent variables, project procurement risk management practice was the best predictor of the variance in the performance of road construction projects in Homa Bay County, Kenya.

The multiple regression results indicated that project procurement planning practice had a positive and significant influence on the performance of road construction projects (β_1 = 0.354; t = 5.366; $p \leq 0.05$) in Homa Bay County, Kenya. The regression results indicated that project procurement risk management practice had a positive and significant influence on the performance of road construction projects (β_2 = 0.578; t = 8.771; $p \leq 0.05$) in Homa Bay County, Kenya. Table 5 presents the multiple regressions coefficients results.

Table 5: Multiple Regression Coefficients[a] Results

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1.660	.174		9.531	.000		
	Project procurement planning practice (X_1)	.209	.039	.354	5.366	.000	.860	1.163
	Project procurement risk management practice (X_2)	.377	.043	.578	8.771	.000	.860	1.163

a. Dependent Variable: Performance of road construction projects (Y)

Hypotheses Test Results

In this research, 2 null hypotheses were tested. The hypotheses were tested at 5% level of significance, $\alpha = 0.05$, t = 1.960, and 95% confidence level to statistically help draw acceptable and realistic inferences. Therefore, the decision rule was to reject the null hypothesis H_0i if the $P \leq 0.05$, and otherwise fail to reject the null hypothesis H_0i if the $P > 0.05$.

Hypothesis One Test Results

The first null hypothesis ($H_0$1) predicted that project procurement planning practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya. The decision rule was to reject the null hypothesis $H_0$1 if the $\beta_1 \neq 0$, $t \geq 1.960$, $P \leq 0.05$, and otherwise fail to reject the null hypothesis $H_0$1 if the $\beta_1 = 0$, $t < 1.960$, $P > 0.05$. The standard multiple regression results

showed that project procurement planning practice had a positive and significant influence on the performance of road construction projects (β_1 = 0.354; t = 5.366; p ≤ 0.05) in Homa Bay County, Kenya. Consequently, the $H_0$1 was rejected, providing the empirical support for $H_1$1. Therefore, deduction was made that project procurement planning practice has a significant influence on performance of road construction projects in Homa Bay County, Kenya.

Hypothesis Two Test Results

The second null hypothesis ($H_0$2) predicted that project procurement risk management practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya. The decision rule was to reject the null hypothesis $H_0$1 if the $\beta_1 \neq 0$, t ≥ 1.960, P ≤ 0.05, and otherwise fail to reject the null hypothesis $H_0$1 if the $\beta_1 = 0$, t < 1.960, P > 0.05. The standard multiple regression results showed that project procurement risk management practice had a positive and significant influence on the performance of road construction projects (β_2 = 0.578; t = 8.771; p ≤ 0.05) in Homa Bay County, Kenya. Consequently, the $H_0$2 was rejected, providing the empirical support for $H_1$2. Therefore, deduction was made that project procurement risk management practice has a significant influence on performance of road construction projects in Homa Bay County, Kenya. Table 6 presents the hypotheses test results.

Table 6: Hypotheses Test Results

Hypothesis	β	t	Sig.	Decision
$H_0$1: Project procurement planning practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya.	.284	3.964	.000	Reject the $H_0$1
$H_0$2: Project procurement risk management practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya.	.603	8.418	.000	Reject the $H_0$2

Discussions

The purpose of this quantitative correlational research was to examine the influence of project procurement management practices on the performance of road construction projects in Homa Bay County, Kenya. Specifically, the research sought to examine the influence of project procurement planning practice and project procurement risk management practice on the performance of road construction projects in Homa Bay County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the project procurement management practices had positive and significant relationship with performance of road construction projects in Homa Bay County, Kenya. A standard multiple linear analysis was performed with performance of road construction projects as the dependent variable and project procurement planning practice and project procurement risk management practice as the predictor variables. The regression results showed that the project procurement management practices had positive and significant influence on the performance of road construction projects in Homa Bay County, Kenya. The findings were consistent with the results of previous studies (Ibrahim & Mutuku, 2023; Mungai & Ndeto, 2023). The findings were also consistent with the results of past studies (Omolo & Ndeto, 2023; Sayyed *et al.*, 2023; Zegeye, 2023) which propose a direct relationship between project procurement management practices and project performance. However, the results are inconsistent with the results of some prior studies (Unegbu *et al.*, 2022) which suggest an indirect relationship between project procurement management practices and project performance.

The first specific objective was to determine the influence of project procurement planning practice

on the performance of road construction projects in Homa Bay County, Kenya. The first null hypothesis ($H_0$1) predicted that project procurement planning practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya. The Pearson's correlation results indicated that project procurement planning practice had a moderately strong positive and significant relationship with the performance of road construction projects in Homa Bay County, Kenya. The regression results showed that project procurement planning practice had a positive and significant influence on performance of road construction projects in Homa Bay County, Kenya. The $H_0$1 was rejected, providing the empirical support for $H_1$1. Therefore, the decision was that project procurement planning practice has a significant influence on performance of road construction projects in Homa Bay County, Kenya. The findings were in harmony with the results of previous studies (Changalima *et al.*, 2021; Kariuki & Wabala, 2021; Mungai & Ndeto, 2023; Nuwagaba *et al.*, 2021). The results were also consistent with the results of prior studies (Changalima *et al.*, 2022; Changalima & Mdee, 2023; Gambo & Musonda, 2021).

The second specific objective was to assess the influence of project procurement risk management practice on performance of road construction projects in Homa Bay County, Kenya. The second null hypothesis ($H_0$2) predicted that project procurement risk management practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya. The Pearson's correlation results indicated that project procurement risk management practice had a strong positive and significant relationship with performance of road construction projects in Homa Bay County, Kenya. The regression results showed that project procurement risk management practice had a positive and significant influence on performance of road construction projects in Homa Bay County, Kenya. The $H_0$2 was rejected, providing the empirical support for $H_1$2. Therefore, the decision was that project procurement risk management practice has a significant influence on performance of road construction projects in Homa Bay County, Kenya. The findings were in line with the results of past studies (Chepng'etich, 2022; Hassan & Omwenga, 2023; Macharia & Osoro, 2023). The results were also consistent with the results of prior studies (Muinde, 2022; Mungai & Ndeto, 2023; Njoki *et al.*, 2021).

SUMMARY

The purpose of this quantitative correlational research was to examine the influence of project procurement management practices on performance of road construction projects in Homa Bay County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the project procurement management practices had positive and significant relationship with performance of road construction projects in Homa Bay County, Kenya. A standard multiple linear analysis was performed with performance of road construction projects as the dependent variable and project procurement planning practice and project procurement risk management practice as the predictor variables. The regression results showed that the project procurement management practices had positive and significant influence on the performance of road construction projects in Homa Bay County, Kenya.

The first specific objective was to determine the influence of project procurement planning practice on the performance of road construction projects in Homa Bay County, Kenya. The first null hypothesis ($H_0$1) predicted that project procurement planning practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya. The Pearson's correlation results indicated that project procurement planning practice had a moderately strong positive and significant relationship with the performance of road construction projects in Homa Bay County, Kenya. The regression results showed that project

procurement planning practice had a positive and significant influence on performance of road construction projects in Homa Bay County, Kenya. The $H_0$1 was rejected, providing the empirical support for $H_1$1. Therefore, the decision was that project procurement planning practice has a significant influence on performance of road construction projects in Homa Bay County, Kenya.

The second specific objective was to assess the influence of project procurement risk management practice on performance of road construction projects in Homa Bay County, Kenya. The second null hypothesis ($H_0$2) predicted that project procurement risk management practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya. The Pearson's correlation results indicated that project procurement risk management practice had a strong positive and significant relationship with performance of road construction projects in Homa Bay County, Kenya. The regression results showed that project procurement risk management practice had a positive and significant influence on performance of road construction projects in Homa Bay County, Kenya. The $H_0$2 was rejected, providing the empirical support for $H_1$2. Therefore, the decision was that project procurement risk management practice has a significant influence on performance of road construction projects in Homa Bay County, Kenya.

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this quantitative correlational research was to examine the influence of project procurement management practices on performance of road construction projects in Homa Bay County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the project procurement management practices had positive and significant relationship with performance of road construction projects in Homa Bay County, Kenya. A standard multiple linear analysis was performed with performance of road construction projects as the dependent variable and procurement planning practice and procurement risk management practice as the predictor variables. The regression results showed that the project procurement management practices had positive and significant influence on the performance of road construction projects in Homa Bay County, Kenya. Therefore, the conclusion was that project procurement management practices have significant influence on performance of road construction projects in Homa Bay County, Kenya.

The first specific objective was to determine the influence of project procurement planning practice on the performance of road construction projects in Homa Bay County, Kenya. The first null hypothesis ($H_0$1) predicted that project procurement planning practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya. The Pearson's correlation results indicated that project procurement planning practice had a moderately strong positive and significant relationship with the performance of road construction projects in Homa Bay County, Kenya. The regression results showed that project procurement planning practice had a positive and significant influence on performance of road construction projects in Homa Bay County, Kenya. The $H_0$1 was rejected, providing the empirical support for $H_1$1. Therefore, the first conclusion was that project procurement planning practice has a significant influence on performance of road construction projects in Homa Bay County, Kenya.

The second specific objective was to assess the influence of project procurement risk management practice on performance of road construction projects in Homa Bay County, Kenya. The second null hypothesis ($H_0$2) predicted that project procurement risk management practice has no significant influence on performance of road construction projects in Homa Bay County, Kenya. The Pearson's correlation results indicated that project procurement risk management practice had a strong positive and significant relationship with performance of road construction projects in Homa

Bay County, Kenya. The regression results showed that project procurement risk management practice had a positive and significant influence on performance of road construction projects in Homa Bay County, Kenya. The $H_0 2$ was rejected, providing the empirical support for $H_1 2$. Therefore, the second conclusion was that project procurement risk management practice has a significant influence on performance of road construction projects in Homa Bay County, Kenya.

The study made the following recommendations;

Managerial Implications: From the findings of this research, the research recommends that managers implement project procurement management practices to foster the performance of road construction projects.

Policy Implications: From the findings of this research, the research recommends that policy makers within construction industry should to review the policy framework to encourage project managers to implement project procurement management practices to foster the performance of road construction projects.

Limitations and Future Research

This research paper generates novel insights into how project procurement management practices predict the performance of road construction projects. However, the current research has a number of limitations, that need to be taken into consideration. First, the research was limited to the influence of project procurement management practices on performance of road construction projects in Homa Bay County, Kenya. Subsequently, caution should be taken when attempting to generalize the results beyond the construction industry. Future research could examine the influence of project procurement management practices on project performance in other sectors or in other regions. Second, the research was contextually limited to only two project procurement management practices, namely procurement planning practice and procurement risk management practice. Future research should examine the influence of other project procurement management practices on performance of road construction projects. Third, as the research paper relied on a cross-sectional survey design, no inferences about the causality of relationships can be made. Therefore, future researchers should consider conducting a longitudinal study on the influence of project procurement management practices on performance of road construction projects.

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