

The Influence of Project Leadership Skills on Implementation of Water Projects in Kenya.

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ABSTRACT: This study is to analyse the influence of project leadership on implementation of water projects in Kenya. Transactional theory was applied and literature review was done and a conceptual framework developed to guide the study. Descriptive survey research design adopted. The target population was from the eight water projects being implemented across the country and the accessible population was 1,675 staff members in the eight service boards in the country. Proportionate stratified random sampling technique was applied. Questionnaires based on a five-point Likert type scale were distributed through drop and pick-up method for collection of primary data. Reliability of the instrument was measured using Cronbach alpha coefficient and the variable returned satisfactory scores above 0.7. Validity of the study constructs was done through factor analysis and results were significant. One hundred and seventy-four (174) questionnaires were distributed out of which one hundred and forty-four (144) were returned. The descriptive results showed a positive bearing on implementation of water projects, and the same applied to the moderating variable. A regression model was fitted to the data and it was found to be statistically significant. Project leadership explained 33.4% variation in implementation of water projects. There was Strong positive correlation between project leadership and implementation of water projects in Kenya. Concluded that Project leadership had a positive and significant influence on implementation of water projects in Kenya. Recommended that Project leaders need to demonstrate clearly what is expected from the project team and make it clear on what deliverables are expected from them.

KEY WORDS: Implementation; Water Projects; Project Leadership Skills; Project Leaders; Project Team; Implementation of Water Projects

1.0 INTRODUCTION

1.1 Background of the Study

In today's fast-paced and constantly evolving business environment, project management is an essential skill set that encompasses planning and execution to monitoring and controlling, with project managers being in charge of all project-related activities (Huemann & Turner, 2024). For projects to be completed on schedule, within budget, and to the satisfaction of stakeholders, project managers and teams need to possess a wide range of skills, including leadership, communication, time management, problem-solving, and organization. Although new technologies and methods keep emerging that require skills project managers and teams must keep abreast with recent developments in project management to ensure readiness for any new dynamics.

Project management skills can be both hard and soft, in order to understand the project plans and the implementation guidelines, project managers need to be able to communicate effectively with project teams and other stakeholders in order to create and carry out quality project plans and where project teams lack these competencies, it is up to the project manager and the project organization to facilitate their up skilling (Pieterse *et al.*, 2022).

Implementing projects entails overseeing them directly to make sure that they achieve the goals set forth during the planning stage (Fox & Macleod, 2023). In order for the team to produce the deliverables necessary to satisfy the project's clients and other important stakeholders, project managers must execute the project effectively. Water and sanitation projects range from building new infrastructure to implementing innovative methods of operation and precisely include technical implementation, service delivery, sanitation promotion and capacity building (Nel *et al.*, 2023).

1.1.1 Water Service Boards in Kenya

Water Service Boards (WSBs), now called Water Works Development Agencies, have the mandate of developing, maintaining and managing national public water works. Therefore, the overall institutional mandate of water service boards includes development, maintenance and management of national public water works, operation of water works and provision of water services as water

service providers, provision of reserve capacity for purposes of providing water services, provision of technical services and capacity building to county governments and water services providers as may be requested, and also provision of technical support to the Ministry of Water discharge in its functions (Nyingi *et al.*, 2023).

As a result of sector reforms, responsibility for water and sanitation service provision has been devolved to eight regional water services boards namely Athi, Coast, Tana, Lake Victoria North, Lake Victoria South, Northern, Rift Valley Water Services Board, and Tanathi Water Services Board. Water services boards are also responsible for asset management especially for the development and rehabilitation of water and sewerage facilities, for investment planning and implementation (Koros *et al.*, 2023).

Water service boards operate under licenses, but the licensing regime has been criticized as bureaucratic, cumbersome and confusing. Responsibility for water and sanitation service provision is in the hands of water services boards. However, they are not required to provide services directly but can delegate to commercially oriented public enterprises called water service providers. (Cherotich, 2021).

1.2 Statement of the Problem

Today, global investment needs in the water sector exceed \$1.37 trillion, and to meet sustainable development goal six by 2030, investments must increase by sixfold from the current level (Javed *et al.*, 2022). Scaling up water investments is meant to result in healthier people and ecosystems, climate-resilient irrigation and drainage services for farmers and improved water storage. As of 2022, 2.2 billion people lacked safely managed drinking water, 3.5 billion lacked access to safely managed sanitation, and 2 billion lacked access to basic hand hygiene facilities. In fiscal year 2023, the World Bank saw increased demand from client countries for assistance in building effective and efficient institutions for delivery of water and sanitation services, and achieving climate-resilient irrigation (Bernards, 2021).

Kenya is a prized destination for international visitors, but it is also a chronically water-scarce country, with a growing population and climate change which are contributing to worsening conditions (Njoki, 2022). The Water Resources Authority (WRA) as a state corporation was established and mandated through delegated authority on behalf of the National government to safeguard the right to clean water by ensuring that there is proper regulation of the management and use of water resources to provide sufficient water for all now and in the future, leading to establishment of Water Service Boards which are located regionally across the country (Lukat *et al.*, 2022).

The water service boards provide policy advice and also support in designing and implementing projects that are sustainable, resilient and inclusive (Malusi, 2023). Despite the concerted efforts to implement various water projects, there have been consistent complaints of projects taking long to complete, being poorly implemented, stalled projects and indeed some becoming outright white elephant projects. A report by World Bank (2023) on Kenya's water projects shows that only 26% of the envisioned water projects have been effectually and proficiently completed, 49% face implementation challenges while the rest have either been abandoned or failed, indicating that there are widespread challenges in implementation of various water projects in the country. In 2021, 2022 and 2023, the abandoned water projects were reported to be at 38%, 44% and 47% respectively (Sakamoto & Kiarie, 2024).

Pieterse *et al.*, (2022) examined critical project management skills for successful delivery of major maintenance projects in the United Kingdom energy sector. Kramskyi *et al.*, (2023) examined the conceptual model for implementation of infrastructure projects in the post-war period in the field of water in Ukraine, thus occasioning a contextual gap. Ngibu (2023) analysed project management skills and performance of youth economic empowerment projects in Kajiado North Sub-County, Kenya; and Rotich and Mungai (2023) reviewed project management technical skills and performance of water, sanitation and hygiene projects in Nairobi City County, Kenya. These studies concentrated on the general aspects of project management skills and performance of water projects, thus occasioning conceptual and methodological gaps. This study focused on the thematic critical project management skill for implementation of water projects and adopted communication planning skill, and moderated by project size, as requisite skill in implementation of water projects in Kenya.

1.3 Research Objectives

The objectives of this study are:

1. To analyse the influence of project leadership on implementation of water projects in Kenya.
2. To investigate the moderating influence of project size on project leadership skills and implementation of water projects in Kenya.

1.4 Research Hypotheses

This study was guided by the following null hypotheses;

H₀₁: Project leadership has no significant influence on implementation of water projects in Kenya.

H₀₂: Project size has no significant moderating influence on project leadership skills and implementation of water projects in Kenya.

2.0 LITERATURE REVIEW

2.1 Transactional Leadership Theory

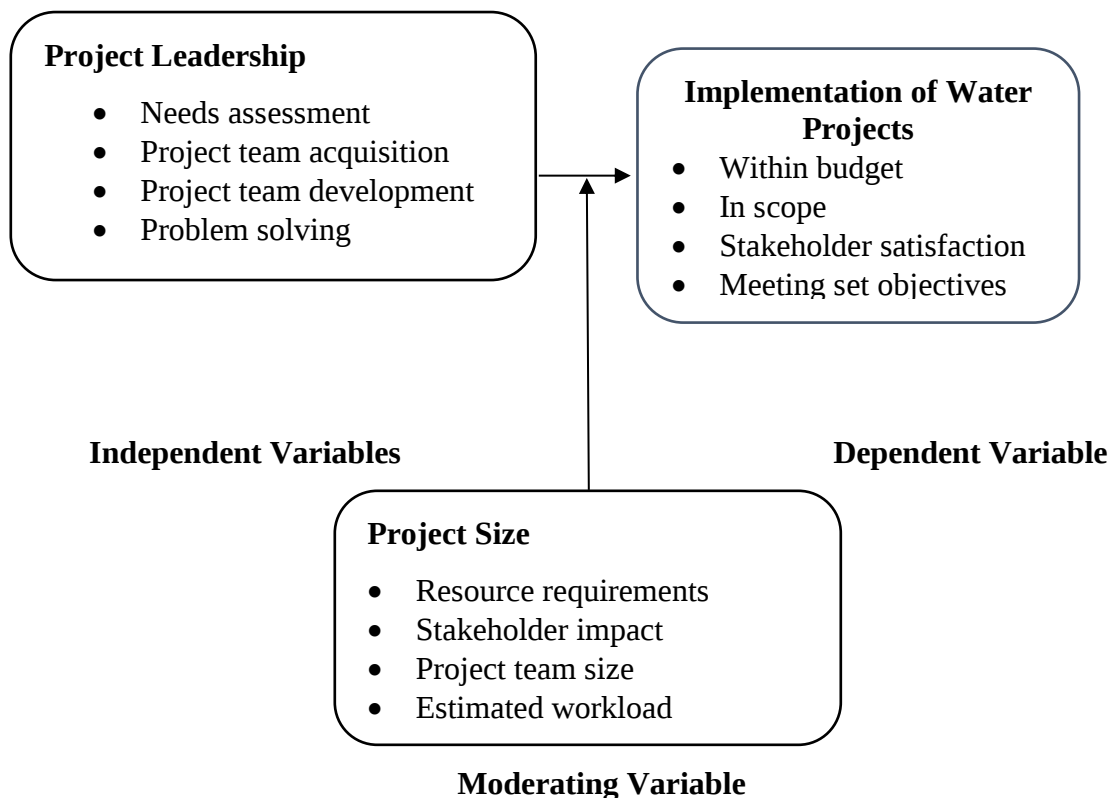
Transactional leadership theory was first defined by Weber (1941) and later by Bass (1981) and the theory posited that leaders are always charismatic, authoritative, traditional and transactional by nature. This theory emphasizes on the importance of the relationship between leaders and followers, focusing on the mutual benefits derived from the form of contract through which the leader delivers such things as rewards or recognition in return for commitment or loyalty of the followers.

The transactional leaders are found to be quite effective in guiding efficiency decisions which are aimed at cutting costs and improving productivity. The transactional leaders tend to be highly directive and action oriented and their relationship with the followers tends to be transitory and not based on emotional bonds (Guarana & Avolio, 2022). The theory assumes that subordinates can be motivated by simple rewards and this theory therefore explains project leadership in the sense of how the different leadership styles can be applied to implementation of projects. Expert power is frequently exercised in the form of logical persuasion and the leader presents reasonable arguments and supporting evidence for a specific suggestion, plan, or request. The success of project implementation is determined by the leader's credibility and persuasive leadership capability in addition to technical knowledge and logical or analytical ability in guiding the project team and other stakeholders (Ahmed et al., 2022).

Mohamadpour and Ghorbani (2023) noted that the strong fitting together between project success and project leadership means that it is valuable to understand which skills and competencies are most important to project leadership effectiveness. Project leaders require the right combination of skills and competencies to be most effective and it is instructive that much of the literature is based not on empirical investigations but project leaders' opinions are not essentially well-reflected in bodies of knowledge. The requisite skills and competencies for project leaders are often varied, including technical ability, detail-orientation, leadership, human issues and others.

2.2 Conceptual Framework

The conceptual framework for this study is indicated in Fig. 2.1;



3.0 RESEARCH METHODOLOGY

3.1 Research Philosophy

This study adopted a positivist research philosophy. Positivism embraces a philosophical system recognizing only that which can be scientifically verified or which is capable of logical or mathematical proof.

3.2 Research Design

This research adopted descriptive survey research design since the researcher focused attention on objectives formulated, selected a sample, collected data, processed and analyzed the data.

4.0 FINDINGS AND DISCUSSION

4.1 General Characteristics of the Study Sample

4.1.1 Response rate

One hundred and seventy-four (174) questionnaires were distributed to respondents out of which one hundred and forty-four (144) questionnaires were duly filled and collected representing 82.7% of the total questionnaires distributed.

Table 4.1: Response Rate

Questionnaire Status	Frequency	Percentage (%)
Returned	144	82.7
Not returned	30	17.3
Total	174	100

The results shown in Table 4.2 demonstrated the high degree of reliability of the questionnaire used in this study.

Table 4.2: Reliability Statistics

Variable	Cronbach Alpha	No. of items	Comments
Project Leadership	.717	7	Accepted
Project Size	.887	7	Accepted
Implementation of Projects	.899	7	Accepted

4.2 Descriptive Statistics

4.2.1 Project Leadership and Implementation of Water Projects

Respondents gave their views on the variable project leadership and the results are shown in Table 4.3;

Table 4.3: Project Leadership

Statement	SD (%)	D (%)	ND (%)	A (%)	SA (%)	Mean	Std Devn.
Project leaders in my organization undertake needs assessment on a regular and timely basis.	0	2.8	24.3	53.5	19.4	3.90	.736
There is cooperation between project managers and line managers in my organization.	0	3.5	22.2	43.1	31.3	4.02	.823
Project managers and sponsors in my organization are knowledgeable in project management matters.	0	4.3	18.8	54.2	22.8	3.96	.765
Project leaders inspire the project team in my organization to achieve set goals.	0	4.9	18.1	48.6	28.5	4.01	.815
There is a high level of accountability by the project leaders.	0	10.4	28.5	41.7	19.4	3.70	.901

The organization rewards project team members who are innovative in their work.	2.1	11.1	40.3	33.3	13.2	3.44	.930
Project leaders demonstrate clearly what is expected from the project team.	0	1.4	20.8	50.7	27.1	4.03	.733

n = 144 *Mean = Strongly Disagree (SD) = 1 – 1.8; Disagree (D) = 1.9 – 2.6; Neither Agree nor Disagree (ND) = 2.7 – 3.4; Agree (A) = 3.5 - 4.2; Strongly Agree (SA) = 4.3 – 5.0

Results in Table 4.3 show that the item on project leaders demonstrating clearly what was expected from the project team returned the highest mean (M = 4.03, SD = .733), and that showed significant convergence of opinion about the statement which was confirmed by 77.8% who answered in the affirmative, and 20.8% of the respondents neither agreed nor disagreed with the statement, with a paltry 1.4% of the respondents disagreeing. The findings also revealed that 74.4% of the respondents agreed that there was cooperation between project managers and line managers in their organizations, but in the same vein, 22.2% of the respondents neither agreed nor disagreed with the statement and 3.5% disagreed (M = 4.02, SD = .823).

The findings showed that on the statement about project leaders inspiring project teams in their organizations to achieve set goals, 77.1% of the respondents agreed with the statement whereas 18.1% of the respondents neither agreed nor disagreed with the statement and 4.9% disagreed (M = 4.01, SD = .815). On the statement about project managers and sponsors in organizations being knowledgeable in project management matters, it elicited a positive response to the statement of 77% but 18.8% neither agreed nor disagreed with the statement with 4.3% disagreeing (M = 3.96, SD = .765). It is worth noting that on the statement about project leaders in organizations undertaking needs assessment on a regular and timely basis, 72.9% of the respondents were in agreement with the statement and 24.3% neither agreed nor disagreed with statement, moreover, 2.8% of the respondents disagreed with the statement (M = 3.90, SD = .736).

The findings indicated that 61.1% of the respondents agreed that there was a high level of accountability by the project leaders but 28.5% of the respondents neither agreed nor disagreed with the statement and 10.4% of the respondents (M = 3.70, SD = .901). On the question concerning organizations rewarding project team members who were innovative in their work, only 46.5% of the respondents answered in the affirmative, meaning less than a half of the respondents had contrarian views on the statement where 40.1% of the respondents neither agreed nor disagreed with the statement; 11.1% of the respondents disagreed and 2.1% of the respondents strongly disagreed (M = 3.44, SD = .930). The inference of the responses was that majority of respondents were not in total agreement with the statement which meant most organizations were not accountable in their dealings with project teams hence the strong divergence.

This study's findings concur with Nawaz and Tian (2022) reviewed the impact of authentic leadership on project success with the mediating effect of organizational learning and innovation. The study's findings showed the positive impact of authentic leadership on project success while organizational innovation and organizational learning played a mediating role. Additionally, the current study agrees with Rana and Shuja (2022) who studied the influence of leadership competencies on transport infrastructure projects' success adopting mediated moderation through innovative-work-behaviour and the project type and the findings showed that innovative work-behaviour of project employees completely had a mediating effect incurred by leadership competencies on project success.

The subject study's findings are also in consonance with Nanono (2022) who examined project leadership, beneficiary involvement and success of non-government organization projects and found that project leadership had a positive linear relationship with project success. The current study also agrees with Zheng *et al.*, (2023) who did a bibliometric analysis on research evolution and thematic breakthroughs in project leadership and the findings showed that thematic mapping and theoretical interpretation illustrated the potential directions of the competence comparison, new and appropriate leadership, and the interaction between leadership and context.

This study's findings concur with Toor and Ofori (2023) who studied project leadership in construction in developing countries and determined the importance of effective project leadership and its development in construction in the developing countries. The current findings concur with Huang *et al.*, (2023) who studied the effects of transformational and adaptive leadership on dynamic capabilities in digital transformation projects and the survey results demonstrated a positive influence of transformational leadership on project dynamic capabilities. This study's findings also agree with Yaro and Njoroge (2023) who reviewed project management practices and implementation of development projects in Kenya and the study findings showed that leadership monitoring support had a positive significant relationship toward the implementation of development projects.

Table 4.4: Summary of Mean and Standard Deviation

Variable	N	Minimum	Maximum	Mean	Std. Deviation
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Project Leadership	144	2.71	4.71	3.8661	.39916
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Ranked on scale: (Strongly Disagree = 1 – 1.8; Disagree = 1.9 – 2.6; Neither Agree nor Disagree = 2.7 – 3.4; Agree = 3.5 – 4.2; Strongly Agree = 4.3 – 5.0).

Table 4.5: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Project Leadership	.106	144	.000	.973	144	.066

a. Lilliefors Significance Correction

Table 4.5 bears results where the variable had p-values greater than the chosen significance level of .05 thus indicating that they were normally distributed.

4.3 Normal Q-Q Plot of Project Leadership

Departure from normality for independent variable project leadership was also not very far off from the line of approximation of fit. That was a corroboration that the data was almost normally distributed and henceforward could be used for regression analysis. This is illustrated in Figure 4.1;

Normal Q-Q Plot of Project Leadership



4.4 Multicollinearity

Table 4.6: Collinearity Coefficients

		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Project Leadership	.920	1.087

a. Dependent Variable: Implementation of Water Projects

4.5 Correlation Analysis Results

Table 4.7: Correlation Analysis Results for Study Variables

		Y	X ₃	M
Y	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	144		

X₃	Pearson Correlation	.578**	1	
	Sig. (2-tailed)	.000		
	N	144	144	
M	Pearson Correlation	.846**	.142	1
	Sig. (2-tailed)	.000	.089	
	N	144	144	144

*. Correlation is significant at the 0.05 level (2-tailed).

Key: Y = Implementation of Water Projects; X₃ = Project Leadership; M= Project Size

The results showed that project leadership had a positive and significant relationship with project implementation ($r = 0.578$, $p = 0.000$). These findings illustrate that there is a significant relationship between the dependent variable and independent variable meaning that project leadership skills have a significant influence on implementation of water projects in Kenya.

4.6 Project Leadership and Implementation of Water Projects

In order to determine the influence of project leadership (X₃) on implementation of water projects (Y), the regression model was significant ($F(1, 142) = 71.239$, $p\text{-value} < 0.001$), indicating that project leadership was a real predictor in the model. The coefficient of determination (R^2) value of .334 showed that project leadership individually explained 33.4% variation in implementation of water projects. The adjusted R^2 explained 32.7% of the variation in project implementation and therefore the remaining 67.3% could be attributed to other factors not considered in the model. The correlation coefficient (R) of .578 detailed a positive relationship between project leadership and implementation of water projects. The standard error of .50529 revealed the deviation from the line of best fit.

The hypothesis to be tested was **H₀₁**: Project leadership has no significant influence on implementation of water projects in Kenya.

The survey results showed that there existed a positive relationship between project leadership and implementation of water projects in Kenya ($\beta_3 = .598$, $t = 3.833$, $p\text{-value} < 0.001$). The regression model fitted to test the relationship was;

$$Y = \beta_0 + \beta_3 X_3 + \varepsilon$$

Where;

Y = Implementation of Water projects

X₂ = Project scheduling

ε = Error term

The null hypothesis **H₀₂**: Project scheduling has no significant influence on implementation of water projects in Kenya was therefore rejected ($\beta_3 = .598$, $t = 3.833$, $p\text{-value} < 0.001$) and a conclusion drawn that project leadership (X₃) certainly influenced implementation of water projects (Y).

The model equation was;

$$Y = 3.415 + .598X_3$$

The beta coefficient for project leadership ($\beta_3 = .598$, $t = 3.833$, $p\text{-value} < 0.001$), deducing that for every single unit improvement in the index of project leadership, there was an improvement index of .598 units improvement in implementation of water projects as shown in Table 4.18(c).

Table 4.8: Regression Analysis Results on Project Leadership and Implementation of Water Projects

a) Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.578 ^a	.334	.327	.50529		
a. Predictors: (Constant), Project Leadership						
b. Dependent Variable: Implementation of Water Projects						
b) ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.182	1	12.182	71.239	.000 ^b

Residual	24.294	142	.171
Total	36.476	143	

a. Dependent Variable: Implementation of Water Projects

b. Predictors: (Constant), Project Leadership

c) Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.415	.411		8.301	.000
	Project Leadership	.598	.156	.578	3.833	.000

a. Dependent Variable: Implementation of Water Projects

The results concur with Zheng *et al.*, (2023) who carried out a bibliometric analysis on evolution and thematic breakthroughs in project leadership. The results of keyword co-occurrence analysis indicated that the research focus evolved from examining traits and competences to inspecting the effects of traditional leadership behaviours, and then considering context-specific leadership. The findings of thematic mapping and theoretical interpretation illustrated the potential directions of the competence comparison, new and appropriate leadership, and the interaction between leadership and context. The study advanced the field by providing a systematic review of project leadership, developing potential future directions for project leadership research and provided practical implications for career development and training.

The results of this study also agree with Olugboyega *et al.*, (2023) who examined project leadership functions and the associated behaviour for projects and project organisations. The study was premised on a model's validity which implied that each project leadership behaviour had its own value, as conditions and necessities dictated. The study assumed that a project leader could embrace project leadership by combining a few different project leadership functions and behaviours. The results indicated that project leadership also played a crucial role in resource allocation, initiating strategic decisions, and resolving conflicts that arise during the project lifecycle. Strong project leaders not only provided guidance but also cultivated a collaborative and positive work culture, encouraging innovation and adaptability.

From the local context, the current study agrees with Wainaina and Pedo (2023) who reviewed project leadership practices and implementation of water projects in Machakos County, Kenya. The study concluded that communication style had a significant effect on implementation of water projects in Kenya. In addition, the study concluded that leadership style had a significant effect on implementation of water projects in Machakos County, Kenya. Based on the findings, this study recommended that project top management needed to make effective and regular communication on the progress of projects to enhance performance.

4.7 Moderated Multiple Regression Analysis

This study carried out the moderated regression analysis and adopted the following model;

$$Y = \beta_0 + \beta_3 X_3 + \beta_i M + \varepsilon$$

Where;

M = moderating variable (project size)

Table 4.9: Moderated Model Summary

Model Summary ^c				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.578 ^a	.334	.327	.50529
2	.634 ^b	.402	.394	.41937

a. Predictors: (Constant), Project Leadership,

b. Predictors: (Constant), Project Leadership, Project Size

In Table 4.9, the findings presented in the model summary show that the value of adjusted R Square was 0.578 prior to introduction of the moderating variable which was project size. When the results are compared to those of model 2 after the introduction of the moderating variable which was project size, the value of adjusted R Square increased to 0.634 which demonstrated that 63.4% variation in implementation of water projects in Kenya could be attributed to changes in moderating project leadership. This means that remainder made up of 36.6% represented other applicable factors that were not included in the obtaining model but which also have a bearing on variation in implementation of water projects.

The study findings show that the moderated variables were significantly and positively related with implementation of water projects in Kenya which was supported by correlation coefficient (R) = .634, confirming the strong relationship between the dependent variable and moderated independent variable.

Table 4.10: Moderated ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.182	1	12.182	71.239	.000 ^b
	Residual	24.294	142	.171		
	Total	36.476	143			
2	Regression	13.040	2	6.570	65.109	.000 ^c
	Residual	23.436	138	.082		
	Total	36.476	141			

a. Dependent Variable: Implementation of Water Projects

b. Predictors: (Constant), Project Leadership,

c. Predictors: (Constant), Project Leadership, Project Size

Moderated ANOVA Table 4.10 presented results of the model showing it as significant because the p-value = .000 was less than the chosen significance of 0.05, and therefore the model was statistically significant in determining the influence of moderated project leadership on implementation of water projects in Kenya. Further, the F-calculated was 65.109 being greater than the F-critical ($F_{2,141} = 3.06$) which indicated that project leadership as moderated by project size could actually be applied to predict implementation of water projects in Kenya and also showing that the moderating variable was significant.

Table 4.11: Moderated Beta Coefficients

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.415	.411		8.301	.000
	Project Leadership	.598	.156	.578	3.833	.000
	(Constant)	3.620	.100		5.531	.000
	Project Leadership*		.104	.		
2	M	.649		.360	3.490	.000

4.7.1 Optimal Model

The moderated model was employed and the following models were fitted based on the model before moderation, and after moderated.

$$Y = 3.415 + 0.598X_1 \dots\dots\dots (\text{Before moderation})$$

$$Y = 3.620 + 0.649X_1 * M \dots\dots\dots (\text{Moderated})$$

The moderated model equation indicates that holding the moderated variable to a constant of zero project leadership and project size; implementation of water projects in Kenya would still occur at 3.620 units.

The study results show that the interaction of project leadership and project size had a positive influence on implementation of water projects ($\beta_1 M = 0.649$, $p\text{-value} = 0.000$), demonstrating that the influence was significant since the $p\text{-value}$ was less than the chosen significance level of 0.05. Therefore, introduction of the moderating variable project size on project leadership explained 0.649 units of implementation of water projects compared to 0.598 units explained before the variable was moderated, thus indicating that project size had a positive influence on project Leadership and implementation of water projects in Kenya. It therefore infers that an improvement in the interaction of project leadership and project size prompted an improvement in implementation of water projects in Kenya by 0.649 units.

4.8 Hypotheses Test Results

Table 4.12: Hypotheses Testing

Hypothesis	β	t	p-value	Decision
H₀₁: Project leadership has no significant influence on implementation of water projects in Kenya.	.598	3.833	.000	Reject H ₀₁ since $p\text{-value}$ is less than 0.05; (H ₀₁ : $\beta_3 \neq 0$).
H₀₂: Project size has no significant moderating influence on critical project management skills and implementation of water projects in Kenya.	3.242	5.551	.000	Reject H ₀₂ since $p\text{-value}$ is less than 0.05; (H ₀₂ : $\beta_5 \neq 0$).

4.9 Summary of Major Findings

The study was to analyze the influence of project leadership on implementation of water projects in Kenya. The study found that project leadership had a positive and significant influence on implementation of water projects. It was established that project leaders demonstrated clearly what was expected from the project team and therefore made it clear as to what deliverables were expected from the project teams. The study also established that there was cooperation between project managers and line managers in most project organizations, and therefore projects were facilitated from across the project organizations' top management. It was established that project leaders inspired the project teams in most project organizations to continuously achieve set goals and even go beyond, as that ensured that project objectives were met. The study noted that project managers and sponsors in most project organizations were knowledgeable in project management matters hence they chaperoned projects from a point of knowledge. However, this study found that there were divergent views on whether project organizations rewarded project team members who were innovative in their work, inferring that different project organizations treated their project teams differently

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions of the Study

The study concluded that Project leadership had a positive and significant influence on implementation of water projects in Kenya. Project leaders demonstrated clearly what was expected from the project team and made it clear as to what deliverables were expected from the project teams. Cooperation between project managers and line managers in most project organizations meant that projects were facilitated from across project organizations' top management. Project leaders inspired the project teams in most project organizations to continuously achieve set goals and even go beyond.

5.2 Recommendations of the Study

This study recommends that project leaders need to demonstrate clearly what is expected from the project team and therefore make it clear on what deliverables are expected from the project teams. The study also recommends that there should be cooperation between project managers and line managers in most project organizations, and projects need to be facilitated from across the project organizations' top management. It is recommended that project leaders should seek to inspire the project teams in project organizations to continuously achieve the set goals and even go beyond, as that ensures that project objectives are continuously met. The study recommends that project managers and sponsors in project organizations are knowledgeable in project management matters for them to be able to chaperone projects from a point of knowledge.

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I. Ethical Considerations

This study did not involve human participants or animals; therefore, ethical approval was not required.

II. Conflict of Interest

The authors declare no potential conflicts of interest related to this study.