



## Interpersonal Skills of Management Teams and Performance of Rural Road Projects in Dodoma, Tanzania

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### ABSTRACT

**Background:** Interpersonal skills of management teams have increasingly become a concern in the performance of public projects in Tanzania, particularly in rural road projects in Dodoma, where weaknesses in communication, conflict resolution, and leadership affect project outcomes.

**Objective:** This study examined how management team interpersonal skills influence the performance of public projects in Tanzania, with a focus on rural road projects in Dodoma, by assessing communication skills, conflict resolution abilities, and leadership skills.

**Method:** A quantitative approach was used, gathering data from 190 participants via questionnaire. Data analysis involved descriptive statistics, Spearman's correlation, simple regression analysis, and ANOVA using SPSS software.

**Result:** The results showed a significant positive correlation between communication skills (mean = 3.8872,  $r = 0.809$ ,  $p < 0.01$ ), conflict resolution abilities (mean = 3.9145,  $\beta = 0.876$ ,  $p < 0.001$ ), and leadership skills (mean = 3.9464,  $\beta = 0.891$ ,  $p < 0.001$ ) with project performance.

**Conclusion:** Effective communication, conflict resolution, and leadership skills play a critical role in enhancing public project performance in Tanzania, particularly in rural road projects.

**Unique Contribution:** The study demonstrates the importance of management team interpersonal skills as key determinants of performance in public infrastructure projects in Tanzania.

**Key Recommendation:** Improving communication skills, conflict resolution abilities, and leadership skills among management teams can lead to better outcomes in public infrastructure projects in Tanzania.

**Keywords:** interpersonal skills, public project, project management, rural roads.



## **INTRODUCTION**

Public projects are crucial for economic growth and infrastructure expansion in developing countries, depend significantly on the capabilities of management teams (Okoro, & Nwafor, 2015). Interpersonal skills including communication, empathy, negotiation, conflict resolution, teamwork, and leadership are essential for effective project management. Poor interpersonal skills can lead to delays, cost overruns, and compromised outcomes, highlighting their importance for project success (Geraldi et al., 2016). Corpus literature, such as Gicovi and Rugendo (2019) and the 2022 World Bank report, underscores the necessity of these skills in managing infrastructure projects in sub-Saharan Africa. Effective communication and collaboration are key for mitigating risks and securing stakeholder support. Geraldi et al., (2016) found that strong interpersonal skills within management teams improved performance in rural road projects in Tanzania by enhancing conflict resolution and stakeholder engagement.

Public projects are vital for economic development, and their success relies heavily on the interpersonal skills of management teams. This study focuses on how communication, teamwork, conflict resolution, negotiation, and leadership influence the performance of rural road projects in Dodoma, Tanzania. Prior studies show that strong interpersonal skills enhance collaboration, reduce delays, and improve project outcomes (Geraldi et al., 2016; Gicovi & Rugendo, 2019).

While Tanzania continues to invest in rural road development, persistent challenges remain due to planning weaknesses and limited resources (Komba & Mbogo, 2020). Existing research has mainly examined technical, financial, and policy aspects of infrastructure projects, with limited attention to the interpersonal competencies of management teams. Most studies also focus on different regions, broader project categories, or alternative methodological approaches, leaving a gap in understanding how interpersonal skills specifically affect rural road project performance within local government settings in Tanzania. This study addresses this knowledge gap by examining the contribution of management teams' interpersonal skills to public project performance, offering evidence that can strengthen project delivery in rural road initiatives.

## **OBJECTIVES OF THE STUDY**

- i. To determine the Influence of Management Team Communication Skills on performance of public Project in Dodoma, Tanzania.
- ii. To assess the Role of Conflict Resolution Abilities within Management Teams on performance of public Project in Dodoma, Tanzania.
- iii. To explore the effects of management leadership skills on performance of public Project in Dodoma, Tanzania.

## **LITERATURE REVIEW**

### **Influence of management team interpersonal skills**

Effective management of public projects, critical for societal advancement, hinges on interpersonal skills due to their complexity and diverse stakeholders. Studies, including Gicovi and Rugendo (2019), highlight that communication and conflict resolution are essential for successful stakeholder management. Transformational leadership, as explored by Muhammad et al. (2022), is also associated with project success. Enhanced collaboration and conflict resolution



improve stakeholder satisfaction and project quality (Gisele et al., 2023), while these skills contribute to personal well-being and job satisfaction (Gisele et al., 2023; Mwakagomele, 2022). Additionally, stakeholder engagement and digital tools (Waris et al., 2022) further optimize project outcomes. This review underscores the importance of interpersonal skills in improving project management.

### **Influence of Management Team Communication Skills**

Effective communication plays a vital role in public project success by enhancing stakeholder engagement, reducing delays, and improving performance outcomes (Larson & Gray, 2011). Strong communication skills are essential for managing risks, resolving conflicts, and fostering stakeholder support (Davis & Williams, 2019). Leadership styles that emphasize communication, such as transformational leadership, predict project success (Gisele et al., 2023). Effective communication contributes to meeting deadlines, maintaining budgets, and satisfying stakeholders, underscoring its importance in project management and the need for further research (Smith et al., 2021).

### **Role of Conflict Resolution Abilities within Management Teams**

Effective conflict resolution is essential for successful project management, particularly in public projects with varied stakeholders. Research indicates that tailored conflict resolution strategies improve project outcomes by enhancing decision-making and reducing delays (Chukwuemeka et al., 2022; Gicovi & Rugendo, 2019). Studies on rural road projects in Dodoma reveal that skilled management teams with collaborative conflict resolution abilities experience fewer disruptions and better performance (Komba & Mbogo, 2020). Additionally, Gisele et al. (2023) associate conflict resolution skills with increased stakeholder satisfaction. Empirical evidence underscores the importance of these skills, suggesting that future research should investigate their impact in different project contexts.

### **Effects of management leadership skills**

The literature highlights the critical role of transformational leadership in public project success, emphasizing its positive impact on deadlines, budget, and quality. Studies by Bass and Riggio (2019), Fetene Getachew (2022), Mwakagomele (2022), and Waris et al. (2022) demonstrate how leadership influences team collaboration, stakeholder satisfaction, and conflict resolution. Effective conflict management, in particular, is linked to better project outcomes. Doe and Roe (2021) underscore the importance of leadership in stakeholder engagement. The review suggests leadership development and training for project managers, advocating for research on leadership's influence on project performance and further refinement of current findings.

## **THEORETICAL REVIEW**

The study employed Bass and Riggio's Transformational Leadership Theory (2019) to illustrate how inspirational leadership enhances team dynamics and project performance, addressing gaps in communication and collaboration, especially in rural road projects in Dodoma. It also adopted Contingency Theory (Fiedler, 1967), emphasizing the need for adaptable leadership styles to meet project-specific needs. This theory, supported by research from Gicovi and Rugendo (2019) and Mwakagomele (2022), provides flexibility in leadership amidst varying conditions.



Additionally, the Team Effectiveness Model (Hackman and Morris, 1976) was used to evaluate and improve team performance, focusing on cohesion, communication, and decision-making, with validation from studies like Waris et al. (2022).

## **EMPIRICAL RESEARCH**

Empirical studies demonstrate that management team skills significantly influence public project success. Gicovi and Rugendo (2019) in Kenya found that interpersonal skills, including communication and conflict resolution, enhanced coordination and efficiency, while Muhammad et al. (2022) reported that trust and transformational leadership improved team cohesion and project outcomes in China. Mwakagomele (2022) confirmed similar results in Tanzanian projects. Effective communication reduces delays and strengthens stakeholder engagement (Davis & Williams, 2019), while conflict resolution enhances decision-making and satisfaction (Chukwuemeka et al., 2022; Komba & Mbogo, 2020; Gisele et al., 2023). Leadership, particularly transformational style, promotes collaboration, timely delivery, and project performance (Fetene Getachew, 2022; Waris et al., 2022; Johnson & Peterson, 2019). However, most studies focus on corporate or community settings, leaving a gap regarding how these skills affect public project implementation in Tanzanian local government authorities.

## **METHODOLOGY OF RESEARCH**

This study was conducted in Dodoma, Tanzania. It examined how management team interpersonal skills impact rural road project performance by TARURA, TANROADS, and the Dodoma Council. Utilizing a quantitative approach, data were collected via structured questionnaire from 190 stakeholders, with a sample of 128 via stratified random sampling. Regression analyses assessed the relationship between skills like communication, conflict resolution, and leadership with project outcomes. Statistical and expert validation ensured data reliability and validity, aligning with established methodologies to evaluate the impact on project success.

## **RESULTS**

### **Descriptive Statistics Results for communication Skills Variable on Performance of Public Project**

#### **Communication effectiveness**

In this study, descriptive statistics were calculated to analyze responses regarding the effectiveness of communication within management teams.

**Table 1: Descriptive Statistics Results**

<b>Variable</b>	<b>Mean</b>
Effectiveness of Communication	4.0
clearly communicated	3.9
communication channels	3.9
Written communication	3.9



The mean score for communication effectiveness is 3.83 (SD = 0.988), reflecting high perceived effectiveness. "Clarity of important information" scored 4.00 (SD = 0.970), showing clear communication. Satisfaction with channels is 3.82 (SD = 0.959), and written communication effectiveness is 3.89 (SD = 0.928).

### Frequency of communication

Table 2 shows management teams engage in regular formal communication (M = 3.96), find it sufficient for success (M = 3.93), and use virtual tools effectively (M = 3.83).

**Table 2: Descriptive Statistics**

Variable	Mean
Formal communication sessions or meetings regularly.	3.96
The frequency of communication	3.93
Responsive in communication.	3.85
Virtual communication tools	3.83

The mean scores above in the table 2 show the management perceives their communication as above average.

### Interpersonal communication skills

The descriptive statistics table below provides an overview of the responses to four statements regarding interpersonal communication skills within management teams.

**Table 3: Descriptive Statistics**

Variable	Mean
The interpersonal communication skills of the members	3.89
Actively listen and understand each other's	3.88
Empathetic communication	3.86
Conflicts are frequently resolved amicably	3.88

The mean scores for interpersonal communication skills in management teams are 3.86 to 3.89, indicating high effectiveness with moderate variability, peaked distribution, and clustered higher agreement.

### Communication Proactiveness

The table below presents descriptive statistics for four items related to communication Proactiveness within management teams, where higher scores indicate greater agreement.

**Table 4: Descriptive Statistics**

Variable	Mean
Proactive communication issues	3.88
Management addressing challenges	3.85
Protocols promoting communication	3.95
Feedback mechanisms	3.94



The mean scores were: proactive communication issues (3.88), management addressing challenges (3.85), protocols promoting communication (3.95), feedback mechanisms (3.94). Distribution was nearly normal.

**Test for data Normality for objective number one**  
**Table 5: Normality Data Test**

Tests of Normality						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic <sup>c</sup>	Df	Sig.
Communication Effectiveness	.195	190	.000	.911	190	.000
Frequency of Communication	.182	190	.000	.913	190	.000
Interpersonal Communication Skills	.196	190	.000	.897	190	.000
Communication Proactiveness	.180	190	.000	.896	190	.000
Conflict Resolution Effectiveness	.194	190	.000	.921	190	.000
Timeliness in Conflict Resolution	.154	190	.000	.942	190	.000
Collaborative Problem-Solving	.195	190	.000	.923	190	.000
Preventive Conflict Measures	.171	190	.000	.924	190	.000
Leadership Effectiveness	.175	190	.000	.898	190	.000
Team Motivation and Cohesion	.178	190	.000	.916	190	.000
Decision-Making Efficiency	.172	190	.000	.920	190	.000
Adaptability	.193	190	.000	.908	190	.000

Both the Kolmogorov-Smirnov and Shapiro-Wilk tests showed significant p-values ( $p < .001$ ), indicating non-normal distributions. Thus, Spearman's Rank Correlation Coefficient was used to assess correlations.



**Spearman's Rank Correlation analysis for determining the Influence of Management Team communication skills on Performance of Public Project**

**Table 6: Spearman's Rank Correlation Results**

Correlations			Public Project Performance	Communication Effectiveness	Frequency of Communication	Interpersonal Communication Skills	Communication Proactiveness
Spearman's rho	Public Project Performance	Correlation Coefficient	1.000	.706**	.740**	.712**	.773**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	190	190	190	190	190
	Communication Effectiveness	Correlation Coefficient	.706**	1.000	.752**	.828**	.843**
		Sig. (2-tailed)	.000	.	.000	.000	.000
		N	190	190	190	190	190
	Frequency of Communication	Correlation Coefficient	.740**	.752**	1.000	.777**	.799**
		Sig. (2-tailed)	.000	.000	.	.000	.000
		N	190	190	190	190	190
	Interpersonal Communication Skills	Correlation Coefficient	.712**	.828**	.777**	1.000	.803**
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	190	190	190	190	190
	Communication Proactiveness	Correlation Coefficient	.773**	.843**	.799**	.803**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	190	190	190	190	190

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

The analysis reveals a significant positive correlation between management team communication skills and public project performance. Spearman's rho coefficients show that communication effectiveness ( $r = .706$ ), frequency ( $r = .740$ ), interpersonal skills ( $r = .712$ ), and Proactiveness ( $r = .773$ ) all positively impact project outcomes.

The implications are significant. Organizations should enhance management teams' communication skills for public projects. Investing in training improves project success through better dialogue and relationships. Open communication reduces conflicts and ensures smoother execution. Research supports communication's key role in project outcomes (Jones & Brown, 2019). Effective communication improves coordination, problem-solving, and decision-making



(Garcia & Serra, 2020). Prioritizing communication practices meets stakeholder expectations and drives success.

## **Descriptive Statistics Results for Conflict Resolution Abilities Variable on Performance of Public Project**

### **Conflict Resolution Effectiveness**

Using Conflict Resolution Effectiveness as the indicator. The following descriptive statistics present the findings:

**Table 7: Descriptive Statistics Results**

<b>Variable</b>	<b>Mean</b>	<b>Std. Deviation</b>
The management team handles conflicts promptly and efficiently.	3.9662	0.74879
The management team effectively resolves conflicts when they arise.	3.8316	0.90116
Conflicts are resolved to the satisfaction of all involved parties.	3.9202	0.75922
Effectiveness of handling conflicts while maintaining positive relationships	3.9382	0.78372

Mean scores for conflict resolution effectiveness were 3.74 to 3.91, showing positive perceptions, Standard deviations (0.929–1.114) indicated variability.

### **Timelines in conflict resolution**

Conflict resolution timeliness within management teams is summarized below.

**Table 8: Descriptive Statistics**

<b>Variable</b>	<b>Mean</b>
Conflict within the management team is resolved quickly.	3.79
Timely conflict resolution is crucial for the project's success.	4.1
I am satisfied with the speed of conflict resolution within the management team.	3.86
Conflicts often remain unresolved for an extended period within the management team.	3.93

Table 3 shows that respondents generally agree on quick conflict resolution (Mean = 3.79), value timeliness (Mean = 4.10), and are satisfied (Mean = 3.86), though concerns remain (Mean = 3.93).

### **Collaborative Problem Solving**

The table shows responses from 190 participants on collaborative problem-solving in management teams.



**Table 9: Descriptive Statistics**

Variable	Mean
Collaboratively approaches problem-solving during conflicts.	3.91
Satisfaction on solving problems collaboratively	3.85
Involvement of stakeholders in the problem-solving process during conflicts.	3.83
Collaborative problem-solving leads to better conflict resolution outcomes.	4.16

Mean scores for collaborative problem-solving range from 3.83 to 4.16, showing a positive view. The highest score ( $M = 4.16$ ) was for improved conflict resolution.

### **Preventive conflict measures**

The table presents descriptive statistics for preventive conflict measures, an indicator of conflict resolution abilities within management teams.

**Table 10: Descriptive Statistics**

Variable	Mean
Implementation of measures	3.86
Effectiveness of measures.	4.07
Satisfaction of measures taken.	3.87
Proactive conflict prevention measures	4.13

Mean scores for preventive conflict measures are positive: implementation (3.86), effectiveness (4.07), and satisfaction (3.87). Proactive prevention significantly enhances harmony with a score of 4.13.

## **7.3 Descriptive Statistics Results for Leadership Skills Variable on Performance of Public Project**

### **Leadership Effectiveness**

Table 11 present's descriptive statistics for Leadership Effectiveness as an indicator of Leadership Skills



**Table 11: Descriptive Statistics Results**

Variable	Mean
The leadership within my management team effectively guides project activities.	3.9662
The leadership skills of the management team effectively contribute to resolving conflicts and challenges encountered during project execution.	3.9487
The leadership style significantly contributes to the achievement of project vision and goals.	3.9333
I feel inspired and motivated by the leadership provided within the team.	3.9461

The table presents leadership effectiveness ratings (1-5 scale). Mean scores (3.90-3.98) suggest positive leadership perceptions, with standard deviations indicating variability.

#### **Team motivation and cohesion**

Table 12 shows the descriptive statistics for team motivation and cohesion as indicators of leadership skills and their impact on public project performance.

**Table 12: Descriptive Statistics**

Variable	Mean
The level of motivation and cohesion.	3.85
The leadership effectively motivates and fosters cohesion among team members.	3.97
I feel highly motivated as a member of the management team under the current leadership.	3.89
The team demonstrates strong cohesion in working towards common project goals.	4.02

Descriptive statistics indicate team motivation and cohesion reflect leadership skills. Scores ranged from 3.85 to 4.02, with "Team Cohesion towards Project Goals" scoring highest (M = 4.02).

#### **Decision making effectiveness**

Table 13 presents the descriptive statistics for the research results related to decision-making effectiveness as an indicator of leadership skills in the context of public project performance.



**Table 13: Descriptive Statistics**

Variable	Mean
The decision-making process within my management team is efficient and timely.	3.86
Timely decision-making positively impacts project outcomes.	4.1
The decision-making process within the management team is transparent.	3.89
The leadership effectively communicates decisions to the team and ensures understanding.	3.94

Mean scores for decision-making effectiveness range from 3.86 to 4.10, indicating positive perceptions of efficiency, timeliness, transparency, and communication in the process.

#### **Adaptability**

The table 14 presents the descriptive statistics for adaptability as an indicator of leadership skills.

**Table 14: Descriptive Statistics result**

Variable	Mean
The management team demonstrates adaptability in response to project challenges.	3.99
The leadership well to changes and challenges in project implementation.	3.98
The leadership effectively guides the team through unforeseen circumstances.	3.97
The management team adjusts strategies and plans effectively	3.93

The mean scores for adaptability as a leadership skill are high (3.93–3.99/5), indicating strong perceptions of management’s adaptability.

#### **7.4 Linear Regression Analysis Assumption for Objective two and Three**

Multiple linear regression was used to analyze eight independent variables. Collinearity was assessed via VIF (3.337 to 6.263) and Tolerance, confirming no multicollinearity.

**Table 15: VIF and Tolerance statistics results for objective two**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Conflict Resolution Effectiveness	0.233	4.299
	Timeliness in Conflict Resolution	0.187	5.334
	Collaborative Problem-Solving	0.16	6.263
	Preventive Conflict Measures	0.3	3.337



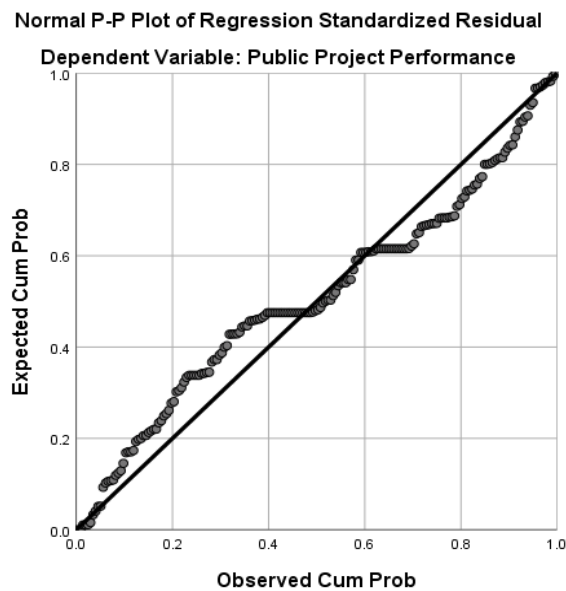
**Table 16: VIF and Tolerance statistics results for objective three**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Leadership Effectiveness	0.21	4.769
	Team Motivation and Cohesion	0.167	5.982
	Decision-Making Efficiency	0.188	5.309
	Adaptability	0.165	6.054

The homoscedasticity check confirmed consistent variances across independent variables, with residuals evenly dispersed around 0 in the plot, indicating the assumption holds.

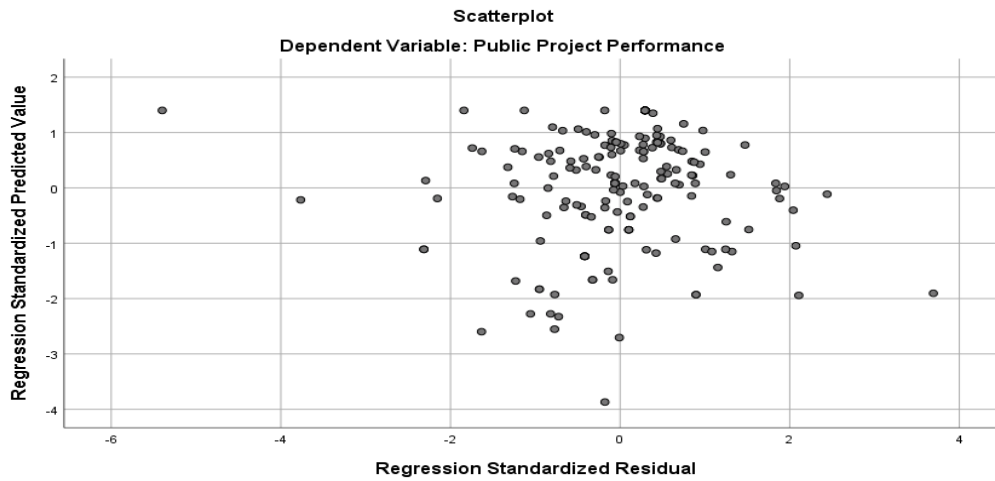
### Objective two Conflict Resolution Abilities

#### 1. P-Plot Regression Assumptions Testing Results for Conflict Resolution Abilities



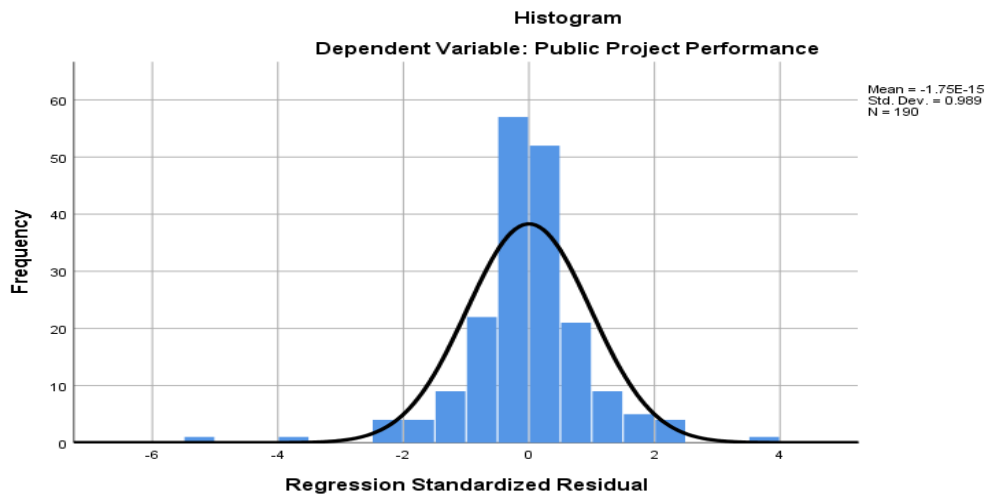
**Figure 1: Normal P-Plots**

#### 2. Homoscedasticity Regression Assumptions Testing Results



**Figure 2: Scatter plot**

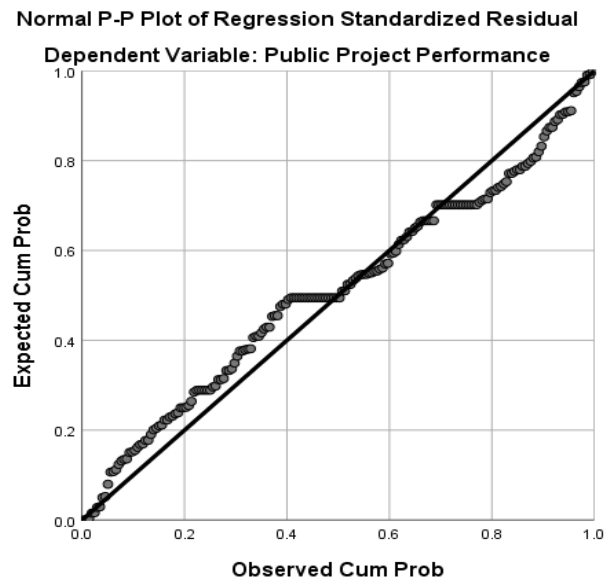
### 3. Normality Histograms Regression Assumptions Testing Results



**Figure 3: Histogram**

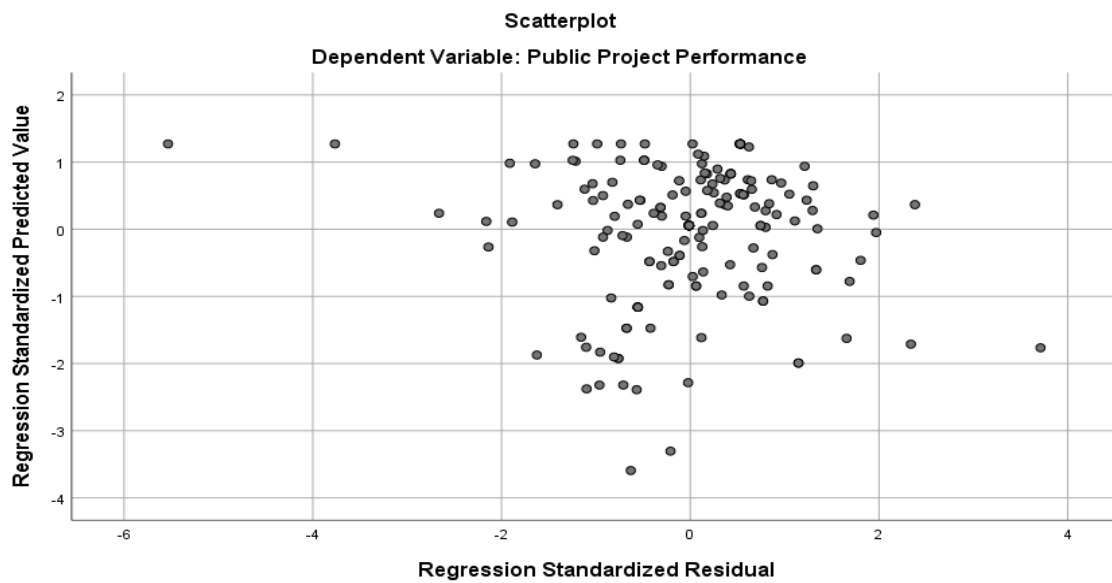
### Objective Three Leadership Skills

#### 1. P-Plot Regression Assumptions Testing Results for Leadership Skills



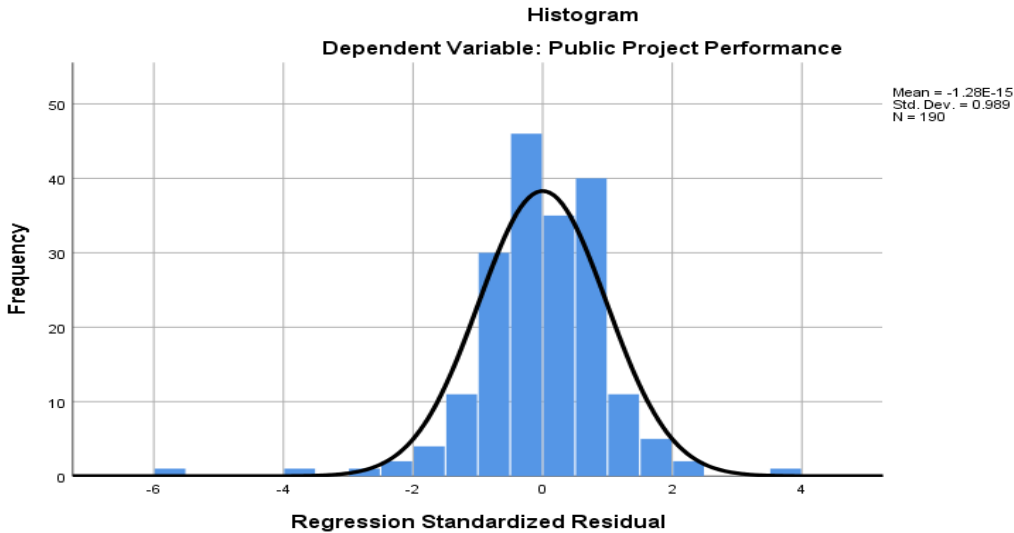
**Figure 4: Normal P-Plots**

## 2. Homoscedasticity Regression Assumptions Testing Results



**Figure 5: Scatter plot**

**3. Normality Histograms Regression Assumptions Testing Results for Leadership Skills**



**Figure 6: Histogram**

**7.5 Linear Regression Analysis Result for the Assessment of the Role of Conflict Resolution Abilities within Management Teams on Performance of Public Project**

**Model Summary**

The model summary shows a strong correlation ( $R = .886$ ) between predictors and Public Project Performance, explaining 78.5% of the variance with minimal autocorrelation (Durbin-Watson = 1.846).

**Table 17: Model Summary Results**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.886 <sup>a</sup>	.785	.780	.35140	1.846
a. Predictors: (Constant), Preventive Conflict Measures, Conflict Resolution Effectiveness, Timeliness in Conflict Resolution, Collaborative Problem-Solving					
b. Dependent Variable: Performance of Public Project					

The ANOVA results ( $F(4, 185) = 168.958, p < .001$ ) confirm that the predictors significantly impact public project performance.



**Table 18: ANOVA Table**

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	83.455	4	20.864	168.958	.000 <sup>b</sup>
	Residual	22.845	185	.123		
	Total	106.300	189			
a. Dependent Variable: Public Project Performance						
b. Predictors: (Constant), Preventive Conflict Measures, Conflict Resolution Effectiveness, Timeliness in Conflict Resolution, Collaborative Problem-Solving						

The Coefficients table shows unstandardized and standardized coefficients, t-values, and significance levels. The constant term ( $B = 0.521$ ,  $p < 0.001$ ) indicates baseline performance when predictors are zero.

**Table 19: Coefficients table**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.521	.142		3.672	.000
	Conflict Resolution Effectiveness	.160	.059	.193	2.735	.007
	Timeliness in Conflict Resolution	.066	.078	.067	.848	.397
	Collaborative Problem-Solving	.254	.082	.265	3.108	.002
	Preventive Conflict Measures	.395	.058	.424	6.816	.000

Preventive Conflict Measures (Beta = 0.424) and Collaborative Problem-Solving (Beta = 0.265) are the strongest predictors of Public Project Performance. Conflict Resolution Effectiveness is also significant, while Timeliness is not.

### **Linear Regression Analysis Result for the Exploring the Effects of Management Leadership Skills on Public Project Performance**

#### **Model Summary**

The model summary shows regression results on how Adaptability, Leadership Effectiveness, Decision-Making Efficiency, and Team Motivation affect Public Project Performance.



**Table 20: Model Summary Results**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.900 <sup>a</sup>	.811	.807	.32988	1.951
a. Predictors: (Constant), Adaptability, Leadership Effectiveness, Decision-Making Efficiency, Team Motivation and Cohesion					
b. Dependent Variable: Public Project Performance					

The model shows a strong correlation ( $R = .900$ ) between independent variables and public project performance, with  $R^2 = .811$  and no significant autocorrelation (Durbin-Watson = 1.951).

The ANOVA table (Table 21) provides further insight into the significance of the model.

**Table 21: ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	86.168	4	21.542	197.958	.000 <sup>b</sup>
	Residual	20.132	185	.109		
	Total	106.300	189			
a. Dependent Variable: Public Project Performance						
b. Predictors: (Constant), Adaptability, Leadership Effectiveness, Decision-Making Efficiency, Team Motivation and Cohesion						

The ANOVA table shows the model's F-value is 197.958 with a p-value of .000, indicating significant predictors for public project performance compared to no predictors.

The coefficients table (Table 22) provides detailed information about the contribution of each predictor.



**Table 22: coefficients table results**

Model		Unstandardized Coefficients		Standardized Coefficient	T	Sig.
		B	Std. Error			
1	(Constant)	.720	.119		6.061	.000
	Leadership Effectiveness	.031	.060	.036	.514	.608
	Team Motivation and Cohesion	.186	.066	.220	2.807	.006
	Decision-Making Efficiency	.195	.065	.221	2.998	.003
	Adaptability	.409	.069	.465	5.909	.000

The coefficients table shows the intercept as 0.720. Significant predictors include Adaptability (B=0.409, p=0.000), Decision-Making Efficiency (B=0.195, p=0.003), and Team Motivation (B=0.186, p=0.006), while Leadership Effectiveness is not significant.

## DISCUSSION

### Communication Skills Variable on Performance of Public Project

Effective communication is essential for project management success, reducing misunderstandings and improving performance (Kerzner, 2022; PMI, 2021). Written communication plays a key role in documentation (Turner, 2020), though tool usage can improve (Davis & Williams, 2019). Communication theories highlight the need for strong interaction to boost team collaboration (Giles, 2019). High interpersonal skills, including listening and conflict resolution, are vital (Robbins & Judge, 2019). Proactive communication fosters issue resolution, better decision-making, and stakeholder trust (Kerzner, 2022). The findings suggest that proactive interaction fosters trust and timely decision-making, extending knowledge on practical communication strategies in public projects.

### Conflict Resolution Abilities Variable on Performance of Public Project

Management teams are generally effective in conflict resolution, a key factor in team cohesion and project success, though effectiveness varies across teams (Smith et al., 2021). Despite overall satisfaction with resolution speed, prolonged conflicts can harm performance, highlighting the need for structured strategies (O'Neill et al., 2020). Collaborative problem-solving is vital, with research supporting its benefits in performance and stakeholder engagement (Smith et al., 2021). Proactive conflict prevention enhances team dynamics, reducing disruptions and improving success rates (Jones & Brown, 2019). The study highlights that structured prevention strategies and team collaboration are crucial for enhancing performance.



### **Leadership Skills Variable on Performance of Public Project**

Leadership effectiveness in management teams is linked to positive outcomes in conflict resolution, guidance, and goal alignment, though lower scores in inspiration suggest further study on employee motivation is needed (Johnson & Peterson, 2019). Effective leadership enhances team cohesion and motivation through supportive cultures and communication, supported by transformational leadership theory (Bass, 1985). Timely decision-making and transparency are essential for public project success (Smith et al., 2021). Adaptability, crucial for managing challenges, aligns with transformational leadership (Bass & Riggio, 2019). A possible explanation could be that public project managers in the study context may focus more on procedural and technical guidance than on inspiring their teams, due to bureaucratic constraints. This insight extends knowledge by indicating that leadership effectiveness in public projects may depend not only on motivational techniques but also on context-specific managerial approaches.

### **Discussion of Linear Regression Analysis for Conflict Resolution Abilities Variable on Performance of Public Project**

The study reveals that preventive conflict measures most significantly improve public project performance, emphasizing the importance of addressing potential conflicts early. Collaborative problem-solving enhances outcomes, while the quality of conflict resolution is crucial. Timeliness in resolving conflicts did not directly impact performance, suggesting that resolution quality matters more than speed. These findings align with existing literature on conflict management's role in project success (Jones & George, 2020). These results extend existing literature by emphasizing that quality-focused and preventive conflict management strategies are particularly effective in public project contexts, offering practical guidance for managers seeking sustainable project success.

### **CONCLUSION**

In conclusion, effective communication, conflict resolution abilities, and leadership skills are crucial for enhancing the performance of public projects in Tanzania, especially rural road projects in Dodoma. Strong positive correlations were observed among these factors, with regression analyses indicating that both conflict resolution and leadership skills are significant predictors of project performance. Effective communication ensures clarity, teamwork, and timely decision-making, while conflict resolution improves outcomes through timely and collaborative problem-solving. Leadership skills drive project success by adapting to changes, making efficient decisions, and motivating teams. Overall, these elements are vital for better project performance and achieving project goals.

### **RECOMMENDATION**

To improve public project performance, invest in communication training, implement conflict resolution workshops, and develop leadership programs. Promote team collaboration and conduct regular performance evaluations. These measures can boost management capabilities and support Tanzania's socio-economic growth.



### **Ethical clearance**

This study was approved by the relevant institutional ethics committee.

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### **Conflict of Interest**

The authors declare no competing interests.

### **Authors' Contributions**

Both authors jointly participated in drafting the proposal, collecting data, conducting analysis, and preparing the final report.

### **Availability of data and materials**

The datasets on which conclusions were made for this study are available on reasonable request.

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