



Effect of Project Manager's Soft Skills on the Performance of Harare –Masvingo - Beit Bridge Road Construction Project in Zimbabwe

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Abstract: *The general objective of the study was to assess the influence of Project Managers (PM) Soft Skills on Performance of Harare-Masvingo-BeitBridge Road Construction Project in Zimbabwe. The study used descriptive and correlation design. The Questionnaire was the main method of data collection. SPSS 25 was used for Data Analysis to calculate Pearson Correlation Coefficient; Regression Analysis and descriptive statistics such as standard deviation, frequencies, mean and percentages. The results showed that Project Manager's Leadership Skills, Communication Skills and Negotiation skills significantly influenced project performance and there was strong positive correlation between the three soft skills and project performance and further the three soft skills were significant predictors of project performance. The Regression coefficients showed that for every one-unit increase in communication skills, project performance was expected to increase by 0.269 units. Similarly, a one-unit increase in Leadership Skills corresponded to a 0.326 -unit increase in project performance, illustrating the impact of leadership on achieving project success. Additionally, the negotiation skills predictor exhibits a coefficient of where a unit increase in negotiation skills will result in 0.328-unit increase in project performance. The three soft skills indeed influence project performance. Based on these findings, it is recommended that Harare - Masvingo - BeitBridge Road Construction Project should invest in targeted training programs to improve communication, leadership, and negotiation skills among Project Managers.*

Keywords: *Project Managers Soft Skills, Performance of Road Construction Project, Leadership skills, Communication Skills, Negotiation Skills*

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1. Introduction

Soft skills are not tied to a specific job function but rather enhance an individual's ability to work well with others to achieve personal and organizational goals. Parlamis and Monnot (2019) listed soft skills like leadership, teamwork, self-awareness, conflict management, communication, and getting along with others stating their importance in success of individuals, teams and organizations.

Projects around the world, including in Zimbabwe, require a project manager who helps coordinate efforts of team members undertaking various tasks towards the attainment of project success. The PM training undertaken for the Project Management qualification primarily focuses on management concepts such as the Problem Tree, Work Breakdown Structure, Risk Management, Critical Path, Resource Allocation, Project Planning, and Project Monitoring and Evaluation. These sessions equip participants with technical or 'hard' skills, while soft skills (SL) are minimally addressed, if at all. These are important for managing people's relations and

ensuring issues arising from human contact can be managed as the project is being implemented.

PMs involved in Zimbabwe, Harare – Beit Bridge Road Construction Project require the requisite soft skills that can contribute to success of a project. Over the past decade, the rehabilitation of the Chirundu –Harare-Masvingo -Beit Bridge Road had been on Government of Zimbabwe's plans since the road was constructed in 1962. Harare -Masvingo -Beitbridge road requires upgrade and refurbishment to help cope with increased traffic flow due to economic development and increased trade with Southern African Development Community (SADC) states and link to the Northern Corridor through Chirundu Border Post.

According to Herald (2023), an Austrian Company Geiger International was awarded the tender to undertake road construction works along Chirundu-Harare-Masvingo -Beit bridge, at an estimated cost of US\$2.7 Billion. The groundbreaking ceremony was undertaken in May 2017. Since the groundbreaking ceremony, there was no progress on the construction of the road and the contract was cancelled in 2018. After the cancellation of the contract, five Zimbabwean companies (Tensor Systems, Masimba Holdings, Bitumen World Company, Fossil Company and Exodus Company) were awarded contracts to undertake the road construction work for Harare -Masvingo -Beit Bridge Road.

Once completed, Harare -Masvingo -BeitBridge road will be expected to meet the SADC standards for roads. The road will help in the transportation of goods between Zimbabwe and South Africa and serve as link with the North Corridor. Shahhosseinia, Afshara, and Amirib (2018) defined project failure as situation when project goes over the planned budget, it uses more time than was expected and in some instances the project is not concluded. Mathabire and Dzingirai (2020) observed megaprojects delays and failure in Zimbabwe due to political interference, corruption, inadequate resources, economic sanctions, bureaucracy, policy gaps and inadequacies, constant change of management and lack of flexibility on planning.

Ngendakumana and Kakono (2020) identified major factors leading to delays in Public Service Construction projects in Zimbabwe which were lack of funds and materials; project variations; slow decision making; project management problems; poor communication; bad weather; and labour disputes. Ngulube, Tatano and Samaddar (2024) identified non-consultation with the beneficiaries on relocation and housing construction issues; failure to consider livelihoods of beneficiaries; politicization of projects; cultural beliefs; place attachment; and delay in project completion as factors that contributed to the failure of Tsholotsho relocation project. Moyo and Chigara (2022) identified causes of projects failing to stay within budget that included currency fluctuations, poor financial management,

economic instability climate, excessive use of prime cost and provisional amounts, project complexity, duration risks and project managers' skills in areas like risk management.

Despite the critical influence of Project Managers' Soft Skills on the performance of construction projects, there has not been any comprehensive research undertaken on the specific influence of Project Managers' Soft Skills on the performance of construction projects in Zimbabwe. Previous studies have focused on various aspects of Project Management excluding the influence of Project Managers' Soft Skills on a Road Construction Project in Zimbabwe. This study aimed to address knowledge deficiencies in this area.

The study assessed the influence of Project Managers' Soft Skills on performance of Harare -Masvingo -Beit Bridge Road Construction Project in Zimbabwe.

The specific Objectives of the Study are:

1. To determine the effect of Project Manager's Leadership skills on the performance of Harare - Masvingo - Beitbridge Road Construction Project.
2. To examine the effect of Project Manager's Communication Skills on the performance of Harare - Masvingo - Beitbridge Road Construction Project.
3. To assess the effect of Project Manager's Negotiation Skills on the performance of Harare - Masvingo - BeitBridge Road Construction Project.

The study tested the null hypotheses listed below:

Ho1: The PM's Leadership Skills have no influence on the performance of Harare - Masvingo - BeitBridge Road Construction Project.

Ho2: The Communication Skills employed by the Project Managers have no influence on the performance of Harare - Masvingo - BeitBridge Road Construction Project.

Ho3: The Negotiation Skills employed by Project Managers do not influence the performance of Harare - Masvingo - BeitBridge Road Construction Project.

2. Literature Review

2.1 Theoretical Review

Soft Skills were defined as abilities acquired from various learning situations that individuals encounter, which can enhance sociability, aid in community

integration, or potentially hinder integration (Mwakagomele, 2022). Five Theories were used in the theoretical review of Soft Skills and Project Performance: Fiedler's Contingency Theory of Leadership, Attribution Theory, Game Theory, and the Theory of Constraints.

2.1.1 Goal Setting Theory (GST)

This theory was proposed by Locke and Latham in 1964, and it underwent further research to refine it. The theory is used to explain human relations in organizations, motivation and managing employees' work towards the attainment of set goals. (Locke & Latham, 2019). Jeong, Healy, and Mcewan (2021) acknowledged that GST has been a very useful and popular theory used when setting goals. Singhi, Mohnert, and Prystawski (2023) noted that managers should develop goals and objectives that are achievable. Mwakagomele (2022) observed that the theory acknowledged that poor objectives result in problems when evaluating soft skills.

Gogoi and Baruah (2021) observed the need for carefully setting specific and challenging goals to facilitate attainment of the intended results. Mihai: Florina and Alexandru (2021) reviewed studies done on the use of goal setting theory in the sports sector and found out that the theory contributed towards improved performance of athletes. Indeed (2023) noted that clear goals contribute to increased worker productivity, clarity in work direction, promote employees' involvement, and facilitate two-way communication between managers and the workers. The theory shortfalls are that difficult objectives demotivate employees and may lead to the use of unorthodox working methods when workers attempt to undertake the work and be successful.

The goals need to be right; provide opportunity for review as well as measuring progress of implementation and lead to improved work outcome. The authors encouraged the involvement of employees in the setting of the goals as this created ownership and motivated them to seriously perform tasks assigned (Gkizani & Galanakis, 2022). The Goal Setting Theory was linked to the study as it emphasized the importance of Project Managers being able to develop clear and achievable goals that motivated workers during the execution of the Harare Masvingo BeitBridge Road Construction Project.

2.1.2 Fiedler's Contingency Theory

The Contingency Theory was advanced by Fred Fiedler in 1964, and many researchers have attested to the theory's successful application in explaining leadership practices. Using the Least Preferred Coworker (LPC) scale and known profile of employees, managers get the best core worker to work on a particular task (De Souza, 2020). Ward (2021) noted that the theory provides insight on how to select and match leaders, with work environment situations. The theory identified task

oriented and relationship-oriented leadership styles. Relationship oriented leaders have high LPC made up of mainly personal skills that help in the creation of good relations and is successfully applied in high task activities. Task oriented leadership works well where the task is not clear, and the leader has strong power (Saha, 2023).

Mind Tools (2024) noted that Fiedler saw leadership as a constant, measurable on a scale he developed and that there would be one effective style in dealing with particular situation at the workplace. The Leader assesses the situation at hand and applies the leadership style suiting that scenario. The theory offers predictable leadership outcomes, provided good insight to leaders, promoted communication with employees and valued workers. The major weakness of the model is that it does not give guidelines to leaders on how they should operate, and it has a bad impact on workers (Li, Lu & Zhang, 2022).

The Contingency Theory of Leadership was applied to help Project Managers address task-related situations, manage relationships with employees using the Least Preferred Co-worker (LPC) scale, and recognize employees, among other situations encountered during the road construction project. Project Managers with adaptable contingent leadership skills were expected to work effectively in situations where their leadership styles were most applicable.

2.1.3 Attribution Theory

The Attribution theory was proposed by Fritz Heider in 1958. It helps in understanding one's own and other people's behavior through enquiring on the causes and the effects. The theory incorporates cognitive, social and emotional aspects that influence behavior (Asemah, Nwammuo & Uwaoma, 2023).

Malle (2022) noted the existence of outcomes of success and failure and the underlying reasons. According to the theory, behavior can be due to intentional and unintentional causes. Behavior is also a result of internal attribution factors like mood and external attribution factors like the situation or environment. The communication that is transmitted through attribution is prone to errors, high level factors influencing behavior were excluded from the theory, interaction between people was not explained and the theory did not address factors like culture and tradition and their influence on attribution (DelGreco, Denes, Davis, & Webber, 2021).

The Attribution Theory gives a message on the underlying reasons for an individual's and someone's behavior. It was important as it helped in explaining the behavior of workers; when the causes were known by the Manager, these could be addressed and result in

improved performance. Using attribution, managers were able to understand the specific needs of each employee, ensuring appropriate treatment and improved performance outcomes.

2.1.4 Game Theory

The theory was put forward by John von Neumann and Oscar Morgenstern in 1944. The type of games played within the theory can be cooperative where players work together; or non-cooperative when players try to outwit each other and or hybrid when some players join forces to compete with the others (Burguillo, 2019). The theory acknowledges that any decision made affects other people. The “game” involves players, strategies, choices, information and payoffs. For cooperative game payoff satisfies all the players, and for non-cooperative games, the player makes a decision to maximize his own pay off at the expense of a competitor (Nath, Srikanth, & Babu, 2020).

Karlsson (2021) observed that the theory has been used in negotiations, management of resources, science, economics amongst other disciplines. In some instances, mathematical calculations are undertaken to determine the best possible outcome. Norozpour and Safaei (2020) stated that the game can depict the problem under discussion and people involved in solving the problem/ decision making process are the players. The player can be individual (s), institutions or nations. Guo (2023) analyzed the interests of a student and supervisor during selection of research topic using gaming concept and the Nash equilibrium. The decisions of the Student and the Supervisor resulted in gains and losses and there existed an optimal option available for them. It was observed that communication and negotiation could facilitate the attainment of the optimal decision.

Game Theory was used by the Project Manager during the negotiation process. The Manager needed to view the negotiation process as a game and consider other players’ interests to ensure success in the negotiation process and project performance.

2.1.5 Theory of Constraints (TOC)

The theory was proposed by Eliyahu M. Goldratt in 1984. Goldratt (1984) identified 5 steps of identifying the constraint which were: identification of constraint; exploiting the identified constraint; implementation of activities based on the decision relating to the constraint, addressing the constraint and restarting the constraint identification process again. Kahaso (2022) noted that TOC can be used to identify problems that inhibit a project from achieving its performance levels and ultimate objectives. Wikipedia notes that TOC observed that the weak part in the organization makes the whole

organization weak since it pulls down the effort of the strong parts.

Fasfus and Hamza (2021) expressed that TOC aims at building effective operations that contribute towards maximizing profits and offer opportunities for continuous improvement of operations within an organization. The contributions of the theory are that it can help solve bottlenecks in projects and positively contribute towards project performance. Kahaso (2022) noted that the theory does not focus on factors not affecting not presently affecting the organization which may later become challenges in a dynamic project environment. The theory has been used in many countries, its application increased in 1997 and has been used in disciplines including Project Management (Nunez & Javier, 2018).

The Theory of Constraints was related to the study as it highlighted the importance of identifying and addressing challenges affecting the project's progress. Project Managers with strong soft skills in communication, negotiation, and leadership could effectively apply TOC principles to alleviate constraints and optimize project performance.

2.2 Leadership Skills and Project Performance

Karuranga and Mulyungi (2018) used Pearson Correlation Coefficient and discovered the existence of a significant relationship between leadership, communication and team building skills and the performance of Red Cross Society projects in Rwanda. The study used a very small sample (35 participants) and covered only one type of institution. The results are difficult to generalize about institutions in the other sectors. The questionnaire method was used for data collection and other data collection methods like observations; interviews could have been used to supplement data collected in the study.

Mwakagomele (2022) found out that Soft Skills (Communication, Problem Solving, Leadership and Ethics) significantly contributed to the success of Jumbo Mine in Tanzania. The study was undertaken using Regression Analysis. Reliability Validity: and Ordinary Least Squares tests were undertaken on the independent variables and they were all found to be positive. The study covered Jumbo mine, this limits the application of the results to other sectors. The number of the study participants (118) made it difficult for the researcher to use some robust data analysis methods like Structural Equation Model; other factors influencing project performance were not covered by the study and the data used was tied to a specific period.

2.3 Communication Skills and Project Performance

Kahaso (2022) found out that communication, team building and conflict management influenced project performance whilst leadership did not. One hundred and thirty-nine (139) members participated in the research study. She studied NGOs in Kenya excluding other institutions, and the other soft skills were not covered in the study. The study used descriptive and explanatory research design and Pearson Correlation Analysis was used to determine the influence of soft skills on Project Performance.

Bekuru (2022) found out that Project Manager's Communication; and Leadership skills strongly influenced project success on road Construction projects undertaken in Addis Ababa in Ethiopia whilst Critical Thinking, Positive Attitude, Teamwork Skills and Emotional Intelligence did not have significant influence. The study used the Pearson Correlation coefficient to determine the influence of soft skills on project performance. Three hundred and twenty-seven (327) project managers and project employees participated in the study. Non-Probability sampling was used in the study, reducing chances for all members of the population to be selected. Because only Addis Ababa was included in the study, results may not apply to other areas in the same country.

2.4 Negotiation Skills and Project Performance

Uwihoreye and Dushimimana (2022) found out that conflict management skills and negotiation skills, were significantly influencing the performance of Musanze Football Team in Rwanda. The study utilized the mean and standard deviation to determine the influence of independent variables on project performance. A small sample of fifty-two (52) participants was used in the study. While regression analysis and interviews could have been employed for data collection, only one team was involved, which limits the generalizability of the results to broader contexts within sports and other sectors.

Tilahun (2023) using regression analysis, did a study showed that negotiation, leadership, adaptability, communication and diligence contributed significantly to project success on construction projects undertaken in Addis Ababa, Ethiopia. A small sample comprised of Forty-five (45) participants (engineers and project managers) was used and the study covered only Addis Ababa and used random sampling.

Silva (2018) found out that communication, flexibility and ability to delegate; negotiation; conflict and stress management and team work and building were high

ranking soft skills required by Project Managers in Cloud Space. The low ranked soft skills required by Project Managers were team behavior, coaching and motivation; multi-tasking; critical analysis; maintaining the delivery process, growth mindset, good relations, multicultural engagement, and organization. The frequencies of responses obtained on a skill were used to rank the skills. A small sample of 20 respondents was used in the study, this makes it difficult to generalize the results to the industry. No analysis like regression, being undertaken to determine influence of the SL.

3. Methodology

This section provides an overview of the research methodologies employed to study the effect of project managers' soft skills on the performance of Harare - Masvingo - Beit Bridge Road Construction Project in Zimbabwe.

3.1 Research Design

The study used descriptive and correlational research designs, as well as quantitative and qualitative research approaches, to characterize the phenomenon under investigation. Descriptive Research Design was employed for quantitative research, where data was collected to help describe features of a particular research variable or topic without manipulating any of the variables.

Correlational design investigated the relationship between two or more variables, ascertaining the extent of correlation between changes in the independent variable and the corresponding change in the dependent variable. The quantitative approach was also employed to determine the association between soft skills and project performance, while the qualitative approach allowed for more detailed information about the research study.

3.2 Study Population

One thousand nine hundred and ninety-two (1,992) participants comprised of management staff and project team members from the five companies undertaking the road construction work, as well as officials from the Ministry of Transport and Infrastructure Development dealing directly with the project, constituted the population of the study. These companies were Tensor Systems, Masimba Holdings, Bitumen World Company, Fossil Company, and Exodus Company, all involved in the Harare-Masvingo-Beit Bridge Road construction project.

3.3 Sample size

Sample size is the number of observations or repetitions chosen for use in statistical research. As is the case with

many empirical research, the representative sample is vital for deriving conclusions about a larger population from a smaller portion of the population (Hepburn 2021). Sample size was determined by Slovin Formula.

$$n = \frac{N}{1 + N(e)^2}$$

n = Sample size

N = Population

e = Level of Precisions (Level of tolerance 5% = 0.05)

1 = is a Constant

$$n = \frac{1992}{1 + 1992(0.05^2)} = \frac{1992}{1 + 1992(0.0025)} = \frac{1992}{5.98} = 333.11 = 333$$

3.4 Data Collection Methods

The researcher utilized relevant documents that may include official records, historical archives, reports, memos, articles, photographs, and any other recorded materials that are related to Harare Masvingo BeitBridge Road Construction Project.

For this study, a total of 333 questionnaires were distributed to gather required data. Five points scaled the responses on the variables (communication, leadership, negotiation), 5=strongly agree, 4=agree, 3=neutral, 2=disagree, and 1=strongly disagree provided by participants using the Likert Scale and some open-ended questions.

3.5 Data Analysis

Descriptive statistics such as frequency, arithmetic mean, and standard deviation were used to evaluate the primarily quantitative data collected. Regression analysis was used to show the relationship between independent variables and their impact on dependent variables. A 5-point scale was utilized for respondents to indicate their level of agreement or disagreement, that ranged from 1 for Strongly Disagree to 5 for Strongly Agree.

Multiple linear regression analysis was used to determine the relationships among the variables. Furthermore, the study's findings, hypothesis testing was conducted through testing the null and alternative hypotheses. The null hypotheses were the statements or statistical hypotheses that were being tested, while the alternative hypothesis was the remaining outcome of interest. The level of significance, sometimes called the size of the test, was determined to identify the region where the null hypothesis under test would be rejected or not rejected. Specifically, a significance level of 0.05 was used in this study to describe the significance levels of different variables.

A model was formulated represented as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Y = Performance of Project

β_0 is a constant

β_1 , β_2 and β_3 = regression coefficients.

X1 = Communication Skills

X2 = Leadership Skills

X3 = Negotiation Skills

3.6 Ethical Considerations

The participants who were included in this study were appropriately informed about requisite aspects of the research, such as the objectives and significance of the research, and their willingness and consent were secured before the commencement of distributing questionnaires. The study maintained the secrecy of the identity of each participant. The questionnaires the researcher used contained acceptable, non-offensive, and non-discriminatory language. The researcher acknowledged the research conducted by other authors that were utilized in any part of the study.

4. Results and Discussion

This section entails the findings of the study based on the data collected from the field. The analysis focused on the objective of the study to assess the influence of Project Managers' Soft Skills on a Road Construction Project in Zimbabwe.

4.1 Response Rate

The results show that out of 333 questionnaires given to the respondents, 292 questionnaires were filled and returned, accounting for an 87.68% response rate. A response rate of 70% and above is considered adequate. Therefore, the obtained response rate of 7.68% was satisfactory for data analysis. This response rate was good enough to allow for a comprehensive and in-depth analysis of the research objectives. Conversely, 41 questionnaires remained unreturned, constituting 12.31% of the total distributed.

4.2 Correlation Analysis

Correlation analysis plays a crucial role in statistical analysis by measuring the strength and direction of relationships between two variables. A p-value of less than 0.05 is commonly used as a threshold for statistical significance. When the p-value is below this threshold, the correlation is considered statistically significant, indicating a more reliable association between the variables.

Table 1: Correlations

		Communication Skills	Leadership Skills	Negotiation Skills	Performance of Project
Communication Skills	Pearson Correlation	1	.498**	.539**	.707**
	Sig. (2-tailed)		.000	.000	.000
	N	292	292	292	292
Leadership Skills	Pearson Correlation	.498**	1	.502**	.731**
	Sig. (2-tailed)	.000		.000	.000
	N	292	292	292	292
Negotiation Skills	Pearson Correlation	.539**	.502**	1	.734**
	Sig. (2-tailed)	.000	.000		.000
	N	292	292	292	292
Performance of Project	Pearson Correlation	.707**	.731**	.734**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	292	292	292	292

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

Source: Primary data, November 2024

The correlation matrix in Table 1 illustrates strong positive relationships between the various skills of project managers (communication skills, leadership skills, negotiation skills) and the performance of the Harare - Masvingo - Beitbridge Road Construction Project.

Notably, communication skills exhibit a strong positive correlation with project performance ($r = 0.707$, $p = 0.000 < 0.05$), indicating that effective communication among project managers significantly contributes to enhanced performance of Performance of the Harare - Masvingo - Beitbridge Road Construction Project.

Additionally, leadership skills also show a considerable positive correlation with project performance ($r = 0.731$, $p = 0.000 < 0.05$), indicating that strong leadership capabilities contribute positively to the overall performance of the Harare - Masvingo - Beitbridge Road Construction Project. Furthermore, negotiation skills display the strongest positive relationship with project performance ($r = 0.734$, $p = 0.000 < 0.05$), signifying that proficient negotiation skills are crucial in achieving superior performance in project execution.

The findings correspond with the insights of Karuranga and Mulyungi (2018), who highlighted the critical role of leadership, communication, and team-building skills in securing successful outcomes for projects. Their research

on the Red Cross Society in Rwanda, although limited in scope, demonstrated that these competencies are essential. Similarly, the correlation analysis conducted on the Harare–Masvingo–Beitbridge Road Construction Project confirms the importance of effective negotiation, communication and leadership in guaranteeing project success. This alignment emphasizes that these skills are integral to the management and success of infrastructure projects.

4.3 Regression Analysis

Regression analysis is a fundamental tool in statistical modeling that helps assess the relationships between a dependent variable and one or more independent variables. The Model Summary provides critical metrics such as R, R-squared, and adjusted R-squared, indicating how well the model explains the variance in the dependent variable. The ANOVA table assesses the overall significance of the model, using an F-statistic and p-value to determine if the model provides a better fit than a model with no predictors. Significant results ($p\text{-value} < 0.05$) suggest the regression model is effective in predicting the outcome. The Coefficients table reveals the strength and direction of the relationship between each independent variable and the dependent variable, alongside p-values that test the significance of each predictor.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.882 ^a	.778	.776	.12482

a. Predictors: (Constant), Negotiation Skills, Leadership Skills, Communication Skills

Source: Primary data, November 2024

Table 2 presents the Model Summary for the regression analysis conducted to assess the effect of project management skills (Negotiation, Leadership, and Communication skills) on performance of Performance of the Harare - Masvingo - Beitbridge Road Construction Project.

The R value of 0.882 indicates a strong positive correlation between the predictors and the dependent variable, signifying that as Project Managers' Soft skills improve, performance of construction projects is likely to enhance.

The R Square value of 0.778 shows that 77.8% of the variability in the performance of construction projects is explained by the independent variables in the model. This indicates that Negotiation, Leadership, and Communication skills collectively account for a substantial portion of the factors influencing performance of the Harare - Masvingo - Beitbridge Road Construction Project. The Adjusted R Square value of 0.776 further supports this finding, indicating a strong model fit when accounting for the number of predictors used.

Findings from this research corroborate those of Silva (2018), who ranked communication and negotiating abilities as the most important soft skills for success in Cloud Space initiatives. Despite limited sample size, negotiation and leadership skills were highlighted as pivotal for project success. In the Harare–Masvingo–Beitbridge Road Construction Project, the model summary indicates that these skills have similarly enhanced outcomes, especially in stakeholder management and addressing project variations. This alignment highlights that negotiation skills are crucial for achieving positive performance across various complex project environments.

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.714	3	5.238	327.375	.000 ^b
	Residual	4.487	288	.016		
	Total	20.201	291			

a. Dependent Variable: Performance of Project

b. Predictors: (Constant), Negotiation Skills, Leadership Skills, Communication Skills

Source: Primary data, November 2024

The Analysis of Variance (ANOVA) results presented in Table 3 indicate a highly significant F-statistic of 327.375 ($p = 0.000$). This F-statistic assesses the overall significance of the regression model, which tests whether the predictors (negotiation skills, leadership skills, and communication skills) have a significant effect on the dependent variable, the performance of Performance of the Harare - Masvingo - Beitbridge Road Construction Project. The small p-value ($p = 0.000 < 0.05$) associated with the F-statistics confirm that these predictors jointly have a significant effect on explaining the variance in project performance.

The study's findings are also consistent with PMI (2020), which highlight the value of Leadership, Communication, and Negotiation skills in high-performing organizations. This emphasis is reflected in the ANOVA results from the Harare–Masvingo–Beitbridge Road Construction Project, where these skills showed a strong correlation with positive project outcomes. The importance of communication skills, highlighted by their impact on project performance, demonstrates how such competencies enhance collaboration and stakeholder engagement, which are essential for success in public infrastructure projects.

Table 4: Coefficients

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error		Beta		
1 (Constant)	.374	.129			2.899	.004
Communication Skills	.269	.030		.315	8.967	.000
Leadership Skills	.326	.028		.389	11.643	.000
Negotiation Skills	.328	.031		.369	10.581	.000

a. Dependent Variable: Performance of Project

Source: Primary data, November 2024

The model utilized in this study is represented by the following equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where:

Project Performance = 0.374 + 0.269 (Communication Skills) + 0.326 (Leadership Skills) + 0.328 (Negotiation Skills) + 0.129

Table 4 highlights the coefficients, which shed light on the relationships between the predictors and performance of Performance of the Harare - Masvingo - Beitbridge Road Construction Project. The significant p-values associated with each predictor reinforce their individual

contributions to project outcomes, emphasizing their importance in this context.

The unstandardized coefficients show that for every one-unit increase in communication skills, project performance is expected to increase by 0.269 units. This ($\beta = 0.269$, $t = 8.967$, $\text{Sig.} = 0.000 < 0.05$) underlines the significant effect of project manager communication skills on performance of Harare-Masvingo-Beitbridge Road Construction Project.

The findings align with Karuranga and Mulyungi (2018), who emphasized that communication was essential for the success of Red Cross Society projects in Rwanda. This correlation illustrates how effective communication supports coordination and decision-making processes, directly enhancing large-scale infrastructure projects like the Harare–Masvingo–Beitbridge Road Construction Project.

Similarly, an increase of one unit in leadership skills corresponds to a 0.326 -unit increase in project performance, further illustrating the impact of strong leadership on achieving project objectives. The values ($\beta = 0.326$, $t=11.643$ Sig. = $0.000<0.05$) underlines the significant effect of project manager leadership skills on performance of Harare-Masvingo-Beitbridge Road Construction Project.

The findings are consistent with Mwakagomele (2022), who highlighted that leadership is one of the highest-valued project management skills. This indicates how leadership skills contribute to maintaining project direction and motivation, which is critical in managing complex infrastructure projects such as the Harare–Masvingo–Beitbridge Road Construction Project, where strong leadership plays a crucial role in achieving project milestones.

Additionally, the negotiation skills predictor exhibits a coefficient of 0.328, indicating that improvements in negotiation abilities are linked to enhanced project performance. The values ($\beta = 0.328$, $t=10.581$ Sig. = $0.000<0.05$) underlines the significant effect of project manager negotiation skills on performance of Harare-Masvingo-Beitbridge Road Construction Project.

The findings are supported by Tilahun (2023) emphasized that negotiation skills significantly influence the success of construction projects in Addis Ababa, Ethiopia. This association reinforces the observation that effective negotiation enhances resource allocation and conflict resolution, which are essential for the performance of extensive projects, such as the Harare–Masvingo–Beitbridge Road Construction Project.

The statistical significance of the p-values, all below 0.05, strongly indicates that each predictor significantly contributes to improving project performance at Harare–Masvingo–Beitbridge Road Construction Project. Collectively, these findings indicate the critical nature of communication, leadership, and negotiation skills in driving the performance of Harare –Masvingo - Beit bridge Road Construction Project in Zimbabwe.

4.4 Hypotheses Results

Table 4 outlines the hypotheses that guided this research: H_{01} posits that the leadership skills of project managers have no influence on the performance of the Harare-Masvingo-Beitbridge Road Construction Project. H_{02} asserts that the communication skills employed by

project managers do not significantly affect the project's performance. Finally, H_{03} suggests that negotiation skills utilized by project managers do not influence the overall project performance.

Given that the p-values associated with these hypotheses are significantly lower than the established threshold ($P < 0.05$), the null hypotheses (H_{01} , H_{02} , and H_{03}) are consequently rejected. This rejection supports the alternative hypotheses, indicating that leadership, communication, and negotiation skills of project managers play a critical and positive role in enhancing the performance of the Harare-Masvingo-Beitbridge Road Construction Project. These findings highlight the significant effect of Project Manager's soft skills performance of the Harare-Masvingo-Beitbridge Road Construction Project in Zimbabwe.

5. Conclusion and Recommendations

5.1 Conclusion

The rejection of all hypotheses indicates that Leadership Skills, Communication Skills, and Negotiation Skills significantly affect Project Performance. This highlights that Project Managers' soft skills are essential for enhancing the efficiency and effectiveness of Harare-Masvingo-Beit bridge Road Construction Project.

5.2 Recommendations

Recommendations are drawn in line with the set objectives of the study as follows:

1. Harare-Masvingo-BeitBridge Road Construction Project Managers must adopt advanced communication techniques like listening; use non-verbal communication skills, make use of feedback and speak clearly to stakeholders during project implementation process.
2. Project team (Project Manager and Team Members) should optimize on the use of engaging in all-inclusive constructive discussions; respect and acknowledge perspective presented by negotiation partners; identification solutions and uses persuasion in the whole process of negotiation.
3. Harare-Masvingo-BeitBridge Road Construction Project management team should invest in advanced capacity building programs to enhance the Leadership, Communication and Negotiation Skills of Project Managers.

5.3. Areas for Further Research

Future studies should investigate the effect of stakeholder engagement practices on project performance. Furthermore, it would be beneficial to

assess the effect of environmental sustainability practices on the performance of Harare-Masvingo-Beitbridge Road Construction Project.

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