

Project Manager's Soft Skills and Project Performance: A Case of Transforming Eastern Province Through Adaptation Project in Bugesera District, Rwanda

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ABSTRACT

The purpose of this study was to investigate the effect of project manager's soft skills on performance of Transforming Eastern Province Through Adaptation (TREPA) Project in Bugesera District, in Rwanda. The specific objectives of this study was to assess the effect of project manager's conflict resolution skills on performance of TREPA Project in Bugesera District; To find out the effect of project manager's motivation skills on performance of TREPA Project in Bugesera District; To determine the effect of project manager's leadership skills on performance of TREPA Project in Bugesera District; and to examine the effect of project manager's communication skills on performance of TREPA Project in Bugesera. The theories that guided this study were Theory of goal setting, Theory of communication, Theory of agency and Theory of decision. The study employed a descriptive and correlational research designs. Target population was 1753 participants including project managers, project team members and beneficiaries. The sample size was 326 respondents selected by using formula proposed by Yamane. Researchers used a random sample sampling to select participants from the entire population, followed by a stratified sampling strategy to divide them into manageable subsets. When collecting data, the researcher used questionnaire, documentary analysis, interview schedule and observation guide. The collected data was analyzed using mixed methods, descriptive statistics, correlational analysis and multiple linear regression analysis with the help of Statistical MS Excel. The data presented, analyzed and interpreted in line with research objectives. The predictors (conflict resolution skills, leadership skills, communication skills and motivation skills) and the performance of TREPA Project in Bugesera District are well correlated (R value of 0.819). There is a 0.341coefficient for conflict resolution skills (t=6.205, p=0.000), a 0.143 coefficient for leadership skills (t=2.641, p=0.009), a 0.182 coefficient for communication skills (t=3.420, p=0.001), and a 0.276 coefficient for motivation skills (t=5.316, p=0.000). This means that Transforming Eastern Province Through Adaptation Project iproves in direct correlation with the level of each of these factors. These coefficients have meaningful statistical significance and major roles in contributing to the performance of TREPA, since their p-values are considerably below the normal significance thresholds of 0.05. Based on these findings, it is recommended that Bugesera District invest in comprehensive training programs focused on developing project managers' conflict resolution and leadership skills. Furthermore, the implementation of regular communication workshops and motivational strategies would be highly beneficial for the TREPA Project.

Key words: Project Management, Project Performance, Soft Skills

I. INTRODUCTION

Every project is designed to fulfill one or more project objectives, using soft skills impacted on performance is therefore crucial for many projects. A project's performance is influenced by numerous factors. Martinsuo and Ahola (2022) asserted that soft skills are crucial for effective management, customer satisfaction, and creating a positive project team environment. Wen (2023) added that the most effective communication, conflict resolution, and personal attitude were positively impacting on Malaysian construction industry project.

In the forestry industry, soft skills are arguably more important than any hard skill project manager can ever learn. However, some studies identified the factors affecting agroforestry project performance. For instance, Mayor et al. (2022) stated that, in Switzerland, the agri-food and forestry sectors faced increasing pressure to adapt to climate change, consumer concerns, technological and economic changes, and complex global value chains. Bianca Ndanu (2021) identified the lack of transformative processes among disputants, positive personal and working relationships, and collaborative. Gunasingha et al. (2023) added that limited consistency and coherence in procedure caused project failure.

The conflict resolution is a key issue to manage when dealing with diverse stakeholders (Njeri & Ngufi, 2021), but Ding et al. (2023) noted that communication and negotiation were the popular conflict resolution method



that aims to find a solution that respects each party's viewpoints while minimizing the negative impact of the disagreement.

According to Tahir (2019) communication skills refer to the abilities used in sharing and receiving various types of information and project communication skills could settle any issue between project manager and project team. Ullah et al. (2023) posited that communication between farmers and extension agents can be enhanced through the use of visually illustrated pamphlets and leaflets. However, according to Emuze et al. (2023) the communication and negotiation skills required for a project manager in an agroforestry project are a significant challenge. In the many project implementations, Niyonkuru et al. (2024) pointed that a project manager communicates with all stakeholders to develop project support and prevent frustration, but miscommunication cause project failure. In another case, a communication plan was created to showcase key communication skills and strategies (Tahir, 2019); However, lack of clarity, lack of feedback and lack of collaboration were factors affecting project communication (Emuze et al., 2023).

In Africa, due to reduced public agricultural extension support budgets, farmer group connections are becoming crucial for information transfer about agroforestry (Lin et al., 2021). Zerihun (2021) pointed out that Agroforestry boosts agricultural productivity, and South Africa needs to promote smallholder agriculture for sustainable rural livelihoods, food security, lower inflation, and address rural unemployment, highlighting the urgent need for sustainable agriculture. Ahmad et al. (2022) added that leadership skills in project management helped every organization deliver projects on time and stand tall on their market reputation. This implies that leadership in agroforestry involves inspiring and empowering others to adopt sustainable land management practices, promoting collaboration and innovation, and advocating for policies that integrate trees into agricultural landscapes.

Manager's soft skills in Rwanda, are meaningful for project performance as they facilitate collaboration, conflict resolution. Nkurikiye et al. (2024) stated that there was a moderate capacity to implement existing forest landscape restoration policies, guidelines, and laws. Further, Niyonkuru et al. (2024) found that strong leadership, communication, and problem-solving skills significantly contributed to project sustainability, positively impacting overall project outcomes in Burera district. Moreover, Muzio et al. (2007) stated that project soft skills had a positive relationship with project performance.

1.1 Statement of the Problem

Even though manager's soft skills are promising solution, project managers, according to various studies, lacked soft skills. A study by Swatek (2024) on agroforestry adoption in Germany, noted that insufficient funding, lack of consulting, restrictive agroforestry definition, bureaucracy, and legal security due to uncoordinated fundingand nature conservation laws are identified as key institutional barriers. In Pakistan, Ullah et al. (2023) pointed that projects failure due to disagreement; project failure due to lack of clearly defined roles and responsibilities in Colombia (Ballesteros-Possú et al., 2022), agroforestry projects exceed the budget due to conflict of small landholdings and poor agroforestry practices in Kenya (Bala et al., 2020). One possible explanation of this is communication breakdowns.

The parties involved in Rwanda's agroforestry projects have reported that most projects do not align with the project scope. Numerous studies have been conducted to identify the factors influencing agroforestry projects, for instance, Nkurikiye et al. (2024) posited that the preference of agroforestry farmers was incorporate non-fruit trees. Dale & Ajibade (2024) found that the disengagement and lack of collaboration between project stakeholders in Rweru Model Green Village project. Ngwijabagabo et al. (2021) added the lack of self-confidence, land use, rainfall, temperature and, fear of committing mistakes.

In Bugesera District, TREPA project implementation faced challenges such as delayed seedling production, heavy rental costs, unclear ownership of sites, and conflict with public lands, requiring collaboration with local leaders. The research on the effect of soft skills in agroforestry project performance is limited. There is a gap since none of above-mentioned studies have not centered to TREPA project. Therefore, this study sought to bridge this gap by investigating the effect of project manager's soft skills on performance of TREPA Project.

1.2 Research Objectives

This study guided by general objective and specific objectives

- i. To assess the effect of project manager's conflict resolution skills on performance of TREPA Project in Bugesera District.
- ii. To determine the effect of project manager's leadership skills on performance of TREPA Project in Bugesera
- iii. To examine the effect of project manager's communication skills on performance of TREPA Project in Bugesera District.
- iv. To find out the effect of project manager's motivation skills on performance of TREPA Project in Bugesera District.



1.3 Research Hypotheses

This study has the following four specific null hypotheses:

- H0₁ There is no significant effect of project manager's conflict resolution skills on performance of TREPA Project in Bugesera District.
- H0₂ There is no significant effect of project manager's leadership skills on performance of TREPA Project in Bugesera District.
- H0₃ There is no significant effect of project manager's communication skills on performance of TREPA Project in Bugesera District.
- H0₄ There is no significant effect of project manager's motivation skills on performance of TREPA Project in Bugesera District.

II. LITERATURE REVIEW

2.1 Theoretical Underpinning

The theoretical literature review aids in identifying existing theories, their relationships, their level of investigation, and developing new hypotheses for further testing. In this study, the theoretical review focuses on the definition of theories, where the theories were used and how research used the theories.

2.1.1 Theory of Goal Setting

Locke's theory, published in 1968, asserts that specific, challenging goals motivate employees and enhance their performance. According to Locke and Latham (2015) TGS found that clear, well-defined, and measurable goals significantly enhance performance compared to vague objectives. TGS posits that specific and challenging goals enhance motivation and performance. The theory believe that self-efficacy enhances performance by increasing the level of self-set goals, reinforcing commitment to these goals, and reinforcing performance (Lunenburg, 2011). In this model good goals should be specific, measurable and reachable. Locke and Latham noted that clear goal orientation is crucial for preventing miscommunication or misunderstandings when setting goals with employees.

Scholars have identified importance in the goal setting theory, making it valuable to validate its foundation. Leadership styles and project leadership are considered critical components in enhancing project performance. For instance, according to Yurtkoru et al. (2017) goal setting dimensions predict affective commitment and job satisfaction, but task-specific strategy and self-efficacy do not significantly mediate these effects. Other study by Lunenburg (2011) indicated using goal setting theory in the effective performance is achieved when goals are specific, evaluated, and linked to feedback. Jeong et al. (2023) added that the theory of goal setting for athletes in applied sport contexts offered valuable insights for athletes, coaches, sport psychology practitioners.

The above studies show no consensus on which leadership skills are most effective in ensuring project performance. The study highlights the need for further research on the significance of project leadership skills, as it is considered an independent variable in this research. Applying this theory to this study, the theory aid the researcher to explain the correlation between various project leadership skills as contingency factors that influence project performance. For a project manager, the project managers are required to sound leadership on how to set project goals, plan project tasks, manage challenges, encourage team members.

2.1.2 Theory of Communication

Communication theory was proposed by S. F. Scudder in the year 1980. It states that all living beings existing on the planet communicate although the way of communication is different. Van Ruler (2020) defines communication theory as a framework that describes and analyzes communication phenomena, relationships, and their relationships, providing a narrative for understanding key events, processes, and commitments that form communication. It aids in mapping the world and answering empirical, conceptual, or practical communication questions, making it a valuable tool for understanding and navigating the world.

Although communication is more complex in practice, the basic principles remain valid. Improving communication skills can lead to more successful careers and relationships. In this regard, Chung et al. (2013) examined the structure and status of communication theory as an alternative for evaluating communication discipline identity. The study noted that communication theory was ongoing practice of intellectual communities and can address various channels, transcend technologies, and bridge levels of analysis. In addition, Doedens and Meteyard (2022) pointed that this theory framework categorizes language use into interactive, multimodal, and contextual components. It reviews research from non-brain damaged adults and aphasia patients, discussing the implications of adopting this approach in assessment and therapy for aphasia rehabilitation. Further, Mason and Carr (2022) focused on how communication and multimedia maintenance is integrated to sustain human interaction in newer channels.



This theory is relevant to this study because it supports in analyzing and understanding key project, processes, and commitments that form communication. It aids in mapping the world and answering empirical, conceptual, or practical communication questions, making it navigable. Further, it helped the researcher to give explanation effect of project manager's communication skills on performance of TREPA Project in Bugesera District.

2.1.3 Theory of Agency

Stephen Ross and Barry Mitnick are considered the first to propose and develop the theory of agency, with Ross responsible for the economic theory and Mitnick for the institutional theory. Bendickson et al. (2016) noted that Theory of Agency (TOA) emphasizes the importance of understanding the history behind these theories to effectively explain various phenomena. The TOA by Jensen and Meckling (1976), outlines the relationship between management as an agent and shareholders as principals, which can lead to conflicts of interest. Agency theory offers a potential explanation for the success and failure of information systems projects.

According to Mahaney and Lederer (2011) TOA was used as a better contract between project managers and developers reduces goal conflict, increasing project success. Davis et al., (2021) added that TOA is a principle used to explain the complex relationship between business owners (principal) and managers (agents), aiming to explain the complexity of human behavior in the principal-agent relationship. In another hand, TOA was used to define hedging policies of project performance. Performance-based compensation is a method employed to strike a balance between the principal and the agent (Fite & Pfleiderer, 1995). Since, TOA is a powerful tool in understanding the emergence and resolution of conflicts of interest between shareholders and managers, the theory explained the relationship between conflict resolution and project performance in this study.

2.1.4 Theory of Decision

Herbert A. Simon, an American political scientist and Nobel Prize winner in Economics, introduced the theory of decision making in 1944, arguing that there is always a better course of action due to the inability to have complete information. North (1968) defines the TOD as the study of individuals or agents' choices, aiding in understanding the decisions made by professionals, consumers, or voters. Lai (2011) posited that every action necessitates a cognitive decision, where we imagine each possible action, consider its consequences, and choose the action with the most preferred outcomes.

Atkinson (2000) used TOD to explain an individual's decision to choose one action from a range of alternatives. He suggested calculating approach and avoidance motives, goal expectancy, and incentive value for each potential act. Performance control measures will be implemented once the chosen action has been initiated. Kuhl (1984) suggested that the highest Expectancy x Value product may indicate one action, but this may not always be the chosen action, as people often opt for non-dominant courses if obligated to do so.

Additionally, a study by Heckhausen and Gollwitzer (1987) suggested that individuals experience two distinct psychological states when choosing between alternative goals and their corresponding actions. Motivation is a conscious process that involves deliberation on incentives and probabilities of achieving various goals. It supports the project managers in decision-making. According to the above studies, the performance of project was achieved by alternative outcomes motivation. The theory is relevant to this study because it explained the effect of motivation skills on project performance.

2.2 Empirical Review

An empirical review is a comprehensive examination of various aspects of a study that hold significant relevance to the research being conducted. This section reviews the studies in project conflict resolution skills, project negotiation skills, project collaboration skills and project ethic work skills and performance of project.

2.2.1 Conflict Resolution Skills and Project Performance

A study by Zhu et al. (2020) explored the concept, scale development, and validation of conflict management in construction project contexts in China and Japan. The authors utilized measurement theory to conduct multiple studies and developed a scale to measure the quality of conflict management in a project context. The study identifies five key aspects influencing the quality of conflict management: satisfactory resolution outcome, integrated resolution process, conflict prevention, fairness perception, and post-conflict effect.

Katz et al. (2020) studied on communication and conflict resolutions skills. The user-friendly material aided in skill development, relationship enhancement, and effective problem-solving at work, home, and in your communities. The study concluded that developed conflict resolution skills including awareness, styles recognition, diagnosis, and interest-based negotiation, and learn two processes and models for addressing resource and/or value conflicts.

Bianca Ndanu (2021) conducted a study on project conflict resolution skills in promoting effective project management in Kenya. The study utilized qualitative research methodology. According to the survey, in promoting



effective project management, mediation facilitated transformative processes among disputants, building and restoring positive personal and working relationships that provided for collaborative teams.

Osiri (2021) examined the effectiveness of alternative dispute resolution methods in the Rwandan construction industry. The study employed both quantitative and qualitative research methods. The study revealed that disputes in Rwandan construction projects are primarily caused by variations in payment, time extension, cost escalation, retention money, and wrongful contract termination.

2.2.2 Leadership Skills and Performance of Project

A study by Ahmad et al. (2022) on impact of the project manager's transformational leadership, influenced by mediation of self-leadership and moderation of empowerment, on project success in Malaysia. The study proposed leadership based on social cognitive theory, directly and indirectly influences project success. The study concluded that transformational leadership and employee self-leadership positively impact project success. The study looked at on leadership skills and project success.

Lin et al. (2021) explored the impact of advice ties and organizational leadership on the adoption of agroforestry among farmers in Myanmar. The study area comprises four villages, namely village A, village B, village C, and village D, each introduced agroforestry in different years. The study found that frequent advice-seeking interactions positively influence farmers' leadership positions, with a core-periphery structure where farmer leaders are overrepresented. Engaging with general farmers can effectively disseminate agroforestry information.

Mutua and Muchelule (2024) investigated the impact of project leadership on the performance of solar energy projects in Kenya. The study utilized transformational leadership and contingency theory, focusing on street lighting solar projects and solar home systems, using a descriptive survey design. The study concluded a strong positive correlation between Project Team Idelaization and the performance of solar energy projects, while Project Prioritization has an insignificant positive correlation.

Hakizamungu (2023) examined the impact of leadership skills on performance curriculum development projects in higher learning institutions, specifically in the construction of a new foundation program in Rwanda. The study findings indicated a significant correlation between leadership skills and project performance. It focused on leadership skills and performance of curriculum development projects.

2.2.3 Communication Skills and Project Performance

Arnold et al. (2015) studied on the critical care communication project aims to enhance the communication skills of fellows in the field of critical care. The study aimed to create an evidence-based communication skills training workshop to enhance the communication abilities of critical care fellows. Between 2008 and 2010, 38 pulmonary and critical care fellows participated in a 3-day communication skills workshop. The workshop included didactic talks, faculty demonstrations, and small group practice sessions with simulated families. Skills covered included giving bad news, achieving therapy goals, and discussing treatment limitations. Participants rated their communication skills using a 5-point Likert scale. The study concluded that 3-day communication skills training program significantly enhanced the communication skills of critical care fellows in family meetings.

Zakiah et al. (2020) examined the collaboration and communication skills of pre-service mathematics teachers in creating project assignments in Indonesia. The study employed a qualitative method to analyze the participants' experiences in completing a project task. The study revealed that students assessed the understanding of presentations, planning future teaching materials, and engage in collaborative learning through group projects. The study focused on collaboration, communication skills and project assignment.

Emuze et al. (2023) studied on curbing communication challenges in construction project management in developing countries in South Africa. This chapter aims to explore practical measures for promoting effective PCM in construction in developing countries, using examples from construction project practices. It concluded the impact of communication skills on project outcomes. The author did a study on communication and construction project.

Niyonkuru et al. (2024) studied the impact of project management skills on project sustainability, specifically in the Vision 2020 Umurenge Program in Rwanda. The study utilized a mix method research design. The study focused on leadership skills, communication skills, and problem-solving skills on Program.

2.2.4 Motivation Skills and Project Performance

Lechler and Huemann (2024) examined the motivation and perception of farmers in Sweden regarding the advantages and challenges of agroforestry in Northern Europe. Data collection involved focus groups, interviews, and field observations to identify four types of agroforestry systems: silvopasture, silvoarable, forest farming, and forest gardens, established on different land types. The study revealed that agroforestry systems' multifunctionality stems from farmers' intentional design, integrating their farm's food and materials with multiple ecosystem services. The study focused on motivation, perception and agroforestry.



A study by Sussman et al. (2004) on motivation, skills, and decision-making model of drug abuse prevention emphasizes the importance of motivation, skills, and decision-making in preventing drug abuse. The study explored risk definitions and strategies for preventing drug use in high-risk youth, highlighting the similarities in productive prevention programs for various at-risk groups, which focus on motivation, skills, and decision-making. The study is linked to clinical psychology, social psychology, sociology, and chemical dependence treatment. The study focused on motivation, skills and decision-making in preventing drug abuse.

Kikechi (2024) studied on examining positive motivational instructional design strategies for a youth project in Kenya. The study utilized John Keller's ARCS model of motivational design and employed a quantitative method with structured questionnaires. The study emphasizes the importance of personalized learning methods in enhancing the engagement and effectiveness of youth training. The study focused motivation, project design and youth project.

Nzabitondera and Bugingo (2024) examined the impact of employee motivation practices on project performance in health projects implemented in Rwanda. The study adopted a convergent parallel design, utilising a mixed approach. The study revealed that recognition, rewards, career development, employee involvement, and job security significantly improved project performance. Nzabitondera and Bugingo did a study focused on motivation practices, projects performance and health projects.

III. METHODOLOGY

3.1 Research Design

This study used the descriptive and correlational research design. A descriptive research design employs various research methods to examine one or more variables (Obilor, 2023). In this study, descriptive research was employed to identify frequencies, trends, and categories in a study. The current study, correlational design used to determine the relationship and the degree of relationship between project managers 'soft skills and performance of TREPA project. According to Mahmood et al. (2022) correlational research examines the relationships between variables without the researcher manipulating or controlling any of them.

In this study, the quantitative research used questionnaire tool in quantitative data collection by using closeended questions. Mixed methods research involves combining quantitative and qualitative data used in this study. Quantitative research involves identifying the subject matter, asking specific questions, and collecting data from numerous participants to measure variables of interest. Quantitative analysis uses statistics to analyze these numbers in an unbiased and objective manner (Dulock., 1993).

The qualitative research in this study provided more information about project by interview and observation methods. Qualitative research focuses on understanding people's experiences, meaning, subjectivity, and their impact on their lives, aiming to comprehend their quality and texture. This involves comprehending meanings, examining concepts, behaviours, and contexts, and formulating theories (Dulock, 1993).

3.2 Population and Sampling

The study population is a subset of the target population from which the sample is actually selected. In this study, the target population comprised 1753 people who including 7 sponsors, 8 project management staff, 138 project team members and 1600 beneficiaries.

Table 1 Study Population

Respondents	Population
Project management staff at district level	8
Project manager	1
Project team members	137
Project beneficiaries	1600
Project sponsors	7
Total	1753

Table 1 shows that a total number of study population this study was 1753. The table above indicates that 7 project sponsors, 8 project managers, 138 project team members and 1600 project beneficiaries of TREPA project in Bugesera District.

The sample is the group of individuals who actually participated in the research. The sample size of this study was calculated by using Taro Yamane's formula as follows: Where by

n = Sample size



N = Population

e = margin of error (expressed as a decimal, e.g. 0.05 for 5% margin of error)

n = 1753/(1+1753 (0.05)(0.05)) = 1753/5.3825=325.68 = 326 respondents

n = 326 respondents

Table 2 Sample size. Study Population, and Sampling design

Respondents	Population	Sample size	Percentage	Sampling design
Project management	8	1	0.456	stratified sampling techniques and Simple
				Random Sampling
Project team members	138	26	7.872	stratified sampling techniques and Simple
				Random Sampling
Project beneficiaries	1600	298	91.272	stratified sampling techniques and Simple
				Random Sampling
Project sponsors	7	1	0.399	stratified sampling techniques and Simple
				Random Sampling
Total	1753	326	100	

The Simple Random Sampling used for this study. Simple Random Sampling technique ensures that every item in the population has an equal and likely chance of being selected in the sample (Obilor, 2023). The sample size of this study was 326 respondents from the TREPA project. Every respondent in the project database from 1 to 1753, the researcher used a random number generator to select 95 respondents.

3.3 Research Instruments

Data collection instruments are essential tools used for data collection. This study used the documents review, questionnaire, interview guide and observation methods.

Obilor (2023) noted that documentary review is the process involves examining various documents related to an event or individual to create a comprehensive narrative. Document review is a way of collecting data by reviewing existing documents. In this study, the method employed to examine the existing documents related to project manager's soft skills and performance of TREPA Project.

The questionnaire utilized as it allowed the researcher to gather data from multiple respondents simultaneously. Mahmood et al. (2022) stated that a questionnaire is a set of questions used to collect information from respondents about their attitudes, experiences, or opinions. The questionnaires structured into 2 sections ranging from A to B whereby section A collects data regarding the respondents' background information and section B about project manager's soft skills and project performance. The study utilized a likert scale to rate questions, with openended questions after each study variable to allow respondents to provide more information about the influence of the independent variable on the dependent variable. The researcher ensured that all questionnaires distributed to respondents returned as soon as they were completed. This tool employed in data collection from project beneficiaries.

An interview guide is a document that helps organizations organize and structure their candidate interviews. Interviews are face-to-face conversations with respondents, often slow and expensive, allowing in-depth questioning and follow-up questions (Mahmood et al., 2022). This tool used in data collection from project managers and project team members.

3.4. Data Analysis Methods

The data collection involved both qualitative and quantitative methods. Qualitative data is defined as data that approximates and characterizes. Qualitative data can be observed and recorded (Dey and Wang, 2022). In this study, the qualitative data collected using interview guide. The qualitative data analyzed based on the responses. Quantitative data analysis is the systematic use of statistical methods to describe, summarize, and compare data (Dey and Wang, 2022). On the other hand, the quantitative data analyzed using descriptive and inferential statistics for summarization and interpretation. Descriptive statistics involve the use of frequencies, mean, standard deviations, and percentages (Dey and Wang, 2022). The relationship between variables evaluated using multiple linear regression employed for prediction between the independent and dependent variables. The study findings presented using tables.



IV. FINDINGS & DISCUSSION

This section entails the findings and discussions of the study based on the data collected from the field. The analysis focused on the objective of the study on project manager's soft skills and project performance. a case of transforming eastern province through adaptation project.

Table 3

Ouestionnaire and Responses Rate

Questionnaire	Frequency	Percentage
Returned and complete	297	91.10
Incomplete	18	5.52
Unreturned	11	3.37
Total	326	100.00

Table 3 shows that out of 326 questionnaires given to the respondents, 297 questionnaires were filled and returned, accounting for an 91.10% response rate. A response rate of 70% and above is considered adequate. Therefore, the obtained response rate of 91.10% 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, 18 questionnaires returned but incomplete, constituting 5.52% of the total distributed while 11 questionnaires remained unreturned, constituting 3.37% of the total distributed.

 Table 4

 Demographic Distribution of Respondents

Demographics	Options	Frequency	Percentage
Age	18-30 years	36	12.1
_	31-40 years	74	24.9
	41-50 years	145	48.4
	51-60 years	42	14.1
	Total	297	100.0
Gender	Male	153	51.5
	Female	144	48.5
	Total	297	100.0
Education qualification	Certificate	131	44.1
-	Diploma	87	87
	Bachelor	72	24.2
	Master	7	2.4
	Total	297	100.0
Work experience	Less than 2 years	43	14.5
-	2-3years	174	58.6
	4-5 years	80	26.9
	Total	297	100.0

Table 4 indicated the information on descriptive characteristics of the respondents so as to determine their maturity, level of understanding, knowledge; it includes their age, gender, educational level, and working experience in TREPA-Bugesera.

Among the 297 respondents, 51.5% are male, while 48.5% are female, reflecting a relatively balanced gender representation. Recognizing the gender diversity among participants is essential, as it may uncover potential variations in the perception and utilization of project manager's soft skills practices.

Regarding the age group of respondents, providing observations into the distribution of respondents across various age groups. The majority of respondents in the age group of 41-50, constituting 48.8% of the sample, may bring significant work experience and maturity to their perceptions of manager's soft skills practices, followed by those aged 31-40 at 24.9%. Respondents aged 18-30 and 51 and above make up 12.1% and 14.1%, respectively. This distribution allows for an understanding of the age diversity among participants, enabling a more analysis on effect of project manager's soft skills on project performance. a case of transforming eastern province through adaptation project in Bugesera District.

Among the 297 respondents, 14.5% have less than 1 year of experience, 58.6% fall within the 2-6 years' experience range, and 26.9% have 4-5 years of professional background. Majority group (the 2-3 years' experience) indicates a workforce with a significant proportion of individuals who have acquired the potential for a well-balanced



team, where mid-level professionals may bring a combination of seasoned knowledge and a fresh perspective This diversity in experience levels highlights the potential for a balanced team dynamic, where the strengths of both relatively junior and more experienced staff and beneficiaries can be harnessed to strengthen collaboration and innovation within the project.

The breakdown indicates that among the 297 respondents, 13.1% have a certificate means secondary education, 23.9% hold a diploma, 56.6% possess a bachelor's degree, and 6.4% have attained a master's degree. This distribution reflects a diverse educational background among the workforce, with the majority having completed a bachelor's degree. Employees with bachelor's degrees may be better equipped to understand and assess the complex interplay between project manager's soft skills and overall project outcomes.

Table 5 Descriptive Statistics on Effect of Project Manager's Conflict Resolution Skills on Performance of TREPA Project in Bugesera District

Statement	Mean	Std. Deviation
The project manager consistently identifies problems efficiently.	4.31	.801
The project manager is adept at identifying the root causes of conflicts.	4.26	.766
Conflict mediation by the project manager leads to satisfactory resolutions.	4.51	.923
The project manager fosters strong relationships among team members.	4.11	.816
The project manager has provided adequate conflict resolution training to the team.	4.13	.905
Overall	4.26	.842

Table 5 presents the descriptive findings on the effect of project manager's conflict resolution skills on performance of TREPA Project in Bugesera District. A significant number of respondents agreed with the statement that the project manager consistently identifies problems efficiently, as evidenced by the very high mean score of 4.31. This indicates a very strong positive agreement among the respondents. The standard deviation of 0.801 indicates heterogeneity in responses among participants. Similarly, respondents, on average, expressed agreement that the project manager is adept at identifying the root causes of conflicts, with a high mean score of 4.26, indicating a strong positive agreement. The standard deviation of 0.766 indicates a relatively heterogeneous response pattern.

Moreover, the very high mean score of 4.51 for the statement that conflict mediation by the project manager leads to satisfactory resolutions indicates a very high level of positive agreement among participants. However, the standard deviation of 0.923 highlights some heterogeneity in responses, reflecting a wider range of opinions. On the statement that the project manager fosters strong relationships among team members, the high mean score of 4.11 indicates strong positive agreement, but the standard deviation of 0.816 shows heterogeneity in responses. The statement regarding the project manager has provided adequate conflict resolution training to the team received a high mean score of 4.13, indicating a strong positive agreement and the standard deviation of 0.905 highlights heterogeneity in opinions among respondents.

The overall high mean of 4.26 for the combined statements reflects an overall strong positive perception that there is effect of project manager's conflict resolution skills on performance of TREPA Project in Bugesera District, with a standard deviation of 0.842, indicating some heterogeneity in opinions among the respondents. The findings align with a study conducted by Zhu et al. (2020) explored the concept, scale development, and validation of conflict management in construction project contexts in China and Japan.

On this matter in relations with project manager's conflict resolution skills, an interviewee from Project team members stated

> "The project manager crossed various interpersonal and project-related conflicts by employing active listening, adopted engagement, and strategic problem-solving techniques. For instance, when disagreements arose between different team factions over resource allocation, the project manager facilitated open discussions that allowed all parties to voice their concerns, fostering mutual understanding and cooperation. This not only diffused tensions but also led to innovative solutions that optimized resource use and project timelines".



Table 6 Descriptive Statistics on Effect of Project Manager's Leadership Skills on Performance of TREPA Project in Bugesera

Statement	Mean	Std. Deviation
The project manager has established a positive project culture.	4.29	.860
The project manager's planning skills are comprehensive and effective.	4.65	.758
The project manager effectively addresses challenges as they arise.	4.12	.835
The project manager maintains a balance of encouragement and discipline within the team.	4.22	.954
The project manager regularly evaluates project activities for improvement.	4.22	.908
Overall	4.30	.863

Table 6 presents the descriptive findings on the effect of project manager's leadership skills on performance of TREPA Project in Bugesera District. Numerous respondents agreed with the statement that the project manager has established a positive project culture, as indicated by the mean score of 4.29 (SD = 0.860). The high mean indicates a strong positive agreement, and the standard deviation shows heterogeneity in responses. Additionally, a significant number of respondents expressed agreement that the project manager's planning skills are comprehensive and effective., with a mean score of 4.65 (SD = 0.758). The very high mean indicates a very strong positive agreement, and the standard deviation highlights heterogeneity in responses pattern.

Moreover, the high mean score of 4.12 (SD = 0.835) for the statement that the project manager effectively addresses challenges as they arise indicates a strong positive agreement among respondents, with a standard deviation showing some heterogeneity in opinions.

When considering the assertion that the project manager maintains a balance of encouragement and discipline within the team, the high mean score of 4.22 (SD = 0.954) reflects a strong positive agreement, and the standard deviation implies heterogeneity in opinions among participants. Lastly, for the claim that the project manager regularly evaluates project activities for improvement, the high mean score of 4.22 (SD = 0.908) indicates a strong positive agreement and the standard deviation shows some heterogeneity in responses.

The overall very high mean of 4.30 (SD = 0.863) for the combined statements reflects a strong positive perception that there is effect of project manager's leadership skills on performance of TREPA Project in Bugesera District, with a standard deviation indicating some heterogeneity in opinions among the respondents. The findings are consistent with Mutua and Muchelule (2024) investigated the impact of project leadership on the performance of solar energy projects in Kenya. The study concluded a strong positive correlation between Project Team Idelaization and the performance of solar energy projects, while Project Prioritization has an insignificant positive correlation. On this matter in regard to project manager's leadership skills, a member of the project team members stated,

> "I can attest that the project manager's leadership skills significantly influenced its success. The project manager exemplified transformative leadership by setting a clear vision and motivating the team to embrace the objectives actively. They demonstrated decisiveness and clarity in assigning roles and responsibilities, ensuring that each team member's strengths were leveraged effectively".

Table 7 Descriptive Statistics on Effect of Project Manager's Communication Skills on Performance of TREPA Project in Bugesera District

Statement	Mean	Std. Deviation
The project manager has implemented effective communication policies.	4.33	.895
The project manager utilizes a variety of communication tools effectively.	4.22	.833
There are sufficient communication channels established by the project manager.	4.43	.887
The project manager ensures that relevant information is readily available.	4.26	.865
The project manager actively seeks and receives feedback from team members.	4.36	.886
Overall	4.32	.873

Table 7 presents the descriptive findings on the effect of project manager's communication skills on performance of TREPA Project in Bugesera District. A significant number of respondents strongly agreed that the project manager has implemented effective communication policies; the very high mean score of 4.33 indicates a very strong positive agreement, and the standard deviation of 0.895 shows heterogeneity in responses among participants.

Similarly, a notable number of respondents strongly agreed that the project manager utilizes a variety of communication tools effectively, with a high mean score of 4.22, indicating a strong positive agreement and a standard deviation of 0.833 indicating heterogeneity in responses. Furthermore, numerous respondents strongly agreed that there are sufficient communication channels established by the project manager, as evidenced by the very



high mean score of 4.43, indicating a very strong positive agreement; however, the standard deviation of 0.887 highlights some heterogeneity in opinions among participants.

Additionally, almost all respondents strongly agreed that the project manager ensures that relevant information is readily available, with a high mean score of 4.26 and a standard deviation of 0.865 indicating a strong positive agreement but with some heterogeneity in responses. Moreover, respondents strongly agreed that the project manager actively seeks and receives feedback from team members, as reflected in the very high mean score of 4.36, indicating a very strong positive agreement; the standard deviation of 0.886 shows heterogeneity in opinions.

Overall, the very high mean score of 4.32 indicates a very strong positive agreement that there is effect of project manager's communication skills on performance of TREPA Project in Bugesera District, with the standard deviation of 0.873 highlighting some heterogeneity in opinions among the respondents. The findings are supported by the emphasis of Zakiah et al. (2020) examined the collaboration and communication skills of pre-service mathematics teachers in creating project assignments in Indonesia.

On this matter in regard to project manager's communication skills, an interviewee from project sponsors stated,

"I observed personal how the project manager's exceptional communication skills played a pivotal role in the project's outstanding performance. From the start, the project manager established clear channels of communication among all stakeholders, ensuring that everyone was aligned with the project's objectives and updates. They facilitated regular meetings that encouraged open dialogue and transparency, allowing for real-time feedback and rapid resolution of issues."

Table 8Descriptive Statistics on Effect of Project Manager's Motivation Skills on Performance of TREPA Project in Bugesera District

Statement	Mean	Std. Deviation
The project manager successfully implements team incentive projects.	4.29	.829
The project manager motivates the team to achieve project goals.	4.37	.845
The project manager creates a powerful and motivating workplace environment.	4.25	.881
Team-building activities led by the project manager are effective.	4.40	.872
The project manager regularly recognizes and appreciates team efforts.	4.43	.840
Overall	4.34	.853

Table 8 presents the descriptive findings on the effect of project manager's motivation skills on performance of TREPA Project in Bugesera District. A significant number of respondents agreed that the project manager successfully implements team incentive projects, as indicated by the high mean score of 4.29 and a standard deviation of 0.829. The high mean indicates a strong positive agreement, and the standard deviation shows some heterogeneity in responses among participants.

Similarly, respondents expressed agreement that the project manager motivates the team to achieve project goals, with a mean score of 4.37 and a standard deviation of 0.845. The very high mean indicates a very strong positive agreement, and the standard deviation indicates some heterogeneity in opinions. Moreover, participants agreed that the project manager creates a powerful and motivating workplace environment, as reflected by the high mean score of 4.25, indicating a strong positive agreement; however, the standard deviation of .881shows heterogeneity in opinions among respondents.

Additionally, respondents agreed that team-building activities led by the project manager are effective, with a very high mean score of 4.40 and a standard deviation of 0.872, indicating a very strong positive agreement with some heterogeneity in responses. Lastly, respondents agreed that the project manager regularly recognizes and appreciates team efforts, as evidenced by the very high mean score of 4.43 and the standard deviation of 0.840, indicating a very strong positive agreement and a heterogeneous response pattern.

Overall, the very high mean score of 4.34 for the combined statements reflects a very strong positive agreement that there is effect of project manager's motivation skills on performance of TREPA Project in Bugesera District, with the standard deviation of 0.853 indicating some heterogeneity in opinions among the respondents. The findings are in line with the emphasis by Kikechi (2024) studied on examining positive motivational instructional design strategies for a youth project in Kenya. The study emphasizes the importance of personalized learning methods in enhancing the engagement and effectiveness of youth training.

On this matter in relations with project manager's motivation skills, a member of the project management team for the TREPA Project in Bugesera District stated

"I confidently say that our project manager's motivation skills were key to our project's success. The manager had an incredible ability to energize and inspire every team member by recognizing individual contributions and linking them to the broader project goals. Through regular feedback sessions, our



manager reinforced the importance of our roles, ensuring we felt valued and integral to the project's achievements".

Table 9 Descriptive Statistics on Performance of TREPA Project in Bugesera District

	Mean	Std. Deviation
Tasks are performed within project scope	4.18	.885
Tasks are performed within timeliness	4.17	.866
Tasks are performed within required quality	4.39	.790
Tasks are performed within budget expectations	4.29	.934
The quality of the project's deliverables meets or exceeds expectations.	4.48	.784
Overall	4.30	.851

Table 9 presents the descriptive findings on performance of TREPA Project in Bugesera District. Respondents agreed that tasks are performed within project scope (with a mean score of 4.18 and a standard deviation of 0.885). The high mean indicates strong positive agreement, and the standard deviation shows some heterogeneity in responses among participants. Similarly, respondents expressed agreement that tasks are performed within timeliness (with the mean score of 4.17 and a standard deviation of 0.866). The high mean indicates strong positive agreement, and the standard deviation indicates some heterogeneity in opinions.

Furthermore, participants agreed that tasks are performed within required quality (with a mean score of 4.39; the standard deviation of 0.790). The very high mean indicates a very strong positive agreement and the standard deviation shows heterogeneity in responses among respondents. Additionally, respondents acknowledged that tasks are performed within budget expectations (with the mean score of 4.29 and a standard deviation of 0.934). The high mean indicates a strong positive agreement, and the standard deviation indicates some heterogeneity in opinions among participants. Moreover, participants agreed that the quality of the project's deliverables meets or exceeds expectations (with a mean score of 4.48 and a standard deviation of 0.784), indicating a very strong positive agreement and a heterogeneous response pattern.

The overall high mean of 4.30 for the combined statements reflects a very strong positive perception of performance of TREPA Project in Bugesera District, with the standard deviation of .0851 indicating some heterogeneity in opinions among the respondents. The findings are supported by the emphasis of Chandanraju (2023) posited that the project performance indicators are quality, time, cost, and scope. It is evident that any change in any one of dimensions would affect the other.

On this matter in relations with performance of TREPA Project, as a member of the project staff for the TREPA Project in Bugesera District,

> "I have witnessed significant positive transformations in the community through our initiatives. Our team has successfully implemented various activities aimed at improving agricultural productivity, enhancing access to clean water, and promoting sustainable livelihood practices. TREPA Project has not only met its objectives but has also laid a solid foundation for continued growth and development in Bugesera District".

Table 10 Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic Df Sig. Statistic df Sig.				Sig.	
Project Performance	.102	297	.108	.960	297	.092

a. Lilliefors Significance Correction

The results of tests of normality for various variables, utilizing both the Kolmogorov-Smirnova and Shapiro-Wilk tests. Considering the Shapiro-Wilk test, the p-values for project performance (0.108 and 0.092) are all greater than 0.05. In this case, the data for all variables are normally distribution based on the Shapiro-Wilk test.

Table 11 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819a	.671	.666	.38854

a. Predictors: (Constant), Motivation Skills, Leadership Skills, Conflict Resolution Skills, Communication Skills



Model Summary for the regression analysis. The R value of 0.819 indicates a strong positive correlation between the predictors (conflict resolution skills, leadership skills, communication skills and motivation skills) and the dependent variable (performance of TREPA Project in Bugesera District). The R Square value of 0.671 signifies that approximately 67.1% of the variability in the performance of TREPA Project in Bugesera District can be explained by the independent variables in the model. The findings align with the emphasis of Ullah et al. (2023) asserted that the organizations use the project management to achieve high-quality results within budget and on schedule. However, according to the author, mismanagement soft skills like leadership and communication impacted on project failure, especially among smallholders.

Table 12 ANOVA

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89.717	4	22.429	148.570	.000 ^b
	Residual	44.082	292	.151		
	Total	133.799	296			

- a. Dependent Variable: Project Performance
- b. Predictors: (Constant), Motivation Skills, Leadership Skills, Conflict Resolution Skills, Communication Skills

The Analysis of Variance (ANOVA) results in Table 4.14 indicate a highly significant F-statistic of 148.570 (p = 0.000). The F-statistic assesses the overall significance of the regression model, testing whether there is a significant difference between the model with predictors (conflict resolution skills, leadership skills, communication skills and motivation skills) and the performance of TREPA Project in Bugesera District. In this case, the small pvalue (p = 0.000< 0.05) associated with the F-statistic indicates that the predictors jointly have a significant effect on explaining the variance in the dependent variable (The performance of TREPA Project in Bugesera District).

Table 13 Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.381	.134		2.840	.005
	Conflict Resolution Skills	.341	.055	.340	6.205	.000
	Leadership Skills	.143	.054	.144	2.641	.009
	Communication Skills	.182	.053	.188	3.420	.001
	Motivation Skills	.276	.052	.278	5.316	.000

a. Dependent Variable: Project Performance

The adopted model presented as follow:

 $Y=b \ 0 + b1CRS + b2LS + b \ 3CS + b4MS + e$

Therefore, Project Performance =0.381+0.341 (conflict resolution skills) + 0.143 (leadership skills) +0.182 (communication skills) + 0.276 (motivation skills) + 0.134

The coefficients for the regression model predicting performance of TREPA Project in Bugesera District based on the predictors conflict resolution skills, leadership skills, communication skills and motivation skills. The constant term has an unstandardized coefficient (B) of 0.381 with a standard error of 0.134 (p = 0.005 > 0.05).

Moving to the predictors, each of them demonstrates statistically significant relationships with performance of TREPA Project in Bugesera District. Specifically, for every one-unit increase in Conflict Resolution Skills, there is a 0.341 unit increase in the performance of TREPA Project in Bugesera District (p=0.000 < 0.05). Similarly, Leadership Skills shows a positive effect, with a 0.143 unit increase in the performance of TREPA Project in Bugesera District for every one-unit increase in e-auction (p = 0.009 < 0.05).

Communication skills and motivation skills also have positive effects, contributing to the performance of TREPA Project in Bugesera District, with unstandardized coefficients of 0.182 (p = 0.001< 0.05) and 0.276 (p = 0.000< 0.05) respectively. These findings indicate that all the predictors significantly contribute to predicting and positively influencing the performance of TREPA Project in Bugesera District in the context of the regression model.



Table 14 Hypotheses Results

Hypotheses	P Value	Comment
H ₀₁ There is no significant effect of project manager's conflict resolution skills on	p=0.000<0.05	Rejected
performance of TREPA Project in Bugesera District.		
H ₀₂ There is no significant effect of project manager's leadership skills on performance	p=0.009<0.05	Rejected
of TREPA Project in Bugesera District.		-
H ₀₃ There is no significant effect of project manager's communication skills on	p=0.001<0.05	Rejected
performance of TREPA Project in Bugesera District.		
H ₀₄ There is no significant effect of project manager's motivation skills on	p=0.000<0.05	Rejected
performance of TREPA Project in Bugesera District.	_	-

The findings from hypothesis testing, as presented in Table 4.16, presents positive and statistically significant effects of various project manager's soft skills on the performance of TREPA Project in Bugesera District. Firstly, the hypothesis H01 There is no significant effect of project manager's conflict resolution skills on performance of TREPA Project in Bugesera District was rejected with a p-value of 0.000, clearly below the significance threshold.

Similarly, the hypothesis H02 There is no significant effect of project manager's leadership skills on performance of TREPA Project in Bugesera District was rejected, with a p-value of 0.009. Additionally, H03 There is no significant effect of project manager's communication skills on performance of TREPA Project in Bugesera District, rejected with a p-value of 0.001. Finally, H04 There is no significant effect of project manager's motivation skills on performance of TREPA Project in Bugesera District rejected with a p-value of 0.000.

In summary, all null hypotheses were rejected accepted, collectively highlighting the beneficial effect of conflict resolution skills, leadership skills, communication skills and motivation skills on enhancing the performance of TREPA Project in Bugesera District.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

The study aimed to examine the impact of a project manager's soft skills on the TREPA Project in Bugesera District, Rwanda. Four key skills were examined: conflict resolution skills, leadership skills, communication skills, and motivation skills. The results showed that conflict resolution skills significantly contributed to project success, as they streamlined processes and fostered a collaborative team environment. Leadership skills were also deemed crucial, as they shaped a productive project culture and motivated team members to achieve project goals. Communication skills were also critical, as effective communication strategies improved information flow among team members, leading to better coordination and timely decision-making. Motivation skills were also recognized as crucial, as they built a motivating work environment, enhancing team morale and productivity.

The findings rejected the null hypothesis regarding the impact of project manager's soft skills on project performance. The results showed a strong positive relationship between conflict resolution skills and enhanced project outcomes, rejecting the hypothesis related to conflict resolution skills. The null hypothesis regarding leadership skills was also rejected, as effective communication was shown to enhance project performance. Finally, the hypothesis concerning motivation skills was rejected, highlighting their critical role in the success of the TREPA Project in Bugesera District.

5.2 Recommendations

The TREPA Project should implement team-building activities to foster trust and open communication, establish a structured feedback mechanism for team members to assess leadership effectiveness, conduct regular communication training sessions, and conduct employee engagement surveys to understand team members' needs and motivations. The Bugesera District should prioritize training and development of project managers in advanced conflict resolution techniques, adopt a transformational leadership program, promote robust communication frameworks, and create an incentive and recognition program to reward team members for their contributions and achievements. These recommendations aim to improve the TREPA Project's overall performance and effectiveness.



REFERENCES

- Ahmad, M. K., Abdulhamid, A. B., Wahab, S. A., & Nazir, M. U. (2022). Impact of the project manager's transformational leadership on project success. *International Journal of Managing Projects in Business*, 15(5), 842-864
- Arnold, R. M., Back, A. L., Barnato, A. E., Prendergast, T. J., Emlet, L. L., Karpov, I., ... & Nelson, J. E. (2015). The Critical Care Communication project: improving fellows' communication skills. *Journal of critical care*, 30(2), 250-254.
- Atkinson, J. W. (2000). Motivational determinants of risk-taking behavior. In E. T. Higgins & A. W. Kruglanski (Eds.), *Motivational science: Social and personality perspectives* (pp. 191–201). Princeton: Van Nostrand Psychology Press.
- Ballesteros-Possú, W., Valencia, J. C., & Navia-Estrada, J. F. (2022). Assessment of a cocoa-based agroforestry system in the Southwest of Colombia. *Sustainability*, *14*(15), 9447.
- Bala, P., Ojunga, S. O., Okumu, J., Kisiwa, A., Langat, D., & Nyambati, R. (2020). Tree-based conflict management mechanism among small landholders in agroforestry systems of Kenya. *East African Journal of Forestry and Agroforestry*, 2(2), 24-39.
- Bendickson, J., Muldoon, J., Liguori, E. W., & Davis, P. E. (2016). Agency theory: background and epistemology. *Journal of Management History*, 22(4), 437-449.
- Bianca Ndanu, NZIOKI (2021). Conflict resolution in promoting effective project management: a case of Lake Turkana Wind Power project in Kenya (Doctoral dissertation, University of Rwanda).
- Chandanraju MK (2023) Project performance dimension, life cycle, classification and management. *International Research Journal of Modernization in Engineering Technology and Science*, Volume:05/Issue:11, pp. 2582-5208
- Chung, C. J., Barnett, G. A., Kim, K., & Lackaff, D. (2013). An analysis on communication theory and discipline. *Scientometrics*, 95(3), 985-1002.
- Dale, L., & Ajibade, I. (2024). Climate resettlement and livelihood transformation in Rwanda: the case of Rweru Model Green Village. *Climate and Development*, 9(1) 1–13. https://doi.org/10.1080/17565529.2024.2314691
- Davis, P. E., Bendickson, J. S., Muldoon, J., & McDowell, W. C. (2021). Agency theory utility and social entrepreneurship: issues of identity and role conflict. *Review of Managerial Science*, *15*, 2299-2318.
- Dey, T. K., & Wang, Y. (2022). Computational topology for data analysis. New York, Cambridge University Press.
- Ding, C. S., Wong, S. Y., Ting, A. M. Y., Teo, C. C., Palis, P. A., & Siong, C. (2023). The Impacts of Project Communication Skills on the Effectiveness of Construction Project Teams in Sarawak, Malaysia, *International Journal of Academic Research in Business & Social Sciences*, 13(10), 2222-6990.
- Doedens, W. J., & Meteyard, L. (2022). What is functional communication? A theoretical framework for real-world communication applied to aphasia rehabilitation. Neuropsychology Review, 32(4), 937-973.
- Dulock, H. L. (1993). Research design: Descriptive research. Journal of Pediatric Oncology Nursing, 10(4), 154-157.
- Emuze, F., Mollo, L. G., & Awuzie, B. (2023). Curbing Communication Challenges in Construction Project Management in Developing Countries. World Scientific Book Chapters, in: George Ofori (ed.), *In Building a Body of Knowledge in Project Management in Developing Countries. World Scientific Publishing Co. Pte. Ltd, 5 Toh Tuck Link, Singapore 596224*, (pp. 295-319).
- Fite, D., & Pfleiderer, P. (1995). Should firms use derivatives to manage risk?. Risk Management: Problems and Solutions, McGraw-Hill, New York.
- Gunasingha, R. M. K. D., Lee, H. J., Zhao, C., & Clay, A. (2023). Conflict resolution styles and skills and variation among medical students. *BMC medical education*, 23(1), 246.
- Hakizamungu, E. (2023). The Role of Leadership Skills To The Performance Curriculum Development Projects In Higher Learning Insinuations. *Emerald International Journal of Scientific and Contemporary Studies*, 4(1), 20-30.
- Heckhausen, H., & Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and emotion*, 11, 101-120.
- Jensen, M. C., & Meckling, W. H. (1976). Agency Costs and the Theory of the Firm. *Journal of financial economics*, 3(4), 305-360.
- Jeong, Y. H., Healy, L. C., & McEwan, D. (2023). The application of goal setting theory to goal setting interventions in sport: A systematic review. *International review of sport and exercise psychology*, *16*(1), 474-499.
- Katz, N. H., Lawyer, J. W., Sosa, K. J., Sweedler, M., & Tokar, P. (2020). *Communication and conflict resolution skills*. Kendall Hunt Publishing, Dubuque, IA.
- Kikechi, B. (2024). Examining Positive Motivational Instructional Design Strategies For A Youth Project In Kenya. Athabasca University, ALBERTA(Doctoral dissertation)



- Kuhl, J. (1984). Volitional aspects of achievement motivation and learned helplessness: Toward a comprehensive theory of action control. *In Progress in experimental personality research 13*(1984), 99-171, *Elsevier*.
- Lai, E. R. (2011). Motivation: A literature review. Person Research's Report, 6, 40-41.
- Lechler, R. C., & Huemann, M. (2024). Motivation of Young Project Professionals: Their Needs for Autonomy, Competence, Relatedness, and Purpose. *Project Management Journal*, 55(1), 50-67.
- Lin, T., Ko, A. P., Than, M. M., Catacutan, D. C., Finlayson, R. F., & Isaac, M. E. (2021). Farmer social networks: The role of advice ties and organizational leadership in agroforestry adoption. *Plos one*, *16*(8), 0255987.
- Locke, E., & Latham, G. (2015). *Goal-setting theory. In Organizational Behavior*, New York, 1(pp. 159-183). Routledge.
- Lunenburg, F. C. (2011). Goal-setting theory of motivation. *International journal of management, business, and administration*, 15(1), 1-6.
- Mahaney, R. C., & Lederer, A. L. (2011). An agency theory explanation of project success. *Journal of Computer Information Systems*, 51(4), 102-113.
- Mahmood, R., Lucas, J., Alvarez, J. M., Fidler, S., & Law, M. (2022). Optimizing data collection for machine learning. *Advances in NIPS*, *35*, 29915-29928.
- Martinsuo, M., & Ahola, T. (2022). Multi-project management in inter-organizational contexts. *International Journal of Project Management*, 40(7), 813-826.
- Mason, A. J., & Carr, C. T. (2022). Toward a theoretical framework of relational maintenance in computer-mediated communication. *Communication Theory*, 32(2), 243-264.
- Mayor, L., Lindner, L. F., Knöbl, C. F., Ramalho, A., Berruto, R., Sanna, F., ... & Busato, P. (2022). Skill Needs for Sustainable Agri-Food and Forestry Sectors (I): Assessment through European and National Focus Groups. *Sustainability*, 14(15), 9607.
- Mutua, O. N., & Muchelule, Y. (2024). Project Leadership and Performance of Solar Energy Projects In Kiambu County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship* (IJSSME), 8(1), 984-994.
- Muzio, E., Fisher, D. J., Thomas, E. R., & Peters, V. (2007). Soft skills quantification (SSQ) Foi project manager competencies. *Project Management Journal*, 38(2), 30-38.
- Ngwijabagabo, H., Niyonzima, T., Nyandwi, E., Hirwa, H., Nishyirimbere, A., Mwizerwa, F., & Uwera, D. (2021). Spatial suitability analysis and mapping of agroforestry areas. *Rwanda Journal of Engineering, Science, Technology and Environment*, 4(1), 17-21.
- Niyonkuru, S., Uwizeyimana, F., & Therese, N. M. (2024). *Influence of Project Management Skills on Project Sustainability: A Case of Vision 2020 Umurenge Program in Burera District, Rwanda.* Unpublished Thesis.
- Njeri, N., & Ngufi, P. (2021). Role of Conflict Resolution on the Performance of a Project Team in Kiambu County, Kenya. *International Journal of Social Sciences and Information Technology*, 7(10), 12-15.
- Nkurikiye, J. B., Uwizeyimana, V., Van Ruymbeke, K., Vanermen, I., Verbist, B., Bizoza, A. R., & Vranken, L. (2024). Farmers' Preferences for Adopting Agroforestry in the Eastern Province of Rwanda, 16 (pp2666-7193).
- North, D. W. (1968). A tutorial introduction to decision theory. *IEEE transactions on systems science and cybernetics*, 4(3), 200-210.
- Nzabitondera, B., & Bugingo, E. (2024). Effect of Employee Motivation Practices on Projects Performance in Health Projects: A Case of Projects Implemented in Ruhengeri Referral Hospital, Musanze District, Rwanda. *African Journal of Empirical Research*, 5(2), 65-77.
- Obilor, E. I. (2023). Convenience and purposive sampling techniques, *International Journal of Innovative Social & Science Education Research*, 11(1),1-7.
- Osiri, J. (2021). Effectiveness of Alternative Dispute Resolution Methods in the Rwandan Construction Industry (Doctoral dissertation, JKUAT-COETEC).
- Sussman, S., Earleywine, M., Wills, T., Cody, C., Biglan, T., Dent, C. W., & Newcomb, M. D. (2004). The motivation, skills, and decision-making model of "drug abuse" prevention. *Substance use & misuse*, 39(10-12), 1971-2016.
- Swatek, S. (2024). Agroforestry adoption in Germany: using decision analysis to highlight the effects of institutional barriers and funding options on system profitability (Doctoral dissertation, RHEINISCHE FRIEDRICH-WILHELMS-UNIVERSITÄT BONN).
- Tahir, M. (2019). The effect of project manager's soft skills on success of project in the construction industry. *International Journal of Applied Research in Social Sciences*, 1(5), 197-203.
- Ullah, A., Mishra, A. K., & Bavorova, M. (2023). Agroforestry adoption decision in green growth initiative programs: Key lessons from the billion trees afforestation project (BTAP). *Environmental Management*, 71(5), 950-964.



- Van Ruler, B. (2020). Communication theory: An underrated pillar on which strategic communication rests. In Future directions of strategic communication (pp. 39-53). London, Routledge.
- Wen, B. J. (2023). The effects of project manager's soft skills on success of the project in the Malaysian construction industry (Doctoral dissertation, UTAR).
- Yurtkoru, E. S., Bozkurt, T., Bekta, F., Ahmed, M. J., & Kola, V. (2017). Application of goal setting theory. *PressAcademia Procedia*, *3*(1), 796-801.
- Zakiah, N. E., Fatimah, A. T., Sunaryo, Y., & Amam, A. (2020, October). Collaboration and communication skills of pre-service mathematics teacher in designing project assignments. *In Journal of Physics: Conference Series, (Vol. 1657*, No. 1, p. 012073). IOP Publishing.
- Zerihun, M. F. (2021). Agroforestry practices in livelihood improvement in the Eastern Cape Province of South Africa. *Sustainability*, 13(15), 8477.
- Zhu, F., Wang, L., Yu, M., & Yang, X. (2020). Quality of conflict management in construction project context: Conceptualization, scale development, and validation. *Engineering, Construction and Architectural Management*, 27(5), 1191-1211.