



INFLUENCE OF PROJECT MANAGERS' SOFT SKILLS ON PROJECT SUCCESS A CASE OF QUALITY EDUCATION AND HUMAN CAPITAL DEVELOPMENT PROJECT IN MUSANZE DISTRICT, RWANDA.

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Abstract: *The study entitled “Influence of project managers' soft skills on project success. Case of Quality education and human capital development project in Musanze District” was conducted for achieving four specific objectives such as: to assess the influence of project managers leadership skills on the success of the Quality education and human capital development project in Musanze District, to find out the influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District, to assess the influence of project managers' team building and team work on of the Quality education and human capital development project in Musanze District and to investigate the influence of mediating variables of the Quality education and human capital development project in Musanze District. To achieve the above study objectives, the researcher used descriptive, quantitative, and correlative research design. Primary data and secondary data also were used. Primary data were collected from 310 Quality education and human capital development project stakeholders and managers in Musanze district who meet at school, sector, and district level. Data collection was done using questionnaire and documentation. Data analysis was done with support of SPSS version 20 to generate linear regression model and bivariate correlation model as well as descriptive statistics. Here below are summary of findings: As defined in the 1st study objective findings confirm that leadership skills are effectively held and used by education and human capital development project in Musanze District (for all items assessed the mean is 4.05 and the standard deviation 0.778). With the 2nd study objective, the findings confirm that communication skills are effectively used by education and human capital development project in Musanze District (for all items assessed the mean was 4.06 and standard deviation 0.729). With the 3rd study objective, findings confirm that there is effective use of teamwork and teambuilding skills by the school's construction project workforce members as the averaged mean from all items assessed is equal to 3.85 and standard deviation 0.747. For all correlation, test of significance was statistically significant as all p-values remain less than 0.05. Thus, the researcher concludes a positive influence of project managers' soft skills on project success as learned on case of quality education and human capital development project in Musanze District. The study findings have demonstrated a gap of project managers soft skills use, where the use of soft skills toward project success remain not full (100) achieved (mean of results was not reached 4-5 for all items) and standard deviation was heterogeneity which signify high degree of variability of values from the mean. Due to this, there are recommended to organize management training on best practices using soft skills to achieve projects goals, mission, objectives, and contribution in national development.*

Keywords: *Influence; Project Managers; Soft Skills; Project Success; Quality education; Human Capital Development.*

0. Introduction

The study entitled “Influence of project managers' soft skills on project success. Case of Quality education and human capital development project in Musanze District” was conducted for achieving four specific objectives such as: to assess the influence of project managers leadership skills on the success of the Quality education and human capital development project in Musanze District, to find out the influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District, to assess the influence of project managers' team building and team work on of the Quality education and human capital development project in Musanze District and to investigate the influence of mediating variables of the Quality education and human capital development project in Musanze District.

Musanze district has a high illiteracy rate compared to the average level of the country. In primary school, pupils/teacher ratio in Musanze District is of 62/1 which is lower than the national ratio of 63/1. At the secondary school level, the pupil/teacher ratio is 32/1 whereas the national one is 30/1. (2012 education statistical yearbook). The mean walking distance to a primary school in Musanze District is 21.6 minutes, while it is 27.2 minutes countrywide. 29.8% of households have a walking distance of between 30 and 59 minutes to a primary school (NISR, 2014). 2.5% of households must walk for more than one hour to reach a primary school attendance among children in Musanze varies across education levels: It is very low (38.6%) for the preschool-age population (3-6 years), widespread (95.4%) for the primary school-age population (7-12 years), and moderate (71.7%) for the secondary school-age population (13-18 years) at the time of the census. School attendance varies also across the sectors: for the preschool-age, it varies from 23% in Gacaca to 52% in Remera; for the primary school-age, it varies from 91.7% in Shingiro to 97.9% in Remera for the secondary school-age, it varies from 63.1% in Kimonyi to 77.3% in Nkotsi. (Rwanda 4th Population and Housing Census, 2012 (NISR, 2014). Thus, this study intends to evaluate the Influence of project managers' soft skills on project success. Case of Quality education and human capital development project in Musanze District.

1. Statement of the problem

Quality education and human capital development project in Musanze district was reported and recorded with numerous practices of soft skills whether technical and administrative to accomplish the works, although some short comes met during the implementation (Musanze District, 2022). As reported by the district officials, there was shortage of technical staffs as they were needed at different sites. And later in the rainy season around 3 schools' floors were destroyed by wind and rain due to poor construction techniques used and materials not well utilized (Musanze District, 2022). There were also numerous challenges raised at schools, sector, District level during the implementation of the project. Some were solved but the district was reported around 5% not solved pending and some other reported to ministerial level (Manazar, 2015). Different authors were conducted studies in previous years, but none of them focused on the influence of project managers' soft skills on the success of quality education and human capital development project a case study of Musanze district. Due to that gap, decentralized education projects in local administration in Rwanda has suffered more challenges which dedicated to being solved by managers and generally by the project stakeholders. In this study, the researcher intends to clarify that good leadership, communication skills and teamwork and team building are important tool and skills required for a good manager to attain goals, sustainability, impact, cost, or budget use efficiently, efficient time management, quality of project outputs and activities, stakeholder engagement, beneficiaries' satisfaction, plan achieved, and materials use efficiently. The researcher wants to inform local authorities especially in education sector the role of soft skills to the project success. Thus, this study intends to assess the influence of project managers' soft skills on project success in Rwanda. Case of Quality education and human capital development project in Musanze District.

2. Empirical Studies

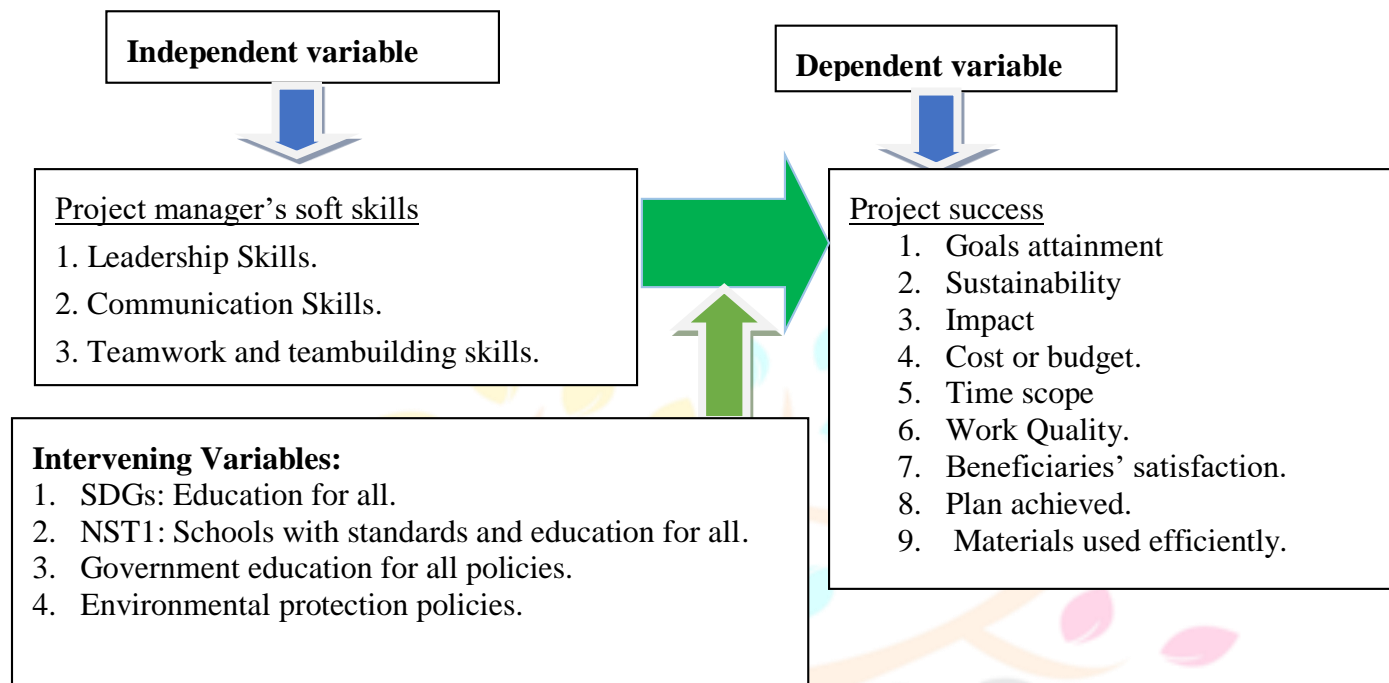
Landau, (2022) in the study about project manager skills for improving project performance, revealed that project managers have multifaceted responsibilities that significantly affect Project effectiveness. For him previous research has identified four skills of effective project managers, namely, conceptual, human, political, and technical skills. The aim of the study was to determine skill components that influence time, cost, and quality performance in construction projects. Data were collected from 107 project managers using a questionnaire survey method. The analysis results show that interpersonal influence has positive relationship with project time performance. Project cost performance is influenced by four skill components, namely, emotional intelligence, interpersonal skill, apparent sincerity, and budgeting. Lastly, project quality performance is affected by eight skill components, which include visioning, emotional intelligence, interpersonal skill, transformational leadership, interpersonal influence, apparent sincerity, quality management, and document and contract administration (Landau, 2022).

Reference to the study conducted by Elmezain, (2021) the term soft skills is traditionally used to describe interpersonal and subjective skills such as leadership, communication, and emotional intelligence. The study addresses a further explanation of soft skills, their relation to Project management, Project management education, and the highlighted differences between a transactional leader and a transformational leader. Project management has often been defined as the making of schedules/tasks; but more importantly providing the inspiration, motivation, and facilitator of great minds to produce innovative ideas. Because of the sheer necessity for human interaction within the Project management profession, soft skills are of crucial concern. Although mastering soft skills is a heavily weighted aspect of the profession, the current education of project managers is lacking the proper emphasis on soft skills. A further case study was analyzed comparing three project managers and their skill sets based on objective and subjective evaluations of their hard and soft skills.

Hypothesizing that the soft skills of the project managers was rated significantly higher than the objective evaluations of their hard skills. Proving that the currently education of only hard skills is not sufficient for successful project managers (Elmezain, 2021). The study conducted by (Shivakumar, 2018) on Soft Skills for IT Project effectiveness: A Systematic Literature Review, the inspiration was taken from the fact that, IT projects continue to fail at a high rate, and this represents losses in both money and opportunity organizations. This leads her to continue studying success factors in projects. The aim of her study is present a systematic literature review focused on soft skills for the IT Project effectiveness. The literature search was conducted using the electronic databases and the primary articles from 2010 to 2017. The results show that a high number of studies are theoretical, conceptual, or based on experience and there are no models that explain the causal relationship between soft skills and Project effectiveness. All studies agree about the relevance of the project manager soft skills for projects performance which made project success. The results show that the most influence soft skills for projects success are communication, leadership, and conflict resolution skills (Shivakumar, 2018).

3. Conceptual framework of the study

Figure 1 is describing the conceptual framework of the study. The figure shows indicators per each variable (independent and dependent) preauthorized by the researcher and intervening variables. Always policies and economic strategies are the guiding principles for financial services decentralization and MSMEs development. Once MSMEs have operating accounts, access to loan or credit, ensure transactions via financial institutions, etc lead to business development, increase of revenues, market expansion and increased savings. Finance can be sourced from micro finance, banks, non-banking financing institutions and even from the government.



Source: Compiled by the researcher

Figure 1: Conceptual framework linking access to Project manager's soft skills and project success

A project is run, managed, controlled, and closed by a project manager and their team. Hence, there are people involved in every stage, process, decision, and task of the project. This element of a project indicate that Project management is as much about people management as it is about Project management. People are key resources in any project i.e., stakeholders, suppliers, clients, project team etc. Thus, a project manager needs to exercise their soft skills while dealing with people i.e., project team (Serhan, 2016). It includes attributes like adaptability and flexibility, and it also includes problem solving, creative thinking, conflict resolution, time management and self-motivation.

4. Methodology of the study

This study used a descriptive and correlational study design with qualitative and quantitative approaches. It is a descriptive design as it described the process at which project managers' soft skills were used in the entire period of school's construction and workforce development project implementation. Furthermore, this research is correlational design, as project managers' skills are studied and their Influence on organization performance examined in form of correlation. The study also intends to use both qualitative and quantitative approaches as intends to collect and analyses quantitative and qualitative data.

This study has taken 313 Quality education and human capital development nominated managers in Musanze district. From which include managers at sector level (1 staff per each sector), managers at school level (2 per each school) and manager on technical level (2 per each school constructed or under construction process) and manager at district level (6 nominated management staff on the project including Mayor). The total constructed schools in Musanze District during the project implementation period are 73 schools (where either new school constructed or existing extended) (Musanze District Report, 2022). This study has adopted census approach and researcher has collected information from all target population (313). Note that, the study population are into three main categories as defined in the next table:

Table 1: Population Distribution by sectors in Musanze District

Sectors	Number of Schools extended or constructed	Number of Population
Musanze (District level)	N/A	6
Busogo	3	13
Cyuve	7	29
Gacaca	4	17
Gashaki	4	17
Gataraga	3	13
Kimonyi	3	13
Kinigi	7	29

Sectors	Number of Schools extended or constructed	Number of Population
Muhoza	4	17
Muko	5	21
Musanze	6	25
Nkotsi	5	21
NYANGE	7	29
Remera	5	21
Rwaza	6	25
Shingiro	4	17
Grand Total	73	313

Source: Musanze District, 2022

Table 1 show that from 313 total population was into three categories such as implementers and authorities at sector and district levels (21), project beneficiaries (146) and stakeholders, employees (146).

Linear regression model also was employed for testing the impact of project manager's soft skills on project success. Here below is the linear function:

$$Y_{(1;2;3;4;5;6;7;8;9 \& 10)} = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4$$

"y" from 1 to 10 represents 10 indicators listed in the conceptual framework on the side of the dependent variable and β_0 is the coefficient, 1 to 10, and "x" values from 1 to 10 represent 10 indicators listed in the conceptual structure representing the variable that is not dependent (independent variable).

5. Specific objectives

The specific objectives concerned by this study were:

1. To assess the influence of project managers' leadership skills on the success of the Quality education and human capital development project in Musanze District.
2. To find out the influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District.
3. To assess the influence of project managers' team building and teamwork skills on of the Quality education and human capital development project in Musanze District.
4. To investigate the influence of mediating variables on the Quality education and human capital development project in Musanze District.

6. Research hypothesis

The research hypotheses of this study were into four folds:

H0.1: There is no significant influence of project managers' leadership skills on the success of the Quality education and human capital development project in Musanze District.

H1.a: There is a significant influence of project managers' leadership skills on the success of the Quality education and human capital development project in Musanze District.

H0.2: There is no significant influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District.

H1.b: There is a significant influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District.

H0.3: There is no significant influence of project managers' team building and team work on of the Quality education and human capital development project in Musanze District.

H1.c: There is a significant influence of project managers' team building and team work on of the Quality education and human capital development project in Musanze District.

H0.4: There is no significant influence of mediating variables of the Quality education and human capital development project in Musanze District.

H1.d: There is a significant influence of mediating variables of the Quality education and human capital development project in Musanze District.

7. Findings

The study findings reflect to the study objectives and hypothesis. The researcher has presented summaries in this study, and they are in forms of descriptive statistics and inferential statistics. Here below are results:

7.1. Descriptive statistics

Table 2: Descriptive statistics

Indicators on both sides (Independent and Dependent)	Mean	Std. Deviation	N
Leadership Skills	4.054194	.2328211	310
Communication Skills	4.060968	.2238072	310
Teamwork and teambuilding skills	3.850645	.2658252	310
Goals Attainment	3.791398	.6592341	310
Sustainability	4.105376	.3300917	310
Impact	4.015054	.3441439	310
Cost or budget	3.819355	.6427632	310
Time scope	4.029029	.2447691	310
Quality	3.924725	.2826607	310
Stakeholder engagement	3.634407	.4702958	310
Beneficiaries' satisfaction	4.210752	.4582853	310
Plan achieved	3.878494	.2960904	310
Materials used efficiently	3.910752	.4043895	310

Source: Primary data 2022

The table 2 gives summary of the mean calculated from all items assessed under each indicator on both side, independent variable side and dependent variable side. Among others the lowest mean on the independent variables' indicators is 3.850 which falls under strong category and the highest mean obtained was 4.06 also falls in category of strong. But the mean explains that not all respondents appreciated the skills level of project managers of the school's construction and workforce development project in Musanze district, some of them were find a small gap.

On the side of dependent variable, the lowest mean obtained was 3.6344 and the highest mean obtained was 4.210 and all are under strong category. This also means that, Quality education and human capital development project was successfully completed but not well as planned, as some mean obtained are less than 4 (agree).

7.2 Regression analysis hypotheses testing

The test if study significance was made using linear regression model. This section present hypothesis test results on the following hypotheses:

H₁: There is no significant influence of project managers leadership skills on the success of the Quality education and human capital development project in Musanze District.

H₂: There is no significant influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District.

H₃: There is no significant influence of project managers' team building and team work on of the Quality education and human capital development project in Musanze District.

H₄: There is no significant influence of mediating variables of the Quality education and human capital development project in Musanze District.

Table 3: Linear regression model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.237 ^a	.056	.047	.2057093

a. Predictors: (Constant), Teamwork and teambuilding skills, Leadership Skills, Communication Skills

The linear regression model data were taken from all mean of independent variable indicators to the summarized mean of all independent variable indicators. And the results are as follows:

Table 4.3 R Square (R²) is a measure of the goodness of fit of a model. In regression, the R Square (R²) coefficient of determination is a statistical measure of how well the regression predictions approximate the real data points. An (R²) of 1 indicates that the regression predictions perfectly fit the data. This shows that, the analyzed model feet at 5.6% as (R²) is equal to 0.056. R is also equal to 0.237 meaning that, Teamwork and teambuilding skills, Leadership Skills, Communication Skills each contribute 23.7% to the success of project (Quality education and human capital development project).

Table 4: Linear regression model ANOVA table summary

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.774	3	.258	6.094	.000 ^b
	Residual	12.949	306	.042		
	Total	13.722	309			

a. Dependent Variable: Project success

b. Predictors: (Constant), Teamwork and teambuilding skills, Leadership Skills, Communication Skills

As seen from table 4, the results show that the model had an F ratio of 6.094 and the P value was $0.000 < 0.05$, signifying that the F ratio was statistically significant, therefore the overall regression model for all the variables tested were statistically significant and can be used for prediction at 5% significant level. This further indicate that the predictors variables (Teamwork and teambuilding skills, Leadership Skills, Communication Skills) used in this study are statistically significant to project success.

Therefore, the formulated null hypothesis starting that there is no significant influence between Teamwork and teambuilding skills, Leadership Skills, Communication Skills on project cuss (all 4 hypotheses) was failed to be accepted in favor of alternative hypothesis (their opposites).

Table 5: Linear regression model coefficients

		``Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
	(Constant)	3.938	.282		13.979	.000
1	Leadership Skills (LS)	.183	.053	.203	3.450	.001
	Communication Skills (CS)	.190	.056	.202	3.406	.001
	Teamwork and teambuilding skills (TTS)	.013	.045	.017	.293	.009

a. Dependent Variable: Project success (All 7 indicators)

Table 5 gives the following linear equation:

$$\text{Project succs} = 3.938 + 0.183 \text{ LS} + 0.190 \text{ CS} + 0.013 \text{ TTS}$$

This means that, there is a positive influence or correlation between Leadership Skills (LS), Communication Skills (CS) and Teamwork and teambuilding skills (TTS) toward project success (project Cost or budget, Time, Quality, Stakeholder engagement, Beneficiaries satisfaction, Plan achieved, and Materials used efficiently). In other words, one unit change from the one above indicators (3 listed above) lead to change of 0.183; 0.190; and 0.013 change times additional value to the current units of project success. In other words, once indicators of independent variable are absolute, the project success equal to 3.938 units. As conclusion the null hypotheses (all 4 hypotheses) were not accepted, and the researcher confirm the following:

There is significant influence of project managers leadership skills on the success of the Quality education and human capital development project in Musanze District; There is significant influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District; There is significant influence of project managers' team building and team work on of the Quality education and human capital development project in Musanze District; and There is significant influence of mediating variables of the Quality education and human capital development project in Musanze District.

7.3 Discussion of study findings

To reduce over crowding and distance to school at the primary level and secondary levels the project of quality education and human capital development was initiated and started and now in most country areas was completed. The project has financed more than 10,000 classrooms over the country and 90% were built on existing schools. The objective of the project was to improve teaching and learning practices in schools by financing the improvement of teaching and learning environment in different schools. The project also intends to develop demonstration schools to enhance pre- and in-service teacher development. It finances the improvement of school facilities (conference room, a 3-classroom preschool block, demonstration school science labs).

As mentioned by the respondents, the project was successfully achieved the objectives after a series of challenges. As mentioned by Maryam, E. (2021), it is difficult even impossible to get project success without any obstacle, but the quality of project achievements depended on the quality made in achieving project implementation risks. To ensure that projects risks are tackled and hindered on time without much more impacts on project activities, managers and stakeholders could be equipped in great project manager's skills. The study findings reveal that, Quality education and human capital development project management and stakeholders were trained and recruited on project management and the project recognize success however not all achieved 100% a series of challenges were faced and handled and today the project in Musanze district were handled to the schools and district as well as sectors management.

6. Conclusion

The conclusion of the study relies on the acceptance or fail to accept study hypothesizes. The study was conducted with 4 hypotheses: (1) there is no significant influence of project managers leadership skills on the success of the Quality education and human capital development project in Musanze District. (2) there is no significant influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District. (3) there is no significant influence of project managers' team building and team work on of the Quality education and human capital development project in Musanze District. And (4) there is no significant influence of mediating variables of the Quality education and human capital development project in Musanze District. The correlation analysis result that project managers soft skills contribute around 78% in the project success. The remaining 22% is signified by other variables not captured in this study. And as p-value is $0.000 < 0.05$, this positive, strong correlation between project managers soft skills and project success is statistically significant.

As conclusion the null hypotheses (all 4 hypotheses) were not accepted, and the researcher confirm the following: There is significant influence of project managers leadership skills on the success of the Quality education and human capital development project in Musanze District; There is significant influence of project managers' communication skills on the success of the Quality education and human capital development project in Musanze District; There is significant influence of project managers' team building and team

work on of the Quality education and human capital development project in Musanze District; and There is significant influence of mediating variables of the Quality education and human capital development project in Musanze District.

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