Project Implementation, Stakeholder Involvement and Project Success of NGOs Education Projects in the Education Sector in Uganda

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Abstract

There are project implementation challenges in executing Non-government Organizations (NGOs) projects in the Education Sector (ES) in Uganda. The study aimed at establishing the mediation role of Stakeholder Involvement (SI) on Project Implementation (PI) and Project Success (PS) relationship. To achieve this, the relationships between project implementation, stakeholder involvement and project success were examined. A cross-sectional research design with a quantitative approach was adopted. The study population was 110 *NGO* projects in the education sector, out of which a sample of 86 projects were selected. The unit of analysis was NGO Education Projects in ES within the Central region of Uganda. The sample of two NGO staff from each project, at senior management level was selected, giving a total of 172 respondents identified by simple random sampling method. The response was 125, constituting 73%. Using the Haves Process Macro Model 4, a mediation analysis was carried out. The findings were that Stakeholder Involvement had a complementary partial mediation effect on the association of Project Implementation and Project success. Based on the results of the study, it was recommended that identification of Stakeholder Interest, ensuring their participation and taking care of stakeholder influence would enhance the chances of Project Success because of the complementary mediation of Stakeholder Involvement on Project Implementation and Project Success relationship. The study generated empirical evidence of stakeholder Involvement as a complementary mediating construct on Project implementation and Project Success relationship, in NGO projects in the Education sector within Uganda.

Keywords Project Implementation, Stakeholder Involvement, Complementary Partial Mediation, Project Success.

Introduction

The study assessed the relationship between project implementation, stakeholder involvement and Project Success focusing on selected education projects in Uganda. The Education and Sports sector strategic plan 2017 Independent Assessment report, indicated that the education system is majorly financed by the Government of Uganda (66%), Development Partners (17%) and 17% is by Households. Also, Mujabi, Otengei, Kasekende, & Ntayi, (2015) have observed that Developing countries such as Uganda have received project funds since the 1990s. In Uganda, the Ministry of Education and Sports works alongside several funders and partners, such as the Global Partnership for Education, African Development Bank and the World Bank, have provided

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funding to implement various projects within the education sector. These projects include the Teacher Training, Skills Development and Teacher/School Effectiveness projects (Ministry of Education and Sports, 2020). The sector also carries out projects in construction, rehabilitation and expansion of learning facilities aimed at enabling access to relevant educational environment, life skills development, vocational training and early childhood development.

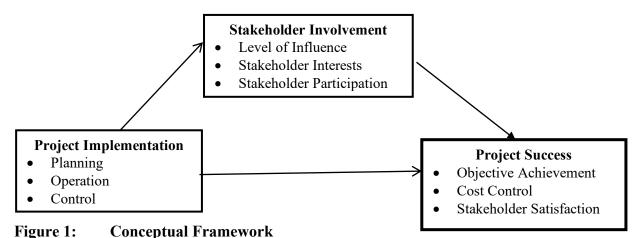
The Semi-Annual Report of the Ministry of Education and Sports Sector revealed that there are implementation challenges that occur while executing these projects (MOES, Education and Sports Sector Semi Annual Monitoring Report, 2019). Challenges such as poor planning for resources in which the projects are effected before the necessary preparatory activities, have been undertaken. For example, the skills development project lost 14 months of implementation and the Albertine region sustainable development project lost 24 months due to inadequate project preparation and planning. There is also lack of proper conceptualization of the actual problem and plan that would be through proper engagement of all the stakeholders at inception and during implementation (MOES, Education and Sports Sector Strategic Plan 2017 - 2020, 2017). Whereas successful stakeholder involvement and project implementation have numerous benefits such as client satisfaction and goal attainment, they continue to be abused and debatable in many third world countries (Azhar, Farouqi, & Ahmed, 2008). Ambitious targets are set to which the interventions and budgets do not match. Community engagement is also largely lacking and hence affecting the performance and success of projects (El-Gohary, Osman, & EL-Diraby, 2006). It likely that inadequate implementation of project activities and constrained involvement of stakeholders has negatively affected the success of projects.

Theoretical Review, Conceptual Model and Hypothesis Development Theoretical Review

Stakeholder Theory was used to underpin the research study because of the overarching interest in the mediation effects of the stakeholder Involvement on the Project Implementation and Project Success relationship. Individuals or groups that can influence or are influence by organizations goals, are considered to be stakeholders to that organization (Freeman, 1984). Also, El-Gohary et al, (2006), note that, any person or organization whose interests, in a project are legitimate, constitutes a stakeholder. Thus, it is important to continuously assess the needs of any person or entity that has vested interest in a given project. It is noted that satisfying the needs of every stakeholder, yet ignoring their interests, can negatively affect the achievement of the project goals (Jawahar & McLaughlin, 2018; Burke & Demirag, 2016). Thus, this research was premised on the understanding of interest, influence and participation of stakeholders as a basis of their mediation effects on Project Implementation and Project Success relationship.

Conceptual Model

The model, in figure 1, summarises the mediating effect of Stakeholder Involvement of project implementation and project success relationship. The conceptual framework indicates Project Success is directly influenced by Project Implementation with mediation effect of Stakeholder Involvement.



Source: Adopted and modified from Baccarini, (2014), Pinto&Slevin, (1988) (Project Implementation), Kanungo, (1982) (Stakeholder Involvement) and Antill, (2014) (Project Success).

Hypothesis Development

Project Implementation and project success

Project Implementation will lead to Project success (Botlhale, 2017). It is as important as or even more important than the strategy itself (Meredith, Mantel, & Shafer, 2017). This is the phase in which practical steps are taken to transform visions and plans into tangible results that satisfy the project objectives. Poor implementation impedes achievement of project objectives and delivery of intended results. Project implementation involves performance of processes that facilitate completion of the work defined in the approved project. This entails project specifications that are to be completed within a specified time. Cynthia (2020), contends that Project Implementation, involves coordination of people and resources and activities in an integrated manner, in line with the project execution plan. Before commencement of any project, the first thing to be done is project planning (Abd Elhameed, 2018). This means that planned projects should cover details of project milestones, schedule, risks and quality levels, as well as detailed plans of project execution. This means that Project plans ought to consider community needs, goals or action strategies obtained from community consultations and other planning processes. Planning for the slated project life, should be planned by focusing on problems and the desired goals, commensurate to a specific time frame. Measurable community benefits that result from the implementation of project, should justify the amount of resources or funding necessary to implement the project. Although a project plan may not take care of all unforeseen events, risks, and deviations, it is better than having no plan. With a well-planned project, response to potential risks or slippages, can be handled, hence saving time and resources (Allen, McLees, Richardson, & Waterford, 2015).

Implementation of a project is achieved when activities outlined in the application form are accomplished leading to delivery of results and outputs (Kuster, et al., 2015). On the other hand, monitoring and controlling of the scope covered, facilitates tracking, reviewing and regulating the progress of a project performance (Kuster, et al., 2015). Regardless of how good the initial plan is, there will always be some deviation during implementation (Pyzdek & Keller, 2010). It is important to keep in mind and track variances and take corrective actions in order to stay within

the scope of the project. Moreover, as project implementation progresses, it is important that progress is systematically monitored to avoid drifting away too much from the original outline (Fernando, Walters, Ismail, Seo, & Kaimasu, 2018). One of the most challenging implementation tasks. is to combine stakeholders' various expectations into a coherent and manageable set of goals. Over the years, a project-based approach has provided a proven way to define desired change, plan and realize it through implementation in many entities (Musawir, Serra, Zwikael, & Ali, 2017). Implementation is one of the key stages in the project which is essential for effective execution of a project. Scholars argue that full-time managers who have had experience with projects were used to generating success factors they considered to be critical to successful project implementation (Mugisa & Muzoora, 2012). However, changes to improve project management and enhance project performance, may be incorporated as the project progresses (Aikins, 2014; Axelsson, Melin, & Lindgren, 2013; Kostalova, Tetrevova, & Svedik, 2015).From the above, hypothesize that;

H₁: There is a significant association of Project Implementation and project success

Stakeholder Involvement and Project Success

Success of a project is achieved when it meets or exceeds the stakeholders' expectations (Axelsson, Melin, & Lindgren, 2013). It is important to timely acknowledge stakeholders' needs during project start-up (Davis, 2014; Kloppenborg, Tesch, & Manolis, 2011). Community cohesiveness is achieved through acquisition of relevant information and its interpretation and effective dissemination (Emmitt, 2010). The more influential a stakeholder is, the more a project manager will need their support (Watt, 2014). Talukhaba, Mutunga and Miruka, (2011) add that during implementation, the project managers need to have sustained monitoring and review the success of their communication strategies in order to gauge the success of the commutation. Their capacity to influence the Project goals is augmented by their working collaboratively with others (Griffiths, Maggs, & George, 2007). Stakeholders may provide a variety of skills and resources which may constitute additional support. Furthermore, Ekirapa-Kiracho et al (2017) add that, in working together, stakeholders employ these differences to build strong and effective interventions.

For effective Project management it is necessary to have analytical skills that enable identification of stakeholders and work with them in realising their expectations and how their influence may affect the project success. Successful completion of project deliverables, however, may depend on relationship management skills which may be needed. Dagli, (2018) argues that achievement of project objectives requires the fulfilment of stakeholder expectations throughout the project lifecycle. The existence of stakeholder support is paramount for successful project performance and hence success. Even if the original time, budget and scope of the project are met, but the expectations of influential stakeholders are not fulfilled, it will not be successful (Walker, Bourne, & Rowlinson, 2007; Bodicha, 2015). We, thus, hypothesize that;

H₂: Stakeholders Involvement is positively correlated with project success

Stakeholder Involvement, Project implementation and Project Success

According to Sudhakar, (2016) and Shojaie, Shadalooie, Khalili-Damghani, & Pakzad, (2016), project management is a critical area that contributes to project success. By implication, since management constitutes, planning, organizing, leading and controlling, then these dimensions constitute antecedents of project success. While Bodicha (2015) argues that, project Success means that activities are completed within set time, using an approved budget and meet the stakeholder's expectations. Yong and Mustaffa, (2012), posit that project success is assessed with two main groups - hard and soft objectives. Devi and Ananthanarayanan (2017), say that many project challenges, make it difficult to manage the probable project costs. The challenges include cost overrun, arising from scope creep, delays and reworks. Also, according to Norul Izzatti, et al. (2019), unclear design specifications, changes in project scope, design errors and change of orders, do contribute to Project delays. Girma & Dixit, (2018) however, stated that, to get the true costs of the project and control over the cost variances, there is need to establish the extent of inaccuracy, risk of indecision and probable completion time. Watson (2010), explains that clear scheduling of due dates for the project milestones, enables proper project monitoring.

Without customer satisfaction there can be no quality (Ray, 2018). Hogan (2019) states that, there is a need to keep stakeholders on board whenever a set project deliverable is completed. The stakeholders should facilitate verification of project deliverables based on the scope requirement in completeness and quality. This view is echoed by Davis (2014) who notes that Project Implementation impacts the interests of stakeholders. Implement of a project is accomplished by carrying out activities that aim at achieving project objectives. Fernando et.al. (2018) note that effectiveness of implementation, depends on a number internal and external factors such as project teams and monitoring processes and related expenditures. PMI & Cunthia, (2020) and Allen, McLees, Richardson, & Waterford, (2015) also argue that stakeholder desire for transparency are achieved through their involvement in implementation monitoring. Participation, facilitates the flow of information and encourages local stakeholders to own project goals and enhance their interest in their environmental and welfare consequences of the project. This also creates a feeling of empowerment. Magassouba, et al, (2019) has identified Stakeholder Involvement as essential for the improvement of project performance, through achieving construction integrity. The above studies indicate that Stakeholder Involvement may mediate project implementation and Project success relationship, thus, we state the hypothesis;

H₃: Stakeholder Involvement mediates project implementation and project success relationship.

Methodology

Population and sampling strategy

The study population consisted of 110 projects in the education sector as have been implemented by various Non-Government Organisations (NGOs) in the central region of Uganda (Kampala, Mukono, Wakiso, Mpigi). These NGOs were selected from the Updated National NGO Register (UNNR) as at 26th October, 2020 and only these were included in the study. A population of 110 projects in the education sector was selected from central region of the Republic of Uganda with majority of the offices for these NGOs. In this study, a sample of 86 education projects were targeted using the Krejcie and Morgan (1970) table and sampling method was simple random sampling. The unit of analysis was NGOs in the education sector within the Central region of Uganda and the unit of inquiry was two NGO Senior Management staff from each project, giving

a total of 172 respondents. Out of these, 133 respondents from the sample returned their questionnaires, giving a response rate of 77%.

Measurement of Variables

The study was covering three variables; Project implementation, Stakeholder Involvement and Project Success. Project Implementation, Stakeholder Involvement and Project Success were measured by a Likert scale, ranging from Strongly Disagree equivalent to one to Strongly Agree equivalent to five (Baccarini & Antill (2014) (Baccarini & Antill, 2014; Kanungo, 1982; Guzin, 2012).

Data Analysis

Data collected were edited for inconsistences and incompleteness. The IBM SPSS version 20 software, was used to enter and analyse the data. Dimension reduction was achieved by establishing the principal components of the study constructs. Also, the internal consistency of scales was tested and correlation between the variables was analysed. Instrument's reliabilities were evaluated using the Cronbach's alpha coefficient (Cronbach, 1951). The coefficient values for individual variable scales (Project Implementation 0.961, Stakeholder Involvement 0.950 and Project Success 0.953) were found to be above threshold of 0.7. Descriptive statistical analysis of frequency, mean and standard deviations were carried out. The model fit was established using SEM with the graphical model derived with the AMOS software. With the use of IBM SPSS software, Hayes (2013) Process Macro Model 4, was used to assess the mediation type that Stakeholder Involvement had on the project implementation and project success relationship.

Findings

Descriptive Statistics and Correlation

Table 1, shows that study variables are significantly correlated. The scale reliability of the three variable measuring instrument is above the threshold of 0.7. The mean values are skewed towards "agree" and the Standard deviations are small indicating high level of agreement amongst the respondents. The high values of Cronbach's alpha indicate that the responses were consistent.

	1	2	3	Mean	SD	Cronbach's Alpha
Stakeholder Implementation	1			3.7234	.92450	0.961
Stakeholder Involvement	.892**	1		3.5787	.82072	0.950
Project Success	.860**	.877**	1	3.5829	.80876	0.953

Table 1: Descriptive Statistics

Project Implementation Dimensions

Table 2 shows that three components of Project Implementation, namely, Planning, control and operations, were identified with the analysis showing sampling adequacy (KMO = 0.947) and a significant Bartlett's Test of Sphericity (p =.000). The factor anlysis indicated that operationalization of this construct fitted the data from the point of view of the KMO and Bartlett's Test.

	Componen	ıt	
	Planning	Control	Operations
Project implementers normally follow the guidelines for all activities	.787		
The project is part of a well-documented and understood strategy	.785		
All project activities were undertaken in the stipulated timelines	.778		
The project is implemented with appropriate controls	.723		
There are milestones which are used to measure progress of implementation	.633		
Planning is considered very important in this project		.822	
The project mission is always put in mind during implementation		.784	
The activities are always planned ahead of implementation		.717	
The project progress is always compared with the plans		.610	
Feedback is received during the implementation of the project			.825
There is a committee in place to oversee implementation of the project			.722
Channels of communication are put in place during project implementation			.631

Project Implementation Factors Table 2:

KMO and Bartlett's Test

itio and Dartiett 5 rest				
Kaiser-Meyer-Olkin Me Adequacy.	asure	of	Sampling	.947
	Appr	ox. Ch	ii-Square	1242.531
Bartlett's Test of Sphericity	Df			66
	Sig.			.000
	0			

Stakeholder Involvement Dimensions

Table 3 shows that three components of Stakeholder Involvement, namely, Interest, level of influence and participation, were identified with the analysis showing sampling adequacy (KMO = .937) and a significant Bartlett's Test of Sphericity (p =.000). This showed that the operationalization of construct of Stakeholder Involvement fitted the data in accordance with the KMO and Bartlett's test.

Table 3 Stakeholder Involvement Factors

	Component		
	Interest	Level of	Participatio
	merest	influence	n
I have a role in formulating the criteria for project success	.767		
I exhibit a lot of interest in my project work.	.713		
I am free to air my views during the project	.667		
I feel attached to the work that I carry out in this project.	.658		
All stakeholder needs are considered in the project		.802	
The stakeholder needs are always in agreement with those of others		.766	

Meetings are held with all project stakeholders	.645	
My views are always incorporated into decisions made in the project		.840
My interests are catered for at all times in the project start- up.		.726
The project seeks to know my areas of attention		.696
KMO and Bartlett's Test	_	

Kaiser-Meye Adequacy.	r-Olkin	М	easure	of	Sampling	.937
Doutlottle	Test	. f	Approx	. Chi	i-Square	1054.447
Bartlett's Sphericity	Test	01	Df			78
Sphericity			Sig.			.000

Project Success Dimensions

Table 4 shows that three components of Project Success, namely, Objective Achievement, Cost control and Stakeholder Satisfaction, were identified with the analysis showing sampling adequacy (KMO = .941) and a significant Bartlett's Test of Sphericity (p = .000). This showed that the operationalization of construct of Project Success fitted the data in accordance with the KMO and Bartlett's test.

Table 4: Project Success Factors

v	(Component	
	Objective	Cost	Stakeholder
	Achievement	Control	Satisfaction
In this project quality is considered a core aspect	.799		
Project executors normally follow the planned schedule for all activities	.761		
The company undertakes regular quality assessment	.753		
There is use of quality materials in this company	.736		
Staff at the company are well trained to ensure quality standards are met	.667		
Activities of the project are usually carried out in the agreed time	.611		
Contractor's and Owner's financial constraints affect the project performance		.845	
There is investigation of likely effects of costs on project performance		.676	
There is application of modularity on project costs to accommodate any possible changes		.658	
There is flexibility within the project plans for any schedule overruns		.619	
All stakeholders participate in this project			.803
All stakeholder views are incorporated in decision making			.801
All project stakeholders are known			.650

KMO and Bartlett's Test							
Kaiser-Mey Adequacy.	er-Olkin	Μ	leasure of Sampling	.941			
Bartlett's	Test	of	Approx. Chi-Square	1384.337			
Sphericity	1050	01	df	120			
sphericity			Sig.	.000			

Model Fit

The Structural Equation model for Project Implementation, Stakeholder Involvement and Project Success relationship, is presented in Figure 2. The data provided in tables 5, 6 and 7 below, indicate five absolute fit determinants, five relative/comparative fit indices of model fit and Two Parsimony model fit estimates.

Absolute Model Fit Estimates

Table 5 contains the absolute fit indices include Chi Square, Cmin/df = 1.070 (Cmin = 25.687, df = 24 and p = 0.369); Root Mean Residual, RMR = 0.016 (< 0.05); Root Mean Square Error Approximation, (RMSEA) = 0.024 (0.05); Goodness of Fit Index (GFI) = 0.959 (> 0.95), Adjusted Goodness of Fit Index (AGFI) = 0.923 (< 0.90). The absolute model fit indices shows a good model fit.

Table 5: Absolute Model Fit Estimates

Model	CMIN	DF	Р	CMIN/DF	RMR	GFI	AGFI	RMSEA
Default model	25.687	24	.369	1.070	.016	.959	.923	.024

Relative/Comparative Model Fit Estimates

The Relative/Comparative fit indices shown in Table 6 include, Incremental Fit Index (IFI), Normed Fit index (NFI), Tucker Lewis Index (TLI), Relative Fit Index (RFI), and Comparative Fit Index (CFI), are well above 0.95 threshold. Relative/Comparative fit indices show a good model fit.

Table 6: Relative/Comparative Model Fit Estimates

Model	IFI Delta2	NFI Delta1	TLI rho2	RFI rho1	CFI
Default model	.999	.978	.998	.967	.999

Parsimony-Model Fit Estimates

Table 7 shows that the Parsimony Model fit estimates are Parsimony Comparative Fit Index (PCFI) and Parsimony Normed Fit index (PNFI) are both above the threshold of 0.5, showing a good model fit. It is concluded that the alignment of absolute, Relative and Parsimony model fit estimates, provide the basis for accepting the hypothesis that the hypothesized model fits the study dataset (Hair et al., 2006).

Table 7: Parsimony-Model Fit Estimates

	110 2001110000	
Model	PCFI	PNFI
Default model	.666	.652

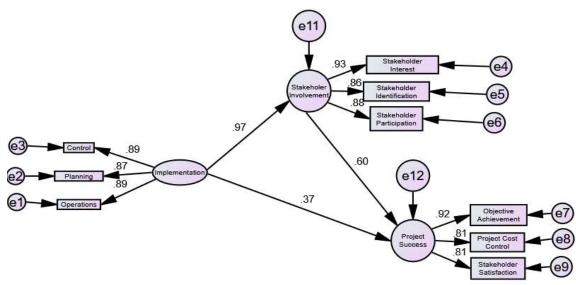


Figure 2: Hypothesized Model

The schematic hypothesized model is as indicated in Figure 2. The Absolute Model Fit estimates (X^2 with p>.05 and all other indices > 0.95), the Relative/Comparative Model Fit estimates (all > 0.95) and Parsimony Model Fit estimates (all > 0.5) indicate that the alignment of the absolute, Relative and Parsimony model fit estimates, provide the basis for accepting the null hypothesis that the hypothesized model fits the study dataset. This lends credence to further analysis of the mediation effects of Stakeholder Involvement on the Project implementation and Project Success relationship.

Mediation Analysis

Predictor and Mediator Variables

The Hayes Process Macro Model analysis output was used to assess the mediating role of Stakeholder Involvement on the Project Implementation and Project Success relationship. Reference is made to Table 8 and figure 3. In Table 8, the model shows that Project implementation explains 79.5% of the variance of the mediator variable, Stakeholder Involvement and the relationship is significant (p=.000). The results indicated a significant correlation between the predictor variable (Project Implementation) and the mediator (Stakeholder Involvement) (a=0.7915, t = 21.8327) and LLCI and ULCI that were both positive, meaning that **H**₁ was supported.

Model Sur			c. Stakenon		vement		
R	R-sq	MSE	F	df1	df2	р	
.8916	.7949	.1393	476.6686	1.0000	123.0000	.0000	

Table 8: Outcome Variable: Stakeholder Involvemen	nt
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	Coeff	se	t	р	LLCI	ULCI
Constant	.6317	.1390	4.5427	.0000	.3564	.9069
Implementation	.7915	.0363	21.8327	.0000	.7197	.8632

Predictor, Mediator and Outcome variables

The Process Macro Model analysis output shows that there is a significant both Project Implementation and Stakeholder Involvement significantly predict Project Success with Stakeholder Involvement having a significant effect (b= 0.5306, t = 6.0056, p = .000) and LLCI and ULCI are both positive which supports $H_2(Stakeholders Involvement is positively correlated with project success)$.

Table 9: Outcome Variable: Project Success

1 4810 > 1 8 4				sjeee ≈ a				
Model Sumr	nary							
R	R-sq	MSE		F	df1	df2	р	
.8938	.7989	.1337	242	2.2573	2.0000	122.0000	.0000	
Model								
	coef	f se	e	t	р	LLCI	ULCI	
Constant	.446	9.14	72	3.0356	.0029	9.1555	.7384	
IMPLEMEN	.332	3 .07	84	4.2364	.0000	.1770	.4875	
STAKINVO	.5300	5 .08	84	6.0056	.0000	.3557	.7055	

Total Effect and significance of Indirect effect

These are indicated in Table 10 and Table 11 along with weight symbols in Figure 3 and the relevant weights identified in figure 3. The output shows a significant effect of Project Implementation on Project success without controlling for Stakeholder Involvement. It constitutes the total effect of both Indirect and direct effects on Project success (c = 0.7522, t = 18.6805) and is significant as indicated by both LLCI and ULCI being positive.

Table 10: Outcome Variable: Project Success

Model S	Summary							
R	R-sq	MSE	F	df1	df2	р		
.8599	.7394	.1719	348.9609	1.000	0 123.00	00.000	00	
Model								
			coeff	se	t	р	LLCI	ULCI
Constar	nt		.7821	.1545	5.0637	.0000	.4764	1.0878
Project	Implemen	tation	.7522	.0403	18.6805	.0000	.6725	.8319

From the Process Macro out-put, it is noted that the indirect effect is significant because the bootstrap interval BootLLCI = 0.2752 and BootULCI = 0.5838 does not contain a zero. This means that the indirect effect is significant implying that Stakeholder Involvement has a mediating effect on the Project Implementation and Project Success relationship, hence

supporting H₃. (*Stakeholder Involvement mediates project implementation and project success relationship*).

Table 11: Total Effect

10010 1101	•••••							
Effect	se	t	p L	LCI U	JLCI			
.7522	.0403	18.6805	.000	0.672	.8319			
Direct effect	ct of PI o	n PS						
Effect	se	t	р	LLC	CI ULCI			
.3323	.0784	4.2364	.000	.1770	0.4875			
Indirect effe	ect(s) of	PI on PS						
]	Effect	BootSE	BootLLCI	BootULCI		
Stakeholder	r Involve	ement	.4200	.0776	.2752	.5838		

Total Effect and Indirect Effect

Referring to **figure 3**, we can derive the following relationships. Given that c = c' + a*b then c - c' = a*b => a*b = 0.7522 - 0.3323 = 0.4200. To evaluate the nature of the mediating effect of SI, we consider sign of a*b*c. Now, a*b*c = 0.4200 * 0.7522 = 0.3160 and is positive, which means that Stakeholder Involvement has a complementary mediating effect on the Project Implementation and Project Success relationship.

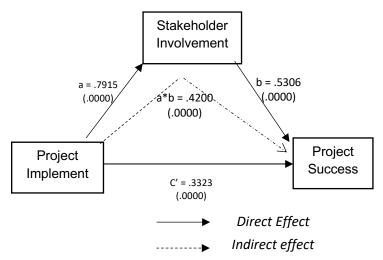


Figure 3: Total Effect and Indirect Effect

Referring to **figure 3**, we can derive the following relationships. Given that c = c' + a*b then c - c' = a*b => a*b = 0.7522 - 0.3323 = 0.4200. To evaluate the nature of the mediating effect of SI, we consider sign of a*b*c. Now, a*b*c = 0.4200 * 0.7522 = 0.3160 and is positive, which means that Stakeholder Involvement has a complementary mediating effect on the Project Implementation and Project Success relationship.

Discussion, conclusion and implications

The support for H_1 (There is a significant association of Project Implementation and project success) indicates that when Project Implementation is effective, there is high chance of Project success. This means that planning, control and Operations aspects of Project Implementation, have significant impact on Project Success. This is in agreement with Cynthia (2020) and Botlhale (2017) who observed that project planning is an essential factor for successful project implementation. This renders credence to the significance of planning as essential components of Project Implementation, Operations and control, entail the choice of activities to be implemented and the control which ensures that the variance between what is actually acted upon and what is planned is kept to a minimum. This observation agrees with (Leonard and Swanepoel, 2010 and Kuster et al. 2015) who observed that operations and control are ex-ante attributes of Project implementation that lead to achievement of project objectives and goals. The significance of Operations and Control in Project Implementation is further emphasized by Fernando et al (2018) by suggesting the need for tracking project activities systematically to avoid drifting from the original project outline and project scope.

The support for hypothesis H_2 (*Stakeholders Involvement is positively correlated with project success*) suggests that stakeholder interest, participation and influence (see Table 3) impact Project Success. This is in agreement with Axelson et al (2013); Davis, (2014) and Kloppenborg, Tesch and Manolis, (2011) who posit that involvement of Stakeholders in identifying their needs increase the chance of Project Success. The Stakeholders know their own needs and priorities which should be in synch with the project goals. Also, In the study we identified participation as an ex-ante component of Stakeholder Involvement as a construct. This suggests that Stakeholder participation enhances Project ownership which precipitated support of efforts to realise project goals. This observation is in support of Flanagan and Norman, (2003) and Andersen et.al., (2006) who posit that stakeholder participation influence project performance, thus enhancing the chance of Project Success. Also, Bourne and Walker (2006) noted that Stakeholders bring a wide range of skills, knowledge, and experiences which contribute to Project success.

The support of H_3 (*Stakeholder Involvement mediates project implementation and project success relationship*) which, according to the Hayes Process Model 4, constitutes complementary mediation, means that the interaction between Project Implementation and Stakeholder Analysis is crucial for the enhancement of prospects of Project Success. The ex-ante components of Project Implementation (Planning, Operations and control) and those of Stakeholder Involvement (Interest Participation and Influence) are critical for project success augmented by identification of stakeholder interests, constructive utilization of stakeholder influence and tapping into their skills though their participation, in aggregate bring about Project Success. This is supported by Magassouba et al (2019) who posit that the components of Stakeholder involvement, namely, planning and monitoring, enhances the chance of project success. Also, Sudhakar (2016) and Hogan (2019) found that there is need for continuous integration of stakeholder involvement and project implementation to realise project objectives.

The complementary effects of stakeholder Involvement on project implementation and Project success relationship, forms a basis for a recommendation that Project management should emphasise the three components of Stakeholder Involvement; Identification of stakeholder interests, their level of influence and effective participation in the project process. In any case, the

success of a project will be an optimal combination of the fulfilment of Stakeholder satisfaction, project cost and project objective achievement. For theoretical contribution of this research, we can say that the aspect of identification of stakeholder interest, enlisting of stakeholder participation and constructive use of stakeholder influence during project implementation process, enhances chances of project success. In practice, the study reveals that project success factors of objective achievement, cost control and stakeholder success, will be realized through continues integration of project implementation and Stakeholder Involvement. The study considered data from NGOs education projects in the Education Sector in Uganda. As such, the salient issues may not apply to other sectors. However, the results may provide insight into the significance of stakeholder involvement in other sectors and in the developing world. There is therefore room for future research in other sectors for enhancement of further generalization and broadening studies to project stakeholder management.

References

- Abd Elhameed, A. (2018). Analyzing the Project Management Body of Knowledge (PMBOK) through theoretical lense: A study of the PMBOK through project Management Theories. *P.M. Wold Journal, 6*, 1-131.
- Aikins, S. K. (2014). A Risk-Based Audit Model for Improving the Success Rates of e-Government Project Implementation. *International Journal of Public Administration in* the Digital Age, 1(3), 70-84.
- Allen, M., McLees, J., Richardson, C., & Waterford, D. (2015). Project Planning and Best Practices. *Journal of IT and Economic Development*, 6(1), 1-15.
- Andersen, E. S., Birchall, D., Jessen, S. A., & Money, A. H. (2006). Exploring Project Success. *Baltic Journal of Management*, 127-147.
- Antill, D. (2014). The Logical Framework Method for Defining Project Success. *Project Management Journal*, 30(4), 25-32.
- Axelsson, K., Melin, U., & Lindgren, I. (2013). Stakeholder Salience Changes in an e-Government Implementation Project. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8074, 237-249.
- Azhar, N., Farouqi, R. U., & Ahmed, S. M. (2008). "Advancing and Integrating Construction Education, Research & Practice", Cost Overrun Factors in the Construction Industry of Advancing & Integrating Construction Education, Research and Practice. *First International Conference on Construction in Developing Countries*. Karachi: First International Conference on Construction in Developing Countries.
- Baccarini, D., & Antill, D. (2014). The Logical Framework Method for Defining Project Success. *Project Management Journal*, 25-32.
- Bodicha, H. H. (2015). How to Measure the Effect of Project Risk Management Process on the Success of Construction Projects: A Critical Literature Review. *The International Journal of Business & Management*, 3(12), 99-112.
- Botlhale, E. (2017). *Enhancing Public Project Implementation in Botswana During the NDP 11 Period.* Africa's Public Service Delivery and Performance Review.
- Bourne, L., & Walker, D. H. (2006). Using a Visualizing Tool to study Stakeholder influence two Australian examples. *Project Management Journal*, 37(1), 5-21.

- Burke, R., & Demirag, I. (2016). Risk transfer and stakeholder relationships in Public Private Partnerships. *Accounting Forum (in Press), http://dx.doi.org/10.1016/j.accfor.2006.06.004.*
- Cronbach, L. J. (1951). "Coefficient alpha and the internal structure of tests". *Psychometrika*, 16(3), 297-334.
- Cynthia, O. U. (2020, May 29). Implementation of Project Evaluation and Review Technique (PERT) and Critical Path Analysis (CPM):A Comparative Study. *InternationalJournal of Industrial and Oprations Research,*, *3*(004). Retrieved from National Implementation Research Network Website: https://nirn.fpg.unc.edu/
- Dagli, O. (2018). Stakeholder Management in project success: Is it an object or subject. P.M. World Journal, 7(4), 1-6.
- Davis, K. (2014). Different Stakeholder Groups and Their Perceptions of Project Success. International Journal of Project Management, 189-201.
- Devi, A. C., & Ananthanarayanan, K. (2017). Factors influencingcost over-runs in indian Construction Projects. *In MATEC Web of Conferences, 120*, p. 020023.
- Ekirapa-Kiracho, E., Ghosh, U., Brahmachari, R., & Paina, L. (2017). *Engaging Stakeholders:* Lessons from the use of Participatory Tools for Improving Maternal and Child Care Health Services. Health Research Policy and Systems.
- El-Gohary, N. M., Osman, H., & EL-Diraby, T. E. (2006). Stakeholder management for public private partnerships. *International Journal of Project Management, 24*(70), 595-604.
- Emmitt, S. (2010). *Managing Interdisciplinary Projects: A Primer for Architecture, Engineering and Construction*. London: Spon Press.
- Fernando, Y., Walters, T., Ismail, M. N., Seo, Y. W., & Kaimasu, M. (2018). Managing Project Success Using Risk and Green Supply Chain Management: A Survey of Automative Industry. *International Journal of Managing Projects in Business*.
- Flanagan, G., & Norman, U. (2003). Assessment and Control of project Risks. Englewood Cliffs: Prentice-Hall.
- Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). *Managing for Stakeholders: Survival, Reputaion, and Success.* New Haven, CT: Yale University Press.
- Freeman,, R. E. (1984). Strategic Management: A Stakerholder Approach. Boston: Pitman.
- Girma, A., & Dixit, P. (2018). A Critical Literature Review on Improving Project Cost Management Practice and Profitability of Domestic Contractors. *International Journal* of Engineering Technologies and Management Research, 51.
- Globerson, S., & Zwikael, O. (2002). The Impact of the Project Manager on Project Management and Planning Processes. *Project Management Journal*, 33(3), 58-33.
- Government of Uganda. (1995). Protection and Promotion of Fundemental and other Human Rights and Freedoms. In *Constitution of the Republic of Uganda* (p. 47).
- Greenwood, M. (2007). Stakeholder Engagement: Beyond the Myth of Corporate Responsibility. Journal of Business Ethics, 74, 315-327.
- Griffiths, J., Maggs, H., & George, E. (2007). *Stakeholder Involvement*. Geneva, Switzerland: World Health Organization (WHO).
- Guzin, B. (2012). *Behavioral Implications of the Project Life Cycle*. New York: Van Nostrand Reinhold Co.
- Haseeb, M., Xinhai-Lu, Bibi, Aneesa, Maloof-ud-Dyian, & Rabbani, W. (2011, September). Problems of Projects and Effects of Delays in the Construction Industry of Pakistan. *Australian Journal of Business and Management Research*, 1(5), 41-50.

- Hayes, A. (2013). Introduction to mediation, moderation and conditional process analysis. *ARegression-based approach*. London: The Guilford Press.
- Hogan, K. (2019). How to Develop an Effective Scope for the Management of a Project. Retrieved June 26, 2019, from Chron: http://smallbusiness.chron.com/develop-effective-scopemanagement-project-44684.html.
- Jawahar, I., & McLaughlin, G. (2018). Towards descriptive stakeholder theory: An Organizational life cycle approach. *Business and Strategy, Vol I and II*, 381-398.
- Kanungo, R. N. (1982). Measurement of Job and Work Involvement. *Journal of Applied Psychology*, 67(3), 341-349.
- Kerzner, H. (2006). *Project Management Case Studies: Implementation of Project Management* (2 ed.). John Wiley & Sons, Inc.
- Kloppenborg, T. J., Tesch, D., & Manolis, C. (2011). Investigation of the Sponsor's Role in Project Planning. *Management Research Review*, 34(4), 400-416.
- Kostalova, J., Tetrevova, L., & Svedik, J. (2015). Support of Project Management Methods by Project Management Information System. *Procedia - Social and Behavioral Sciences*, 210, 96-104.
- Krejcie, P., & Morgan, D. W. (1970). Determing Sample Size for Research Activities. *Education* and Psychological Measurement, 30, 607-610.
- Kuster, J., Huber, E., Lippmann, R., Schimid, A., Schneider, E., Wistschu, U., & Wilst, R. (2015). *Project Management Handbook* (Vol. 6). Berlin, Heidelberg: Springer.
- Leonard, A., & Swanepoel, A. (2010). Project Portfolio Management Implementation Pitfalls. South African Journal of Business Management, 41(3), 13-22.
- Magassouba, S. M., Tambi, A. M., Alkhlaifat, B. I., & Abdullah, A. A. (2019). Influence of Stakeholders Involvement on Development Project Performance in Guinea. *International Journal of Academic Research in Business & Social Sciences*, 1111-1120.
- Mary, K. (n.d.). *How to Develop an Effective Scope for the Management of a Project: Small Business.* Retrieved from Chron.
- Meredith, J. R., Mantel, S. J., & Shafer, S. M. (2017). *A Managerial Approach*. North Carolina: Wiley Publishers.
- Ministry of Education and Sports, U. (2020). Annual Reort of Ministry of Education and Sports on Sports Projects. Government of Uganda.
- MOES. (2017). *Education and Sports Sector Strategic Plan 2017 2020*. Kampala: Ministry of Education and Sports.
- MOES. (2019). *Education and Sports Sector Semi Annual Monitoring Report*. Kampala: Ministry of Finance, Planning and Economic Development.
- Mugisa, M., & Muzoora, A. (2012). Behavioral Change Communication Strategy Vital in Malaria Prevention Interventions in Rural Communities: Nakasongola District, Uganda. *The Pan African Medical Journal*.
- Mujabi, S., Otengei, S. O., Kasekende, F., & Ntayi, J. M. (2015). Determinants of Successful Implementation of Donor-Funded Projects in Uganda. *International Journal of Social Economics*, 42(12), 1139-1154.
- Musawir, A. U., Serra, C. E., Zwikael, O., & Ali, I. (2017). Project governance, benefit management and Project success: Towardsa framework for supportingorganiztional strategy implementation. *International Journal of Project Management*, 35(8), 1658-1672.

- Nangoli, S., Namagembe, S., Ntayi, M. J., & Ngoma, M. (2012). "Towards Building Project-Stakeholder Commitment: Case Study - Citinzenship Projects in Uganda". World Journal of Entrepreneurship, 8(4), 233-245.
- Norul Izzatti, M. A., Mohd Amir Shazwan, H., & Yong, S. H. (2019). Cost over-runs in Construction Projects in Malaysia: A study of contractor related factors. *INTI Journal*, 52.
- Pinto, J., & Slevin, D. (1988). 20 Critical Success Factors in Effective Project Implementation. Project Management Handbook 479, 167-190.
- PMI, & Cunthia, O. U. (2020). Implementation of Project Evaluation and Review Technique(PERT) and Critical Path Method(CPM): A Comparative Study. International Journal of Industrialand Operations Research, 3(004).
- Pyzdek, T., & Keller, P. (2010). The Six Sigma Handbook. McGraw Hill.
- Ray, S. (2018). *Project Quality Management: A Quick Guide*. Retrieved from Project Manager: https://www.projectmanager.com/blog/project-quality-management-quick-guide
- Shojaie, A. A., Shadalooie, M., Khalili-Damghani, K., & Pakzad, M. R. (2016). Development of a Conceptual Model of Project Management Information Systems for Investigating its Effective Factors Impacting the Success of Project using Structural Equation Model. International Journal of Life Science & Pharma Research(1), 17-29.
- Sudhakar, G. P. (2016). Understanding the Meaning of "Project Success". *Binus Business Review*, 7(2), 163-169.
- Talukhaba, A., Mutunga, T., & Miruka, C. (2011). Indicators of Effective Communication Models in Remote Projects. *International Journal of Project Organisation and Management*, 3(2), 127-138.
- Walker, D. T., Bourne, L., & Rowlinson, S. (2007). Stakeholders and the Supply Chain. Procurement Systems: A Cross-Industry Project Management Perspective, 9780203939, 70-100.
- Watson, C. (2010). *Effective Project Management: The Art of Creating Scope Statements.* Georgia: University of Georgia School of Law Library.
- Watt. (2014). Project Management. (B. O. Education, Ed.) Pressbooks.
- Yong, Y. C., & Mustaffa, N. E. (2012). "Analysis of Factors Critical to Construction Project Success in Malaysia". *Engineering, Construction and Architectural Management*, 19(5), 543-556.