

Modeling Performance of Government Projects in Sub-Saharan Africa Using Project Management Competencies and Ethical Positions: Empirical Evidence from Projects of Public Universities in Uganda

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Abstract

The purpose of the study was to develop a model that holistically synchronizes project management competences, ethical positions and performance of government projects in Sub-Saharan Africa. Data were collected using a self-administered questionnaire from 103 government projects of five public universities in Uganda. The study used cross section design and quantitative approach. Descriptive and inferential statistics were used in the analysis. Results revealed that behavioral and technical project management competences, teleological and ontological ethical positions exist as well as significantly affect project performance. Ethical positions partially mediated the relationship between project management competences and project performance, which is a requirement for promoting sustainable performance outcomes of government projects. The findings, managerial and policy implications are fully discussed in this paper. This study makes a contribution by providing information that is relevant for filling the practical gap that exists in government projects of Sub-Saharan Africa

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as well as contributes to theoretical development of project management discipline.

Keywords: Project management competences, ethical positions and project performance

Background

Public universities in Sub-Saharan Africa are characterized by significant failure of government projects, which limit the Universities' growth and competitive advantage in the global market compared to other sectors where project performance has paved ways for institutions to transform into global players. Public universities have been primary beneficiaries of government projects for more than half a century and such projects have tended to focus on health, agriculture, education, social, community development and infrastructural development (Wood, 2005). Despite the consistent increase and effort in funding the projects by both the government and donors, performance outcomes continue to remain a major challenge in public universities of Sub-Saharan Africa (Kagaari, Munene & Ntayi, 2013). Moreover, Africa housed most of the world's fastest-growing public universities and government projects in the past decade, which remain the backbone of substantial recorded strides in uplifting many developing countries out of social and developmental stagnation (Globerson, 2002).

A few studies that have been carried out focused on cognitive moral development measure and multi dimensional ethics scale by focusing on idealism and relativism but personal consequences, social consequences and social rules seem to have been ignored in the field of Project management. In Sub-Saharan Africa, some scholars have attempted to conduct research on performance of government projects but no in-depth studies have been carried out to explain how this is attributed to staff's

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ethical positions and project management competence in public universities (Ntayi, *et. al.*, 2010; Basheka and Mugabira, 2008). Results from scholars do not articulate clearly the issue of ethical positions as revealed that most government project officers still lack conceptualization of their ethical positions and project management competence when making their project performance decisions (Merritt, 1991; Sentum, 2006; Ntayi, *et. al.*, 2011). According to Hassam and colleagues (2010), staff ethical orientation issues result into behaviors or actions like accepting bribes and gifts, misappropriation of relief items, inflated contracts, conflict of interest resulting from both preparation of technical bid documents and bidding, violation of laws, violation of confidentiality, improper reciprocal agreements, collusive tendering, changing specifications, lies about prices or cover pricing and wrong volume of quantities. The quality of audit judgments in all stages in audit works is dependent on the auditors' efforts in performing their duties. Project stakeholders in different public universities are dissatisfied with time within which projects are completed including scope and the budgets of different projects. This may be a reflection of inadequate project management competence and weak ethical positions of project staff.

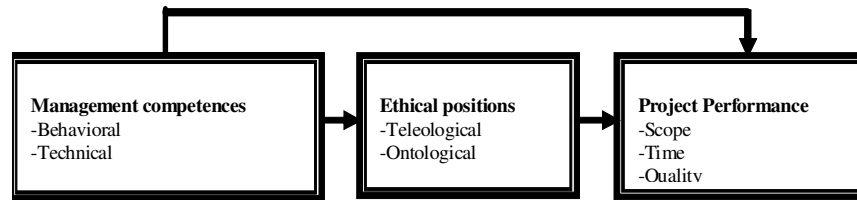
Despite the importance attached to government projects, their outputs in terms of quality, cost, and time together with stakeholder satisfaction remain the subject of abuse as well as debate. Evidence is revealed by Makerere University construction project in 2006. Makerere University began a perimeter wall construction project with expenditure of two billion Ugandan shillings, but the perimeter wall collapsed before it was fully completed. There was no value for money for the construction project. It was further witnessed in 2007 that the socket works project in Makerere University Business School failed because of project management incompetence of that Information Communication Technology (ICT) project. The software was not delivered as agreed, which was an unethical issue of accounting officer in the socket works project (PPDA report,

2007). Recent reports indicate some of the government projects that were successful included Makerere University Walter Reed Project and the Millennium Science Initiative project in Busitema University (Auditor General's Report, 2012/2011). Yet, in Uganda, bodies, which strengthen integrity still exist like Directorate of Public Prosecution (DPP), Criminal Investigation Directorate (CID) and the Public, Procurement and Disposal Act (PPDA). This study sought to examine the existing failure to realize performance of government projects that can be translated into social and economic inclusion. The author thinks that developing a model that synchronizes mediation of ethical positions on the relationship between project management competences and performance of government projects can propel universities' performance outcomes.

The study intended to establish a model that synchronizes the relationship between project management competences, ethical positions and government project performance in public universities of Sub-Saharan Africa. This study was guided by the following three specific objectives:

- i) To examine measures of performance of government projects in public universities;
- ii) To establish strength of the relationship between ethical positions, project management competence and performance of government projects in public universities; and
- iii) To test the mediation of ethical positions on the relationship between project management competence and performance of government projects.

Conceptual model



Literature Review

Projects are temporary organizational structures, unique, goal-oriented work systems and consequently, they are complex (Frame, 1995). Meeting or exceeding stakeholder needs and expectations invariably involves balancing competing demands among scope, time, cost and quality. According to the project management body of knowledge Guide (2007), projects performance entails determining the scope, time and quality of activities executed by the project. This description is sufficiently general to cover project needs in terms of time, cost, scope and needs of the product of the project or customers of the project in terms of defined requirements.

Thus, H1 is derived: cost, quality and scope are measures project performance.

Project Management Competences and Ethical Positions

Competences are used at workplaces to perform a variety of behavior and activities, which, in turn, produce outputs (products and services) that are provided to others (Picket, 2005). A competence is a relationship between the employee and his or her environment (Munene, Bbosa and Ebonyu, 2005). They (*ibid.*) further argue that when an individual

maneuvers the environment in which he/she is and becomes successful, then he/she has the competence. Competences are critical success factors for projects' performance. According to Harley (1995), competency is defined as, "an underlying characteristic of an individual which is causally related to effective or superior performance in a job." This definition may be further expanded to encompass competences that can be motives, traits, self-concepts, attitudes or values, content knowledge or cognitive or behavioral skills – any individual characteristic that can be measured or counted reliably and that can be shown to differentiate significantly between superior and average performers, or between effective and ineffective performers. People participating in projects need both technical and behavioral competences so as to be able to work in the project as members of the project team fulfilling the required tasks (Ruuska and Vartiainen, 2003).

Anantatmula (2010) suggests that project management involves planning and organizing project activities through decision-making processes that improve efficiency and effectiveness of the project. Although there is growing interest in project management and a level of commitment within organizations as well as a growing number of practitioners, this field of knowledge is still limited in terms of applications (Shenhar and Dvir, 2007). Williams (2005) states that project management practices have not provided the expected benefits. In addition to this, Shenhar and Dvir (2007) claim that even when the schedule and budget are followed, many proposed projects do not fulfill the clients and the executives expectations showing that there is a gap in this field of knowledge making it difficult to correct the discrepancies.

Many factors are predicted to influence ethical positions and they consist of deontology and teleology (Hunt and Vitell, 1993; 1986). The two approaches to ethical orientation, which have received most attention in literature, are those reliant on theories of deontology and teleology (McDonald and Beck-Dudley, 1994).

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Although some scholars argue that an individual may be guided by rules or principles in order to be ethical, others may be guided by expected consequences. Accordingly, ethical consequences are based on egoism and utilitarianism, whereas rules or principles are based on duty of care, rights and justice (Kant, 1994; Rawls, 1971; Adam.S., 1937; Rand, 1964). Deontology places the means as more important than the end, while for teleology it is the end that justifies the means.

Ugandan government project officers seem to be guided by general principles while others are guided by moral consequences in order to be morally ethical. The way inferior suppliers are recommended during approving contracts, bidding process and making final payments are based on egoism while pre-bid specification is based on utilitarianism (Kant, 1964, Adam Smith and Dawny, 1998). Ethical orientations refer to what pattern helps an individual to decide about actions and consequences that are right or wrong, good or bad. They include egoism, ethic of duty, ethic of care, rights and justice (the idea of fairness to all), utilitarianism (the extent to which an action leads to the greatest good for the greatest number of people). Deontology emerges from the Greek word “deon,” which means necessary or obligatory. This theory has been established in Western moral philosophy that receives influence of prominent Greek moral philosophers, such as Socrates and Plato and the very influential German philosopher, Immanuel Kant (1724-1804). The theory states that the only unqualified good is good will. Good will manifests itself when it acts for the sake of duty, where duty implies recognition and adherence to a law or precept.

A deontological approach enjoys a rich historical legacy, dating back to philosophers such as Socrates and more recently to the work of Kant. With the idea of universal truths and principles, that should be adhered to, regardless of circumstances. Kant’s categorical imperative states that a person faced with a problem should be able to respond consistently and in conformity with moral principles and also feel comfortable with the decision

being made in full view of others. The deontological approach ignores and/or fails to examine the motives behind people's ethical behaviour (Ntayi, 2013). However, the drawback of deontology is that it only focuses on motivation and the duty of the decision-maker and ignores consequences derived from the judgments.

Teleology evaluates ethical actions in terms of their contribution and consequences of judgments, rather than their confirmation to rules or commandment (Finniss, 1998). Teleology theory postulates that an action is ethically correct if it produces a net balance of good over evil for the decision-maker or society as a whole. An unethical action is sometimes considered good if it provides the greatest good over evil to majority of stakeholders, irrespective of rule compliance. However, the drawback of using teleology is that the decision-maker must take broad perspectives concerning who might be affected by the decisions and choose judgments that promote pleasure as well as alleviate pain and suffering. In addition, breaking the law is allowed if it could bring more goodness than badness. However, neither deontology nor teleology can stand alone. Both theories are needed to produce a comprehensive ethical judgment. This makes a useful complement to each of the theory because an action that satisfies both theories can be said to have a good chance of being ethical.

This leads to hypothesis H2: *There is a significant positive relationship between Project Management (Behavioral and technical) Competences and ethical positions.*

Project Management Competences and Project Performance

Project performance areas are defined by many standards and they are usually separated into multiple project management knowledge areas, such as management of integration, scope, time, cost, quality, human resources, communications, risk, and procurement (PMBOK, 1996). Core skills

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needed in project performance are mostly in areas of budgeting, scheduling and resource allocation as well as key tools related to those areas, like scheduling networks and resource-loading charts (Frame, 1994). There is also evidence that leadership and human skills are among the most critical competence areas in project performance (Webb and Vielvoije, 1999; Zimmerer and Yasin, 1998; Crawford, 2000; El-Sabaa, 2001).

Project management is application of knowledge, skills, tools and project techniques to project activities in order to meet or exceed stakeholder needs including expectations from a project. Role model behavior is an important guideline for all managers (Hamzah and Zairi, 2006). These scholars seemingly did not go on to bring out clearly the relationship between project management competence and project performance. For those involved with a project, Project Performance is normally thought of as achievement of some pre-determined performance goals (Lim and Mohamed, 1999).

Turner and Muller (2005) reviewed the contribution of project competence and leadership style to Project Performance. They (*ibid.*) concluded that literature has largely ignored the impact of the project manager and his or her leadership style including competence on Project Performance. They (*ibid.*) found that in the general management literature, it is widely recognized that performance of the functional manager's leadership style contributes to success of the organization he or she manages. It appears that the project manager's competences are ignored when identifying Project Performance factors (Love, *et. al.*, 2011; Ahadzie, *et. al.*, 2009). Project Managers have developed practices and approaches for the corporate environment without having a broad theoretical understanding of the subject. Kerzner (1998) comprehensively studied excellence in project management and he developed a six – component model of excellence that comprises integrated processes, culture, management, support, training and education, informal project management

and behavioural excellence. Loo (2002) conducted a study of internal best practices with a sample of project managers from 34 Canadian organizations that are project driven.

Many scholars in ethics believe that organizations are set-up to encourage ethical behaviour (Gerber, 2005; Gellerman, 2005). Lysonski and Gandis (1991) examined ethical tendencies of samples of university business students from the USA, Denmark and Newzland using a questionnaire containing ten short vignettes of ethical dilemmas. Individuals use more than one rationale in making ethical judgments and inadequacies in existing measures in business ethics. Reinabach and Robin (1988-1990) initiated a project to develop a multidimensional, multi-item measure that reflected five normative theories of ethics because the cases for these theories on fairness, justice, duty and the greatest good can be found in many philosophical as well as religious writings.

Wiley (1998), in her study of human resources managers, found that regardless of gender, position, or company-size, managers' ethical behaviours are influenced by behaviours of managers more senior than themselves. Efforts at enhancing ethical behavior in public service organizations are seen as important and widespread (Feldheim and Wang, 2002). But the ERC (2005) concluded that although there had been an increase in number of ethics programmes, their impact on misconduct was not as great as hoped and appeared to be strongly reliant upon culture. Companies with strong ethics programmes report improvements in ethical conduct and programmes have positive effect on employee behavioural ethical attitudes and corporate culture (Ferrell, *et. al.*, 1998). According to Tam and colleagues (2000), culture related factors including "commitment" to quality and experience of the "project management team" and "consciousness of labour" are the most important ones affecting construction quality. They (*ibid.*) further argue that ethical standards (goal setting) and ethical behaviours of project participants are responsible for the final project outcome.

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This leads to hypothesis H3: *There is a significant positive relationship between Project Management (Behavioral and technical) Competences and Project performance.*

Mediation of Ethical Positions on the Relationship between Management Competences and Project Performance

Seyts and Latham (2005) argue that assignment of performance goals without knowledge of how to attain those goals may lead to a performance –at- any cost mentally may be a basis to perform tasks and duties unethically. Initial empirical studies have found that performance goals lead to more instances of unethical behavior than do-your-best goals if employees are not well managed (Schwetter, Ordinez and Donma, 2004).

Kelly (2005) suggests that “rules are for moral infants, principles are for moral adults.” Kitson (1996) found that effectiveness of corporate codes of ethics is independent on day –to – day behavior of managers in execution of a firm’s business. He (ibid.) further argued that it enhances a firm’s performance. Forsyth (1980) developed the ethics position questionnaire to identify an individual’s ethical positions. Ethical positions can be described as a continuum with idealism at one end and relativism at the other. Idealism focuses on common welfare without violating moral guidelines. Relativism describes an individual’s concern for universal set of rules or standards. Individuals of relativism also tend to judge decisions highly leniently in performance of organizational tasks and duties (Elias, 2002).

This leads to hypothesis H4: *There is a significant positive relationship between ethical (teleological and ontological) positions and Project Performance.*

Methodology

Research Design, Population, Sample Size, Sampling Procedures and Data Collection Methods

The study adopted a cross-sectional research design through quantitative research approach. To address the research hypotheses generated in literature, the researcher undertook a large scale comprehensive survey covering a random sample of government projects in Ugandan public universities. A questionnaire was developed to tap the constructs of ethical positions, project management competences and project performance.

The study population comprised of a total of 191 government projects both of which are funded by government and donors from five public universities in Uganda (Parliamentary report, 2013). The public universities included Makerere, Kyambogo, Mbarara, Gulu and Busitema. Data were collected from each of the projects by targeting technical persons and non-technical respondents. The unit of analysis was a government project in public universities. Using the table of sample size determination provided by Krejcie and Morgan (1970), a sample size of 103 projects was used in this study. Krejcie and Morgan's (1970) sample size determination approach was preferred because it yielded a representative sample, which one would expect even if other popular approaches such as Yamane (1973) were used. Such that $n = \frac{N}{1 + \frac{N(e)^2}{2}}$ where n-represents sample size, N-represents target population, e-represents tolerable error.

Simple random sampling technique was used to select the projects for survey. The researcher generated a table of random numbers using EPITABLE- random number listings. All NAADS projects were listed in an alphabetical order and assigned numbers from 001 to 191. The selection criterion of the project sample was based on length of the largest numbers on the population list. Consistent with rules of simple random sampling technique, the researcher only selected cases from the list for the sample,

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which corresponded with the identified number from the table. Using this process, the researcher ignored all repeated numbers and numbers that were not on the population list. The process was continued until the desired sample size of 104 was achieved. According to Weisberg and Brown (1977), magnitude of errors ranging from 3 percent to 4 percent is acceptable in survey research. Results from this study conformed to this guideline.

Data Cleaning, Sources, Collection Instruments, Measurement and Analysis

Primary data were collected by gathering views from project coordinators, project team, and government officials using a questionnaire. Data were tested for assumptions of parametric data prior to analysis. These diagnostic tests included Linearity, homogeneity of variance and normality. Item scales for all the study constructs were anchored on a 6-point Likert scale with 1= Strongly dissatisfied, 2=Satisfied, 3=slightly dissatisfied, 4=slightly satisfied, 5=satisfied, strongly disagree to 6= strongly agree. All items were derived from previous studies and modified to suite the study in Ugandan context. The item scales were given to experts to assess their relevance to the study. Project performance was measured in terms of reliability, effectiveness and efficiency using constructs of time, scope, costs and quality as defined in the Project Management Body of Knowledge (1996). Project management Competences were measured using items developed from Michigan Organizational Assessment Questionnaire as advanced by Cammann, Fichman, Jenkins and Klesh (1997). Ethical positions were measured using items scales developed by Lim and Kevin (2006). Data were edited, coded and aggregated to the unit of analysis, which was the project. Data were analyzed to answer objectives of the study as elaborated in the proceeding sections.

Data Cleaning and Diagnostic Tests

Data were checked, recorded, cleaned and negatively worded scale items were reverse coded. The completed questionnaires were also checked for missing values and series of mean values with replacement method used to screen the data. Data screening further aimed at diagnosing the distribution of data set by assessing where data followed the assumptions of parametric tests. Key specific assumptions tested included test of normality of the data distribution patterns, linearity of data independence of errors and Multicollinearity tests as well as tests of homogeneity of variance. Multicollinearity tests using the variance inflation factors (VIF) and tolerance errors indicated that predictor variables yielded no problem of Multicollinearity because all values were below the minimum cut-off points and the threshold VIF were less than 10 and tolerance ratio greater than 0.1.

Results

Table 1: *Descriptive Statistics*

Characteristics	Item	<u>F</u>	%ges	Cum%ges
Name of University	Makerere University	40	38.5	38.5
	Mbarara University of Science & Tech	23	22.1	60.6
	Kyambogo University	16	15.4	76.0
	Gulu University	18	17.3	93.3
	Busitema University	6	6.7	100.0
Type of project	Health	15	15.4	15.4
	ICT Based	10	9.6	25.0
	Community Based	20	19.2	44.2
	Research	43	41.3	85.6
	Other	15	14.4	100.0

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Characteristics	Item	E	% ges	Cum %ges
Duration of project	Less than 5 yrs	35	33.7	33.7
	05 - 10 yrs	54	51.9	85.6
	11 - 15 yrs	9	8.7	94.2
	Above 15 yrs	5	5.8	100.0
Working experience	Less than 30	54	52.9	52.9
	30 – 50	25	24.0	76.9
	51 – 70	15	14.4	91.3
	71 – 100	5	4.8	96.2
	Above 100	4	3.8	100.0
Project Funders	Government	29	27.9	27.9
	Donor	69	66.3	94.2
	Others	5	5.8	100.0

Table 2: *Measures of Project Performance*

Factors	Quality	Cost	Time	Scope
We are satisfied with the output of the project.	.859			
We often receive officials from the project executive and regulate the quality standards of the project activities.	.830			
The users of the project are all happy.	.821			
We were all satisfied by the project's services.	.820			
This project has helped beneficiaries so much to improve their quality of life.	.792			
To a larger extent the project meets our expectations.	.779			
The project goals and its terms can be changed any time in order to meet our needs.	.568			
The project meets budget requirements.		.748		
Project activities are usually carried out following a clear budget.		.743		
The financial limits for the project are clearly stated.		.697		
The project was completed within the planned budget.		.617		
The users of the project are all happy with the budgeting process.		.555		
Project executors always follow the planned cost for all activities.		.514		

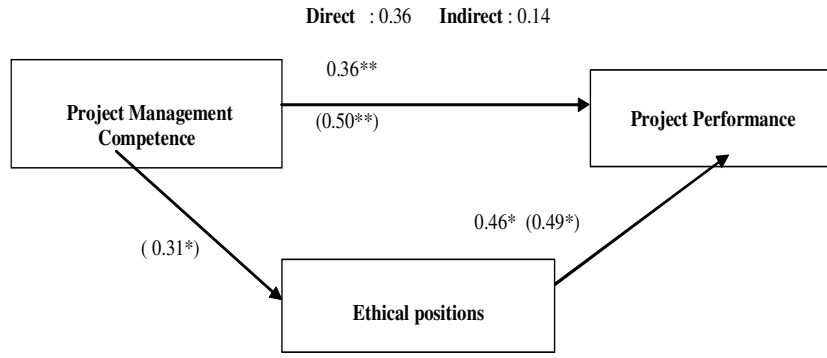
Factors	Quality	Cost	Time	Scope
Project executors always follow the planned cost for all activities.		.514		
The project activities are cost effective.				
My project considers time as an important resource in the project boundary.			.698	
The products of the project often meet our needs.			.611	
The financial limits for the project are clearly stated.			.580	
We are satisfied with the output of the project.			.508	
To a larger extent the project meets our expectations.				
Project executors always follow the planned cost for all activities.				
The project has internal quality control measures to ensure that the deliverables is high quality.				.742
My project includes stakeholders' expectations in its boundary..				.736
This project has helped beneficiaries so much to improve their quality of life.				.629
Activities of the project are usually carried out following a clear budget.				.584
Eigen values	10.113	2.902	1.966	1.372
Variance %	43.967	12.616	8.546	5.965
Cumulative %	43.967	56.583	65.129	71.094

Factor analysis was used to identify key significant measures of project performance as the first objective. Results indicated that sampling adequacy was 0.944 according to Kaiser-Meyer-Oklin (KMO). Bartlett's test of Sphericity showed an approximate Chi-square of 1266.692 with 91 degrees of freedom (sig.0.000). Principal component analyses were performed to identify patterns in the data and to reduce into manageable level and four factors remained significant. The major components of project performance in public universities are Quality (43.967%), Cost (12.616%), Time (8.546%), and Scope (5.965%). This justifies that key measures of performance of government projects are Quality, Scope, Cost and Time.

Mediation of Ethical Positions on Relationship between Project Management Competences and Project Performance

To test the mediation of ethical positions on the relationship between project management competence and performance of government projects as the third objective, tests of mediation were conducted in this study to establish the nature of mediation and the extent to which ethical positions influence association of the relationship between project management competences and project performance. The tests of mediation were carried out using Med Graph program developed by Jose (2004) based on works of Field (2006); Baron and Kenny (1986). According to Baron and Kenny (1986), before mediation can be tested, three conditions have to be met. A three step approach was used as suggested by Jose Path Model (2004): To test for mediation, the researcher first investigated whether or not i) Project management competence significantly predicts the mediator, ii) Project management competence significantly predicts Project performance in absence of Ethical positions as a mediator, iii) Ethical positions showed a significant unique predictive relationship on Project performance and iv) the predictive power on the relationship of Project management competence on Project performance changes upon addition of Ethical positions in the Jose Path Model using regression coefficients.

Standardized coefficients of Project management competence on Project performance



Significant at level of :**p<0.01, * p<0.05

Fig. i: Med graph shows mediation of Ethical positions

Type of Mediation: Partial

Sobel Z- Value : 2.92 significance: 0.00

Results in Figure (i) reveal that: Sobel z-value is large with a p-value less than 0.05, meaning that there is a significant mediation of Ethical positions on the relationship between Project management competence and Project performance. The relationship between Project management competence and project performance on addition of mediating variable of ethical positions significantly reduced from 0.50 to 0.36 in regression model (Jose Path Model, 2004). The type of mediation was partial mediation because the correlation between independent variable and dependent variable significantly reduced to a significant level on adding the mediating variable in the model (i.e., from 0.50 ** to 0.36 **). Results indicate that Ethical positions mediate the relationship between Project management competence and Project performance.

Regression Model

Figure (ii) shows the predictive potential of management competence and Ethical positions on Project performance. To establish the strength of the relationship between ethical positions, project management competence and performance of government projects in Public universities as the first objective, Hierarchical regression analysis was used.

Variable	Model 1		Model 2		Model 3	
	B	SE	B	SE	B	SE
Intercept	3.71**	0.20	2.36**	0.28	1.28**	0.42
Age of project	0.04	0.10	0.14	0.09	0.13	0.08
Project management competence			0.53**	0.05	0.39**	0.05
Ethical positions					0.31**	0.09
R	0.04		0.52		0.59	
R^2	0.00		0.27		0.35	
Adjusted R^2	0.01		0.26		0.34	
ΔR^2	-		0.27		0.08	
F Change	-		36.76		11.36	
Sig. F Change	-		0.00		0.00	
Df	99.00		98.00		97.0	
F	0.12		18.46		17.4	
Sig.	0.73		0.00		0.00	

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

Fig. ii: *Hierarchical Regression Analysis Results- Dependent Variable is Project Performance*

Consistent with other scholars, the researcher entered control variable of age of project in Model 1. As suggested by Cohen and colleagues (2003), model selection should be based on statistically significant improvement in explained variance. Results in Model 1 indicate that age of project is not associated with project performance. This means that there is no inherent need to understand age of the projects in fostering project performance.

Model 2 reveals that Project management competence predicted 26 percent in variance of Project performance ($\hat{\alpha}=0.53$, $p \leq 0.01$, " $R^2=0.27$). Findings from this study indicate a significant positive relationship between project management competence and project performance.

In model 3, Ethical positions predicted 33 percent in variance of project performance ($\hat{\alpha}=0.31$, $p, "=0.08$). Findings indicate a significant predictive potential of Ethical orientation on Project performance.

Discussion

Results from this study are in agreement with the research carried out by Wei (2010) that revealed that if employees are given greater opportunity to improve established work procedures, their own performance outcomes increases in organizational settings characterized by high levels of innovation, which lead to better organisational performance. The research results are also in line with the Project Management Institute (2008) that reveals that projects are vehicles that deliver benefits and they generate value to organization's strategic need with input(s) from competent managers.

The research results are related to works of Ruuska and Vartiainen (2003) who found out that goals and vision promote understanding and management of a project as a whole and are considered critical. The findings are again in conformity with the research conducted by Hanson (2006) who established that better management competences enable managers to perform their tasks well, which enhance project performance.

Also results from the study indicate that better project management competences influence project performance positively, which is supported by Hamzah and Zairi (1996) who established that management competence is an essential precondition for successful quality performance. Again, these findings are in agreement with works of Turner and Muller (2005) who established the contribution of the project manager's competence and leadership style to project success and concluded that performance of the

functional manager's competences contributes to success of the organization he/she manages.

The research results concur that management competence is an indispensable part of project performance impacting directly on project outcomes that was established by Shenhar and co-workers (2002). The research results agree with findings of Petterson (2010) who established that management competences are vehicles for mobilizing people for change. The findings are again related to the implication of the project manager's competences, which encompass a key branch to improving project performance (Love, *et. al.*, 2011)

Conclusion and Recommendations

Project managers should be equipped with innovative competencies on how to improve project quality, minimize costs and manage project scope through technical competencies so as to continuously create value for the projects. This will enhance value creation, effectiveness, efficiency and sustained performance of government projects. Project managers should emphasize on competences that enhance effective functioning of the projects through efficient allocation of scarce resources, proper planning and scheduling thereby promote projects performance in public universities in Uganda. Managers in different projects should be trained, coached and developed such that they would act as role models in terms of ethical behaviors and management competences, which will enhance project performance in public universities in Uganda.

Furthermore, based on results, ethical positions predict performance of government projects. This means that there is need to engage project team and other stakeholders both primary and secondary stakeholders in the ethical decision-making process and in all tasks of the project life cycle phases especially at implementation level. Public universities should introduce ethical and moral training and testing as part of the recruitment policy to enhance project performance in public universities.

The researcher empirically attests that a closed loop model that synchronizes project management competences, ethical positions and project performance is a requirement for promoting sustainable performance outcomes of government projects. Therefore, the researcher advances the need to develop a holistic model that creates bondage of ethical competencies and project competencies in government projects in Sub-Saharan Africa.

Limitations and Areas for Further Research

The study was limited to only three variables. Such pattern limited the scope of the study to only project management competences, ethical positions and project performance in public universities, ignored project performance in private universities. In addition, it was cross-sectional in nature and ignored longitudinal data on government project performance.

This study concentrated on modeling performance of government projects using predictors of project management competences, ethical positions and project performance in public universities. Future research should attempt to widen the scope of the study to both private and public universities in Sub-Saharan Africa. From the results, the regression model explains 32 percent predictive power of project performance due to ethical positions and project management competences and other factors predict 68 percent variance in project performance.

References

- Achilles W.W. (2006). An experimental Analysis of the impact of goal orientation, ethical positions and personality traits on managers and accountant's ability to recognize misappropriation of assets. Doctoral dissertation, Virginia Common Wealth University
- Ahmad Bakeri Abu Baker (2005) Faculty of information and communication Technology, International Islamic University Malaysia, Jalam Gombak kuala Lumpur, Malaysia IT competencies in academic libraries. The Malaysian experience.
- Ali, A. (2009), "economic crisis illusionary virtues", competitiveness review, Vol. 19 No. 3 pp157
- Anita M. Mhiu Richard (2004) The impact of ethics programmes and ethical culture on misconduct in public service organizations.
- Asger Sorensen (2008), Deontology- Born and Kept in Servitude by Utilitarianism
- Auditor General's Report to parliament, 2012/2011
- Best Interests of the student: an ethical model Jacqueline A. Stefkovich and G. Michaele O'Brien The Pennsylvania State University,
- Boyle, B.A. (2000), "The impact of customer characteristics and moral philosophies on ethical judgments of salespeople". Journal of Business ethics, Vol. 23 No. 3 PP. 249-67
- Bragues, G, (2006), "seek the good life, not money: the Aristotelian approach to business ethics". A journal of business ethics, Vol. 67, No. 4, pp.341-57
- Bragues, G, (2008), "the ancients against the moderns: focusing on the character of corporate leadres", a journal of business ethics, Vol. 78 No. 3, pp. 373-87.

- Charlotte windfall, Pierre Anderson, Christian Berggren and Camilla Nehiler (2004) manufacturing forms and intergrated solutions; characteristics and implications.
- Cherry J & Fraedrich.J. (2007). Perceived risk moral philosophy and marketing ethics: mediating influences on sales mananger's ethical decision-making. *Journal of business research*, 55 (12). 951-962
- Colin –coulson, (1990)” Project management A necessary skill, *industrial management & Data systems*, Vol.90 iss:6,pp. 17 -21
- Comfort B.S. Madebele, 1997, developing a competence based teacher education programme in Swaziland.
- Content Validity developed ratio (CVR) developed by Lawshe (1975)
- Cooke-Davis, T. (2002), “The real success factors of the project”, *International Journal of Project Management*, Vol. 20. No.3, pp.185-90.
- Dan Bangher (2006), *Egoism, Justice, Rights and Utilitarianism: Students Views of Classic Ethical Positions*. Ellen Weisboard, Pace University:
- David MC Nanghton and Piers Rawling, (1998), *On defending Deontology*
- Davis, N. (1993), “Contemporary deontology”, in Singer, P. (Ed), *A Companion to ethics*, Blackwell, Malden, MA.
- Deakin University, Warrnambool Australia (2012) *Personal competences and outdoor development for managers*. Donald Maclean, Robert Paton and Elaine de Vries University of Glasgow Business School,
- Emerald article: virtues and leadership: An integrating conceptual framework founded and Confucian perspectives on virtues Rick D. Hackett, Gordon Wang (2012)
- Flood, P., Guthrie, J., Liu, W., & MacCurtain, S. (2005). *High Performance Work Systems in Ireland: The Economic Case*. National Centre for Partnership and Performance.

Modeling Performance of Government Projects in Sub-Saharan Africa ...

- Frame, D. (1994) *The New project Management. Tools for an Age of Rapid Change, Corporate Reengineering and other Business Realities*, Jossey-Bass, San Francisco, CA
- Frame, D.J. (1995) *Managing projects in Organizations. How to Make the Best Use of Time, Techniques and People*, Jossey-Bass, San Francisco, CA
- Frame, D.J. (1999) *Project Management Competences. Building Key Skills of Individuals, Teams, and Organizations*, Jossey-Bass, San Francisco, CA
- Gareis, R. (2000) "Competences in the project-oriented organizations", In *Proceeding of PMI Research Conference 2000*, Paris France.
- Glasgow, UK (2008), *Transparency in Malaysian property companies*. Muhammad Najib Razali Department of Real Estate Management, Universiti Teknologi Malaysia, Johor, Malaysia and Yasmin Mohd Adnan Department of Real Estate Management, Universiti Malaysia, Kuala Lumpur, Malaysia (2012)
- Göran Svensson, Greg Wood, (2011) "A conceptual framework of corporate and business ethics across organizations: Structures, processes and performance", *Learning Organization*, The, Vol. 18 Iss: 1, pp.21 – 35
- Heungsik Park, college of public services, Chung University Seoul, Republic of Korea and Jolum Blenkinsopp, Hull university Business school, Hull UK (2012)
- Hunt, S.D., Vitell, S. (1986), "A general theory of marketing ethics", *Journal of Macromarketing*, Vol. 6 pp.5-16.
- James E. Macdonald, Caryn L. Beck-Dudley (1994), *Deontology and Teleology mutually exclusive?*

- James R.K. Kagaari, John C. Munene, Joseph M. Ntayi (2013), Agency Relations and Managed Performance in Public Universities in Uganda.
- Joseph Mpeera Ntayi, Pascal Ngoboka & Cornelia Sabiiti Kakoza, (2012), Moral Schemas and Corruption in Uganda Public Procurement
- Joseph Mpeera Ntayi, Pascal Ngoboka, Isaac Ndahiro, Sarah Eyaa (2013), Leadership Ethical positions, Mindfulness and Procurement Contract Performance in the COMESA Central governments; Makerere University
- Kant, I (1994). grounding for the metaphysics of morals (J.W. Elington, Trans). Ethical philosophy, 2nd edition indianapolis: Hackett publishing (original work published, 1785).
- Krejcie, R.V., & Morgan, D.W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30,607-610
- Lianying Zhang and weyire fan (2013), school of management and economics, Tianyins University, Tianyin, China. Improving performance of construction projects.
- Mathew H.Sauber, Hugh B.Mc Surely and V.M Rao Tummala (2008) College of Business eastern Michigan University, vipslanti, Michigan U.S.A. Mediation effect of sustainability (the case of Egyptian higher education enhancement projects)
- Meheran Zakaria & Norhaini, Mat Lajis (2012), Moral Philosophies Underlying Ethical Judgements: Universiti Teknologi MARA
- Michael E. Brown, Linda K. Trevino (2006), Ethical Leadership: A review and future directions
- Mill, J.S. (1962), Utilitarianism, Liberty, Representative Government, J.M. Dent & Sons/E.P. Dutton, London and New York, NY

Modeling Performance of Government Projects in Sub-Saharan Africa ...

Mojeed Olujinmi A. Alabi, (2001), Implementation challenges of the African Charter for the public Service : Public service ethics and change management

Phil Nixon, Megan Harrington and David Parker (2011) Leadership performance is significant to project success or failure acritical analysis.

PMBOK (1996) A guide to the Project Management Body of Knowledge, PMI Standards Committee, Project Management Institute, Upper Derby, PA.

Podasakof, P. M., Scott, B., Mackenzie, J., Beith, P., & Daniel, B. (2000). Emperical Literature and Suggestion For Future Research. Journal of Management 26(3): 5213

Project Management Institute (2006), The Standard for Program Management, Project Management Institute, Newton Square, PA

Project Management Institute (2008), A guide to Project Management Body of Knowledge, Management Institute, Newton Sylva, NC.

Razana Juhanda Johari, Zurandah (1999), The effect of knowledge, Effort and Ethical Orientation and Audit Judgement Performance: Mohd Sanusi University Teknologi MARA Shal Alam, Selangor

Rebecca A. Luzadi, Megan W. Gerhardt (2000), An exploration of the relationships between ethical orientation and goal orientation: Miami University

Rick D. Hacket (2011), Emerald Article: Virtues and Leadership: An integrating Conceptual Framework founded in Aristotelian and Confucian Perspectives on Virtues.

Robert Holt & David Rowe (2009) University of Bath, Uk Total quality, public management and critical leadership in civil construction projects.

Robert Loo (2003) Faculty of Management, University of Lethbridge, Alberta, Canada. A multi level causes model for best practices in project management.

Rogeris Taileu de oliveira Lacerda, Leonardo Ensslin and Sandra Rohim Ensslin, Federal University of santa Catarina, campus university of Brazil (2009). Aperformance measurement view of IT project management.

Rowe, J. (2003), "Introduction to project alliancing", paper presented at the Alliance Contracting Conference, Sydney, 30 April, Project Control International Pty Ltd, Brsbane.

Sherin H. Abou-warda (2014). Department of business Administration, Faculty of commerce, Kafrelsheik city Egypt.