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The Role of Project Manager Leadership Styles in Improving Project Performance; A case of Initiative Africa

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Abstract: Leadership plays an important role in project management. This study was to examine the relationship between leadership styles (transformational and transactional) and project performance. A set of questionnaires was administered to purposive selected 55 project leaders in 18 organizations in Addis Ababa, of whom 44 were responded. Regression statistical analysis was done to explain the relationship between variables. The most salient finding was that transformational leadership styles were related to project performance. Implication of the study was discussed, and some suggestions were made. The study concluded adoption of transformational leadership style by project managers is more likely to yield better project performance.

Keywords — Africa, leadership style, project management, performance, transformational, transactional,

I. INTRODUCTION

Leadership is a dynamic process in which one individual influences others to contribute to achievement of the group goals [1]. Thus, leadership is a social influencing process in which the leader seeks active participation of the followers in the attainment of set goals. Within a project set up, it is recognized that the project manager must provide leadership in order to ensure effective planning, co-ordination and control of project activities through application of appropriate project management knowledge and systems. However, existing literature acknowledges that an effective project manager must not only be technically qualified but must also possess the requisite soft skills such as leadership and people management which is essential in their roles. In addition to this project manager's role is recognized as a key determinant of performance. A study [2] has theorized and tested the link between project manager's leadership style and project performance. For example[3], A link between project manager's transformational leadership style and project performance while Higgs established a preference for transactional leadership style for simple projects and transformational leadership style for complex project. In accordance with these, most common leadership styles that can be identify by [4]-[7] are Leadership based on trait (like confidence), Leadership based on behavior or style (empowerment), Leadership based on contingency, Leadership based on charisma or vision, Leadership based on emotional intelligence, Leadership based on competency (emotional competencies)

Therefore; one of the key issues in project management is on what needs to be done to improve project performance [8]. Indeed, a review of extant literature shows that time and cost over-runs have become the norm rather than an exception [9]. Consequently, there has been increased number of litigations, wastage of resources, negative reputation of clients and professionals involved in unsuccessful projects as well as lack of envisioned product, service or change [10] highlighted the importance of leadership on project performance suggesting it has been one of the major issues for both research and practice

The focus of this study is undertake to answer the following question; which project manager's leadership style is appropriate on empowering young girl's project performance which is implement by initiative Africa and its partners? And to conduct a profound analysis of ideal leadership styles and evaluates attributes that add value to the productivity levels for a project manager [11].

II. LITERATURE REVIEW

Several theories exist that explains the relationship between leadership style and project performance. These theories include visionary leadership theory, resource Based View (RBV) theory, contingency theory, stakeholder theory and agency theory.

A. Leadership theories

As noted [12] 90-95 percent of project issues require soft skills such as leadership, management, teamwork, and communication. Only 10 percent of project manager's role entails application of technical knowledge while 90 percent involves soft skill issues such as leadership and management [13].

B. Leadership style

Leadership style is as a consistent pattern of behavior that a leader uses when working with and through people. Over

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the past decades, there have been six schools of leadership theories namely the trait, behavioral, contingency, visionary, and emotional and competency school. Within the visionary school, there are transformational and transactional leadership styles which were first articulated [14] defines transformational leadership as an approach to leading that changes followers, making them to look beyond self-interest in favor of the group's objectives by modifying their morale, ideas and values. Thus, in transformational leadership style, leaders define and articulate need for change, create new vision, mobilize commitment and inspire followers to deliver extraordinary results. Transactional leadership style, on the other hand, is based on rewarding followers for meeting performance targets and punishing them when they fail [15]. While leadership and leadership styles have been identified as critical factors in organization performance, no consensus has been reached in the area of project performance [16]. In addition, a literature search [17] found inadequate coverage of the relationship between project manager's leadership style, teamwork, project characteristics and project performance.

C. *Behavioral leadership*

The leader efforts focus on the more tangible measures for the team to achieve its goals such as work quality, quantity and efficiency. Group Maintenance Behaviors – The actions of the leader focuses on maintaining group cohesiveness, collaboration, team work and social stability. Participation and Decision Making – In this approach Leader can choose to make a decision autocratically or democratically. As a project manager the concepts of behavioral leadership are key in managing aspects of every project from determining how decisions will be made to the level of involvement the project manager chooses to have with the project staff.

D. *Visionary Leadership*

One highly important element that every leader must have is the characteristic of having a vision. Without the ability to have a vision, the leader has no concept of direction and is unable to strategize. A visionary leader has the capacity to see beyond the horizon and limitations of the environment and foresees the challenges, opportunities and is able to prepare his/her staff to overcome difficulties and ultimately succeed. Having a clear concept of his/her vision, formulating an effective plan of action or a mission and motivating his/her team to reach the desired outcome. [18]

E. *Transformational Leaders*

The leaders inspire subordinates to do beyond expected by instilling pride, communicating personal respect, facilitating creative thinking, and providing inspiration is as the father of transformational theory of leadership, viewed transformational leadership as a requirement to achieve and successfully manage change amidst constantly changing world conditions. His model of transformational leadership refers to a transformation in the assumptions and thoughts of followers while creating a commitment for the strategies, objectives and mission of the firm, company or corporation [19].

F. *Transactional and Transformational Leadership*

Transforming leadership "is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents". "[Transforming leadership] occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality…"

G. *Contingency leadership*

At first sight, it might appear that the competence school signals a return to the trait school. However, in reality, the competence school encompasses a full range of the earlier schools. Competence can be defined as knowledge, skills, and personal characteristics that deliver superior results. In the 15 leadership competencies, seven are considered emotional (EQ) competencies, three intellectual (IQ) and five managerial (MQ).[20]

H. *Fiedler's Contingency Theory*

Fiedler's Contingency Model is widely regarded as the Father of Contingency Theory of Leadership [21]. "This theory was developed by Fiedler and postulates that the performance of groups is dependent on the interaction between leadership style and situational favorableness". Fiedler recommends three major important variables which determined whether in a particular situation is favorable to the leaders.

i. Leader-member relation – the degree of confidence, trust, respect the follower in the leader, in other word the leader's personal relations with the followers.
ii. Task structure – the level of the structure in the tasks the followers are involved to solve.
iii. Position power – the authority power that the inbuilt to the leader position.
    a. Task-oriented leaders tend to do better in group situations that are either very good or unfavorable.
    b. Relationship-oriented managers, on the other hand, do better in all others situations, that are intermediate in favorableness.

Although Fiedler's leadership theory is useful, but there is drawback because judging whether a leadership style is good or bad can be hard. Each manager has his or her own preferences for leadership. [22]

I. *Situational Leadership*

Situational leadership is comprised of a supportive and a directive dimension, each applied as required in given. The

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situational leadership model claims that there is no magical formula in influencing people and that there is no unique leadership style in effectively leading people. The style to be adopted depends on the readiness level of the people that the leader is attempting to influence [23]

J. Project Performance

How do we measure the performance of a project? All projects are expected to have specific objectives; that is, an end result, which costs so much and should be completed within a certain time-frame. Therefore, projects which achieve cost, schedule and quality objectives are successful. Those that do not are failures. Success or failure is a simple measure of performance. Determining project performances become one of the major tasks in the project management system. Above all these, the performance of nongovernmental organization projects has an extensive effect on the economic well being of developing countries.

K. Project Leadership and Project Performance

The importance of leadership in project performance is widely researched and documented. A project's success or failure is the result of the leadership of project stakeholders. Leadership is considered a critical success factor for projects [46], and it is argued that there is a greater need for leadership rather than management. The transformational leader wants to achieve results beyond what is normal and sets higher corporate goals by inspiring a sense of importance of the team's mission, stimulates employees to think innovatively about a problem or task, and places the group goals over personal self-interest. Transformational leaders' behaviors are influential in motivating the employees, to make them more aware of the task outcomes; they stimulate their order needs and develop their self – interest for the organization's performance [24].

L. Project Cost Over -run

Cost overrun is the amount by which actual costs exceed the baseline or approved costs. For the purpose of this research cost overrun is defined as the positive difference between the final or actual cost of a construction project at completion and the contract amount agreed b y the client and the contractor during signing of the contract.

M. Causes of Cost Over-run

Cost overrun occurs when the final cost or expenditure of the project exceeds the original estimation cost, for instance; Inflation of Project Costs, Insufficient Fund:- Additional work at owner's request, adjustment of prime cost and provisional sums.

N. Time Over-run

The social and economic costs of delay can be amazingly high and to a certain extent cannot be absorbed by the industry. When a delay can no longer be absorbed by the client, it will result in the project being abandoned. Thus, it is important to predict and identify problems in the early stages of construction and diagnose the main causes and implement the most appropriate and economical solutions to prevent further negative impacts of delay. The contractors and consultants agreed that owner interference, inadequate contractor experience, financing and payments, labor productivity, slow decision making, improper planning, and subcontractors are among the top ten most important factors of construction delay in Jordan.

O. Implication of Time and Cost Over-run

Time and cost overrun have an implication and affection to the construction project performance and to the client or project owner. Time and cost certainty is known to be the top priorities of construction clients. Although affected by many internal and external factors, construction time and cost is considered a good and measurable indicator of project performance. However, low cost and speedy project are not always the main concern of clients today; instead time and cost certainty are becoming increasingly important and it is one of the most important contractor performance criteria for clients' satisfaction. Client satisfaction is an important determinant of contractor performance evaluation and comparison and it is the driving force for continuous improvement of contractor Performance [25]

P. Measures to Control Construction Cost

There are some measures which are found from the researchers' study to control the construction costs or to overcome the problems of cost overruns. Proper Project Costing and Financing, Competent Personnel, realistic cost estimation has been taken to overcome cost related problems in project areas. Risk management during project execution and appropriate contractual framework are essential in any project phases. In any development project, there must be contain certain amount of risks. Therefore, a risk management function needed to be performed by project manager to determine and reduce the risks of the particular project.

Q. Delay Mitigation Measures

It is important to improve the estimated activity duration according to the actual skill levels, unexpected events, efficiency of work time, and mistakes and misunderstandings. Mitigation efforts are necessary to minimize losses and this can be achieved by many procedures such as protection of uncompleted work, timely and reasonable re-procurement, and timely changing or cancellation of purchase orders. It is important to predict and identify the problems in the early stages of construction and diagnose the cause to find and implement the most appropriate and economical solutions It was indicated from the survey findings derived from different levels of management that the major causes of delay are due to financial problems followed by manpower shortage and changes in the project requirements. All parties involved in the project also agreed that delay occurs mostly during the construction phase. Therefore, in resolving those problems, the units of analysis suggested to increase the construction

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productivity, followed by increase the expertise and skill of human resources, and conducted site meetings more frequently. A strategic view of solving delay problems should consider the importance of the management aspects, the effects of knowledge and information flow between the organization levels, and the importance of top management contribution in solving the problems

R. The Project Manager's Role

One of the mistakes development organizations make is appointing a project manager only for the depth of her/his technical skills. It is not unusual to find a good engineer being promoted to project manager just for her technical competence. While it is true that one must have a good understanding of the technical aspects of the project, the principal areas of competence that are required in the management competence areas and these include communicating; planning, negotiating, coaching, decision-making, and leadership. These skills are often overlooked at the time of hiring or appointing a project manager; and they are supplemented by the functional support provided by the organizations back-office operations, such as accounting, human resource and logistics.

S. Influence of Leadership Styles On Project Performance

Leadership is identified as an important subject in the field of project management. The various leadership styles have different impacts on the project performance. The component of leadership is the one with the most dynamic effects during individual and organizational interaction. In other words, the ability of management to execute planned objectives depends on leadership capability. Understanding the influence of leadership styles on implementation is also important because leadership styles are viewed by some researchers as one of the key driving forces for improving a firm's performance. Effective leadership is seen as a potent source of management development and sustained competitive. For instance, transactional leadership helps organizations achieve their current objectives more efficiently ensuring proper strategy implementation.

This work therefore fills the gaps that exist in the literature on project leadership and project management.

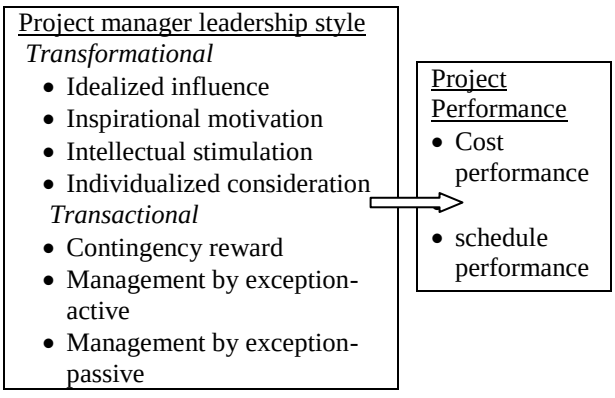

Figure 1.Conceptual framework developed by researcher

III. RESEARCH QUESTIONS

1. What is the relationship between project leadership styles and project performance?
2. What are factors that affect the project performance in case of empowering young girl's project?

The general objective of this study is to determine role of project manager's towards the performance of empowering young girl's project.

- To examine the relationship between project manager's leadership style and project performance.
- To identify the major factors affecting project performance on empowering young girl's projects.
- To establish the leadership styles adopted by initiative Africa and its implementing partners local NGOs.

Significance of Study

The nongovernmental sector plays an important role in the socio-economic development of the country. Thus, the results of this study will be useful to various stakeholders and will make several contributions. For instance for the government, development partners, project managers, consultants, donors, contractors and clients in the nongovernmental sector, the study has clarified the relationship between project manager's leadership style and project performance. Through this, project managers are expected to adopt appropriate leadership style which will enhance project performance in the nongovernmental sector. With enhanced project performance in the NGO sector, the study findings will result in values for money and hence reduce wastage of public funds through reduction of time and cost over-runs. This will enable the NGO's to channel available resources to other sectors of the economy.

IV. RESEARCH METHODOLOGY

Research Design and Approach

The research objective is to identify the central role of project manager's towards the performance of empowering young girl's project. To conduct this research the researcher used quantitative approach. Appropriate and efficient researches design to achieve the objective of this study; were used primary, secondary, and quantitative data were approached and collect for this descriptive research.

Data Type and Source

Involves general information collection, including both first-hand and second-hand data, in order to identify major themes from the literature researchers or practitioners. At initiative Africa the impressions of top leaders, project managers and program officers on the subject including the effects on the lack of project manager leadership styles that contribute to project performance.

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Target Population

The population of this study comprised of empowering young girl's projects undertaken by initiative Africa and its 17 sub-grant organizations were identified. 44 projects were selected from 18 organizations and at least one respondent for each project. This study employed census survey because the target population was manageable.

Data Collection Method

The research data was collected through the use of primary and secondary data collection instruments. Secondary data use in the study comprised of budgeted project cost, actual project cost at the time of completion, budgeted project duration and actual project duration. Secondary data will be collected from initiative Africa and its implementing partner achievement reports and project files that are available at initiative Africa offices.

Primary data was collected through administration of questionnaires to project managers, program officers and executive directors that were involved in each of implementing partners. Project manager's questionnaire was captured project manager assessment of his/her leadership style on project performance. For the questionnaire, there will be an introduction letter explaining the purpose of the study and assuring the respondent about confidentiality of data will collect only for the purpose of this study.

The survey questions contain several questions requiring types of answers including;

- Open-ended questions
- Likert Scales

To accomplish the objective of the thesis, surveys data and Questionnaires, are conducted, in which a list of important factors in successful leadership are identified.

Operation of Study Variables

Operationalization of variables entailed development of an operational definition to facilitate measurement of the study variables. The independent variable; leadership style was operationalized into two variables namely transformational and transactional leadership styles. These two leadership styles were further operationalized in accordance with the latest version of the Multifactor Leadership Questionnaire (MLQ) 5x-short. Consequently, transformational leadership had four sub-scales namely idealized influence, inspirational motivation, intellectual stimulation and individualized consideration while transactional leadership was operationalized into three subscales namely contingency reward, MBEA and MBEP

TABLE 2 OPERATIONLIZATION OF VARIABLES

Variable	Nature	Indicator	Instruments
Transformational leadership style	Independent	Idealized influence	(MLQ)
		Inspirational motivation	
		Intellectual stimulation	
		Individualized consideration	
Transactional leadership style	Independent	Contingency reward	(MLQ)
		Management by exception- Active	
		Management by exception- passive	
Project performance	Dependent	Time performance Cost performance	Index computed based on secondary data collected

Data Analysis

To prepare data for analysis the questionnaires were coded and data entered into a database. For each project, completeness of data was based on availability of secondary data, receipt of project manager's questionnaire and at least a questionnaire from one of the project team members. Since the unit of analysis was project, multiple responses for a given project were consolidated through computation of mean rating for each of the Likert scale items. Descriptive statistics namely the mean and standard deviation were computed for each of the study variables in order to understand the data.

Further, based on extant, Schedule Performance Index (SPI) and Cost Performance Index (CPI) were computed for each of the project in which complete data was available. Computation of TPI and CPI was as follows:

SPI = (actual contract duration/projected contract duration)……eqn.1

CPI = (actual contract cost /budgeted contract cost) ……eqn. 2

The computed TPI shows the efficiency in which project activities were undertaken, with index less than one indicating completion of the project before the planned project duration; index equal to one indicating completion of the project on time and index being greater than one indicating the project had a time over-run (project taking a longer duration than planned). On the other hand, CPI indicates the efficiency in which resources were utilized

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within the project with index less than one indicating completion of the project at a cost lower than budgeted; index equal to one indicating completion of the project within the budgeted cost, and index being greater than one indicating the project had a cost over-run (project cost being greater that the budget). An Overall Performance Index (OPI) was also computed as an average of time performance index and cost performance index.

In the analysis, Coefficient of Variation (CV) was used to measure variability across a set of measurements while multiple linear regression analysis was used to assess the nature of the relationship between various variables while coefficient of determination (R^2) as well as the adjusted R2 were computed and used to determine the strength of the relationship between the independent variables and dependent variable. In addition, F-test was used to determine the statistical significance of the resulting regression model while t-test was used to test the significance of each of the model coefficients. Further, multicollinearity was tested through the use of Variance Inflation Factor (VIF), multicollinearity exists if VIF >10. For each of the objectives and hypotheses, data analysis was undertaken as detailed in Table 3 below.

TABLE 3 DATA ANALYSIS METHODS

Objectives	Analysis Model	Analytical Method	Interpretation
Establish the relationship between project manager's leadership style and project performance	PP= ß0+ß1II+ß2IM+ß3IS+ß4 IC+ß5CR+ß$_6$MBEA+ß7 MBEP + ε where : PP = Project performance in terms of SPI or CPI, II =Idealized influence, IM= Inspirational motivation, IS=Intellectual stimulation, IC = Individualized consideration, CR = Contingency reward, ß's=regression coefficients, ε = random error term	• Multiple linear Regression analysis • R^2 • F –test • t-test	R^2 provides predictive power of model Model significant if p value ≤ 0.05 Results are significant if at least one of ßi's is significant.

Validity and Reliability

Validity refers to the extent with which the instrument being used is measuring the concept set out to measure. For validity, the instrument was first subjected to an expert evaluation in which its adequacy was assessed given the study objectives. In addition, the questionnaire was subjected to a pilot survey to ensure clarity and understandability of the survey instruments.

Results of the expert evaluation and pilot survey were used to update the study instruments.

Reliability of a measure is concerned with the stability and consistency with which the instrument measures the concept. Stability gives an assurance on the extent to which results are consistent over time. On the other hand, internal consistency is concerned with the homogeneity of the items that measure the concept. For reliability, the study made use of survey items that had been tested for reliability by other researchers. In addition, by making use of data from the piloted questionnaires, internal consistency was measured through computation of Cronbach alpha.As shown in Table 4 the Cronbach alpha for leadership style were above the 0.7 cut-off point and hence the instrument was considered to have strong internal consistency

TABLE 4 THE CRONBACH ALPHA

Scale	Number of items	Cronbach's Alpha
Leadership styles	32	0.744

V RESULTS AND DISCUSSIONS

The study sought to establish the relationship between leadership styles and project performance in Initiative Africa. To achieve this, the study was guided by two objectives: data was collected using questionnaires as the data collection instruments whose presentation and interpretation is given below through the use of a frequency distribution tables, mean and standard deviation; and multiple regression analysis.

Response Rate

Out of the targeted 17 implementing partners, complete data (primary and secondary) was received for "empowering young girl's projects giving a response rate of 85 Percent. A response rate of 50 percent is adequate, 60 percent is good while a responses rate of 70 percent is very good.

TABLE 5 RESPONSE RATE

Scale	Number of items	Cronbach's Alpha
Leadership styles	32	0.744

Respondents' Profile

In order to avoid self-rating biases, questionnaires were administered to project managers, program officers and executive directors. For the project, completeness of data was based on availability of secondary data, receipt of project manager's questionnaire. Since the unit of analysis was project, multiple responses for a given project were consolidated through computation of mean rating for each of the items.

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Distribution of Respondents by Category

For the empowering young girl's project in which complete data was availed, there were a total of 44 individual respondents. Distribution of the respondents by project team member categorization was as presented in Table 5 below.

As shown in Table 6 below, majority of the respondents 59.1 percent were project managers followed executive directors in which "empowering young girls project was being implemented at 22.7 percent while program officers were at 18.2 percent.

TABLE 6 DISTRIBUTION OF RESPONDENTS BY CATEGORY

Category	Frequency	Percent
Project manager	26	59.1
Program officer	8	18.2
Executive	10	22.7
Total	44	100.0

Distribution of Respondents by Gender

On the distribution of the respondents by gender, 86.4 percent of the respondents were male while 13.6 percent were female as presented in Table 7 below. In addition, it was found that 100 percent of the project managers were male.

TABLE 7 DISTRIBUTION OF RESPONDENTS BY GENDER

Category	Gender	Frequency	Percent
All respondent	Male	38	86.4
	Female	6	13.6
	Total	44	100.0
Project managers	Male	26	100
	Female	0	0
	Total	26	100

TABLE 8 RESPONDENTS BY EDUCATION LEVEL.

Category	Educational level	Frequency	Percent
All respondents	bachelor degree	35	79.5
	master degree	9	20.5
	Total	44	100.0
Project managers	bachelor degree	24	92.3
	master degree	2	7.7
	Total	26	100

As indicated in Table 8 above majority of the respondents (79.5%) were first degree holder and 20.5% had Second degree. This shows that all of the respondents were graduates hence were able to read and understand the questionnaire to provide relevant information for the questions.

TABLE 9 DISTRIBUTION OF RESPONDENTS BY EXPERIENCE

Respondent category	Experience category	Frequency	Percent
All respondents	5-7 years	8	18.2
	above 7years	36	81.8
	Total	44	100.0
Project managers	5-7 years	7	26.9
	Above 7 years	19	73.1
	Total	26	100.0

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In most jobs, experience is considered as one of the key determinants of performance. Thus, respondents' profile was analyzed in terms of their experience. The results of the analysis are shown in Table 9

In terms of experience, 18.2 percent of the respondents had 5 to 7 years of experience, 81.8 percent had above 7 years of experience. For project managers, 26.9 percent of the respondents had 5 to 7 years of experience, 73.1 percent had above 7 years of experience. Results in Table 10 above show that majority of the projects in initiative Africa and its implementing partners were being managed by project managers with more than seven years of working experience this shows that the respondent gave valid information about the project.

TABLE 10 SELECTION OF PROJECT MANAGER

Categories	Frequency	Percent	Valid Percent	Cumulative Percent
Assigned by Functional managers	22	50.0	50.0	50.0
Employed from outside	15	34.1	34.1	84.1
Others	7	15.9	15.9	100.0
Total	44	100.0	100.0	

The result in the table 10 above shows that most of the project managers in Initiative Africa and its implementing partners are being selected from functional units of the organization based on their closeness of the candidate. 34.1 percent of the project managers are hiring outside based on their knowledge of project management, behavioral, strategic and business skills, and 15 percent of the project manager's selection criteria is not known.

4.6 Project Performance

In this study, project performance was evaluated in terms of project time and cost performance. Using secondary data in appendix D and equations 1 and 2 in Section three SPI and CPI were computed for the project. Table 11 below shows the project performance was classified 'good' if SPI or CPI was equal to or less than one and 'poor', if the respective SPI or CPI was greater than one.

TABLE 11 DISTRIBUTION OF PROJECTS BY PERFORMANCE

Performance Classification	Evaluation Criteria			
	Cost performance index		Time performance index	
	frequency	Percent	Frequency	Percent
Good	23	52.3	18	40.9
Poor	21	47.7	26	59.1
Total	44	100.0	44	100

The results in Table 12 indicates that based on SPI, 59.1 percent of the projects had poor performance while based on CPI, 52.3 percent of the projects had good performance. These results also show that although a project may experience time over-run, it is not automatic that the project will also experience cost over-run. For projects that had time and cost over-run, further analysis was undertaken and the results are presented in Table 12.

TABLE 12 PROJECTS TIME AND COST OVER-RUN

Projects with Time Over-run		Projects with Cost Over-run	
Number of projects	44	Number of projects	44
Mean	1.59	Mean	1.48
Standard deviation	0.497	Standard deviation	.505
Range	1	Range	1
Minimum	1	Minimum	1
Maximum	2	Maximum	2
Coefficient of variation	0.247	Coefficient of variables	.255

Based on the results in Table 13, the average time-overrun in all implementing partners was approximately 59 percent..

In terms of cost, the average cost overrun was approximately 48 percent. Thus, majority of the projects were being completed at a cost 48 percent higher than what was initially budgeted. The results in Table 12 above also show that project cost over-run measurements had higher variability (CV = 0.255) compared to those of project time over-run (CV = 0.247)

Rating of Variables

The study variables in this study were project manager's leadership style and project performance. Individual rating of these variables was assessed through computation of descriptive statistics for each aspect as follows.

Project Manager Transformational Leadership Style Rating

For transformational leadership style, there were four key aspects that were assessed namely idealized influence, inspirational motivation, intellectual stimulation and individual consideration. A summary of respondent's mean rating of the four aspects and overall transformational leadership style was as presented in Table 13.

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TABLE 13 TRANSFORMATIONAL LEADERSHIP STYLE RATING

Aspect	One sample statistics			Test value = 0	
	Mean	Standard deviation	Coefficient of Variation	t*	Sig. (2tailed)
Idealized influence	3.4489	.67034	.449	34.128	.000
Inspirational motivation	3.3636	.64125	.411	34.794	.000
Intellectual stimulation	3.4034	.70549	.498	32.000	.000
Individual consideration	2.9886	.68615	.471	28.892	.000
Overall transformational	3.3011	.44343	.197	49.381	.000

Source own computation using SPSS ver.20

The results show that project managers use transformational leadership style to a moderate extent with a mean score of 3.30 out of 5. Within transformational leadership style, the most practiced aspect was Idealized influence with a mean score of 3.44 out of 5. Detailed statistics for the various elements under each aspect are depicted in Appendix C

The results in Table 14 above also show that inspirational motivation has less variability (CV = .411) compared to Intellectual stimulation (CV = .498), Individual consideration (CV =.471) and Idealized influence (CV=.449). In addition, the independence among the means was evaluated through one sample t-test and the results show that the means of the various transformational leadership style elements were statistically independent.

Project Manager Transactional Leadership Style Rating

In transactional leadership style, there were three aspects that were assessed namely contingent reward, MBEA and MBEP. A summary of the respondent's mean rating of each of the three aspects and overall transactional leadership style rating are shown in Table 14.

TABLE 14 TRANSACTIONAL LEADERSHIP STYLE RATING

Aspect	One-Sample Statistics			Test Value = 0	
	Mean	Standard Deviation	Coefficient of Variation	t*	Sig. (2tailed)
Contingent reward	2.4489	.43328	.188	37.491	.000
Management by exception-active	2.8580	.67857	.460	27.937	.000
Management by exception-passive	3.7330	.52661	.277	47.021	.000
Overall transactional	3.0133	.36917	.136	54.142	.000

Source own computation using SPSS ver.20

The results in Table 15 above show that project managers use transactional leadership style moderately with a mean score of 3.01 out of 5. Within transactional leadership style, the most practiced aspect was Management by exception-passive with a mean score of 3.73 out of 5. Detailed statistics for the various elements under each aspect are depicted in Appendix C.

The results in Table 14 above also show that Management by exception-active measurements had a high variability (CV = .460) compared to Management by exception-passive (CV = .277) Contingent reward (CV = .188). In addition, the independence among the means was evaluated through one sample t-test and the results show that the means of the various transactional leadership style elements were statistically independent.

Relationship among Variables

In the analysis of the relationship among the study variables, the Pearson product -moment correlation coefficient (r) was computed. The absolute value of the correlation coefficient (r) provided a measure of the strength of the relationship between the variables. The computed correlation coefficients among the variables are presented in Table 15 below.

TABLE 15 CORRELATIONS MATRIX OF VARIABLES

	II	IM	IS	IC	CR	MBEA	MBEP	TPI	CPI
Idealize influence	1	.940**	.189	.207	.241	.153	.298*	-.064	-.029
Inspirational motivation	.940**	1	.157	.201	.330*	.162	.346*	-.088	-.082
Intellectual stimulation	.189	.157	1	-.185	.036	.308*	.293	.448**	-.031
Individual consideration	.207	.201	-.185	1	.208	-.069	.225	-.644**	.083
Contingent reward	.241	.330*	.036	.208	1	.079	.295	-.045	-.045
Management by exception –Active	.153	.162	.308*	-.069	.079	1	.168	.444**	.202
Management by exception –Passive	.298*	.346*	.293	.225	.295	.168	1	.128	.075
Time Performance Index	-.064	-.088	.448**	-.644**	-.045	.444**	.128	1	.055
Cost Performance Index	-.029	-.082	-.031	.083	-.045	.202	.075	.055	1

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

*. Correlation is significant at the 0.05 level (2-tailed).

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The results in Table 15 above indicated a varied degree of interrelationship among the study variables. For instance, there was a strong statistically significant positive relationship between II and IM ($r = .940$, $p < 0.01$) and IC ($r = 0.330$, $p < 0.01$). A statistically significant negative relationship exist between IC & time performance Index ($r=.593$)

Relationship between Study Variables and Project Performance

To address the study objectives, regression analysis, R2 and adjusted R2 have been reported. However, in order to avoid over-stating of the model predictive power as the number of predictors increases, the study adopted the use of adjusted R. In addition, F-test was used to determine the statistical significance of the resulting regression model while t-test was used to test the significance of each of the model coefficients. Further, multicollinearity was tested through the use of VIF and was considered to exist if VIF>10.

Relationship between Project Manager's Leadership Style and Project Performance

The main objective the study was to evaluate the relationship between Project Manager's Leadership (PML) style and project performance. In order to determine the contribution of each of the leadership style towards project performance, hierarchical multiple linear regression analysis was done. In this analysis, two steps were used; in the first step, TPI was regressed on transformational leadership style while in step two, TPI was regressed on both transformational and transactional leadership styles and the results are summarized in Table 15 below.

As shown in Table 16, two models were generated. Results for model1; show that 48.1 percent of the variance in project time performance was explained by project manager's transformational leadership style while model 2 shows that 60.2 percent of the variance in project time performance was explained by both transformational and transactional leadership styles. In addition, based on change in R^2, transactional leadership style accounts for 13.6 percent of the variance in project time performance. Thus, adoption of transformational leadership style leads to higher level of project performance.

TABLE 16 REGRESSION RESULTS OF TIME PERFORMANCE INDEX AND PROJECT MANAGER'S LEADERSHIP STYLE

Model		Unstandardized Coefficients[a]	t	Sig.	Collinearity Statistic
		B			VIF*
1[b]	(Constant)	2.081	4.752	.000	
	Idealized influence	.094	.387	.701	8.835
	Inspirational motivation	-.111	-.443	.660	8.670
	Intellectual stimulation	.239	2.944	.005	1.101
	Individual consideration	-.419	-5.011	.000	1.105
	R Square	.529			
	Adjusted R^2	.481			
	F	10.969		.000	
2[c]	(Constant)	1.280	2.775	.009	
	Idealized influence	.197	.900	.374	.106
	Inspirational motivation	-.295	-1.252	.219	.100
	Intellectual stimulation	.128	1.650	.108	.763
	Individual consideration	-.451	-5.886	.000	.829
	Contingent reward	.064	.517	.609	.802
	MBEA	.241	3.216	.003	.886
	MBEP	.185	1.743	.090	.736
	R Square	.667			
	Adjusted R^2	.602			
	R Square change	13.6			
	F	10.298		.000	

a. Predictors: (Constant), management by exception passive, individual consideration, contingent reward, intellectual motivation, individual influence, management by exception active, individual stimulation

b. Dependent Variable: time performance index

Results in Table 16 also show that the two models were statistically significant with model 1 reporting a significant F value of 10.969 ($p < 0.05$) and model 2 with a significant F value of 10.298 ($p < 0.05$). Hence there was a statistically significant relationship between project manager's leadership style and project performance (based on TPI).

The findings in Table 16 also indicate that for model 1, the significant predictors of project time performance were IS (ß = .239, $p < 0.05$), and IC (ß = - .419, $p < 0.05$). However, IM (ß = -.111, $p > 0.05$) and II (ß = -.84, $p > 0.05$) were not significant predictor of project time performance. For model 2, the findings indicate that the significant predictor

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of project time performance were IC (ß = -.451, p < 0.05) and MBEA (ß = 241, p < 0.05) since all the other variables (II, IM, IS, CR and MBEP) were not significant predictors of performance (p > 0.05).

Although the two models (model 1 and model 2) are statistically significant, model 2 was a better model as it account for a higher variation of the project time performance (60.2 percent) compared to model 1 (48.1 percent).

Based on the above results, the predictive model for project time performance in initiative Africa and its implementing partners become:

$$TPI = 1.28 - 0.451IC + 0.241MBEA$$

The predictive model implies that empowering young girl's project performance (in terms of TPI) in all implementing partners is a function of IC and MBEA. Specifically, a unit increase in IC would result in a 0.451 reduction in TPI while a unit increase in MBEA would result in a 0.241 increase in TPI.

To determine the relationship between PML and CPI, the same procedure was followed. This resulted in two regression models whose results are shown in Table 18. Results for model 1 show that 6.4 percent of the variance in project cost performance was explained by project manager's transformational leadership style while model 2 shows that 6.8 percent of the variance in project cost performance was explained by both transformational and transactional accounts for 0.71 percent of the variance in project cost performance.

As shown in 17, the two models generated after regressing CPI on project manager's leadership style were not statistically significant since model 1 had F value of 0.355 (p > 0.05) and model 2 with F value of 0.608 (p > 0.05). Given the results, there was not enough statistical evidence to suggest that a significant relationship exist between PML style and project performance (based on CPI).

TABLE 17 REGRESSION RESULTS OF COST PERFORMANCE INDEX AND PROJECT MANAGER'S

Model		Unstandardized Coefficients[a]	t	Sig.	Collinearity Statistic
		B			VIF*
1[b]	(Constant)	1.526	2.396	.021	
	Idealized influence	.302	.857	.397	8.835
	Inspirational motivation	-.374	-1.025	.312	8.670
	Intellectual stimulation	-.11	-.091	.928	1.101
	Individual consideration	.060	.561	.578	1.105
	R Square	.035			
	F	.355		.839	
2[c]	(Constant)	1.069	1.392	.173	
	Idealized influence	.339	.928	.359	9.452
	Inspirational motivation	-.452	-1.154	.256	9.969
	Intellectual stimulation	-.089	-.690	.495	1.311
	Individual consideration	.058	.452	.654	1.207
	Contingent reward	-.038	-.187	.852	1.247
	MBEA	.187	1.501	.142	1.129
	MBEP	.121	.685	.498	1.358
	R Square	.106			
	R Square change	7.1			
	F	.608		.745	

a. Dependent Variable: CPI
b. Predictors: (Constant), Individual, Intellectual, Idealized, Inspirational
c. Predictors: (Constant), Individual, Intellectual, Idealized, Inspirational, Contingent, MBEP, MBEA

On the relationship between PML style and project cost performance, no statistical significant relationship was found. One possible explanation of non-existence of a statistically significant relationship between PML style and project cost performance (CPI) could be due to the use of fixed price contract in the NGO sector projects which only accounts 10 percent

TABLE 18 SUMMARY OF FINDINGS

Objectives	Findings	Conclusion
Establish the relationship between project manager's leadership style and project performance	Results based on TPI: Adjusted R^2 = 0.602, model significant (F = 10.298, p < 0.05)	There was a statistically significant relationship between project manager's leadership style and project performance (based on TPI). The predictive model is: $TPI = 1.28 - 0.451IC + 0.241MBEA$
	Results based on CPI: Adjusted R^2 = 0.068, model not significant (F = 0.608, p > 0.05)	There was not enough statistical evidence to suggest that a significant relationship exist between project manager's leadership style and project performance (based on CPI)

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Causes of Cost and time Overrun in initiative Africa

The cost overrun was presented to almost in all projects. Questionnaire survey, appendix B in question 9 revealed that the respondents are asked to list the most factors that leads to cost and time over- run in their respective projects. According to the questionnaire survey the most five factors of cost and time over-run presented below.

TABLE 19 FACTORS OF COST OVER-RUN

Factors	Cost over run		Rank
	frequency	percent	
Inflation of project cost	30	75	1
Insufficient fund	28	63.6	2
Poor logistic facilities	25	56.8	3
Additional work	24	54.8	4
Adjustment of prime cost and provision sum	10	22.7	5

According to the result of table above, inflation of project cost is the first ranked factor with 75 percent response of the respondent followed by project manager turnover, poor contractor performance, poor stakeholder participation and lack of government support. Based on the above result, to handle project cost over-run related inflation which is the first ranked of all problem, Initiative Africa and its implementing partners should follow fixed contract agreement with contractors and carefully planning of project activities and accurate cost estimation procedures should be adopted by those organizations.

Proper Project Costing and Financing, Competent Personnel, realistic cost estimation has been taken to overcome cost related problems in project areas. Risk management during project execution and appropriate contractual framework are essential in any project phases. In any development project, there must be contain certain amount of risks. Therefore, a risk management function needed to be performed by project manager to determine and reduce the risks of the particular project. Therefore, initiative Africa and its implementing partners should have a strategic cost handling mechanism based on the finding above.

TABLE 20 FACTORS OF TIME OVER-RUN

Factor	Time over-run		Rank
	frequency	percent	
Poor contractor performance	40	90.9	1
Lack of prompt approval of work	39	88.6	2
Not honoring payment for completed work	28	64	3
changes and decision-making	15	34	4
Frequent change of government policies	5	11.36	5

According to the result of table above, Poor contractor performance is the first ranked factor with 91 percent response of the respondent followed by project manager turnover, poor contractor performance, poor stakeholder participation and lack of government support.

Initiative Africa should have take a mitigation efforts to minimize losses and this can be achieved by many procedures such as protection of uncompleted work, timely and reasonable re-procurement, and timely changing or cancellation of purchase orders. It is important to predict and identify the problems in the early stages of construction and diagnose the cause to find and implement the most appropriate and economical solutions

VI CONCLUSIONS

The first objective of this study was to evaluate the relationship between PML style and project performance in Initiative Africa and its implementing partners. The study found a statistically significant relationship between PML style and project performance (in terms TPI). However, no statistically significant relationship was found between PML style and project performance (in terms of CPI).

From the study findings, it can also be concluded that existence of time over-run does not automatically imply that the project will experience a cost overrun. Further, given the statistically significant relationship between PML style and project time performance and the resulting predictive model, it can be concluded that project manager's transformational leadership style has a major impact on project performance.

The results of the predictive model between project performance and different aspects of transformational and transactional leadership style, assertion on the importance of transformational leadership style in enhancing project performance. The study concluded adoption of transformational leadership style by project managers is more likely to yield better project performance.

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