MONITORING AND EVALUATION AND PROJECT PERFORMANCE IN KENYA: THE CASE OF NON-GOVERNMENTAL ORGANISATIONS IMPLEMENTING EDUCATION PROJECTS IN NAIROBI COUNTY

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ABSTRACT

This study was carried out to assess the extent to which the use of skills and experience of the M&E team influences performance of development projects, to examine how suitability of approaches to monitoring and evaluation adopted influences performance of development projects. The study employed a descriptive survey design that involved two methods of data collection namely questionnaire and key informant interview. The study population consisted of 156 officers implementing education projects in Nairobi County of which 112 respondents were sampled and information was collected from 90 respondents which was a response rate of 80.4% using questionnaires. Five key informants were also interviewed using interview guide. Qualitative data was examined by narrative analysis to come up with themes as per the study objectives. Quantitative data was analyzed and presented using descriptive and inferential statistics. Simple linear regression was used to test individual relationships between the dependent variable and independent variables and multiple linear regression to test the influence of the independent variables on the dependent variable. The results established that the strength of the M&E team was a useful predictor of project performance with a p-value=0.000 and 19.4% of the changes in project performance could be explained by the strength of the M&E team. Suitability of M&E approaches adopted was a useful predictor of project performance with a p-value=0.010 and 7.3% of the changes in project performance could be explained by the strength of the M&E team. The researcher concluded that monitoring and evaluation has a relationship with performance of development projects with the strength of the M&E team, suitability of the approach to M&E adopted. It was therefore recommended that the M&E team and all staff should keep on sharpening their skills and be abreast with the current trends and approaches to M&E. Management needs to fully embrace and support M&E team to conduct their work and fund the function adequately for the team to perform their duties effectively which this study has found influences project performance and hence achievement of results.

INTRODUCTION

Background of the Study

There are many definitions of monitoring and evaluation according to various scholars all narrowing down to one as summarized by (UNDP, 2009), “Monitoring is the ongoing process by which stakeholders obtain regular feedback on the progress being made towards achieving their goals and objectives. On the other hand, evaluation is a rigorous and independent assessment of either completed or ongoing activities to determine the extent to which they are achieving stated objectives and contributing to decision making.” This definition of monitoring differs from many definitions that treat monitoring as merely reviewing progress made in implementing actions or activities as it focuses on reviewing progress against achieving goals. Monitoring, therefore, is not only concerned with asking “are we taking the actions we said we
would take?” but also “are we making progress on achieving the results that we said we wanted to achieve?”

Evaluations, like monitoring, can apply to many things, including an activity, project, program, strategy, policy, topic, theme, sector or organization. The key distinction between monitoring and evaluation is that evaluations are done independently to provide managers and staff with an objective assessment of whether or not they are on track. They are also more rigorous in their procedures, design, and methodology, and generally, involve more extensive analysis. However, the aims of both monitoring and evaluation are very similar: to provide information that can help inform decisions, improve performance and achieve planned results (UNDP, 2009). Monitoring and evaluation (M&E) of development activities provides government officials, development managers, and civil society with better means for learning from past experience, improving service delivery, planning and allocating resources and demonstrating results as part of accountability to key stakeholders (Rist, 2004).

M&E has all along not had a smooth embracement as many organizations view it as a donor requirement rather than a management tool for reviewing progress and identifying and correcting problems in planning and implementation of projects (Amstrong & Baron, 2013). Though donors are entitled to know whether their money is being prudently used, the primary use of M&E should be for the organization itself to see how it is performing and to learn how to better do it. It should be noted that effective project M&E enhances the basis for evidence-based project management decisions (Naidoo, 2011). As the donors, governments, private sector, civil society and the media all over the world are tightening their measures for ensuring that there is transparency in use of donor funds, recipient organizations all over the world are grappling with internal and external demands and pressures for continuous improvements in project management to enhance performance and stay competitive (Kusek & Rist, 2004). Whether it calls for greater accountability and transparency in exchange for foreign aid or real results, organizations must be increasingly responsive to stakeholders’ demand to demonstrate tangible results (Khan, 2001).

Due to the continued migration of people from rural to urban areas in search for employment for the last two decades, a drastic increase in population has resulted into mushrooming of informal settlements in Nairobi where low-income earners live and hence establishment of more informal schools to cater for the school going children that cannot all fit in the few formal schools. In order to ensure the quality of education is achieved in both formal and informal schools in Nairobi, development partners have been playing a key role in supporting the government to ensure that schools are accessible, have infrastructures that are inclusive for all, students have adequate reading and writing materials. With many projects coming up, there is a need for the organizations to ensuring accountability and transparency of resource utilization to all the stakeholders (Besner C & Hobbs B, 2008). In Kenya and other East Africa countries, the idea of monitoring and evaluation has been familiarized in the sector of education to fast-track the performance of education projects (Mwangi & Kimenyi S, 2011). This being the case, exercising monitoring and evaluation activities during project implementation gives the organization an edge towards improved project performance. Many organizations have been embracing monitoring and evaluation to fulfill donor requirements but the management is
solely the one making all the decisions, this study seeks to stimulate a culture where the
management should practice delegation on monitoring and evaluation activities to M&E
specialists in awake to ensure quality programming to influence performance of education
projects in Nairobi County.

Statement of the Problem

Majority of NGOs, CBOs, FBOs and do not have or have not found the need to have a full-
fledged M&E department with firm structures to support its functions irrespective of
monitoring and evaluation playing a critical role in the effectiveness and success of
development projects. For the NGOs that have monitoring and evaluation department, it is not
held with value as the Programs, finance or administration departments. According to Babbie
and Mouton, (2006) project, monitoring and evaluation is an activity seen as a donor
requirement rather than a management tool. Thus, NGOs undertake M&E of the projects they
implement just to cope with demands and pressures from the funding agencies rather than a
measure to contribute to project performance (Kusek & Rist, 2004). They fail to understand
the benefits that accrue from having a functional M&E department that is fully supported to
perform M&E duties independently and advise the organization operations accordingly.

Many NGOs seem not to have a better understanding of the functions of a monitoring and
evaluation department and the levels of interaction with the programs and finance departments.
This being the case, they do not have a budget line for monitoring and evaluation. For those
that have, the monitoring and evaluation team does not have the authority to incur expenditure
on the allocated budget and it’s held by the executives. Past studies; a study by Waithera and
Wanyoike (2015) on “The Influence of M&E on performance of youth funded projects in
Bahati Sub-County, Nakuru County,” a study by Ogolla and Moronge (2016) on “Determinants
of effective monitoring and evaluation of government-funded water projects in Nairobi County,
Kenya,” and a study by Lekamparish (2017) on “Influence of monitoring and evaluation on
performance of construction projects, a case of Mombasa-Nairobi pipeline construction project,”
have observed that presence of a functional M&E department and implementation of
monitoring and evaluation activities on development projects enhances project performance.
In spite of this, many development organizations still fail to have an independent M&E
department for the projects that they implement. For the organizations that have an M&E
department, the team may fail to have the capacity and skills to effectively carry out their roles.
Lack of management support is a contributing factor to hindering proper monitoring and
evaluation to be carried out within an organization. This study sought to establish the
relationship between monitoring and evaluation and project performance by focusing on the
strength of the M&E team, the suitability of the approaches to monitoring and evaluation
adopted and allocation of budget to monitoring and evaluation activities with management
support as a moderator on the realization of project performance of education projects in
Nairobi County.

Objectives of the Study

(i) To assess the extent to which the strength of the monitoring and evaluation team influences
project performance of education projects in Nairobi County, Kenya.
To examine how the suitability of monitoring and evaluation approaches applied influences project performance of education projects in Nairobi County, Kenya.

**Research Questions**

The study sought to answer the following questions:

(i) To what extent does the strength of the monitoring and evaluation team influence project performance of education projects in Nairobi County, Kenya?

(ii) How the suitability of monitoring and evaluation approaches does applied influence project performance of education projects in Nairobi County, Kenya?

**Research Hypothesis**

In order to answer the research questions, the study tested the following hypotheses:

H₀ 1: The strength of the monitoring and evaluation team does not have a significant influence on project performance of education projects in Nairobi County, Kenya.

H₀ 2: Suitability of monitoring and evaluation approaches applied does not have a significant influence on project performance of education projects in Nairobi County, Kenya.

**LITERATURE REVIEW**

**Project Performance**

Over the decades, attempts have been made to come up with the best criteria for measuring project success but none have had one definite criterion. The most commonly used criteria for long is the “iron triangle” which focuses on time, cost and quality dimensions (Atkinson, 2009). According to PMBOK (2004), project success is measured by product and project quality, timeliness, budget compliance, and the degree of customer satisfaction. Ling et al (2009) assessed Scope management, Time management, Cost management, Quality management, Risk management, Human resource management, Procurement management, and Integration management in relation to project success where he established that there were significant associations and these factors alluded to Papke-Shields et al (2010) factors. In summary, project success can be assessed on the basis of project completion within the scheduled time, completion within reasonable cost and within budget, quality achievement, meeting of the technical requirements, project achieving user satisfaction and finally the achievement of organizational objectives (Charles G. Kamau & Humam Bin Mohamed, 2015).

**Strength of the M&E Team and Project Performance**

Having a competent M&E team that is supported by the senior management in an organization is of paramount importance to leading the project management and implementation. It is a clear sign of good governance within an organization. Providing support and strengthening of the M&E team plays a key role in ensuring that the monitoring and evaluation team adds value to
the organizations’ operations (Naidoo, 2011). Zaccaro et al., (2002) asserts that a motivated team usually achieves high performance which implies that the more a team is strengthened, the better the performance and value addition to the organization. For long in the educational and training institutions there were no courses that were majoring on monitoring and evaluation as is the case nowadays and thus the need for orienting the personnel entrusted with monitoring and evaluation with the necessary skills to conduct their mandate.

Different scholars have identified different aspects which are used to assess the strength of the monitoring team which is perceived to be one of the major contributing factors influencing project performance. These include skills of monitoring staff, number of monitoring staff, financial availability dedicated to monitoring activities and the ability of the monitoring staff to plan for it, frequency of monitoring, adaptation and use of technology, stakeholders representation, power of monitoring and evaluation team and teamwork among members (Naidoo, 2011; Ling et al, 2009; Magond, 2013; Hassan, 2013; Georgieva & Allan, 2008; Gwadoya, 2012).

During the implementation phase of a project, activities are always scheduled back to back and thus a higher probability of not achieving project success, it’s at this stage that the project M&E team should be highly active in monitoring and giving feedback on time. At the closure of the project, the M&E team has minimal activities to carry and just like the rest of the project team, they are involved in reporting for the project outcomes and the lessons learned in preparation for future projects (Kyriakopoulos, 2011; Chin, 2012; Pinto and Slevin, 1988; Müller and Turner, 2007; Khang and Moe, 2008).

An M&E team with proper training and experience is necessary for the delivery of quality results. It’s of paramount importance to have an effective M&E workforce in terms of quality and quantity, hence the management is required to maintain and retain a stable monitoring and evaluation personnel in an organization. This is because incompetent staffs are a major constraint in selecting appropriate M&E systems (Koffi-Tessio, 2002). Thus there is a great demand for skilled professionals, capacity building of monitoring and evaluation systems, and harmonization of training courses as well as technical advice (Gorgens & Kusek, 2009). Human resources is vital for effective monitoring and evaluation and staff working in this department should possess the required technical expertise and skills in order to ensure high-quality monitoring and evaluation (UNDP, 2009).

Practical training in M&E is important in capacity building of personnel as it helps with the interaction and management of the M&E systems. It starts with the understanding of the M&E theory and ensuring that the team understands the linkages between the project theory of change and the results framework as well as associated indicators (CPWF, 2012). Theory of change also known as the program theory/result chain/program logic model/attribution logic is a causal logic that links research activities to the desired changes in the actors that a project targets to change (Perrin, 2012). It is, therefore, a model of how a project is supposed to work. Its function is to provide a road map of where the project is heading while monitoring and evaluation tests and refines that road map (CPWF, 2012 and Perrin, 2012).
Suitability of Approach to monitoring and evaluation Adopted and Project Performance

In the world of monitoring and evaluation, three approaches can be identified: result-oriented, constructivist and reflexive. The emphasis on result-oriented monitoring and evaluation lies in “measuring”: to what degree have the original project objectives and subsequent interventions been achieved? In other words: what are the results? The “what” question; (Kusek & Rist, 2004). Result-oriented approaches are often used to provide an accountability trail for the investment in the project, whenever financiers and their backers have to or want to see what has been done with their money. Planning methods which match this type of M&E are Log Frames or Logic Charts or the more flexible Theory of Change (Cooke-Davies, 2002).

These methods are based on assumptions and expectations of causality and linearity: ‘If we do this in the project, then this will happen and this or that change will take place; to put it another way, the project can plan for change and then measure it.’ (Mierlo, B. V., 2010). The strength of result-oriented methods lies in strategy and planning. They force project managers and participants to consider carefully what they want their contribution to be and how they think they should act to achieve this. In other words, they support the development or justification of the intervention strategy. By developing an intervention strategy the project managers and participants can assess what works and what doesn’t work at specific times. If necessary, the strategy can be modified along the way. As well as that, the result-oriented methods can be useful in monitoring the progress of the projects, the so-called operational process.

Result-oriented methods are powerful instruments but they have their limitations in (system) innovation processes. An example of a well-known intervention strategy in system innovation is the stimulation of unforeseen contacts in order to trigger surprising new insights and initiatives. During the implementation of a project-based monitoring and evaluation, project managers and the participants will want answers to a number of questions. In the short term, to what degree they are successful in stimulating unforeseen contacts (output). Further in the process, they will want to know to what degree these contacts have led to surprising new initiatives (outcome). In the long term, they will want to gain an insight into the degree to which the initiatives have contributed to, for example, a more sustainable agricultural sector (impact).

The constructivist monitoring and evaluation approach assumes that people are the motor behind the development of novelties and societal change processes. They achieve this through interaction and negotiation (Guba & Lincoln, 1989). Mutual understanding and exchange of experiences support collective learning, improvement, and change. Constructivist methods focus heavily on monitoring and evaluation of the progress of the collective learning process. They do not so much define (the “what” question) but highlight more how successful collective learning processes are initiated and prolonged (the “how” question).

A central activity is sharing experiences from different perspectives by different people. An analysis of the most important issues is made on the basis of individual stories and together with the story-tellers, the group reflects on possible further steps. Related M&E methods are Learning Histories (Kleiner & Roth, 1997) see Networks Learning from Learning Histories,

The strength of constructivist methods is that they stimulate the exchange of perspectives. They ensure a good insight into how processes evolve. These insights are of value for the learning process itself and the relationships within the project or network can be strengthened using the results of monitoring and evaluation. In particular, constructivist methods can help collective learning when the outcomes of an intervention are unpredictable, the process of change is intangible involving multiple pathways and interrelated factors, and the actors involved have different perspectives on the central problems and their causes, a common phenomenon in innovation projects. This type of learning can increase support for the project. One weakness of this method is that the insights are not easily transferable or exchangeable with the people who have not taken part in the M&E process. One trap can be that there is so much focus on the exchange of perspectives that the intention of a project to contribute to actual change is forgotten.

Reflexive approach is the most recent approach in M&E (Voss et al, 2006). Reflexive methods focus on both a collective learning process (in groups of actors and in networks) as well as on the results in terms of learning and institutional change. The reflexive approach has a constructivist basis but goes further. Project or network participants not only exchange their personal viewpoints and motives but they also debate their presumptions and underlying values and norms and the institutional context in which they operate. In this way, they can arrive at diverse agreements about possible joint actions. Reflexive monitoring assumes that system innovation can only take place if the institutions (laws, regulations, culture, etc.) which have until now perpetuated the current (non-sustainable) practices change as well (Mierlo, 2010a). The leading question in reflexive monitoring is whether the activities in an innovation project stimulate precisely those learning processes that can lead to a change in current practices of interdependent parties.

The strength of this approach is that it is based on thinking in terms of systems; current practices are questioned and the aim is to change a complete system. For this reason, the approach is promising for projects where the ambition is to contribute to system innovation. Because reflexive monitoring has not yet been implemented in practice very often, there are few people with knowledge and experience of it. It requires sincere commitment and intensive effort; self-monitoring is not or hardly possible. Related methods are the Interactive Learning Approach (Regeer et al., 2009), Reflexive Process Monitoring and Reflexive Monitoring in Action. Reflexive Monitoring in Action (RMA) has mainly been conducted in the context of agriculture in the Netherlands; a few examples of RMA experience in practice can be found in Mierlo et al., 2010a and Mierlo et al., 2010b.

**Theoretical Framework**

A theoretical review is a collection of existing theories and models from literature which underpin the conceptual framework and subsequently inform the problem statement (Mugenda & Mugenda, 2008). The study was guided by the social theory that plays a major part and role in evaluation practice. Such a theory and prior research are instrumental in
providing information on the initial needs assessment and program design. A review of the available literature is crucial as it provides knowledge on the effective strategies to use in dealing with the problems at hand. Further, they can provide lessons about what is not effective as such saving program designs and other resources (Donaldson & Preston, 2005). The theory is related with the study due to the fact that the study focused on the relationship between Monitoring and Evaluation and project performance and this is social accountability which is an important motivation for project performance, a way to improve programs and society.

**Conceptual Framework**

A conceptual framework provides a link between independent and dependent variables (Orodho, 2009). The conceptual framework is shown in Figure 1.

![Conceptual Framework Diagram](image-url)

**Figure 1: Conceptual Framework**
RESEARCH METHODOLOGY

Research Paradigm

This study used pragmatism as it recognizes that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture and that there may be multiple realities (Saunders, Lewis, & Thornhill, 2012). Thus use of both quantitative and qualitative data for triangulation purposes and complementing one another was employed in this study.

A paradigm refers to a shared world view that represents the beliefs and values in discipline and that guides how problems are solved (Schwandt, 2001). It’s a way of describing a world view that is informed by philosophical assumptions about the nature of social reality, ways of knowing and ethics and value systems (Patton, 2002).

There are three most common paradigms which include; Positivists believe that there is a single reality, which can be measured and known, and therefore they are more likely to use quantitative methods to measure and this reality. Constructivists believe that there is no single reality or truth, and therefore reality needs to be interpreted, and therefore they are more likely to use qualitative methods to get those multiple realities. Pragmatists believe that reality is constantly renegotiated, debated, interpreted, and therefore the best method to use is the one that solves the problem.

Research Design

This study adopted a cross-sectional survey design. This design refers to a set of methods and procedures that describe variables. It involves gathering data that describe events at a given time and then organizes, tabulates, depicts, and describes the data (Glass & Hopkins, 1984). The method was chosen because it is more precise and accurate since it involves a description of events in a carefully planned way (Babbie, 2004). This research design also portrays the characteristics of a population fully (Chandran, 2004).

Research design refers to the overall strategy that the researcher chooses to integrate the different components of the study in a coherent and logical way, thereby, ensuring effective analysis of the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data (De Vaus, 2001). Vaus stresses that the research problem determines the type of design a researcher should use and not the other way round. Cooper & Schindler (2003) summarizes the essentials of research design as an activity and time-based plan; always based on the research question; guides the selection of sources and types of information; a framework for specifying the relationship among the study variables and outlines the procedures for every research activity.

Target Population

According to the NGO Board database, there were 393 active NGOs implementing education projects in Nairobi County which formed the target population for this study (NGO Board, 2018). Cooper & Schindler, (2003) define the target population as the entire group of individuals or objects from which the study seeks to generalize its findings. It’s a complete
group that fits the researchers’ specifications from which the researcher wants to generate the result of the study.

**Sample Size and Sampling Procedures**

According to Mugenda & Mugenda (2003), a sample can be made up of 10% to 20% of the population. For this study, the researcher examined a sample of 10% of the population. Therefore, from the total 393 NGOs, the researcher conducted simple random sampling and a sample of 39 NGOs was selected to form the second tier target population.

In the implementation of the projects, each project employs a range of staff who include the finance officer, project coordinator, M&E officer, project officers, and project assistant who are the respondents for this study. Taking the minimum for each designation, then in all the 39 NGOs each has 4 officers in charge of implementing the project, thus 156 officers will form the total population.

Since it is not possible to study all these implementing personnel in all the sampled NGOs, the researcher used Multi-stage sampling to come up with the sample.

Using Slovin’s formula to calculate the sample size.

\[ n = \frac{N}{(1 + Ne^2)} \]

Where:  
- \( n \) = Sample size  
- \( N \) = Total population  
- \( e \) = Error tolerance

In this study, the researcher used 95% confidence level and since the study population (N) was 156, then;

\[ n = \frac{156}{(1 + 156\times0.05^2)} \]

\[ n = 112.2 \]

Thus a sample of 112 respondents was randomly selected in the sampled 39 NGOs implementing education projects in Nairobi County.

Sampling is the selection of a few items that are as representative as possible to produce a miniature cross-section of all items constituting a population under study (Kothari, 2004). On the other hand, a sample is the segment of the population that is selected for investigation, it is a subset of the population (Bryman & Bell, 2011).

**Table 1. Sampling frame**

<table>
<thead>
<tr>
<th>Personnel Designation</th>
<th>Total Population</th>
<th>Ratio</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>M&amp;E Officers</td>
<td>39</td>
<td>0.72</td>
<td>28</td>
</tr>
<tr>
<td>Project Officers &amp; Project Assistants</td>
<td>39</td>
<td>0.72</td>
<td>28</td>
</tr>
</tbody>
</table>
In the 39 organizations that were sampled, the respondents were randomly selected from the total population of this study and also 5 organizations were randomly selected for key informant interviews of senior management, one in each organization.

### Data Collection Instrument

The questionnaires were the main data collection instrument that was used in this study. This was used for the purpose of collecting primary quantitative data. Use of questions allows for the intensity and richness of individual perceptions in respondent answers (Kothari, 2012). In addition, the questionnaires were used for its potential to reach a large number of respondents within a short time. It also gave the respondent’s adequate time to respond to the items. Also, it offered a sense of security and confidentiality to the respondent and was an objective method since there was no bias resulting from the personal characteristics during interviews. Additionally, questionnaires were appropriate because they are easy to analyze and cost-effective. Every item on the questionnaire was addressing the objective of the study. They had close-ended questions. A 5-point Likert scale was used where the representations were; 1-Not at all, 2-to a small extent, 3-to a moderate Extent, 4- to a large Extent and 5- to a very large Extent to assess the respondents opinion on the objectives of this study, in addition to Likert scale, the study also used visual analog scale, on a scale of 1 – 10 to seek quantitative information to measure the feeling of respondents towards specific M&E attributes. The study also used key informant interview guide to collect qualitative data from the senior management.

### Pilot Testing of the Instruments

Pilot testing of the study instruments/questionnaire was conducted before the main data collection to make corrective revisions to instruments and data collection procedures to ensure that the data that was collected was reliable and valid. Pilot testing was carried out on project officers implementing education projects in Nairobi County but not from the NGOs implementing the projects that this study purposively sampled to represent the population of this study. The comments made by the respondents during piloting were used to improve on the instruments by correcting errors and ambiguity that the tools had. Pre-testing of tools allowed errors to be discovered before the actual data collection and 10% of the sample size was considered adequate for piloting (Mugenda & Mugenda, 2003). For pilot testing, 11 respondent was randomly selected.

### The validity of the Instrument

Validity is a crucial criterion for every research. Validity is a measure of relevance and correctness (Mugenda & Mugenda, 2003). It estimates how accurately the data in the study represents a given variable or construct in the study (Saunders, Lewis & Thornhill, 2009). Validity was ensured by having objective questions included in the questionnaire and by pre-testing the instrument that was used to identify and change any ambiguous, awkward, or offensive questions as emphasized by Cooper and Schindler (2003). Content validity was
ensured through expert opinion from the research supervisor who was consulted on the representativeness and suitability of questions and gave suggestions of corrections to be made to the structure of the research tools. Construct validity was achieved through restricting the questions to the conceptualization of the variables and ensuring that the indicators of each variable fell within the same construct. The researcher noted that the quality of a research study depends to a large extent on the accuracy of the data collection procedure (Mugenda & Mugenda, 2008).

**Reliability of the Instrument**

Reliability is a measure of the degree to which research instruments yield consistent results (Mugenda & Mugenda, 2003). It is concerned with the consistency, dependability or stability of a test (Nachamias, 1996). This study used the test re-test technique to estimate the reliability of the instrument. This involved administering the same questionnaire twice to the same group of respondents for the first time, then after six days administering the same questionnaire the second time to the same respondent and then correlated the score from both testing periods. Cronbach’s Alpha Coefficient was used to test the reliability of the measure used in the instrument using SPSS. Cronbach Alpha value was 0.87 and this sufficed Mugenda & Mugenda (2003) assertion that Cronbach Alpha that is equal to or greater than 0.7 is acceptable and the tool was found to be reliable.

**Data Collection Procedures**

Before the start of data collection, the researcher obtained the necessary authorizations which included an introduction letter from the University of Nairobi and a research authorization letter from the National Council for Science and Technology. Upon getting clearance, the researcher in person dropped and picked up the questionnaire on the same day from individuals that were sampled. At the same time, the researcher administered the key informant interviews to five senior management team officers in the five organizations that he randomly sampled from the 39 organizations that he administered questionnaires.

**Data Analysis Techniques**

Data collected was analyzed using quantitative and qualitative data analysis methods. For quantitative data, descriptive analysis which included frequencies means standard deviation and percentages were used to present quantitative data in the form of tables and figures. Data from questionnaires were coded and logged in the computer using Statistical Package for Social Science (SPSS V 21.0). Descriptive statistics involved the use of frequencies, measures of central tendency and dispersion (mean and standard deviation respectively). Frequency tables were used to present the data for easy comparison. The study also conducted linear regression analysis to determine the proportion of the variance in the dependent variable that can be explained by each independent variable and multiple linear regression to determine the proportion of the variance in the dependent variable that can be explained by all independent variables.
DATA ANALYSIS, PRESENTATION, AND INTERPRETATION

Questionnaire Response Rate

The researcher issued out 112 questionnaires for the respondents to fill and 90 questionnaires were returned which formed an 80.4% response rate. This was an appropriate response rate since a response rate of more than 70% is considered appropriate for analysis (Kothari, 2007).

Table 2: Questionnaire response rate

<table>
<thead>
<tr>
<th>Sample size (112)</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaire filled and returned</td>
<td>90</td>
<td>80.4</td>
</tr>
<tr>
<td>Questionnaire not returned</td>
<td>22</td>
<td>19.6</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Strength of M&E Team and Project Performance

The first objective of this study sought to assess the extent to which the strength of the M&E team influence project performance of education projects in Nairobi County, Kenya. To achieve this, the respondents were requested to indicate their levels of agreement on some parameters of the strength of monitoring and evaluation team and project performance. The responses ranged from strongly disagree, disagree, neutral, agree and strongly agree. Mean, standard deviation and percentage were used to come up with a summary of the study findings as shown in Table 3.

Table 3: Strength of M&E Team and Project Performance

<table>
<thead>
<tr>
<th></th>
<th>Percentage (n=90)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean    Std. Deviation   1   2   3   4  5</td>
<td></td>
</tr>
<tr>
<td>Our organization has an M&amp;E team with proper training in M&amp;E.</td>
<td>3.40 .922 0 20 30 40 10</td>
</tr>
<tr>
<td>Our organization has skillful and experienced M&amp;E staff.</td>
<td>3.67 .703 0 3.3 36.7 50 10</td>
</tr>
<tr>
<td>Our M&amp;E team is deployed according to the size of the project.</td>
<td>3.27 .818 1.1 8.9 63.3 15.6 11.1</td>
</tr>
<tr>
<td>Our M&amp;E team is committed to their work of project implementation.</td>
<td>4.10 .704 0 0 20 50 30</td>
</tr>
<tr>
<td>Our M&amp;E team monitors the projects frequently.</td>
<td>3.80 .753 0 0 40 40 20</td>
</tr>
</tbody>
</table>

*1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree and 5 - Strongly Agree

From the findings, the factors that influence the strength of the M&E team on project performance the to a great extent included the M&E team being committed to their work of project implementation which had a mean score of 4.10, frequency M&E team monitoring the projects had a mean score of 3.80. Skillful and experienced M&E staff in the organization had significant influence with a mean score of 3.67, the organization employing M&E team with proper training in M&E also had significant influence on project performance with a mean score of 3.40 and lastly M&E team being deployed according to the size of the project had
remarkable influence on project performance with a mean score of 3.27. The overall mean of the strength of the M&E team on project performance was 3.8 which indicates that the respondents agreed that the strength of the M&E team had an influence on project performance.

**Suitability of M&E Approach Adopted and Project Performance**

The second objective of this study sought to examine how suitability of monitoring and evaluation approaches adopted influences project performance of education projects in Nairobi County, Kenya. To achieve this, the respondents were requested to indicate their levels of agreement on a range of parameters of the suitability of M&E approaches adopted and project performance. The responses ranged from strongly disagree, disagree, neutral, agree and strongly agree. Mean, standard deviation and percentage were used to come up with a summary of the study findings as shown in Table 4.

**Table 4: Suitability of M&E approach adopted and project performance**

<table>
<thead>
<tr>
<th></th>
<th>Percentage (n=90)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Our organization has a detailed logical framework for the projects where all other M&amp;E tools are developed</td>
<td>3.96</td>
</tr>
<tr>
<td>Our organization has an elaborate theory of change for the project</td>
<td>3.99</td>
</tr>
<tr>
<td>In our organization, we focus on results and outputs rather than outputs only</td>
<td>3.97</td>
</tr>
<tr>
<td>In our organization, we make changes to project plans and implementation depending on M&amp;E feedback</td>
<td>3.90</td>
</tr>
</tbody>
</table>

*1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree and 5 - Strongly Agree

From the findings, the factors that influence suitability of monitoring and evaluation approaches adopted on project performance to a great extent includes the organization having an elaborate theory of change for the project with a mean score of 3.99, focusing on results and outputs rather than outputs only during project implementation had a great influence also with a mean score of 3.97. Having a detailed logical framework for the projects where all other M&E tools are developed was found to have significant influence with a mean score of 3.96 and lastly making changes to project plans and implementation depending on M&E feedback had a remarkable influence on project performance with a mean score of 3.90. The overall mean of the suitability of M&E approaches adopted on project performance was 3.95 which indicates that the respondents were in agreement that suitability of M&E approaches adopted had an influence on project performance.

**Regression Results**

To examine the model as conceptualized in the literature review, the study carried out inferential statistics. The researcher conducted a linear regression analysis for each independent variable to test its individual relationship with the dependent variable and then conducted
multiple regression analyses to test the combined influence of the independent variables on the dependent variable. The visual analog scale was used to run a regression analysis for both independent and dependent variables. The coefficient of determination ($R^2$) which is a measure of how well a statistical model is likely to forecast future outcomes and the proportion of the variance in the dependent variable that is predictable from the independent variable was calculated.

**Strength of the M&E team and project performance**

From the findings, an $R^2$ of 0.194 indicated that 19.4% of the changes in project performance could be explained by the strength of the M&E team. Also, Strength of the M&E team ($F=21.207$, p-value $=0.000$, $R^2=0.194$) shown that there was a significant relationship between $p$ and Strength of the M&E team as shown in Table 5.

**Table 5: Model Summary - Strength of the M&E team and project performance**

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>Std. Error of the Estimate</th>
<th>$R$ Square Change</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.441$^a$</td>
<td>.194</td>
<td>.185</td>
<td>1.08938</td>
<td>.194</td>
<td>21.207</td>
<td>1</td>
<td>88</td>
<td>.000</td>
</tr>
</tbody>
</table>

$a$. Predictors: (Constant), Strength of the M&E team

**Table 6: Coefficients - Strength of the M&E team and project performance**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>4.954</td>
<td>.586</td>
<td>8.457</td>
<td>.000</td>
</tr>
<tr>
<td>Strength of M&amp;E team</td>
<td>.367</td>
<td>.080</td>
<td>.441</td>
<td>4.605</td>
</tr>
</tbody>
</table>

$a$. Dependent Variable: Project Performance

For each unit increase in strength of the M&E team, project performance increased by 0.367 units as shown in Table 6.

**Suitability of the approach to M&E adopted and project performance**

An $R^2$ of 0.073 shown that 7.3% of the changes in project performance could be explained by the strength of the M&E team. Also, Strength of the M&E team ($F=6.930$, p-value $=0.010$, $R^2=0.073$) shown that there was a significant relationship between $p$ and Suitability of M&E Approaches adopted as shown in Table 7
Table 7: Model Summary - Suitability of the approach to M&E adopted and project performance

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.270a</td>
<td>.073</td>
<td>.062</td>
<td>1.16843</td>
<td>.073</td>
<td>6.930</td>
<td>1</td>
<td>88</td>
<td>.010</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Suitability of M&E Approaches adopted

Table 8: Coefficients - Suitability of the approach to M&E adopted and project performance

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>6.140</td>
<td>.568</td>
<td>10.803</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Suitability of M&amp;E Approaches adopted</td>
<td>.209</td>
<td>.080</td>
<td>.270</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Project Performance

For each unit increase in Suitability of M&E Approaches adopted, project performance increased by 0.209 units as shown in Table 8.

Hypothesis testing

This study conducted simple linear regression to test individual relationships between the dependent variable and independent variables and multiple linear regression to test the combined influence of the independent variables on the dependent variable. At significance level $\alpha=0.05$, null hypothesis was rejected if $p$-value $\leq 0.05$, with the study using F-test method.

$H_0 1$: Strength of the M&E team does not have a significant influence on project performance of education projects in Nairobi County, Kenya.

To answer this, a simple linear regression analysis was carried out. At significance level $\alpha=0.05$, $F=21.207$ and $p$-value $=0.000$ thus the study rejected the null hypothesis. At the $\alpha = 0.05$ level of significance, there existed enough evidence to conclude that the slope of the regression line was not zero and, hence, the strength of the M&E team was a useful predictor of project performance of education projects in Nairobi County, Kenya.

$H_0 2$: Suitability of M&E approaches applied does not have a significant influence on project performance of education projects in Nairobi County, Kenya.

To answer this, a simple linear regression analysis was carried out. At significance level $\alpha=0.05$, $F=6.930$, $p$-value $=0.010$ thus the study rejected the null hypothesis. At the $\alpha = 0.05$ level of significance, there existed enough evidence to conclude that the slope of the regression
line was not zero and, hence, the suitability of M&E approaches adopted was a useful predictor of project performance of education projects in Nairobi County, Kenya.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concludes that all the four monitoring and evaluation factors studied each had influence on project performance of education projects implemented in Nairobi County, Kenya. The strength of the M&E team enhanced project performance and thus there was a need to evaluate specific characteristics associated with the strength of the M&E team and cement them so as to reap the full benefits of the M&E team in relation to improved project performance. The approach to monitoring and evaluation that the project adopts was also found to influence the performance of education development projects. To enable monitoring and evaluation activities to be carried out well, there was a need to have enough budget to support this and thus an allocation of 5-10% of the total project budget was found adequate to support the same. This budget should be allocated to the M&E team for conducting their activities according to their plans without being diverted to other project activities which this study revealed takes place regularly.

Management support was found to be of much importance to ensure that monitoring and evaluation activities are carried out in the right way. From ensuring that the M&E team that is recruited is qualified and got the requisite skills and experience to carry out their work in a professional manner to ensuring that they budget for M&E activities and allocate enough budget for only monitoring and evaluation purposes, ensuring that suitable approach to M&E is selected, adopted and used to lead M&E activities and also delegate full monitoring and evaluation responsibilities to the M&E team. In addition, the project managers are responsible for ensuring that the M&E team is always motivated, keep building their capacities and sharing the new knowledge acquired with the rest of the project team.

Recommendations

1. The M&E team that is charged with carrying monitoring and evaluation roles in the projects should ensure that they keep sharpening their M&E skills regularly as they gain experience and adapt to the current approaches to M&E. They should ensure that they are in close communication with the rest of the project teams and be ready to share what they learn with them as well as always ensuring that there is a cordial working relationship with them.

2. Monitoring and evaluation trends are evolving with time and that project teams, M&E team and their management should ensure that they are well versed with current and suitable approaches to M&E and adopt them in conducting monitoring and evaluation activities in their projects geared towards enhancing project performance.
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