



DETERMINANTS OF SUCCESSFUL IMPLEMENTATION OF EARLY CHILDHOOD EDUCATION PROJECTS IN ELGEYO MARAKWET COUNTY

Barchok, P. K., & Miroga, J.

DETERMINANTS OF SUCCESSFUL IMPLEMENTATION OF EARLY CHILDHOOD EDUCATION PROJECTS IN ELGEYO MARAKWET COUNTY

Barchok, P. K.,^{1*} & Miroga, J.²

^{1*} Msc. Candidate, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

² Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

Accepted: August 17, 2020

ABSTRACT

The main objective of this study was to investigate the determinants of successful implementation of early childhood education projects in Elgeyo Marakwet County, Kenya. The study used the following theories in supporting the research variables; stakeholder theory, competence theory and ladder of participation. A descriptive research design was used in the study. The study targeted 297 respondents. From the targeted population, the study sampled 169 respondents using stratified random sampling techniques. The study used primary data which was collected using structured questionnaires. Pilot test was conducted to test validity and reliability of data collection tools. Descriptive and inferential analysis was done by the use of Statistical Package for Social Sciences (SPSS 23) and presented through percentages, means, standard deviations and frequencies. For variable relationships, inferential analysis was examined and analyzed data was presented by use of tables and models. The findings established that there is significant positive influence of project fund management, stakeholder participation, technical capacity, monitoring and evaluation on successful completion of ECDE projects in the county of Elgeyo Marakwet. The study concluded that improvement of project funding management, stakeholder participation, and technical capacity; monitoring and evaluation would results to successful completion of ECDE projects. The study recommended that there is need of appropriate structures of stakeholders' participation which for successful implementation of devolved projects in Kenya. The study also recommended that county governments should consider institutionalizing monitoring and evaluation by creating monitoring unit and hire an officer responsible for the Unit with adequate resources.

Key Words: *Project Fund Management, Stakeholder Participation, Monitoring and Evaluation, Technical Capacity, Early Childhood Education*

CITATION: Barchok, P. K., & Miroga, J. (2020). Determinants of successful implementation of early childhood education projects in Elgeyo Marakwet County. *The Strategic Journal of Business & Change Management*, 7(3), 591 – 608.

INTRODUCTION

Projects are used in all economic and non-economic fields as mean of organizing the activity, aiming the achievement of desired objectives. Projects, as the main way of creating and dealing with change (Cleland & Gareis, 2016), are used to implement strategies. Meskendahl (2010) refers to projects as the central building block used in implementing strategies, therefore business success is determined by the success of the projects. According to PMI (2013), aligning projects with strategic objectives brings value to an organization. Implementing successful projects generates positives effects on the organisation, influencing not just short and medium, but also long term development.

The quest for achieving greater implementation success in projects, and their quality need has been the desire of project. Many projects have failed due to the inability to maintain standard procedures and the required operational effectiveness regarding the attainment of targeted project goals. The World Bank (2011) mentioned that some of these procedures are loose and are often supplemented by circulars that are unclear and often contradictory and this greatly influence project outcome. Clearly, the study has shown that seven out of ten projects surveyed suffered delays in their execution (Odeyinka & Yusuf, 2012). Several researchers have addressed similar studies on cost overruns, unbudgeted financial burdens, disputes, arbitration, adversarial relationships, cash flow problems and time overruns, among others (Kirui, 2016).

From a global perspective, problems relating to project implementation success have been identified, particularly in the United States of America (USA), through an increased amount of variations work due to design changes in projects (Wambeke, Hsiang & Liu, 2011). Numerous causes of poor project success, including; inaccurate evaluation of project time and cost by key participants; have contributed to poor project performance in developed countries such as the United Kingdom (UK) (Olawale & Sun, 2010). In

Middle Eastern countries, a number of time overrun causes, such as financial difficulties and substantial changes in the scope of work, have been found to contribute to extensive delays in project success (Sweis, Sweis, Abu Hammad & Shboul, 2008).

Mbachu and Nkado (2017) indicated there is prevalence of client dissatisfaction in the South African building industry is a consequence of non-achievement of set project objectives due to identifiable constraints. A set of consultants' and contractors' acts of omission or commission is shown as the most influential and most frequently occurring factor constraining successful project delivery in the South African building industry. Ayehu (2017) investigated the determinants of project success in an international non-governmental organization in Ethiopia. The result revealed that comprehensiveness of the work plan, procurement, stakeholder participation and monitoring and evaluation were found to be statistically significant.

Gahigana (2019) inspected the degree of association and significance effect between project leadership, organization maturity, business driven approach, visibility, executive backing, user adoption and success of project implementation in Rwanda. The results showed that organization maturity level 3 contributed to the failure of sur'eau project. This study suggests to stakeholders to set a policy that should pay attention to project fund management and technical capacity. Mujabi, Otengi, Kasekende and Ntayi (2015) examined, empirically the relationship between organizational rationality, knowledge management (KM), risk management and successful implementation of donor-funded projects in Uganda. The results suggest a positive and significant relationship between each of the predictor variables, that is, technical capacity; project monitoring, risk management and project implementation success.

Inda and Moronge (2015) explored the underlying determinants hindering successful implementation of these projects in Kenya. The study found out that project fund management was the most significant

factor followed by technological factors, project management skills and government policy at influence successful implementation of domestic biogas projects in Githunguri sub-county. Osedo (2015) sought to examine the determinants of effective implementation of county construction projects in Kenya. The findings of the study concluded that Staff competency has an effect on the Effective implementation of county construction projects in Kenya. The study also concluded that Management support influence the effective implementation of county construction projects in Kenya.

Achieving project success is becoming more important as projects are becoming more difficult to complete successfully in developing countries such as Kenya (Swan & Khalfan, 2007). In Kenya, Early Childhood Education projects are under county governments. The County Government started implementing its mandates in March 2013 as per the provisions of the Fourth Schedule of the Constitution which came into effect in August 2010. Agriculture, health, education, trade and infrastructure were devolved functions. More specifically, Part 2(9) of the Fourth Schedule confers to County governments the responsibility to provide pre-primary education and childcare services. The devolution of ECDE to County governments resonates with Section 26(1) of the Basic Education Act No. 14 of 2013, which further elucidates that County governments are responsible for funding the development of required infrastructure for institutions providing ECDE services (Shinali & Kamau, 2016).

In relation to infrastructural facilities, county governments are responsible for establishing ECDE centres, constructing and furnishing classrooms, as well as for developing appropriate sanitation, water, outdoor play and assistive facilities for children. However, most of existing early childhood education projects has remained white elephants in some country. This has hindered 100% enrollment in most counties especially in Arid and Semi-Arid lands such as Elgeyo Marakwet (Cherotich, 2018).

Elgeyo Marakwet County is one of the County Governments in Kenya created under the new two-tier governance system, i.e. national and county systems created by The Constitution of Kenya, 2010. Politically, the county comprises of four constituencies, namely: Marakwet East, Marakwet West, Keiyo South and Keiyo North. There are 20 electoral Wards in the county. Keiyo North and Marakwet East Constituencies have four electoral wards each covering a total area of 541.0 and 784.3 Km² respectively. Keiyo South Constituency and Marakwet West Constituencies have six electoral wards each with an area of 899.7 and 804.6 Km² respectively

In Elgeyo Marakwet County, there are 515 pre-primary centres in the county, 370 public and 145 private centres. Enrollment in public pre-primary centres was at 34,120 learners of which 15,517 are boys representing 45.4% while girls are 16,603 representing 54.6% in 2019. Gross Enrolment Rate (GER) increased marginally from 72.4% in 2013 to 74.6% in 2017 though slightly below the national average of 76.6%. This implies that there is need to upscale early childhood education centers so as to increase children enrollments in the county. It is against this background that this study focuses to investigate the determinants of successful implementation of early childhood education projects in Elgeyo Marakwet County, Kenya.

Statement of the Problem

According to World Bank (2017), access rates to infrastructure projects are slowest and unreliable in Sub Saharan Africa and Asia due to low implementation success rate. The major causes of failures cited include insufficient implementing capacity, inadequate monitoring and evaluation, lack of standardized methodologies to guide project management, weak project design, insufficient stakeholder participation and political interference (Msafiri, 2015).

The County Government of Elgeyo Marakwet proposed to come up with 500 Early Childhood Development centers by so as to attain 95% pre-primary education gross enrollment rate by 2022

according to County integrated Development Plan 2018-2022. However, to-date, only 229 ECD centers have been complemented implying that county government of Elgeyo Marakwet has not implement 54.2% of proposed ECD centers. Out of the 229 completed ECD projects, according to National Tax Payer Association (2019), 118(51.5%) have not been delivered according to required specifications, for example they were poorly finished, lacked necessary WASH facilities, electricity and other necessary utilities which threaten the lives of both learners and teachers. This implies there are major gaps as far as implementation and adoption of project management best practices is concerned in public sector, where the county governments play a critical role (World Bank, 2017).

Previous on the determinants of successful implementation of projects has yield mixed outcome therefore making it impossible to generalize the findings and recommendations. For instance, Inda and Moronge (2015) as well as Kirui (2016) found that fund management and stakeholder participation is significant determinant. However, Osedo (2015) indicated that stakeholder participation has weak and not statistically significant influence of successful project implementation. Andhoga (2016) failed to isolate technical capacity as a significant determinant of effective project implementation. This left a significant knowledge gap which this study filled.

General Objective of the Study

The general objective of this study is to investigate the determinants of successful implementation of early childhood education projects in Elgeyo Marakwet County, Kenya. The specific objectives were;

- To establish the influence of project fund management on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County
- To evaluate the influence of stakeholder participation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County

- To determine the influence of monitoring and evaluation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County
- To establish the influence of technical capacity on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County

The study was guided by the following hypotheses;

- **H₀₁** There is no significant influence of project fund management on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County
- **H₀₂** There is no significant influence of stakeholder participation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County
- **H₀₃** There is no significant influence of monitoring and evaluation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County
- **H₀₄** There is no significant influence of technical capacity on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County

LITERATURE REVIEW

Stakeholders Theory

The stakeholder theory asserts that the importance of a firm focuses on various partner groups that were concerned with the daily operations of the organization. Hence, Stakeholder theory was proposed by Freeman (1984) and suggested that managers in an organization had an obligation of ensuring that there was cordial relationship between customers, business partners, suppliers and contractors. More so a stakeholder who controlled them, could come up with value chain for customers, vendors, communities and financiers. The illustration and representation of all the partner groups on projects was therefore paramount for effective and efficient performance of the organization (Gibson, 2000). The

stakeholders' model was very critical since it defined duties, rights and responsibilities of various stakeholders (Freeman, 2002). Stakeholder had larger share in the corporation and expected maximum returns (Frey & Nickerman, 2009). Stakeholder theory will therefore be relevant to this study because when all key stakeholders are involved in ECD projects; there will be successful completion of ECD projects through ensuring proper management of the potential project management risks.

Ladder of Participation Theory

This theory is the most elaborate model that seeks to explore the concept of stakeholder participation (Arnstein, 1969). The theory of ladder of participation explains the different levels of participation at community level from manipulation or therapy level of citizens, consultation level and to what is viewed as the genuine participation level like partnership and citizen control. Communities can participate in decision making if they have been involved and empowered. One of the aims of county projects is empower communities by giving them an opportunity to take part in decision making on which projects to be implemented in their constituencies. There must be real opportunities for participative decision making for the target groups and those decisions must largely relate to their future development (Sadiullah, 2006).

There are good reasons for close association of participation with community development as an approach to community participation. The aim to meet basic needs obviously requires the participation of all who will benefit. Participation in implementation of a program improves effectiveness and efficiency through mobilization of local resources and the development of the capacity of the community to plan and implement which requires greater intensity and scope of participation as the projects proceeds (Sidiullah, 2006). Basically theory underscores the importance of beneficiaries' involvement in project cycle hence

the researcher prefers it as a relevant theory for his work.

The above theory informed the role of stakeholder participation. The ladder theory explains the participating level of stakeholders in project implementing and their significances and drawbacks at each level. Therefore, the theory was ideal in evaluating the influence of stakeholder participation on ECD project implementation.

Competence theory

The work of McClelland & McBer in the 1980s established the competence theory. The authors defined competency as the underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation (Githenya & Ngugi, 2014). A competence articulates the expected outcome or performance standard that is achieved as a result of applying a combination of knowledge, personal attitude, and skills and experience in a certain function.

According to competence theory, a competent project manager implements proper project management techniques, avoids misuse of management techniques, ensures commitment to the project, spends time to define the project, correctly plans activities in the project, ensures correct and adequate information flows, changes activities to accommodate frequent changes, accommodates employees' personal goals with performance and rewards and makes a fresh start when mistakes in implementation are identified (Natchayangkun, 2014).

The competence theory was therefore relevant to this study since it helped to assess whether competence or technical capacity in terms of machinery, technical staff capacity to handle project scope, project managers' expertise, and contractors' certification influence successful implementation of ECD projects.

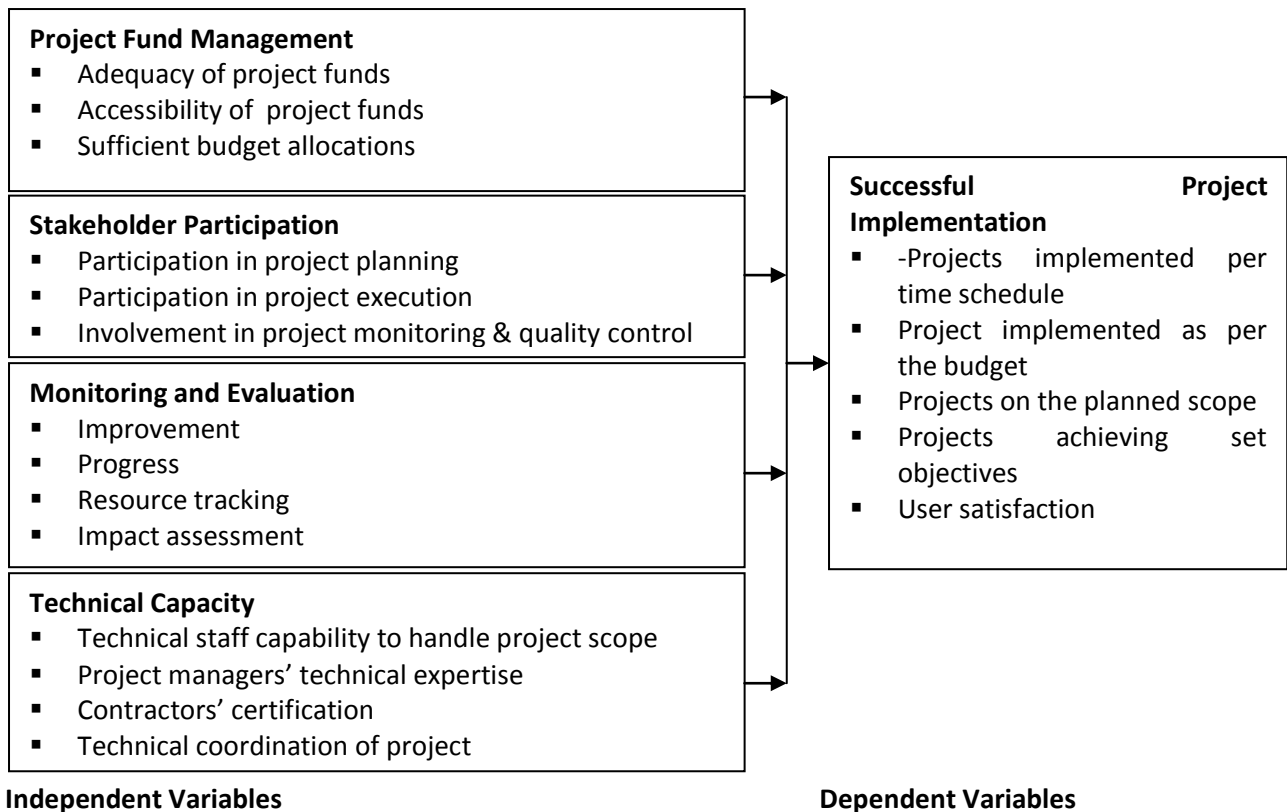


Figure 1: Conceptual Framework

Empirical Studies

Amade, Ogbonna and Kaduru (2012) investigated the critical success factors of project implementation in Nigeria. The study sampled the opinion of fifty selected project professionals presently working in six project sites located in Anambra, Imo and River States. Results of the analysis among others show that Environmental factors are more critical to the success of project implementation than skills portfolio of the project team. Collective responsibility among project stakeholders is a necessary condition for successful project implementation; Ability of project professionals to generate accurate designs, cost and time estimates will minimize the negative effects of economic instability on successful project delivery. Commitment of Clients to project financing obligations is a necessary condition for contractor commitment to project plans.

Yeri (2018) examine the determinants of successful implementation of infrastructure projects in Kilifi County, Kenya. The study targeted a population of 738 and a sample size of 259 respondents. Descriptive research design method was applied. In

conducting the study, a total of 259 questionnaires were administered. Findings of the study reveal that majority of respondents significantly supported the idea that adequate budgetary allocation influences successful infrastructure project implementation. Finally, a majority of respondents are in agreement to the idea that project design and specifications does influence the successful implementation of infrastructure projects.

Kirui (2016) examine the factors influencing project implementation in construction sector in Elgeyo Marakwet County. The study adopted descriptive analysis with a questionnaire used as an instrument of data collection. The researcher analyzed both primary and secondary data that provided information on the study. The findings show that proper implementation techniques especially with the use of charts by road contractors as well as communication systems and commitment of project stakeholders influences implementation of road construction projects.

Inda and Moronge (2015) explored the underlying determinants hindering successful implementation

of these projects in Kenya. The target population for this study was 600 biogas users and 60 biogas contractors. The study found out that all the independent variables influenced the dependent variable positively and financial resources was the most significant factor followed by technological factors, project management skills and government policy at influence successful implementation of domestic biogas projects in Githunguri sub-county.

Mondal and Chowdhury (2015) aimed to identify Key determinants for successful Project Implementation in the state of West Bengal with special focus in the Durgapur Industrial area. An objective realization instrument developed using 47 factors identified in the research as possible drivers in Project implementation based on Likert's seven point scale of ranking. Result of the analysis clearly identifies the Key determinant among all factors which are essential for successful Project Implementation.

Osedo (2015) sought to examine the determinants of effective implementation of county construction projects in Kenya. The target population of the study was all the 2,048 approved county construction projects in Nairobi City County in year 2015. The study adopted random sampling technique to select a sample size of 241 approved building projects from the total of 2,408. Structured questionnaires were used to collect data. Primary data was collected from project managers of the selected projects. The findings of the study concluded that Staff competency has an effect on the Effective implementation of county construction projects in Kenya. The study also concluded that Management support influence the effective implementation of county construction projects in Kenya. From the study results it was concluded that the effect of stakeholder relationship on the Effective Implementation of County Construction Projects in Kenya is weak and not statistically significant.

Chesiyna and Wanyoike (2016) attempted to establish the determinants of effective implementation of CDF funded projects in Baringo

Central Constituency, Kenya. The study employed a descriptive design using quantitative approaches. The target population was all 150 project beneficiaries, management committees and constituency planning and development officers in all CDF funded projects. The study found that all four factors influenced effective implementation with community participation and training having the greatest influence.

Githenya and Ngugi (2014) assess the determinants of housing projects implementation in Kenya. The study aim was to assess project planning, project control, motivated project team and project management competency, on housing project implementation in Kenya. The study employed descriptive study. Data was collected using questionnaires for project managers. The target population of the study was project managers implementing housing project in Nairobi. Random sampling was used to sample the project managers. The study found that project planning, project control, motivated project team and project management competency have a great influence on housing project implementation in Kenya.

METHODOLOGY

The researcher used descriptive research survey design. The target population was 297 respondents from 229 completed early childhood development education projects in five Sub counties of Elgeyo Marakwet. The respondents comprised of Contractors, Ward administrators, Public work officers, Head of ECD centers, County ECD officers, sub county administrators. Stratified sampling technique was utilized while respondents were selected through simple random sampling. The study's sample size was determined using Taro Yamane's proportional sampling technique formula. 169 was used for this study as the sample size, where respondents were randomly selected. Data was collected through structured questionnaires to collect primary data. The study used 15 participants for pilot study. For data analysis, this study involved the use of descriptive and inferential statistics. Regression and correlation analysis was

used to determine both the nature and the strength of the relationship between study variables.

FINDINGS AND DISCUSSIONS

Analysis of Descriptive Data

Descriptive analysis included an assessment of the project fund management, stakeholder participation, technical capacity, monitoring and evaluation. The statements were anchored on a five point Likert-type scale ranging from 5=Strongly Agree to 1= Strongly Disagree and respondents were asked to indicate the extent to which they agreed to the statements. Descriptive measures included percentage, frequency, mean and standard deviation. Mean is a measure of central tendency used to describe the most typical value in

a set of values. Standard deviation shows how far the distribution is from the mean.

Project fund management

Project fund management is essential to all successful project implementation. Good fund management is imperative in any public project as it enhances accountability and transparency therefore improves public trust. Therefore, the first objective of the study to establish the influence of project fund management on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. Project fund management was measured using adequacy of project funds, accessibility of project funds and sufficient budget allocations. Table 1 presented findings as obtained from sampled respondents.

Table 1: Project fund management

Statement	5	4	3	2	1	Mean	Std Dev
Adequate funds affect project scope on successful implementation of ECDE projects	23 (16.7)	61 (44.2)	37 (26.8)	16 (11.6)	1 (0.7)	3.64	0.92
Accessibility of funds affects project scope on successful implementation of ECDE projects	49 (35.5)	58 (42)	27 (19.6)	3 (2.2)	1 (0.7)	4.09	0.84
Budget allocation affects project scope on successful implementation of ECDE projects	22 (15.9)	53 (38.4)	41 (29.7)	15 (10.9)	7 (5.1)	3.49	1.05
Adequate funds affect project time on successful implementation of ECDE projects	21 (15.2)	60 (43.5)	44 (31.9)	9 (6.5)	4 (2.9)	3.62	0.92
Budget allocation affects project cost on successful implementation of ECDE projects	22 (15.9)	65 (47.1)	31 (22.5)	15 (10.9)	5 (3.6)	3.61	1.00
Valid listwise 138							
Grand mean = 3.69							

From table 1, slight majority respondents agreed (44.2%) and strongly agreed (16.7%) that there is adequate funds affect project scope on successful implementation of ECDE projects. A mean of 3.64 postulated project funds are adequate to moderate extent. Further, 42.0% and 35.5% of respondents agreed and strongly agreed respectively that accessibility of funds affects project scope on successful implementation of ECDE projects. This was further supported by a mean of 4.09.

Further, slight majority respondents agreed (43.5%) that adequate funds affect project time on successful implementation of ECDE projects and additional 15.2% strongly agreed on the same. A mean of 3.62 revealed that, to a moderate extent,

adequate funds affected project time on successful implementation of ECDE projects. More so, small majority of the respondents agreed (38.4%) that budget allocation affects project scope on successful implementation of ECDE projects and further supported by 15.9% of the respondents who strongly agreed on the same.

The study also revealed 47.1% agreed that budget allocation affects project cost on successful implementation of ECDE projects while 15.9% strongly agreed on the same. A mean of 3.61 indicated that budget allocation affects project cost on successful implementation of ECDE projects. This is supported by Brigham and Ehrhardt (2013) who reiterated that project fund management enhances

continuous and sufficient cash flow for a project in order to meet the expenditures incurred at the course of a project and thus project fund management is a very critical element of accounting in that it provides direct link between the start of a project to the end.

Stakeholder Participation

Stakeholder participation in any project usually enhances good implementation of the project activities leading to project achievement assessable through parameters as; completion on schedule,

completion on budget, scalability of the project outcome through sustainability process and citizens themselves being satisfied with the project outcome hence acceptability of project. The essence of devolved projects is to spur local development through various stakeholder participations. The objective was achieved through identifying the level of participation in project planning, participation in project execution and involvement in project monitoring & quality control. The results were summarized in table 2.

Table 2: Stakeholder participation

Statement	5	4	3	2	1	Mean	Std. Dev
All stakeholders are involved in initial planning of the ECDE project	17 (12.3)	77 (55.8)	29 (21)	13 (9.4)	2 (1.4)	3.68	0.86
The County Government of Elgeyo Marakwet consult with school project committee members in budgeting for ECDE project funds	24 (17.4)	76 (55.1)	32 (23.2)	3 (2.2)	3 (2.2)	3.83	0.82
The County Government of Elgeyo Marakwet involve school project committee members in monitoring of ECDE project funds	35 (25.4)	73 (52.9)	8 (5.8)	20 (14.5)	2 (1.4)	3.86	1.01
All stakeholders are involved in tenders awards/supplies	22 (15.9)	78 (56.5)	18 (13)	15 (10.9)	5 (3.6)	3.70	0.98
Generally stakeholder participation in planning, implementation and evaluation of ECDE projects influence successful implementation of ECDE projects	15 (10.9)	80 (58)	20 (14.5)	19 (13.8)	4 (2.9)	3.60	0.96
Valid listwise 138							
Grand mean = 3.74							

From the results 55.8% and 12.3% of respondents agreed and strongly agreed respectively that all stakeholders are involved in initial planning of the ECDE project. On the other hand, 21.-% of the respondents was undecided. A mean of 3.68 suggested that they were cases where all stakeholders were not involved in initial planning of the ECDE project. Further 55.1% of the sampled respondents agreed that the County Government of Elgeyo Marakwet consult with school project committee members in budgeting for ECDE project funds and 17.4% agreed on the same. However, as indicated by 23.2% of the respondents who were undecided, the county did not consult with school

project committee members in budgeting for ECDE project funds in some cases.

More so, 52.9% of respondents agreed that the County Government of Elgeyo Marakwet involve school project committee members in monitoring of ECDE project funds, while 25.4% of the respondents strongly agreed on the same. On the other hand, 14.5% and 1.4% disagreed and strongly disagreed respectively on the same. The results also revealed that most of the respondents (56.5%) agreed that all stakeholders are involved in tenders awards/supplies and 15.9% strongly agreed on the same. A mean of 3.70 implied that the all

stakeholders are involved in tenders' awards/supplies at moderate extent.

Lastly, 58.0% of respondents agreed that generally stakeholder participation in planning, implementation and evaluation of ECDE projects influence successful implementation of ECDE projects while 10.9% strongly agreed on the same. A mean of 3.60 postulated that generally stakeholder participation in planning, implementation and evaluation of ECDE projects moderately influence successful implementation of ECDE projects. This supported by Holmes and Moir (2015) who also observed that stakeholder involvement process builds a proactive two-way

process between the organization and the stakeholder. The communication, opinions and proposals flow in both directions and the organization, which can change its behavior because of stakeholder involvement which then has an effect on project completion.

Monitoring and Evaluation

These are descriptive statistics on the influence of monitoring and evaluation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County as summarized in table 3. Monitoring and evaluation was measure by project improvement, progress, resource tracking and impact assessment.

Table 3: Monitoring and Evaluation

Statement	5	4	3	2	1	Mean	Std. Dev
Report checking affects project scope on implementation of early childhood Development projects	20 (14.5)	102 (73.9)	10 (7.2)	4 (2.9)	2 (1.4)	3.97	0.68
Resources tracking affects project scope on implementation of early childhood Development projects	25 (18.1)	66 (47.8)	39 (28.3)	4 (2.9)	4 (2.9)	3.75	0.89
Impact assessment affects project time on implementation of early childhood Development projects	20 (14.5)	100 (72.5)	13 (9.4)	4 (2.9)	1 (0.7)	3.97	0.65
Resources tracking affects project time on implementation of early childhood Development projects	19 (13.8)	91 (65.9)	22 (15.9)	3 (2.2)	3 (2.2)	3.87	0.75
Generally, Project Monitoring & Evaluation affects on implementation of early childhood Development projects	27 (19.6)	61 (44.2)	34 (24.6)	13 (9.4)	3 (2.2)	3.70	0.96
Valid listwise 138							
Grand mean =3.85							

From table 3, majority of the respondents agreed (73.9%) and strongly agreed (14.5%) that report checking affects project scope on implementation of early childhood Development projects. A mean of 3.97 revealed that reports checking affected project scope on implementation of early childhood Development projects. The results also revealed that 47.8% of the respondents agreed that resources tracking affects project scope on implementation of early childhood Development projects and 18.1% strongly agreed on the same although 28.3% were neutral on the same assertion.

Further, most of the respondents (72.5%) of respondents agreed that impact assessment affects project time on implementation of early childhood Development projects and additional 14.5% strongly agreed on the same. A mean of 3.97 postulated that impact assessment affected project time on implementation of early childhood Development projects. The results also revealed that 65.9% and 13.8% of the respondents agreed and strongly agreed that resources tracking affect project time on implementation of early childhood Development projects although 13.8% of the respondents were neutral.

Lastly, 44.4% of the respondents agreed that project Monitoring & Evaluation effects on implementation of early childhood Development projects and further 19.6% strongly agreed on the same. A mean of 3.70 indicated that project Monitoring & Evaluation affected implementation of early childhood Development projects in Elgeyo Marakwet County. According to Kusek & Rist (2010) activity of monitoring is concerned with regularly having a check of whether or not an intervention is rolling on as planned while evaluation is concerned with establishing the worth of an intervention. According to the International Federation of the Red Cross (IFRC) (2011), the activities of Monitoring and Evaluation do offer significant support to project implementation via providing the requisite details for making decisions, organizational learning and sharing of knowledge. On the other hand,

Kipsaina (2010) concluded that project implemented' knowledge, skill and attitude influenced performance of devolved projects in Emgwcw constituency and that project implementers need to be empowered with the right skills, altitude and knowledge in regard to monitoring and evaluation.

Technical Capacity

The study set out to establish the influence of technical capacity on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. Technical capacity was operationalized along four dimensions namely technical staff capability to handle project scope, project managers' technical expertise, contractors' certification and technical coordination of project. The descriptive statistics were summarized in table 4.

Table 4: Technical capacity

Statement	1	2	3	4	5	Mean	Std.dev
1. Most contractors have genuine certification from NCA	20 (14.5)	68 (49.3)	33 (23.9)	13 (9.4)	4 (2.9)	3.63	0.94
2. Most contractors have technical staff capability to handle project size and time limits	28 (20.3)	94 (68.1)	4 (2.9)	8 (5.8)	4 (2.9)	3.97	0.85
3. Project managers' technical expertise influence project quality	10 (7.2)	104 (75.4)	8 (5.8)	12 (8.7)	4 (2.9)	3.75	0.83
4. The construction machineries/equipment owned by certified contractors work very well without frequent breakdowns	23 (16.7)	84 (60.9)	23 (16.7)	4 (2.9)	4 (2.9)	3.86	0.83
5. Technical coordination of ECDE projects influence successful completion of ECDE projects	18 (13)	87 (63)	15 (10.9)	16 (11.6)	2 (1.4)	3.75	0.88
Valid listwise =138							
Grand mean =3.79							

From table 4, slight majority respondents agreed (49.3%) that most contractors have genuine certification from NCA and 14.5% of the respondents strongly agreed. A mean of 3.633 implied some contractors do not have genuine certification from NCA an assertion further supported by 23.9% of the respondents. Further, 68.1% and 20.3% of the sampled respondents agreed and strongly agreed respectively that most

contractors have technical staff capability to handle project size and time limits. A mean of 3.97 indicted that most contractors have technical staff capability to handle project size and time limits.

The results also revealed that most of the respondents agreed (75.4%) that project managers' technical expertise influence project quality while 7.2% strongly agreed on the same. However, only % disagreed on the same. The results further revealed

that 60.9% of the respondents agreed that the construction machineries/equipment owned by certified contractors work very well without frequent breakdowns. A mean of 3.86 indicated that the construction machineries/equipment owned by certified contractors work very well without frequent breakdowns.

Lastly, most of the respondents agreed that technical coordination of ECDE projects influence successful completion of ECDE projects as shown by 63.0% and further 13.0% strongly agreed on the same. A mean of 3.75 indicated that technical coordination of ECDE projects influence successful

completion of ECDE projects. Findings on technical capacity are supported by Wanjiru (2013) study which sought to find out influence of technical capacity on performance of devolved projects in Kenya. The study on technical capacity was shown to be crucial for coordinating various activities as well as different stakeholders which influenced performance of devolved projects. In his study, Adan (2012) indicated that technical officers have a positive impact on the Constituency Development Funded projects performance through their roles in project identification, planning, implementation and monitoring and evaluation of such projects.

Inferential statistics

Table 5: Correlations

		PFM	SP	MnE	TC	SPI
PFM: Project Fund Management	Pearson Correlation	1	.547**	.437**	.483**	.588**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	138	138	138	138	138
SP: Stakeholder Participation	Pearson Correlation	.547**	1	.305**	.633**	.773**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	138	138	138	138	138
MnE: Monitoring and Evaluation	Pearson Correlation	.437**	.305**	1	.546**	.487**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	138	138	138	138	138
TC: Technical Capacity	Pearson Correlation	.483**	.633**	.546**	1	.729**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	138	138	138	138	138
SPI: Successful Project Implementation	Pearson Correlation	.588**	.773**	.487**	.729**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	138	138	138	138	138

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

Multiple regression analysis

Multiple regression analysis was computed to assess the multivariate influence of the study's independent variables (Project fund management, Stakeholder participation, Monitoring and Evaluation, and Technical capacity) on the

dependent variable (successful implementation of Early Childhood Education projects). This was after the compulsory assumptions of multiple regression analyses were checked and met. The multiple regression results were shown in table 6.

Table 6: Multiple regression results

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.850 ^a	.722	.714	.3605581	.722	86.347	4	133	.000

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	44.901	4	11.225	86.347	.000 ^b
	Residual	17.290	133	.130		
	Total	62.192	137			

a. Predictors: (Constant), Technical capacity, Monitoring and Evaluation, Stakeholder participation, Project fund management

b. Dependent Variable: Successful implementation of Early Childhood Education projects

Table 6 showed the multiple regression results of the combined influence of the study's independent variables (Project fund management, Stakeholder participation, and Monitoring and Evaluation and Technical capacity). The model's R squared (R^2) is 0.722 which shows that the study explains 72.2% of variation in successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet, while other factors not in the conceptualized study model accounts for 27.8%, hence, it is a good study model.

Furthermore, Analysis of Variance (ANOVA) shows the mean squares and F statistics significant ($F=86.347$; significant at $p<.001$), thus confirming the fitness of the model and also implies that the study's independent variables (Project fund management, Stakeholder participation, Monitoring and Evaluation, Technical capacity) have significant variations in their contributions to successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet.

Finally, the values of unstandardized regression coefficients with standard errors in parenthesis indicated that all the study's independent variables (Project fund management; $\beta = 0.145$ (0.065) at $p<0.05$, Stakeholder participation; $\beta = 0.548$ (0.074) at $p<0.01$; Monitoring and Evaluation; $\beta = 0.092$ (0.043) at $p<0.05$, Technical capacity; $\beta = 0.258$ (0.058) at $p<0.01$ significantly influenced successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet (dependent variable).

In this regard, the study's final multiple regression equation was;

$$Y = -0.246 + 0.145X_1 + 0.548X_2 + 0.092X_3 + 0.258X_4$$

Where;

y = successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet.

X_1 = Project fund management

X_2 = Stakeholder participation

X_3 = Monitoring and Evaluation

X_4 = Technical capacity

Table 7: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.246	.204		-1.203	.231
Project fund management	.145	.065	.130	2.237	.027
1 Stakeholder participation	.548	.074	.476	7.438	.000
Monitoring and Evaluation	.092	.043	.122	2.139	.034
Technical capacity	.258	.058	.299	4.441	.000

a. Dependent Variable: successful implementation of Early Childhood Education projects

Hypothesis testing

First, study hypothesis one (H_{01}) stated that there is no significant influence of project fund management on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. Multiple regression results indicated that project fund management has significant influence on successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet ($\beta = 0.145$ at $p < 0.05$). **Hypothesis one was therefore rejected.** The results indicated that a single increase in project fund management will lead to 0.145 unit improvement in successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet.

Secondly, study hypothesis two (H_{02}) stated that there is no significant influence of stakeholder participation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. Multiple regression results indicate that stakeholder participation practice has significant influence on successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet ($\beta = 0.548$ at $p < 0.01$). **Hypothesis two was therefore rejected.** The results indicated that a single improvement in stakeholder participation practice will lead to 0.548 unit improvement in successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet.

Thirdly, study hypothesis three (H_{03}) stated that there is no significant influence of monitoring and evaluation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. Multiple regression results indicate that monitoring and evaluation has significant influence on successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet ($\beta = 0.092$ at $p < 0.05$). **Hypothesis three was therefore rejected.** The results indicated that a single increase in monitoring and evaluation will lead to 0.092 unit improvement in successful implementation of Early Childhood Education

projects in the county government of Elgeyo Marakwet.

Fourthly, study hypothesis four (H_{04}) stated that there is no significant influence of technical capacity on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. Multiple regression results indicated that technical capacity has significant influence on successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet ($\beta = 0.258$ at $p < 0.01$). **Hypothesis four was therefore rejected.** The results indicated that a single improvement in technical capacity will lead to 0.258 unit improvement in successful implementation of Early Childhood Education projects in the county government of Elgeyo Marakwet.

CONCLUSIONS AND RECOMMENDATIONS

In regard to first objective, the study concluded that there is significant positive influence of project fund management on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. In this regard, adequate allocation of funds by the County government of Elgeyo Marakwet to ECDE projects and prompt disbursement of same funds would result to successful completion of project per schedule with little cost overrun associated with inflation and other macro-economic risks.

In regard to second objective, the study concluded that there is significant positive influence of stakeholder participation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. To moderate extent, there was stakeholder participation in planning and small extent in budgeting and tendering. Therefore, increase in stakeholder participation in planning, execution and quality control would result to acceptability, sustainability as well as user satisfaction of completed projects in the county.

In regard to third objective, the study concluded that there is significant positive influence of

monitoring and evaluation on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. Both monitoring and evaluation practices such as resource tracking and impact assessment respectively were carried out moderately in regard to ECDE projects in Elgeyo Marakwet County. Therefore, increase in resource tracking and impact assessment would result to increase in ECDE projects within time, scope, user satisfaction and per set objectives.

In regard to fourth objective, the study concluded that there is significant positive influence of technical capacity on successful implementation of Early Childhood Education projects in Elgeyo Marakwet County. Contractors undertaking ECDE projects in the county were found to have technical staff capability to handle project size and time limits. Besides, technical coordination of ECDE projects has resulted to successful completion of ECDE projects. Therefore, increase in technical expertise, certification standard and experience would result to successful completion of ECDE projects as per time, budget, technical specification and user satisfaction.

The study recommended that there should be a clear financing framework that is focused to allocation and disbursement of funds for approved projects with clear implementation plans to achieve success in devolved projects implementation. Further, county governments should adopt a project funding management model which would allow full allocation of project instead of funding several projects at once. They would reduce overhead cost both of county government and for the contractors while at the same time delivering completed project within shortest time possible.

Since implementation of ECDE project is a collective responsibility of all participants which ensures that public resources are utilized to the benefit of the citizens. The study recommended that there is need of appropriate structures of stakeholders' participation which include level;

form of identification and form of participation have effective contribution to the implementation of devolved projects.

The study recommended that county governments should consider institutionalizing monitoring and evaluation, create a monitoring unit and hire an officer responsible for the Unit. This will enhance successful completion of devolved projects through effective monitoring and evaluation process. Also, enough resources should be allocated so as to have the funds availed at the right time and be in the right hands in order to have the monitoring and evaluation processes a success.

The study recommended that the national government should have adequate structures to ensure technical requirements are adhered to at devolved units. There is need for trainings/workshops meant to increase stakeholders' expertise, skills and knowledge of implementing devolved project efficiently. Lastly, the county governments should ensure that their human resource or those contracted met the minimum requirement in terms of experience, skills, academic qualification and expertise in the area of specialization.

Areas for further research

This study focused on determinants of successful implementation of early childhood education projects in Elgeyo Marakwet County, Kenya. To begin with, the scope of the study was only limited to Elgeyo Marakwet county and therefore the findings may not necessarily reflect other counties in Kenya due to different dynamics, thus there is a need for similar study considering all counties in Kenya.

Secondly, the study focused on four determinants which did not fully determine successful completion of ECDE projects. This implies there may be other independent, moderating, mediating or intervening variables which may influence successful completion of ECDE projects. Therefore, further studies should focus on political influence as an intervening variable.

REFERENCES

- Adan, H. (2012). *Influence of Stakeholders role on performance of constituencies' development fund projects: A case of Isiolo North Constituency*. Masters. Thesis. University of Nairobi.
- Adek, R. T. (2016). *Determinants of successful projects implementation of infrastructure projects in devolved units; a case study of Mombasa County, Kenya* (Doctoral dissertation, University of Nairobi).
- Alliany, A. (2014). *The determinants of project implementation for maximum realization of the objections. The human capital approach and the project approach to development, German consortium of project consultants*. Master Thesis. University of Nairobi.
- Amade, B., Ogbonna, A., & Kaduru, C. (2012). Determinants of successful project implementation in Nigeria. *International Journal of Management Sciences and Business Research*, 1(6).
- Anita, C.S (2015). *The strategies for effective projects implementation at community ferele: a case of community poultry projects in Kwale County*. Unpublished Master Thesis. University of Nairobi.
- Awiti, V.P. (2008). *An assessment of the use and management of development funds: The case of Constituencies Development Fund in Kenya*. Master Thesis, University of Nairobi.
- Ayehu, M. (2017). *Determinants Of Project Success In International Ngos: The Case Of Pact Ethiopia* (Doctoral dissertation, St. Mary's University).
- Bagaka, O. (2008). *Fiscal decentralization in Kenya and the growth of government: The Constituency Development Fund*. Illinois: Northern Illinois University.
- Bourne, L. (2008). *Stakeholder relationship management maturity*. Paper presented at PMI Global Congress – EMEA, St Julian's.
- Chandra, P. (2002). *Projects Planning, Financing, Implementation and Review*. (5th ed.). Tata McGraw-Hill Publishing Company
- Cherotich, L. (2018). *The impact of community support grants on ECD Centre's: a case of Kamariny division, Keiyo district Kenya* (Doctoral dissertation, Moi University).
- Chesiyna, P. K., & Wanyoike, D. (2016). Determinants of effective implementation of constituency development fund projects in baringo central constituency, Kenya. *International Journal of Research in Business Management*, 4(4), 31-42.
- Chomaz, Z. (2012). *An investigative survey of the implantation of community agriculture development interventions: The Chiles approach to community involvement in implementation of local initiatives*. Nairobi: CUEA Press
- Cleland, D. I., & Gareis, R. (2016). *Global Project Management Handbook—Chapter 1—The Evolution of Project Management*.
- Dooley, D. (2007), *Social Research Methods*. Prentice Hall. New Delhi:
- Gahigana, S. (2019). *Determinants of project management success in Rwanda, evidence from sur'eu project of society for Family Health Rwanda* (Doctoral dissertation, University of Rwanda).
- Githenya, M. S., & Ngugi, K. (2014). Assessment of the determinants of implementation of housing projects in Kenya. *European journal of business management*, 1(11), 230-253.
- Gwayo, A.O., Masu, S.M., & Wanyona, G. (2014). A Critical Analysis of the Causes of Project Management Failures in Kenya. *International Journal of Soft Computing and Engineering*, 4(1): 64-69.

- Hajnati, N. (2013). *Factors influencing implementation of community based interventions in Brisbane Australia*, Brismal publishing press, Brisbane Australia.
- Inda, P., & Moronge, M. (2015). Determinants of successful implementation of domestic biogas projects in Kenya: a case of Githunguri Sub-county. *International Journal of Business and Law Research*, 3(1), 100-118.
- Inda, P., & Moronge, M. (2015). Determinants of successful implementation of domestic biogas projects in Kenya: a case of Githunguri Sub-county. *International Journal of Business and Law Research*, 3(1), 100-118.
- Indrakumaran, A. (2011). *The role of monitoring and evaluation in promoting good governance in South Africa: A case study of the Department of Social Development*. University of Witwatersrand, Johannesburg
- Isaac, S. & Michael, W.B. (1995). *Handbook in Research and Evaluation*. EdITS. San Diego:
- Kazhibekova, A., & Jusufovic, V. (2010). Critical success factors in the implementation of international development projects in kazakhstan.
- Kenya Human Rights Commission. (2010). *Social and Public Accountability Network (SPN, 2010) – Harmonization of Decentralized Fund in Kenya, Towards Alignment, Citizen Engagement and Accountability*. Government Press. Nairobi
- Khoder, K. (2012). *Factors influencing implementation of the manufacturing project in the Chinese informal sector*. Nairobi: Cueva press
- Kimenyi, S. M. (2005). *Efficiency and efficacy of Kenya's constituency development fund: Theory and Evidence (2005)* Economics Working Papers. University of Connecticut working paper 2005-42
- Kirui, V. J. (2016). *Factors Influencing Project Implementation in Construction Industry: a Case of Road Construction in Elgeyo Marakwet County* (Doctoral dissertation, University of Nairobi).
- Laban, D. (2012). *Influence of project management best practice on effective community projects implementation: a case of community agricultural interactions in Uganda*. Makerere University Press
- Mbachu, J., & Nkado, R. (2007). Factors constraining successful building project implementation in South Africa. *Construction Management and Economics*, 25(1), 39-54.
- Meskendahl, S. (2010). The influence of business strategy on project portfolio management and its success— A conceptual framework. *International Journal of Project Management*, 28(8), 807-817.
- Mondal, S. S., & Chowdhury, A. (2015). Application of two stage factor analysis for identification of key determinants for successful project implementation in the industrial area of West Bengal (India). *International Journal of Engineering, Science and Mathematics*, 4(1), 33-44.
- Mondal, S. S., & Chowdhury, A. (2015). Application of two stage factor analysis for identification of key determinants for successful project implementation in the industrial area of West Bengal (India). *International Journal of Engineering, Science and Mathematics*, 4(1), 33-44.
- Mujabi, S., Otengi, S. O., Kasekende, F., & Ntayi, J. M. (2015). Determinants of successful implementation of donor-funded projects in Uganda. *International Journal of Social Economics*.
- National Taxpayers Association March. (2012). *"Citizens CDF Report Card for Machakos Town Constituency*. NTA, Nairobi

- Njeri, C. (2014). *Factors influencing implementation of pineapple processing in juja*. Master Thesis. Kenyatta university.
- Odeyinka, H. A., & Yusuf, A. (2012). The Causes and Effects of Construction Delays on Completion of Housing in Nigeria. *J Financial management Property Construction 1997. International Journal of Project Management*.
- Odili, D. (2012). *Factors influencing implements of infrastructure project in the construction industry in south Africa, government supported community initiatives*. Nairobi: CUEA press
- Odwar, E. (2014). *The status of implementation of poultry projects in Migori County, a case of the Wawida community poultry project*. Nairobi: CUEA press
- Oguda, S. (2015). *The status of the implementation of local poultry commercialization project in Homa Bay County*. A survey of the Homa/Bay county government's community based projects.
- Olive, P. (2010). *The student's guide to research ethics*. McGraw-Hill International
- Omar, V. (2012). *Influence of project team empowerment on project implementation for sustained gains in reconstruction efforts in southern Sudan an ADCP programme*. Nairobi University of Nairobi press
- Ondari, J. (2011). *Factors influencing implementation of poultry projects in Vihiga County: community involvement for gainful development*. Master Thesis, University of Nairobi.
- Orodho, J.A. (2004). *Element of Education and Social Science Research Methods*. Masola Publishers. Nairobi:
- Osedo, A. A. (2015). Determinants of Effective Implementation of County Construction Projects in Kenya: A Case of Nairobi City County. *Imperial Journal of Interdisciplinary Research (IJIR) 4(4)*
- Otieno, N. (2013). *Factors influencing sustainability of gold mining projects among the local communities in Migori county: a community capacity building strategy for sustainable resources application*. Master Thesis, University of Nairobi.
- PMBOK, (2001). *A guide to the Project Management Body of Knowledge*. Project Management Institute; Newtown Square, Pennsylvania USA
- Sweis, G., Sweis, R., Hammad, A. A., & Shboul, A. (2008). Delays in construction projects: The case of Jordan. *International Journal of project management, 26(6)*, 665-674.
- UNDP, (2002). *Handbook on Planning, Monitoring and Evaluating for Development Results*. UNDP.
- UNDP, (2009). *"Who are the Question-makers – A Participatory Evaluation Handbook"*. OESP
- Wambua, W. K. (2010). *Factors Influencing Board of Management in Managing Constituency Development Fund Projects in Public Secondary Schools in Kenya*. Nairobi: Kenya
- Weiss, H.(2004). On Theory – Based Evaluation: *Winning Friends and Influencing People Evaluation Exchange, 9(4): 2 -7*.
- World Bank, (2000). *Key Performance Indicator Handbook*. Washington, D.C. World Bank, (2011). *Monitoring & Evaluation Capacity Development*. The world Bank Group. <http://go.worldbank.org/1FASV17ECO>
- Yeri, T. M. (2018). Determinants Of Successful Implementation Of Infrastructure Projects In Devolved Units In Kenya: A Case Of Kilifi County, Kenya.
- Zuarez, K. (2013). *Factors influencing effective project implementation of community based development projects in different parts of the world; a world vision survey Monaco*.