

Influence Of Characteristics Of Project Manager On Completion Of Construction Projects In Public Secondary Schools In Bungoma County, Kenya

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Abstract: This paper aimed at determining how characteristics of project manager influence completion of construction projects in public secondary schools in Bungoma County, Kenya. The study employed purposive sampling technic in choice of study respondents (Principals and Chairpersons of Parents Teachers Association) who were subjected to Stratified sampling to ensure homogeneity of the selected sample in ensuring that samples are drawn from each region encompassed in the target population, then followed by simple random sampling technique from each region. With a sample size of 461 respondents (n=461), the study questionnaires and interview schedules as primary data collection instruments. Data analysis involved use of statistical package for social sciences, SPSS version 21 software. Both descriptive and inferential statistics were used. Simple regression analysis was used to determine the direction and strength of the relationship between characteristics of project manager and completion of construction projects in public secondary schools in Bungoma County, Kenya. The correlation coefficient (R) or the beta value β_1 of $0.774 \neq 0$ at $p=0.00$ indicated that the hypothesis was accepted. The coefficient of determination, R-square of 0.599 implied that 59.9% of the variance in completion of construction projects was explained by characteristics of project manager. The findings reveal importance of characteristics of the project manager as key to guarantee the success of the completion of construction projects. The study recommends the need to evaluate characteristics of the project manager when handling construction projects in public secondary schools. The current study was done in public secondary schools in Bungoma County. Future studies are encouraged to be done in both private and public secondary schools in the whole country and compare the results. In addition, the research concentrated on education sector. Future research is encouraged to cover other sectors and compare the findings. The findings are of importance to the Ministry of Education in Kenya and other interested parties in future.

Keywords: Characteristics of project manager, Completion of construction projects, Public Secondary schools.

I. INTRODUCTION

The construction industry globally has not been efficient and effective in projects delivery. Studies conducted by researchers globally indicate that most projects fail to achieve their mission within cost and time constraints. United Kingdom (UK) in 2010 statistics showed that 52% of projects had cost overruns in excess of 10% while 45% of projects had

time overruns of over 25% (Mbathi, 1986 as cited in Atkinson, 1999). Mbathi (1986) further indicated that similar studies carried out in India showed that 56% of projects had cost overruns in excess of 20% while 49% had time overruns in excess of between 1 and 160 months. However, causes of delays have been identified in various parts of the world recently such as Malaysia, Saudi Arabia, Jordan, Kuwait, Hong Kong and Thailand (Njuguna, 2008 as cited in Al-

Momani, 2000). The results reveal that there are differences and similarities as to the causes of delays.

There is growing recognition that different types of projects require different approaches to their management, requiring management procedures tailored to the needs of the project, (Crawford et al., 2005), and project managers selected with appropriate competencies, (Muller and Turner, 2007). Project managers' competence is a critical factor that affects project planning, scheduling and communication. This is in line with Lee-Kelley and Leong, Loong (2003), Prabhakar (2005) and Dolfi and Andrews (2006) all of whom found a significant correlation between project managers' experience and project success. The central role the project manager holds in project success guides the choice of this variable to seek to determine how the characteristics of the project manager influence completion of construction projects in public secondary schools in Bungoma County.

II. STATEMENT OF THE PROBLEM

Successful project completion is hinged on the factors that affect the project and how they are managed. If they are allowed to influence the project, they will frustrate wonderful ideas while stalling other projects that already kicked off or were almost complete. It is thus important to know the different factors and learn how to handle them successfully. One of them is the schedule of a project, which can be affected by delays that emerge from different sources. There is a possibility of resources getting delayed and this will affect the kind of performance or outcome of the project. A report by the National Society of Professional Engineers (NSPE) has indicated that over 50% of the projects carried out are behind the schedule that was projected when they first began. (Yahya, 2009). The construction industry in Kenya and the public sector in general has not been efficient and effective in projects delivery.

According to Chua, Kog and Log, (1999) the chances or failure of a project will depend on whether the finer details of a project are well understood and addressed professionally. It on the basis of these that this study sought to determine how characteristics of project manager which include technical competencies, commitment of the project manager and communication skills influence project completion in public secondary schools Bungoma County with an intention of making recommendations to enhance project completion.

Project managers' traits such as their competencies and commitment, technical background and communication skills may affect project completion. Many studies in the literature underscore the central role a project manager holds in the implementation of a project. When carrying a construction project, managers must appreciate that there are hindrances that emerge and thus there is need to prepare how to block them (Pinto and Slevins, 1988).

The competency of a leader has been the emphasis of how effective project managers should be like. Boyatzis (2008), explains that competency is the ability of a person to express superior performance. The competency of a manager is of great importance in the process of carrying out a project, Crawford (2001). This is because the skills are required to manage different aspects such as cost or other implications

that will require the project to be managed professionally until it is complete and successful. When leaders are required to be competent, it is because they also express the same to their juniors and show them how to carry out certain tasks. He or she also set a good example on what should be done (Aketch and Karanja, 2013). Competency can either be learned or acquired through experience.

In order to ensure the project is implemented successfully, there need to develop a set of competencies, communication essentials and commitment. Kerzner, (2001), explains that project manager's commitment is a critical determinant of the success of a project. Therefore, it is easy to conclude that commitment is essential in the process of project management. Toor and Ogunlana (2007), explains in a study that comprehension of what should be done, commitment to the ideals of a project will heavily influence its completion.

Communication remains a major pillar in the process of managing a project. The different stakeholders will need to communicate. A good example is the project manager who as the leader of the team will be required to work perfectly in communicating the how and why the project should be implemented. On the other hand, the juniors need to write reports to express what has happened and the changes that can be implemented. In case there is communication breakdown the wrong objectives may end up being implemented. It is also crucial to point out that receiving and sending information requires a medium. According to Kerzner (2001), the communication will require a standard medium through which the stakeholders in the project can communicate. Without proper communication the juniors would not understand what should be done and they would also fail to express themselves to the manager on whether they have understood what should be done when carrying out project (Project Management Institute Standards Committee, 1996).

The review of related literature reveal that studies on completion of construction projects have been undertaken in other parts of the world with little evidence of similar study as far as Bungoma County public secondary schools is concerned yet school construction contributes significantly to learners performance. From the literature review, many of the studies done on project critical success factors and completion of projects focused on large organizations and the general construction industries and not school construction projects. Further from the literature review, most of the studies were explored through descriptive survey with very few testing hypothesis to confirm study findings further. Though Bungoma County public secondary schools have challenges in project completion, much study has not been conducted in Bungoma County to determine how characteristics of project manager influence completion of Construction projects in public secondary schools, the aim of this paper.

STUDY OBJECTIVE

To determine how characteristics of project manager influence completion of construction projects in public secondary schools in Bungoma County, Kenya.

RESEARCH QUESTION

How does the characteristics of project manager influence completion of construction projects in public secondary schools in Bungoma County?

III. LITERATURE REVIEW

The performance of managers has improved over the years due to the increase in managerial competencies. Unlike in the past when managers were just using a traditional approach, today, they are radical and thus their work is classic Shehu and Akintoye (2009). In the construction sector, a huge emphasis was laid on the skills of planning, monitoring and execution. However, today, the focus has been on planning, execution and control. Beyond ensuring the project has been completed, a manager will also be required to ensure the right mechanisms are laid down for the future in order to prevent failure (Abraham, 2003). Therefore, management practices are highly embraced in any organization that desires to come up with the best strategies with which the finest mechanisms are applied.

Project managers' traits such as their competencies and commitment, technical background and communication skills may affect project completion. Many studies in the literature underscore the central role a project manager holds in the implementation of a project. When carrying a project, managers must appreciate that there are hindrances that emerged and thus there was need to prepare how to block them (Pinto and Slevins, 1987). In this case, when carrying out different projects, varied approaches were applied in order to tailor each approach to the problems and challenges that may arise (Crawford, Hobbs and Turner, 2005). The project manager should thus bore specific qualities that fitted to address the challenges that arise (Muller and Turner, 2007). The competency helped organize and implement the project in terms of planning, scheduling and communication.

The competency of a leader has been the emphasis of how effective project managers should be like. Competency according to Kalinova (2007), is a set of skills that helps a person to carry out a certain task. On the other hand, Boyatzis (2008), explains that competency is the ability of a person to express superior performance. The competency of a manager was of great importance in the process of carrying out a project Crawford (2001). This is because the skills were required to manage different aspects such as cost or other implications that will require the project to be managed professionally until it is complete and successful. When leaders are required to be competent, it is because they also expressed the same to their juniors and show them how to carry out certain tasks. He or she also set a good example on what should be done (Aketch and Karanja, 2013). Competency can either be learned or acquired through experience. A person who has been working for a long time would have a certain level of competency while another one would from school and get a skill or competency, either intellectual or cultural (Dulewicz and Higgs 2003).

Muller and Tunner (2007), have carried out a study to show the influence of managers on the projects they manage.

Therefore, managers should have a certain set of skills and competencies that will have an influence on the success that was achieved in a project. The study was carried out using a survey method, which was based on the web. ANOVA was used as a way of identifying the different traits the project managers were required to have. The findings of the study suggested that project managers were in the habit of team building but the people who were new to the field did not regard team building as a special trait. This is because the older ones were more focused on learning through other people. In the process, they were able to improve the customer relations, the customer satisfaction and improvements on business requirements. The findings are similar to those of Lee-Kelley and Leong, Loong (2003), Prabhakar (2005) and Dolfi and Andrews (2006). All the four researchers found there was a huge relationship between the experience of a project manager and the kind of results they could deliver.

Construction projects were also found to be of high quality when the certification was involved. When a manager is certified, there is an assurance that the work to be done will be perfect. In terms of the quality of the project and the kind of satisfaction it could render to the client, there was need to understand that the quality of the project was high. In this regard, the project would be perfect due to the competency of the person in charge. It is thus important to identify the right project manager who delivered the needed quality. On the other hand, if the wrong choice is made, there will be poor results due to the incompetency of the manager. Therefore, depending with the kind of work that should be done, there is need to find a project manager who matched the skills of the task at hand as stated by Turner and Muller (2006). Projects also failed or succeeded if the manager who have been competent and has acquired the right experience MacInnis (2003).

The topic on how competent managers are in their work has been examined by Kariungi (2014), who researched on how the skill of managers would directly impact the time they would take to complete a project. The study was based on the Kenya Power and Lighting Company in Thika. In the study, the researcher focused on the project engineers and other technicians who were closely involved in projects. In their response, the participants indicated that managerial skills would in no way affect their work and when they would complete it. While the engineer was responsible for leadership of the team it was important for the rest to follow suit. However, in the process of carrying the project implementation activities, the engineers would accept that they had been challenged by issues due to lack of competency. With a certain level of competency, the respondents agreed that they were able to carry on their duties effectively. Similarly, Kibebe and Mwirigi (2014), found that there was a huge relationship between the experience in project management and the quality of work that was done by the CDF officers. The duo used descriptive and exploratory research design. The target population for the study was engineers and other technicians who were involved in the process of handling projects.

Communication remains a major pillar in the process of managing a project. The different stakeholders will need to communicate. A good example is the project manager who as

the leader of the team will be required to work perfectly in communicating the on how and why the project should be implemented. On the other hand, the juniors needed to write reports to express what has happened and the changes that can be implemented. In case there is communication breakdown the wrong objectives may end up being implemented. It is also crucial to point out that of receiving and sending information required a medium. According to Kerzner (2001), the communication will require a standard medium through which the stakeholders in the project can communicate. Without proper communication the juniors would not understand what should be done and they would also fail to express themselves to the manager on whether they have understood what should be done (Project Management Institute Standards Committee, 1996).

Various studies have been reviewed on how construction projects have been carried out previously and the kind of success they have received. In this case, Chan (2004), reviewed journals on management in order to develop a clear and solid conceptual framework for the specific critical success factors. The independent variables identified include procurement related, participant related, project related, external related and management related. Toor and Stephen Ogunlana (2007), carried out a study and their findings would support the assertion that different challenges are experienced in the process of project management. Therefore, in order to ensure the project is implemented successfully, there need to develop a set of competencies, communication essentials and commitment. On the other hand, Kerzner, (2001), explains that cooperation and communication were critical determinants of the success of a project. Therefore, it is easy to conclude that communication is essential in the process of project management.

Salleh (2009) identified that there were delay factors that would be detrimental to the success of the project. The study was conducted using the Delphi methodology for the Brunei Construction Project. In this case, the project investigated the how the delay factors would have an impact on the success of a project. The various factors that were identified included bureaucratic system of decision making, poor communication, poor planning and lack of experience. The factors were also found to resemble the problems other projects in developing countries experience. The findings were confirmed by Kuen and Yudi (2008) and Maslej (2006). Benita (2014), identified that when the project management process had effective communication skills, it was easy for the project to run smoothly. On the other hand, it was easy to ensure the whole team was motivated, informed and team building was enhancing the work being done. Emmitt (2003), also finds that communication is a core element in project management.

IV. CONCEPTUAL FRAMEWORK

Figure 2.1 shows the interaction between project characteristics and completion of construction projects in public secondary schools in Bungoma County Kenya.

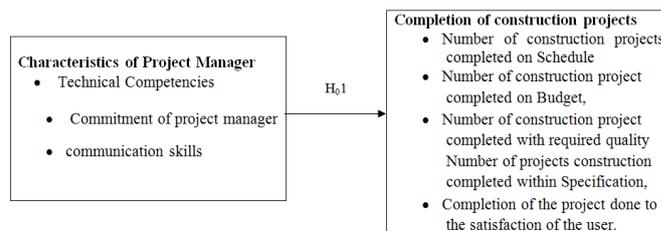


Figure 2.1: Conceptual Framework

V. RESEARCH METHODOLOGY

The study adopted a descriptive survey leads to an intense accuracy at the phenomena of the moment and helps the researcher to describe precisely what is being seen (Saunders et al., 2007). A descriptive research design also enables generation of factual information about the study. A descriptive research design is concerned with describing characteristics of a problem. A descriptive research design is deemed appropriate for this research proposal because it helped to portray accurate profile of events and how they are. It also allowed for in-depth analysis of variables and elements of the study population as well as collection of large amounts of data in a highly efficient way. These was possible, because of the combination of both qualitative and quantitative data through interviews and questionnaires.

The County has 296 public secondary schools and 12 private schools. The literacy level is 60.5% with those attending school (15 yrs-18 yrs.) at 87.4% with secondary school enrolment of 130,907 students. The target population from which the study sample was drawn was 296 Principals and 296 PTA Chairpersons of public secondary schools and 9 Quality Assurance and Standards Officers giving a total of 601, as the target population.

Purposive sampling was adopted in choice of study respondents who were subjected to Stratified sampling to ensure homogeneity of the selected sample in ensuring that samples are drawn from each region encompassed in the target population, then followed by simple random sampling technique from each region. The sample size for this study was 461 drawn from a target population of 601 using Yamane (1967) theory of sampling.

Primary data was obtained from the questionnaires and interview schedules as research instruments. Questionnaires were used to capture data from the respondents. This instrument was used in the study because it is confidential, saves on time, has no bias and covers wide area (Mugenda, Mugenda, 2003). The questionnaire as an instrument used both closed ended and open ended questions in its structure.

The study used both descriptive and inferential statistics during data analysis. Numerical scores were awarded to closed ended questions. Descriptive statistics employed the use of means, frequencies and percentages and for inferential statistics. Quantitative data collected from respondents was coded and analyzed using Statistical Package for Social Sciences (SPSS version 20). Simple regression was used to determine the influence of project characteristics on completion of construction projects. The following table shows how the hypothesis was tested and decision rule.

VI. RESULTS

A total of 452 questionnaires were issued to the respondents out of which 320 questionnaires were correctly filled and returned. This constituted 70.8% of which was considered adequate and in line with Kothari (2004) who recommended that a return rate of more than 50% was acceptable in social science research. From the results, 16 (5%) of the respondents came from Cheptais sub county, 36(11.3%) from Kimilili sub county, 28(8.8%) were from Bungoma central sub county, 58 (18.1%) from Bungoma East sub county, 48(15%) from Bungoma South sub county, 42 (13.1%) from Bumula sub county, 50 (15.6%) were from Bungoma North sub county, 32 (10%) from Bungoma West sub county while the remaining 10 (3.1%) were from Mt Elgon sub county. The results showed that 18 (5.6%) of the respondents were aged between 25-34 years, 39 (12.2%) were aged between 35- 44 years, 191 (59.7%) were aged between 45-54 years, 35 (10.9%) were aged between 55 – 64 years while the remaining 37(11.6%) were 65 years and above. The age of the majority of respondents is important because it is an active age that is quite productive in determining the success of any given task (Sin, 2010). Out of 320 respondents who participated in the study 246 (76.9%) were male while 74 (23.1) were female. This finding goes against gender parity as articulated in Kenyan constitution. The results shows that out of 320 respondents who participated in the study 55 (17.2%) had tertiary education, while 265 (82.8%) had university education. This shows that the level of education of the people involved in the management of projects is adequate for completion of construction projects. The results indicate that out of 320 respondents who participated in the study, 248 (77.5%) had acquired training in management of projects while 72 (22.5%) had no formal training in the same.

The objective the study sought to achieve was to determine how characteristics of project manager influence completion of the construction projects. To achieve this, their opinion showing the level of their agreement or disagreement with the statement provided in a Likert scale of 1- 5 where: Strongly agree (SA)=5, Agree(A)= 4, Neutral or not sure (N)= 3, Disagree (D)= 2 and strongly disagree (SD) = 1.

The study aimed at determining how characteristics of a project manager influence completion of construction projects. The results were as shown in Table 4.1.

Statements	SA f (%)	A f (%)	N f (%)	D f (%)	SD f (%)	Mean	Std Deviation
A school construction project managers' experience matters.	227(70.9)	92(20.6)	1(0.3)	0(0)	0(0)	4.7063	0.46301
The technical background of school construction project manager is important	245(76.6)	66(20.6)	9(2.8)	0(0)	0(0)	4.7375	0.50063
School construction Project manager's competencies are crucial for the project	258(80.6)	62(18.4)	0(0)	0(0)	0(0)	4.8063	0.39585

School construction project manager's ability to work on time matters a lot.	232(72.5)	88(27.5)	0(0)	0(0)	0(0)	4.7250	0.44721
The school construction project manager's consistence on project work is important	242(75.6)	62(19.4)	16(5)	0(0)	0(0)	4.7063	0.55536
Project manager's level of communication to project teams is valuable	240(75)	80(25)	0(0)	0(0)	0(0)	4.7500	0.43369
Project manager's timely communication is good for the project	230(71.9)	77(24.1)	10(4.1)	0(0)	0(0)	4.6500	0.54814
Composite mean						4.7259	0.4777

Table 4.1: Characteristics of Project Manager and Completion of Construction Projects

Statement one; A school construction project managers' experience matters. Out of 320 respondents, 227(70.9%) strongly agreed, 92(20.6%) agreed, 1(0.3%) was not sure while 0(0%) disagreed and strongly disagreed respectively. Majority of the respondents 319(99.7%) agreed a school construction project manager's experience matters. The item mean was 4.7063 below the composite mean 4.7259 which implied a school construction project manager's experience does not matter for project completion. Statements two; the technical background of school construction project manager is important. Out of 320 who responded, 245 (76.6%) strongly agreed, 66(20.6%) agreed, 9(2.8%) were not sure, 0(0%) disagreed and strongly disagreed respectively. Majority of the respondents 311(92.2%) agreed the technical background of project manager is important. The items mean 4.7375 which was above the composite mean of 4.47259 implied the technical background of the project manager matters for completion of construction projects.

Statement three; School construction project manager's competencies are crucial for the project. Out of 320 who responded, 258(80.6%) strongly agreed, 62(18.4%) agreed 0(0%) none was not sure, disagreed and strongly disagreed respectively. All the respondents agreed school project manager's competencies are crucial for the project. The statement mean 4.8063 was above the composite mean 4.7259 implies a project managers competencies supports completion of construction projects in public secondary schools. Statement four; School construction project manager's ability to work on time matters a lot. From 320 respondents, 232 (72.5%) strongly agreed, 88(27.5%) agreed, 0(0%) were not sure, disagreed and disagreed respectively. All the respondents agreed school construction project manager's ability to work on time matters a lot. The statement mean 4.725 was below composite mean 4.7259 implies the project manager's ability to work on time does not support completion of construction projects.

Statement five; the school construction project manager's consistence on project work is important. Out of 320 respondents, 242 (75.6%) strongly agreed, 62 (19.4%), agreed 16(5%) were not sure while 0(0%) disagreed and strongly

agreed respectively. Majority of the respondents 304 (95%) agreed school construction project manager's consistence on project work is important. The statement mean 4.7063 was below the composite mean 4.7259 implying the project manager's consistence on project work does not influence completion of construction projects. Statement six; project manager's level of communication to project teams is valuable. Out of 320 who responded, 240 (75%) strongly agreed, 80(25%) agreed while none were not sure, disagreed or strongly disagreed. The statement mean of 4.75 was above the composite mean 4.7259 implies the project manager's level of communication supports completion of construction projects. Statement seven; project manager's timely communication is good for the project. Out of 320 who respondent, 230 (71.9%) strongly agreed, 77 (24.1%) agreed, 10 (4.1%) were not sure while 0(0%) disagreed and strongly disagreed respectively. Majority of the respondents 310(95.9%) agreed project timely communication is good for the project. The statement mean 4.650 was below the composite mean 4.7259 implies the project manager's timely communication does not support completion of construction projects.

HYPOTHESIS

H1: Characteristics of project manager significantly influence completion of construction projects in public secondary schools in Bungoma County.

The test criteria was set such that the study accepts the hypothesis if the value of beta, $\beta_1 \neq 0$. Simple regression $Y_{cp} = \alpha + \beta_1 CPM + e$ was used where Y_{cp} is completion of construction projects, α is the y-intercept term, CPM is the characteristics of project manager, β_1 is the beta value and e is the standard error term. The mean of characteristics of project manager (CPM) was regressed with the mean of completion of construction project (Y_{cp}). This was tested using significance of R square and Regression coefficient at 95.0% confidence level. The results were shown in Table 4.2.

Model's Goodness of Fit Statistics					
R	R Square	Adjusted Square	Df	F	Sig.
0.774	0.599	0.598	1	475.202	.000 ^b
Regression Coefficients					
Model	B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
(Constant)	10.795	.849		12.713	.000
CPM	1.049	.048	.774	21.799	.000

a. Dependent Variable: Completion of construction projects
Table 4.2: Regression of Characteristics of Project Manager and Completion of Construction Projects

Table 4.2 shows that the relationship between the characteristics of project manager (CPM) and completion of construction projects had a statistically significant positive correlation given coefficient (R) of 0.774 at P=0.00. The coefficient of determination, R-square of 0.599 implies that 59.9% of the variance in completion of construction project is attributed to characteristics of project manager. The significance value is 0.000 which is less than 0.05 thus the model is statistically significant in predicting how characteristics of project manager influence completion of

construction project. An F-significance value of $p = 0.000$ was established showing that there is a probability of 0.00% from the regression model to reject the hypothesis. Since the value of beta is 0.774 and is not equal to zero, the hypothesis was accepted. The regression equation to estimate the completion of construction project was hence stated as:

$$\text{Completion of construction project} = 10.795 + 0.774 * \text{characteristics of project manager} + 3.229.$$

The findings on whether the experience of a project manager matters for project completion differ with those of Lee-Kelley and Leong, Loong (2003), Prabhakar (2005) and Dolfi and Andrews (2006), who found out that there was a huge relationship between the experience of a project manager and the kind of results they could deliver.

The findings of the current study are supported by a study carried out by Müller and Turner (2007), who noted that the project manager should bear specific qualities that fit to address the challenges that arise. They noted that managers should have a certain set of skills and competencies that will have an influence on the success that was achieved in a project. The competency helps organize and implement the project in terms of planning, scheduling and communication. Kariungi (2014) found that with certain level of competency, project managers is able to carry out their duties effectively. Similarly, Kibebe and Mwirigi (2014), found that there was a huge relationship between the experience in project management and the quality of work that was done by the CDF officers.

On communication skills, the findings of the current study are in agreement with Salleh (2009), who identified that there were delay factors that would be detrimental to the success of the project. The various factors that were identified included bureaucratic system of decision making, poor communication, poor planning and lack of experience. Further, Benita (2014), identified that when the project management process had effective communication skills, it was easy for the project to run smoothly.

Interview schedule from the QASOs had the following;

"Experience of a project manager matters a lot since he/she will be in a position to draw from their first failures and success stories. Lack of technical competencies limits the ability of the team leader to supervise and monitor the project work. The project manager must be consistent and should have the capacity to work for long hours to deliver a timely and quality project. Timely and proper communication is essential. Late communication will touch on quality and cost of the entire project."

VII. CONCLUSION

There is a significant positive correlational influence of the characteristics of a project manager on the completion of the construction projects. A school construction project managers' experience, competencies, consistence on project work, level of communication to project team and technical background of school construction project manager is important and matters for project completion. Experience of a project manager matters a lot since he/she will be in a position to draw from their first failures and success stories. Lack of

technical competencies limits the ability of the team leader to supervise and monitor the project work. The project manager must be consistent and should have the capacity to work for long hours to deliver a timely and quality project. Timely and proper communication is essential. Late communication will touch on quality and cost of the entire project.

VIII. RECOMMENDATION

Plans for projects should be availed on time to ensure timely completion of construction projects. The budget of the project should be observed to avoid cost cutting which will eventually lead to poor quality of materials and hence affecting the entire project. The time to allocate funds for a project should be within the scheduled period to avoid last minute rush which affects the quality of projects.

IX. LIMITATIONS

The major limitations of this study were: the high cost implications of the study area. Bungoma County measures 2,206.9 square Km, therefore schools are many kilometers away from each other, and hence this caused challenges to the researcher who visited them. This was overcome by using motor cycles as means of transport to access schools located in the interior of the county. This helped to reduce cost. The researcher anticipated experiencing financial constraints due to wide area the County covers and the spread of schools. This was mitigated by securing funds in good time from a Sacco to avoid delaying the study due to lack of funds. The funds were used to facilitate travel, subsistence and materials required for the research. Laxity by respondents to willingly and freely share information with the researcher for not knowing what the information was to be used for was guarded by the researcher stating and introductory letters were crucial in order to assure the respondents of their safety and the confidentiality of the information. Respondents who participated in the study were given an assurance that the information sought was regarded as confidential and that the findings of the study analysis were for academic purposes only. PTA Chairpersons are not school employees and so may not be readily found in schools when required to fill questionnaires. The researcher made appointments with them through the school principals. The researcher facilitated their travel to school to be able to fill questionnaires and even carry out telephone interviews where necessary for practical reasons. Given the busy schedule of school Principals, the researcher made appointments with them to allow the use of some of their time out of their busy schedule in filling the questionnaires. This hastened their response to filling the research questionnaire.

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