Effect of Budget Preparation on Performance of Academic Projects in Kimilili Sub-county, Bungoma county, Kenya

1Sarah Nasike Mwasame, 2Dr.Emily Chepkoech, 3Prof.Julius Maiyo

1School of education, Mount Kenya University, Kitale campus, p.o.box 1869-30200 Kitale Kenya

2Masinde Muliro university ,school of education Kakamega town, p.o box 190-50100 Kakamega Kenya

3Kibabi University, school of social sciences, education department Bungoma county, p.o box 1699-50200 Bungoma


Abstract
The success of any academic project depends on so many things. The quality of the people handling it is one of the things that will determine its success; hence the need to improve on them. The head teachers are usually the ones in charge of any projects. Since they are the overall in charge, the success of any academic project in their school will depend entirely on them as much as other factors are involved they are the ones answerable. The objective of the study was to determine the effects of budget preparation on performance of academic projects in Kimilili sub-county, Bungoma County. The significance of the study was to help head teachers that handle finances dealing with academic projects or any other projects in their schools stewardship theory guided the study. This study adopted a descriptive survey research design. The target population of the study was 55 head teachers. The study utilized the census technique in coming up with the sample size of 55. Questionnaire was the main tool for data collection. Analysis was done using descriptive statistics that included frequencies, mean percent, standard deviation as well as inferential statistics and presented using tables and figures. The study findings revealed that budget preparation had a positive and significant effect on performance of academic projects ($\beta=0.170$, $p<0.05$).This study recommended that head teachers in the Sub-County should make more attempts in carrying out budget preparation in order to enhance performance of academic projects.

Keywords: Budget preparation, performance of academic projects,

1 Introduction
Management of finance is among many core operational areas in management that will lead to a successful business enterprise. If the management of finance is inefficient or there is any form of uncertainty, then the business enterprise will encounter serious problems Deresse and Prabhakara, (2012). The financial management function may be separated into three major areas: decisions in asset management, financing and investment. Therefore, for an efficient financial management one has to be good at all these (Ellery, 2017)
Globally, in countries like Pakistan, Turkey and China, finance management practices have been linked to better performance and management of academic projects (Okoli, 2011). Most governments in Africa and other developing countries across the globe, lack sufficient resources to provide adequate basic infrastructure for education, especially in rural areas (Sneil, 2015) thus making little improvement on the physical state of such schools that is by funding of construction and academic projects, providing textbooks (Ohemeng, 2009).

In Kenya, financing academic projects in public schools has been a nagging issue (Muchiri, 2017). Most public schools have undergone many challenges when it comes to this (Onduso, 2013). It was once a big relief when it was decided that funds will be driven from the central government and other sources like Constituency Development Funds (C.D.F.), ward bursaries, etc. School administrators were jubilant and the community as well. Pupils and their parents were eased the burden of paying an extra fee for the sake of raising more finances for the school running. Resources like libraries in schools are important for they support learning, rich source of knowledge, develop thinking and reading habits in students (Muchiri, 2017). Dining halls on the other hand provide a safe environment for pupils to take their food while laboratories are wonderful places for the students to practically learn all the theoretical concepts that they were taught in class through experiments (Stern, 2016). However, most schools do not have these projects or if they have, they are in a sorry state. The problem is the increased cases of project fund mismanagement, which may be due to lack of financial management skills, attitude, skills, competence, experience, transparency and many others (Dawuda & Azeko, 2015). Often these head teachers lack the basic financial management skills to allow them to comprehend the financial implications of their made decisions. As a result, there is wastage of resources due to poor decisions made and finally the financial performances of the projects dwindle. Without effective solutions, the said challenges are likely to continue and retard the achievement of the school academic projects (Gamze, 2012). What most studies have dealt with is listing the general challenges to be encountered. What it has not touched on exhaustively is one important thing: the financial skills in management the head teacher handling the finances has and how it has a ripple effect on everything concerning the finances of the academic projects concerned which this current study has intended to fill the gap.

Thus, this study intended to look into one of these drawbacks that public school in Kimilili sub-county face as they are handling finances concerning academic projects in their schools and that is lack of financial skills on management of the academic projects. Several written documents have outlined these challenges that schools face in handling finances for example, Editorial Projects in Education (2014), The Association for Education Finance and Policy, The National Academics Press published a book online ‘Equity and Adequacy in Education Finance Issues and Perspectives, The report of 2004, ‘Investing in Learning’: the policies for school funding to guide performance from the committee for Economic Development, among others. What all these researchers have talked about are the general challenges to be encountered. What it has not touched on exhaustively is one important thing: the financial skills in management the head teacher handling the finances has and how it has a ripple effect on everything concerning the finances of the academic projects concerned which this current study has intended to fill the gap.
2. Objective of the study
To determine the effects of budget preparation on performance of academic projects in Kimilili sub-county, Bungoma County.

H01: There is no statistically significant effect of budgeting on the performance of academic projects in Kimilili sub-county in Bungoma County.

3. Scope of the Study
The study was limited to head teachers who handle finances in academic project in the (public) primary schools in Kimilili sub-county. The period covered was extensive and therefore more likely to give accurate results.

4. Review of Literature
Financial management is the thorough and careful usage of funds in order to attain the goals and aims of any organization (Ellery, 2017). Financial management is part of an organization financial strategy. It mostly sheds light on how to raise capital, budget, and allocate funds to different departments. An efficient finance manager takes his/her time, effort and experience while doing the task of handling the finances. So, as a school and a head teacher one needs to be the best finance manager to be chosen.

Micro imaging, (2013) posted a blog explaining why it is important to hire a well-experienced manager. It is for the fact that you want to ensure the project success: it is compared to taking up insurance. An effective and experienced manager of the project is someone who always write down project plans, always sticks to the schedule, sticks to the laid down budget, he calculates variances, always create checklist and keeps to quality. These managers are not only programmers that come up with better solution and approached to manage projects, but also are also the nave of that project keeping communication all the time. They ensure the details of the project are well handled and the project is moving to the direction it is required.

Among the very crucial aspects of financial management is the financial planning (budgeting) that mostly involves such a rigorous process that includes monitoring finance at a regular basis (Brown et al, 2005). As one prepares the budget, the person does it as per the finance available. This process involves assessment of the financial situation using other financial statements (Lusardi & Mitchell, 2007). Another aspect when preparing the budget involves making a comprehensive plan on the way to attain your goals like minimizing unnecessary expenses or other investments (Lusardi & Tufano, 2009). It requires financial discipline and can be attained if professionals like accountant and others come in handy (Van Rooij, Lusardi & Alessie, 2011). A good planner will always monitor their budgets in case of any adjustments arises.

Gamze et al, (2012), did another study on the effects of management of working capital on the performance of firms, in Turkey. They focused on the correlation between working capital and the performance of firms in Turkey. The variables were several days account receivable, several days account payable, days of inventory, operating cycle, conversion of cash cycle, size of the firm and lastly leverage. The data collected was from secondary data and analyzed using the
panel technique. It was gathered from 75 manufacturing firms, they were sampled from those firms in the stock exchange of Istanbul for duration of 8 years (2002-2009). The findings were that firms might have high profits determined by gross operating profit by having a short accumulating duration of; received accounts and conversion cycle. The control variable (advantage) has a negative correlation with the value of the firm and its profits as well.

Deresse and Prabhakara (2012) did another study about the effect of practices of management of finance and profitability characteristics in Jimna town, Ethiopia. This very study concentrated on the relationship between the practices of management of finance and profitability in business enterprises. The variables were accounting of finance, planning of finance, management of; working capital & capital budgeting, control and analysis finally reporting. The sample consisted of 37-business enterprise in the Jimna town in Ethiopia. Data gathered was from primary and secondary data directly about these enterprises. The findings were that the profit was majorly influenced by efficiency in practices of management of finance like management of working capital, accounting, and management of fixed asset, reporting and planning of finance. Muhammad, (2013) had done a study on effects of advantage of finance on the performance of the firm. This was verified by the stock exchange in Karachi. The variables were size of the firm and advantage. This study used analyzed data from the panel as well as secondary data gathered from some non-financial firms appearing in the stock exchange of Karachi for a range of 6 years (2004 – 2009). The findings were that there is negative correlation in the advantage and performance.

In Malaysia, Mohd (2010). This specific study factored out the vital financial management components to be budgeting of capital, management of the working capital, control and planning of finance, financial accounting and analysis of finance. Another related study done by Chung and Chuang (2009) they had a study on five areas of management of finance practices: budgeting of capital, management of capital structure, management of working capital, building an information system for accounting, reporting of finance and analyzing.

In Kenya, Onduso, (2013), carried out a study about the effects of budget on the performance of finance of companies that deal with manufacturing in the county of Nairobi. It focused on the following: budget, managerial performance and financial performance. The study narrowed down to those that deal with manufacturing in the county of Nairobi to see the connection of the budget and performance of finance of a company. The study sampled 18 manufacturing firms listed in NSE. A cross-section survey was used. The findings were that there is a strong effect in a positive way of budget on the performance of finance of companies that deal with manufacturing as determined by return on assets (ROA).

Muchiri (2017) did a study about practices of management of finance and the performance of finance of firms (non-financial) at Kenya’s NSE. The variables were liquidity, capital budgeting and advantage. They focused on the connection of management of finance and performance of finance of these firms. Data was collected using the analyzed data by panels and used census study on the concerned firms. It used secondary data from 34 companies for a period of 5 years.
that covered 2010-2014. The findings were that with proper liquidity management as well as proper capital budgeting, it could really bring about higher profits.

As one makes these decisions, one needs to assess their current situation of their finance, which will assist them to establish their financial objectives. Later on, outline the course of action to be followed to attain the goals by doing an evaluation of several alternatives. Lastly, one needs to do a review of the initial financial plan to see if it is performing in accordance with what was expected. However, the current study was done in a school set up which is a bit different from the other studies done on companies or corporations.

### 4.1 Theoretical Framework

The study was guided by stewardship theory established in 1991 by Davis and Donaldson (Cribb, 2016). The theory states that the managers who operate independently would behave as responsible stewards, protecting their assets (Davis et al. 2010). The philosophy of management motivates stewards to address the requirements of the stakeholders' needs via long-term development priorities, full transparency and overshoot accountability (Contrafatto, 2014). According to Hernandez, (2012) stewardship theory brings forth a model where the employees champion the strategic objectives of the organization, therefore if the organization does well definitely the employees will be doing well and further boost their morale and drive to serve the company better (Davis et al., 2010). The study finds relevance in this theory as it demonstrate how a good controlled environment which involves transparency, accountability and healthy relationship between employees and managers can lead to good stewardship and management of resources in an organization, government and business entities.(Schepers, Falk, de Ruyter, de Jong & Hammerschmidt, 2012).This study used the concept in this theory as a guide in explaining the effects of budgeting and proper decision making on performance of academic projects in Kimilili sub-county in Bungoma county

### 5 Methodologies

#### 5.1 Target Population

The target population comprises of all the items or people to be studied (Kombo & Tromp, 2011). The area of study is Kimilili sub-county. The target population consisted of 55 public primary schools head teachers, (TSC Kimilili sub-county, 2020). The researcher ought to draw an overall conclusion basing on the findings of the research he/she got from the features of the chosen population targeted for the research (Mugenda, 2008). The state of financial skills in management on performance of academic projects was a projection of other administrators as a population.

#### 5.2 Data Collection Instruments

The data was gathered by a set of questionnaire for the administrators. Questionnaire is an efficient survey instrument because the responses from the questionnaires are deemed standard as well as easy to analyze (Christensen, 2015). The questionnaires were structured questions. The questionnaires were issued to the head teachers because they were the people that were directly involved with the projects thus give firsthand information. There was a set time limit for the questionnaires to be distributed and be recalled a day or two from the time they were issued. A
guide was used during data collection so that it guides all the respondents where necessary. For those respondents who did not hand in the questionnaires

5.3 Estimation procedure
The data that was collected was later edited so as it is accurate, consistent and complete. It was arranged to enable the researcher to do coding and tabulation before analyzing it. The data analysis generated descriptive statistics like percentages, standard deviations and means. The data was presented using tables and tabulations. The researcher used frequency distribution and percentage to tabulate the data. For the inferential statistics, the researcher used Pearson correlation coefficient for strength, relationship and direction. The following regression model was used in analyzing quantitative data. (SPSS) Statistical Package for Social Scientists was in use to process the data

5.4 Measurement of Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operationalization</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance of academic projects</td>
<td>5 Point Likert scale</td>
<td>Percentage of the Completion rate</td>
</tr>
<tr>
<td>Budget Preparation</td>
<td>5 Point Likert scale</td>
<td>process of designing a list to be followed by planning events or conditions anticipating what is in the future</td>
</tr>
<tr>
<td>maintaining financial reports</td>
<td>5 Point Likert scale</td>
<td>Records that show the financial endeavors and the financial position of an organization.</td>
</tr>
<tr>
<td>financial decisions</td>
<td>5 Point Likert scale</td>
<td>Planning and management of resources</td>
</tr>
<tr>
<td>variance analysis</td>
<td>5 Point Likert scale</td>
<td>Percentage of the difference between the actual and planned projects</td>
</tr>
</tbody>
</table>

5.5 Research design
A descriptive survey design was adapted, in which a selected sample of administrators were used. Kothari and Garg, (2014) explains descriptive design as the studies that are basically concerned with describing the characteristics existing with particular predictions and states the facts of specific situation, individual or a group. This method was suitable in this research because it allowed the researcher to assess effects of head teachers’ financial skills in management on performance of academic project. The design allowed collection of rich data from the respondents for they were able to give their thoughts independently on how things are on the ground. In the end, this enabled determination of the relationships between the variables.
5.6 Model Specification
In order to establish the relationship between budget preparation and performance of academic projects, the study used a (MLR) Multiple Linear Regression model was used for prediction of results as shown below
\[ Y = \beta_0 + \beta_1X_1 + \varepsilon \]
That is:
- \( Y \) = performance of academic projects
- \( \beta_0 \) = constant coefficient
- \( X_1 \) = Budget Preparation
- \( \varepsilon \) = the error term
- \( \theta \) = Regression coefficient of four variables

6 Results and Findings
The questionnaire return rate was 78.18%, demographically, the male respondents accounted for 69.77 while 30.23 were female. 4.65% had Masters, 48.84% had Bachelors, 37.21% had Diploma and 9.3% Certificates. On years of work experience, 48.84% served for 1-5 years, 39.53% served from 6-10 years, 11.63% had served for 11-15 years. 2.33% of the respondents ranged between the age of 31-40 years, 30.23% 41-50 years and 67.44% above 60 years.

The descriptive statistics were as presented in the table below

<table>
<thead>
<tr>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget preparation is in line with the accounting and finance standards</td>
<td>F</td>
<td>21</td>
<td>17</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>43</td>
<td>3.84</td>
</tr>
<tr>
<td>% 48.84</td>
<td>39.53</td>
<td>6.98</td>
<td>2.33</td>
<td>2.33</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The budget of the projects finance and operations are reviewed</td>
<td>F</td>
<td>28</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>43</td>
<td>3.79</td>
</tr>
<tr>
<td>% 65.12</td>
<td>30.23</td>
<td>2.33</td>
<td>2.33</td>
<td>0</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost benefit analysis is conducted regularly</td>
<td>F</td>
<td>18</td>
<td>21</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>43</td>
<td>4.04</td>
</tr>
<tr>
<td>% 41.86</td>
<td>48.84</td>
<td>4.65</td>
<td>2.33</td>
<td>2.33</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic conditions that could affect income and spending are evaluated</td>
<td>F</td>
<td>23</td>
<td>19</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>3.93</td>
</tr>
<tr>
<td>% 53.49</td>
<td>44.19</td>
<td>2.33</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spending requests not in the budget are monitored</td>
<td>F</td>
<td>15</td>
<td>19</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>43</td>
<td>4.03</td>
</tr>
<tr>
<td>% 34.88</td>
<td>44.19</td>
<td>9.30</td>
<td>6.98</td>
<td>4.65</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budgets are monitored and adjusted throughout the year</td>
<td>F</td>
<td>27</td>
<td>13</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>43</td>
<td>3.96</td>
</tr>
<tr>
<td>% 62.79</td>
<td>30.23</td>
<td>4.65</td>
<td>2.33</td>
<td>0</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budget information is updated regularly</td>
<td>F</td>
<td>17</td>
<td>23</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>43</td>
<td>3.83</td>
</tr>
<tr>
<td>% 39.53</td>
<td>53.49</td>
<td>2.33</td>
<td>2.33</td>
<td>2.33</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: 1=Strongly Disagree, 2=Agree, 3=Undecided, 4= Agree and 5= Strongly Agree
(Source: Authors computation, 2022)
The respondents were requested to give their views on whether budget preparation is in line with the accounting and finance standards and the study findings revealed that 38 (88.37%) of the respondents agreed as compared to 5 (11.63%) who disagreed. This was confirmed by (Mean=3.84 and SD = 1.047). Majority of respondents were requested to give their views on whether the budget of the projects finance and operations are reviewed. The study results revealed that 41 (95.35%) agreed while 2 (4.65%) disagreed (Mean=3.79; SD=1.047). Respondents were also asked if cost benefit analysis is conducted regularly and the study findings revealed that 39 (90.70%) agreed while 4 (9.30%) disagreed as supported by the mean of (Mean=4.04; SD=0.342). In addition, the study results showed that 42 (97.67%) of the respondents agreed that the economic conditions that could affect income and spending are evaluated whereas 1 (2.33%) were in disagreement as shown by the mean of (Mean=3.93; SD=0.346). Finally, the study findings revealed that 34(79.07%) of the respondents agreed and 9(20.93%) disagreed that spending requests not in the budget are monitored, 40(93.02%) of the respondents agreed while 3(6.98%) disagreed that budgets are monitored and adjusted throughout the year and 40(93.02%) of the respondents agreed while 3(6.98%) disagreed that budgets are monitored and adjusted throughout the year. All are supported by (Mean=4.03; SD=0.348), (Mean=3.96; SD=0.341) and (Mean=3.83; SD=1.072) respectively. These findings are in line with Oluoch, (2010) who defined a budget as details of income and expenditure in an institution and the estimated amount in the budgets and expenditure were categorized according to vote heads. He further explained that budgets were comprehensively thought out plans on various sources of income that head teachers would draw them for the projected annual estimates of income and expenditures.

Table 2: Performance of academic Projects

<table>
<thead>
<tr>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is customer satisfaction because of established academic projects.</td>
<td>F</td>
<td>15</td>
<td>9</td>
<td>7</td>
<td>7</td>
<td>5</td>
<td>43</td>
<td>4.52</td>
</tr>
<tr>
<td>Performance of academic projects is achieved as a result of proper working capital management systems.</td>
<td>F</td>
<td>21</td>
<td>17</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>43</td>
<td>4.49</td>
</tr>
<tr>
<td>Performance of academic projects is successful because of cost benefit analysis.</td>
<td>F</td>
<td>23</td>
<td>12</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>43</td>
<td>4.52</td>
</tr>
<tr>
<td>Productivity is realized as a result of performance of academic projects.</td>
<td>F</td>
<td>14</td>
<td>13</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>43</td>
<td>3.93</td>
</tr>
</tbody>
</table>

Key: 1=strongly disagree, 2=Agree, 3=Undecided, 4= Agree and 5= strongly agree
Source: Authors computation, 2022)
The study results on indicators of client satisfaction revealed that 55.81% (mean=4.52) were of the view that client satisfaction indicates performance of academic projects, 88.37% (mean=4.49) were of the view that performance of academic projects is achieved as a result of proper working capital management systems, 81.40% (mean=4.52) were of the view that performance of academic projects is successful because of cost benefit analysis; 62.79% (mean=3.93) were of the view that productivity is realized as a result of performance of academic projects.

**Correlation Analysis**

In order to analyze relationship between head teachers’ financial management skills and performance of academic projects in Kimilili sub-county, the researcher used Pearson’s product correlation analysis.

<table>
<thead>
<tr>
<th>Performance of Academic Projects</th>
<th>Budget Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>Performance of Academic Projects</td>
</tr>
<tr>
<td>Sig.(2tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>55</td>
</tr>
<tr>
<td>Budget Preparation</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig.(2-tailed)</td>
<td>0.001</td>
</tr>
<tr>
<td>N</td>
<td>55</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2 tailed)**
Source: Authors computation, 2022)

The study findings indicated that there was a positive statistical significant effect of budget preparation on performance of academic projects ($r=0.507, p<0.01$).

**Regression analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.921*</td>
<td>0.648</td>
<td>0.652</td>
<td>2.312</td>
</tr>
</tbody>
</table>

Source
a. Predictors: (Constant), Budget Preparation.
b. Dependent Variable: Performance of Academic Projects
Source: Authors computation, 2022)
From the results, it is clear that the variation in the independent variable (Budget preparation) in the study causes up to 64.8% of the changes in the dependent variable (performance of academic projects). This showed that the independent variables had a substantial connection with the dependent variable. From the adjusted R-squared results in the above table it is clear that Adding predictors to explain the dependent variable will yield more results to the R squared. The adjusted Rsquare was 65.2% meaning that the statistical model used in the study is fit and the variations in the dependent variable could be explained up to 65.2% by the changes in the independent variables in the study.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>228.550</td>
<td>4</td>
<td>57.137</td>
<td>7.864</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>937.279</td>
<td>129</td>
<td>7.266</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1165.828</td>
<td>133</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Budget Preparation,  
b. Dependent Variable: Performance of Academic Projects  
Source: Authors computation, 2022)

ANOVA was used to determine if the multiple regression model was fit for the data. The results were shown in Table 5The ANOVA was highly significant (F=67.281, p=0.000a). This implies that the regression model was termed fit for this particular data and hence budget preparation, maintenance of financial reports, financial decisions and variance analysis affects performance of academic projects.

Table 6 coefficient on budgets preparation on performance of research performance of academic projects in Kimilili subcounty, Bungoma county  
Source: Authors computation, 2022)

Regression coefficient was conducted in order to establish the beta coefficient values of each variable. From the coefficient results in table 6 the results indicated how a unit change in the independent variable causes changes in the dependent variable. From the coefficient regression results in Table 6 the study finds out budget preparation had a positive and significant effect on performance of academic projects in Kimilili sub-county in Bungoma county as indicated by (β=0.391; p = 0.001<0.05). The constant value of 0.391 implies that holding all the independent variable in the study constant performance of academic projects will still improve by 0.391 units, The budget preparation coefficient value of 0.451 units implies that, holding other factors
constant, a unit increase in budget preparation process will result to 0.451 unit improvement in the management and performance of academic projects in Kimilili sub-county in Bungoma county.

The regression model for performance of academic projects can be outlined as follows:

\[ Y = 0.391 + 0.451X1 + \varepsilon \]  
\[ \text{Equation 4.1} \]

**Discussion**

The first null hypothesis (H01) predicted that budget preparation has no statistically significant effect on performance of academic projects in Kimilili sub-county, Bungoma County. The results in table 4.12 indicated that budget preparation had a positive and significant effect on performance of academic projects in Kimilili sub-county, Bungoma County with \((\beta=0.451; p<0.05)\). The study therefore rejected the null hypothesis at 95% level of significance and accepted the alternative hypothesis, which showed that budget preparation has no significant effect on performance of academic projects in Kimilili sub-county, Bungoma County. Budgeting is very essential in regulating the day to day operations of any business (Kent, 2018) by ensuring achievement of programs concerned with business goal and objectives, under a given time period, by use of specific availed resources. Budget is also essential in outlining the available resources as well as the future required resources (Elliott, 2015) which is vital for the wellbeing of the academic projects in any learning institutions (Didinya, Ouda & Ndanu, 2018). In view of prudent academic projects performance, School heads in Kimilili sub-county in Bungoma county need to strengthen their controlled environment like the internal audit and budgeting which will help them identify and deal with the risks and challenges involved in academic projects at schools thus helping them to improve the management of the expenditures on academic projects in schools. This will help to improve the management of academic projects in schools by reducing resource wastages and misappropriation of funds allocated towards the development of the academic projects.

These findings concurs with the findings of Kaluo, (2017), Kent (2018) and Harmon, (2013) who established that Budgeting integrity and ethics results into improvement in the performance of academic projects. In addition, the study findings coincide with the fundamental principles from the Kenya National Union of Teachers (KNUT, 2020) that key indicators for effective performance of academic projects include budgeting. In contrast to the findings of this current study, Jones & Vesiland (2016) found an insignificant relationship between budgeting and performance of academic projects and instead the study established that factors like integrity, ethical values and competence of the school heads are necessary and significant to performance of academic projects and thus require special attention as opposed to budgeting.

**7 Summary and conclusion**

Basing on the analysis, it was observed that head teachers’ budget preparation skills affect performance of academic projects in Kimilili Sub-County. It was therefore concluded that head teachers need to focus on the stated variables, while carrying out budget preparations, in order to enhance performance of academic projects in Kimilili Sub-County. The study therefore
recommended that head teachers in the Sub-County should make more attempts in carrying out budget preparations in quest to enhance the performance of academic projects.

The study was done in only one Sub-County; there is need for similar research to be done in other Sub-Counties before generalizations are made. Since the current study used only four variables and given the fact that there are other factors that may affect performance of academic projects, other researchers may seek to unravel the adoption of the procurement procedures, accountability and transparency on performance of academic projects. It would be interesting to find out whether the outcomes would be related when different variables are employed. The study recommends further study where the moderating variables such as the age and size of the project may be studied to discover their moderating influence on the relationship that was between head teachers’ financial management skills and the performance of academic projects.

Authors’ contributions
This work was carried out in collaboration between all authors. Author SNW designed the study, performed the statistical analysis, wrote the protocol, wrote the manuscript, managed the analyses of the study and managed the literature searches. Authors Prof.JM and Dr.EC supervised the author SNW.

References
Ellery, D.J. (2017), Importance of Efficient Financial Management, article.


Publications Africa, 70-110.

Stern, J. (2016). Introduction to Online Teaching and Learning, Online Learning Consortium, 2-