THE WORKING CAPITAL MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE OF MIDDLE LEVEL COLLEGES IN ELDORET TOWN, KENYA

BY

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (FINANCE) OF KENYATTA UNIVERSITY

JULY 2018
DECLARATION

Declaration by the Student

I hereby declare that this research project is my original work and has not been presented for a degree in any other university. No part of this proposal may be reproduced without prior permission from the author and/or the university.

Signature……………………………… Date………………………………
Paul Kipruiyot Yator
D53/OL/5473/2003

Declaration by the Supervisor:

This Research project has been submitted to the Kenyatta University for Examinations, with my approval as the university supervisor.

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ACKNOWLEDGEMENT

I acknowledge the Almighty Lord for the far He has brought me especially in my academics. I also acknowledge and appreciate my Supervisor Dr. John Mungai for whom I am most grateful and deeply indebted for his help and guidance in writing this proposal. I am fortunate to have him as my mentor, because he helped me realize my dreams. I will always treasure his friendship.

Finally, this acknowledgement would be rendered impartial if I do not convey my sincere gratitude to my entire family. It is a great pleasure of humility to thank you for your love, support, and serenity. I am truly blessed and honoured to have you as my family.
DEDICATION

I dedicate this research project to my wife Celestine and my children for their moral support they have given me so far.
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## ABBREVIATIONS AND ACRONYMS

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<th>Description</th>
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<tr>
<td>ABE</td>
<td>Association of Business executives</td>
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<tr>
<td>ACCA</td>
<td>Association of Chartered Certified Accountants</td>
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<tr>
<td>ACP</td>
<td>Accounts collection period</td>
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<td>APP</td>
<td>Accounts Payable period</td>
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<tr>
<td>ARP</td>
<td>Accounts Receivable period</td>
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<tr>
<td>CCC</td>
<td>Cash Conversion Cycle</td>
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<tr>
<td>EIM</td>
<td>Efficiency inventory management</td>
</tr>
<tr>
<td>EMU</td>
<td>Efficiency monitoring unit</td>
</tr>
<tr>
<td>ERM</td>
<td>Efficiency receivable management</td>
</tr>
<tr>
<td>GOK</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>ICM</td>
<td>Institute of Commercial Management</td>
</tr>
<tr>
<td>IHP</td>
<td>Inventory holding period</td>
</tr>
<tr>
<td>KASNEB</td>
<td>Kenya Accountants and Secretaries national examination council</td>
</tr>
<tr>
<td>KNEC</td>
<td>Kenya national Examination council</td>
</tr>
<tr>
<td>OLS</td>
<td>Ordinary Least Squares</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Assets</td>
</tr>
<tr>
<td>TTI</td>
<td>Tertiary Training institute</td>
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<tr>
<td>WCM</td>
<td>Working Capital Management</td>
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# OPERATIONAL DEFINITION OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Accounts Payable Period</td>
<td>The average number of days it takes the organization to pay its suppliers.</td>
</tr>
<tr>
<td>Accounts Receivable Period</td>
<td>The average number of days an organization takes to collect payments from its customers.</td>
</tr>
<tr>
<td>Financial performance</td>
<td>A monetary indicator of firm’s performance and mostly in terms of net profit, return on equity, return on investment.</td>
</tr>
<tr>
<td>Inventory period</td>
<td>The average number of days of stock held by the firm.</td>
</tr>
<tr>
<td>Working Capital Management</td>
<td>Refers to the management of current assets and current liabilities of a firm to meet its short-term liquidity needs</td>
</tr>
<tr>
<td>Working capital management</td>
<td>The distinctive institutionalized approaches used by firms in the management of working capital and this includes: cash management, accounts payable, inventory management and accounts receivable</td>
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ABSTRACT

The financial performance of any organization is crucial dependent on the efficient management of working capital management. In virtually all cases, educational institutions is afflicted by poor financial performance due to its unique approach to the management of working capital which involves more of accounts payables and receivables than any other working capital management practises. Due to prevailing economic conditions, these Middle level Colleges are financially weakened by the decline in admissions, a problem that is further compounded by lack of established working capital management policies which expose them to delinquency risks of slow fee payment and defaults which consequently affecting their financial performance. The purpose of this study was to investigate the effects of working capital management practices and their effects on financial performance of Middle level Colleges in Eldoret town in Kenya. The specific objectives of the study were to assess the effects of cash management practices on financial performance, to establish the effects of inventory management on financial performance of Middle level colleges, to ascertain the effects of trade payable management and to determine the effects of accounts receivables on financial performance of Middle level colleges. The study was informed by stakeholder and agency theories and guided by descriptive research design in that the method was best suited as it gave an exhaustive analysis of the situation while reporting the way things with regard to the possible behaviour, attitude, values and characteristics. The study adopted the census technique because of the fewer numbers of Middle level colleges and employed a random sampling technique to target the 86 respondents who held the position of financial managers/owner and the accountants from the 43 Middle level colleges registered by the ministry of education at Eldoret Town. The researcher used structured questionnaires and documentary analysis to collect primary data from the accountants and Managers of the Colleges. The data collected were analysed using descriptive statistics to determine the mean, standard deviation, minimum and maximum of the various variables. Pearson correlation coefficient was used to analyse the relationship between the dependent variable (operating margin) and the independent variable based on the inventory turnover days, number of day’s accounts receivable, number of day’s accounts payable and the cash conversion cycle. Regression analysis was used to estimate the causal relationships between the financial performance variable (dependent variable) and the working capital variables (independent variables). Results from the analysis showed that these institutions have focused on working capital management practises in two aspects, that is, cash management and accounts receivables. The cash conversion cycle, APP are significant in determining the operating margins. Further, operating margin significantly correlated with cash conversion cycle (r = 0.826), accounts payable(r = 0.634) and accounts receivable(r = 0.522) while the margins are particularly influenced by cash conversion cycle and accounts receivables. The findings show that the institutions are able to efficiently handle working capital by improving on the cash management techniques and largely implementing efficient accounts receivable practises.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The concept of evaluation of financial performance has become a great concern to the shareholders, managers, potential investors, creditors and other stakeholders. This explains why auditors are hired by companies to give an independent opinion on their performance and financial status. The timely preparation and availability of financial statements assists top management in the process of examining the condition and performance of a company (Horne & Wachowicz, 2004).

Business entities exist for purposes of enhancing owners’ investment value and the realization of this objective requires refinement in financial strategy and entrenchment of responsive adoption systems. Therefore, firms are required to maintain a balance between liquidity and profitability while conducting its day to day operations. Liquidity is a precondition to ensure that a firm is able to meet its short-term obligations and its continued flow can be guaranteed from a profitable venture (Gitman, 2008).

Management of working capital is a fundamental part of the overall corporate strategy to create value and is an important source of competitive advantage in businesses (Deloof, 2003). In practice, it has become one of the most important issues in organizations with many financial executives struggling to identify the basic working capital drivers and the appropriate level of working capital to hold so as to minimize risk, effectively prepare for uncertainty, and improve the overall performance of their businesses (Lamberson, 2005).
Horne and Wachowicz (2004) provide that companies seek to minimize risk and improve the overall performance by understanding the role and drivers of working capital management. Consequently, a firm may adopt an aggressive working capital management policy with a low level of current assets as percentage of total assets or it may also be used for the financing decisions of the firm in the form of high level of current liabilities as percentage of total liabilities. Excessive levels of current assets may have a negative effect on the firm’s profitability whereas a low level of current assets may lead to lower level of liquidity and stock-outs resulting in difficulties in maintaining smooth operations. They conclude by emphasizing that the main objective of working capital management practices is to maintain an optimal balance between each of the working capital components.

Filbeck and Krueger (2005) stipulated that business success heavily depends on the ability of financial executives to effectively manage receivables, inventory, and payables. Kwame (2007) retorts that the existence of efficient working capital management practices can make a Substantial difference between the success and failure of an enterprise and it is of particular importance to the managers, because it is they who strive for finances and the Opportunity cost of finances; for them is usually on the higher side.

1.1.1 **Financial Performance**

Financial performance can be described as the measurement of the results of a firm’s policies and operations in monetary terms and signify the firm’s overall financial health over a given period of time which can be used for industrial comparison.
Financial performance evaluation represents one of the key functions of any business owner or manager. The purpose of financial statements analysis is to assist statement users in predicting the future by means of comparison, evaluation and trend analysis (Filbeck & Krueger, 2005).

The financial performance evaluation is designed to provide answers to a broad range of important questions, some of which include whether the company has enough cash to meet all its obligations; is it generating sufficient volume of sales to justify recent investment; does the company collect outstanding accounts from customers without creating burden on its cash flow; does the company make timely payments to suppliers to take advantage of discounts; does the company utilize the inventory in an efficient manner; does the company have sufficient working capital; does the company maintain an adequate profit margin; and does the company produce sufficient return on investment? An effective financial performance evaluation system should be able to attain the goals of promoting goal congruence and coordination, communicating expectations, motivating, providing feedback and benchmarking (Horgren, Harrison & Oliver, 2009).

1.1.2 Financial Performance of Middle Level Colleges
Virtually all non-profit organizations including colleges and universities have been adversely affected by declines in government assistance and unfavourable economic circumstances and greater competition for private gifts and grants (Chabotar, 2009). To this end they monitor collection rates on their net receivables, ranging from tuition
receivable to membership fees in order to ensure an adequate cash flow and discourage delinquency.

The statistics in Table 1.1 shows that the growth in revenues was at 30.40% in 2011 and dropped to single digits of 8.20% in 2015, while growth in accounts receivables recorded 22.96% in 2011 and gradually dropping to a single digit, 25.3% in 2015. The overall measure of performance as highlighted by profitability indicates a 27.0%, before gradually declining to single digits growth of 7.80% in 2015. Whereas, the revenues are gradually decreasing, the operational costs tend to gradually increase from period to period due to persistent inflationary pressure, thereby resulting in depressed financial performance over the same periods.

Table 1.1 Financial Indicators of Middle Level Colleges in Eldoret Town

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>% growth in student population</td>
<td>30.6</td>
<td>40.2</td>
<td>25.9</td>
<td>18.9</td>
<td>12.8</td>
</tr>
<tr>
<td>% growth in revenues</td>
<td>30.4</td>
<td>19.5</td>
<td>14.3</td>
<td>9.90</td>
<td>8.20</td>
</tr>
<tr>
<td>% growth in accounts receivable</td>
<td>17.96</td>
<td>23.0</td>
<td>28.40</td>
<td>28.0</td>
<td>25.3</td>
</tr>
<tr>
<td>% growth in accounts payable</td>
<td>12.8</td>
<td>15.3</td>
<td>17.9</td>
<td>19.8</td>
<td>20.7</td>
</tr>
<tr>
<td>% growth in profitability</td>
<td>27.0</td>
<td>25.0</td>
<td>15.1</td>
<td>11.9</td>
<td>7.80</td>
</tr>
</tbody>
</table>

Source: Colleges’ Financial Accounts offices

Financial sustainability is one of the most important characteristics for evaluation of the financial situation of an establishment. Providing inventory and expenditures by the sources of their forming is the essence of financial sustainability, and solvency is its external manifestation. The ratio between inventories and sources of proprietary and
borrowed funds for their forming defines a degree of financial sustainability (Stabislavchik, 2010).

Understanding the financial condition of the non-profit organizations is an important part of deciding how to respond to these pressures. Findings from a study indicate that Middle level Colleges follow the recommended and acceptable financial management practices as per the Government Financial Regulations thus the major problems arising from the government financial regulations include lack of monitoring and evaluation unit on financial usage, long procurement procedures, lack of financial management training, late disbursement of funds and lack of audit personnel in secondary schools (Maronga, Weda & Kengere, 2013).

Financial sustainability will be one of the key challenges for educational institutions including universities in the next decade: only those institutions that have sound financial structures and stable income flows will be able to fulfill their multiple missions and respond to the current challenges in an increasingly complex and global environment (Sazonov, 2015).

1.1.3 Working Capital Management Practices
The idea of working capital came from the collaboration between current assets and current liabilities. In another explanation, it is described as the two (assets and liabilities) working together to achieve the essential needs of the business (Padachi, 2006). In business transactions, the business manages to pay all the liabilities in a relevant short period of time that probably comes from the business’s engagement in the financial
institutions through the financial support system (Le & Nguyen, 2009). The management of these short-term assets and liabilities warrants a careful investigation since the working capital management plays an important role for the firm’s performance, risk as well as its value.

The three different components of cash conversion cycle (accounts payables, accounts receivables and inventory) can be managed in different ways in order to maximize profitability or to enhance the growth of a company. Sometimes trade credit is a vehicle to attract new customers. Many firms are prepared to change their standard credit terms in order to win new customers and to gain large orders. In addition to that credit can stimulate sales because it allows customers to assess product quality before paying (Deloof, 2003).

The optimal level of working capital is determined to a large extent by the methods adopted for the management of current assets and liabilities. It requires continuous monitoring to maintain proper level in various components of working capital i.e. cash receivables, inventory and payables (Afza & Nazir, 2007). According to Gitman (2009) the objective of Working Capital Management (WCM) is to minimize the Cash Conversion Cycle (CCC) the amount of capital tied up in the firm’s current assets. It focuses on controlling account receivables and their collection process and managing the investment in inventory. Working capital management is vital for all business survival, sustainability and its direct impact on performance.
An increasing portion of the investment in corporate assets have been in accounts receivable as expanding sales, fostered at times by inflationary pressure, have placed additional burdens on firms to carry larger balances for their customers (Lazaridis & Tryfonidis, 2006). Frequently, recessions have also stretched out the terms of payment as small customers have had to rely on suppliers for credit. Account receivables as percentage of total assets have increased relative to inventory, and this is a matter of concern for some corporation in their management of currents assets (Raheman & Nasr, 2007).

In managing accounts receivable, a number of studies have suggested that companies should strive to collect cash from customers as quickly as possible. The proxy for measuring accounts receivable management will be the accounts collection period (ACP) which refers to time taken to collect cash from customers. The ACP is measured as accounts receivable scaled by sales multiplied by the number of days in a year. Consistent with previous studies, the accounts collection period will be used as proxy for collection policy and as an independent variable (Makori, 2013).

Deloof (2003) generalized working capital management as the cash conversion cycle (i.e., the time span between the expenditure for the purchases of raw materials and the collection of sales of finished goods). Further, a longer cash conversion cycle is associated with a larger investment in working capital. Deloof concludes by suggesting that firms should strive to minimize the cash conversion cycle, however, the declaimer is
that a longer cash conversion cycle might increase firm performance because it leads to a higher level of sales.

Shin and Soenen (1998) held a similar definition of working capital as the time lag between the expenditure for the purchases of raw materials and collection for the sale of finished products. However, a number of studies hold that corporate firm performance might also decrease with cash conversion cycle. This usually arises if the costs of higher investment in working capital rise faster than the benefits of holding more inventories and/or grading more trade credit to customers (Kieschnich et al., 2006). Taking the cash conversion cycle as the overall measure of company’s working capital management, Raheman & Nasr (2007) found that the coefficient of cash conversion period effects firm performance of company.

Similarly, Deloof (2003), Garcia –teruel and Martinez –Soenen (2007) and Falope & Ajilore (2009) found that a relationship exists between the cash conversion cycle and profitability. This is consistent with the view that a decrease in cash conversion cycle will generate more profits for a company. Deloof (2003) argued that it cannot be ruled out that negative relation between the cash conversion cycle and not vice versa. From these previous studies, it is evident that companies strive to reduce the cash conversion cycle to its minimum in order to maximize firm performance.

Inventory management is largely affected by macroeconomic factors such as inflation and cyclical changes in the economy. Gaur et al (2005) and Gaur & Kessavan (2009)
found that inventory turnover should not be used on its own performance management. This is because an increase in inventory turnover as a result of unexpected sales volume does not indicate improved capacity to manage inventories well. Flanagan (2005) explained that maintaining large inventory levels strains cash resources of a business. On the contrary, maintaining insufficient inventory levels is associated with lost sales and delays in selling to customers. This means that, in line with the transaction cost theory, the finance manager has to strike a balance when managing inventories such that a company does not hold too much or insufficient inventories.

Trade payable management has been explored in depth by various studies. Most studies suggest that paying payables closer to the due date is the best practice (Garcia-Teruel and Martinez-Solano, 2007; Raheman & Nasr, 2007; Falope & Ajilore, 2009). These findings are pegged on the belief that shortening the accounts collection period improves company firm performance. Companies may also opt to prolong the accounts collection period due to competition. This is as a result of intense competition in the industry where companies are forced to grant discounts to their customers to encourage early payments. Conversely, if the bargaining power of customers is high, then a company may be forced to relax its credit policy by lengthening the time it takes to collect payments from its customers. Zinger (2009) called for a careful and an effective analysis of the credit policy especially during periods of credit crisis

According to Oduog (2003), financing education has been and is still a burden and this implies that even in schools, debts owed by students in form of fees may be a burden to
pay. Apart from the Kenya School of Monetary Studies and Kenya Institute of Management that are mandated to offer their own certificates, all the other Middle level colleges offer training for courses that are then examined by independent examination bodies such as Kenya National Examination Council (KNEC), Kenya Accounting and Secretaries National Examining Board (KASNEB), Association of Certified and Chartered Accountants (ACCA), ABE, Institute of Chartered Marketers (ICM) among others but operate autonomously from the training institutions. This means that, as long as the student has registered and booked the examination, he/she will sit for it regardless of whether the student has cleared with the training institution. This leaves such institutions without anything to withhold as security for the outstanding fees receivable from students and therefore a high risk of slow fee payment and defaults since the Institutions do not have the option of deterring the students with fee balances from sitting for their examinations. This unsecured nature of accounts receivables in majority of Middle level colleges exposes them to delinquency risks of slow fee payment and defaults.

For these institutions to have a strong financial performance, they are expected to have proper management of their accounts receivable. The costs associated with receivables are not trivial. First, there is the chance that the client will not pay the arrears, secondly, the organization has to bear with the cost of carrying receivables (Ross, 2003). It is therefore, becoming increasingly important for Middle Level Colleges- to develop proper and effective methods of managing fee receivables. Slow fee payments and debt defaults in turn are likely to expose the colleges to financial performance problems which would
in turn affect the quality of training they offer. This research therefore sought to fill in the existing gap of inadequate working capital management in private Middle Level Colleges and also extending the work of the researchers who broadly concentrated on the general working capital management practices in primary, secondary schools and companies.

1.1.4 Middle Level Colleges in Eldoret Town, Kenya
Eldoret town used to be known as the farmers’ town being surrounded by the agricultural activities but this has changed dramatically. Today the headquarters of Uasin Gishu County is a major industrial, banking, health, communication and education hub serving the North rift and western part of Kenya.

The Middle Level Colleges existing in Eldoret Town offer courses and programmes in areas of Banking, Accountancy, Aviation, Health and many others. The courses offered by these institutions plays a critical role in moulding skilled labour for different economic sectors.

1.2 Statement of the Problem
The massification of higher education together with additional and tougher accountability requirements, new societal demands on institutions and rising costs of human resources form the majority of the sources for increased costs that private educational providers are confronted with. Under stringent conditions of budgetary expenditures, the problem of financial sustainability and efficiency of higher education institutions is becoming urgent, thus the focus turns to the search for possibilities to develop educational establishments. In this context, the most important issue deals with developing approaches for
quantifying financial sustainability in form of financial performance and identifying the directions and means of its rise (Sazonov, 2015).

Many financial ratios that serve profit making organizations can also serve nonprofits and therefore an analysis of ratio such as tuition revenues to instructional expenditures provides a better understanding of financial condition and institutional priorities (Chabotar, 2009). A study in The Manchester Metropolitan University website confirms that there are cases of non-payment of fees due to the university by students and that about 20 percent of the students every year experience difficulty in paying fees (Joyce, 2012). Over 60 percent of Tertiary Training Institutions (TTI) country wide approach the Ministry of Higher Education Science and Technology, Directorate of Technical Education, Bursaries and Grants department every year requesting for funding of their operations citing difficulties in fees collections from students as the main cause of their cash flow problem (GOK, 2010).

To provide financial sustainability to an education institution in currently changing market conditions, it is necessary to constantly monitor the market situation of education services, at the same time critically evaluating its own position in the market. Moreover, the expansion of private education institutions’ activity has resulted in a dramatically intensified competition in higher education, in an increasing struggle for the survival of state education institutions, in a struggle for every student and every penny (Sazonov, 2015).
In an effort to fill the gap of inadequate working capital management in Tertiary Training Institutions (TTI), this study therefore seeks to investigate the effects of working capital management practices on the financial performance of these colleges in Eldoret Town and to recommend the way forward towards prudent working capital management practices in enhancing the college’s performance.

1.3 Research Objectives
The purpose of the study was to analyse the working capital management practices on the financial performance of the Middle Level Colleges in Eldoret Town. The study focused on the below research objectives classified into the general and the specific objectives.

1.3.1 General Objective
To determine the effects of working capital management practices on the financial performance of Middle Level Colleges in Eldoret Town, Kenya.

1.3.2 Specific Objectives
i. To determine the effect of receivables management practices on financial performance of Middle Level Colleges in Eldoret Town

ii. To assess the effect of cash management practices on financial performance of Middle Level Colleges in Eldoret Town

iii. To establish the effect of inventory management practices on financial performance of Middle Level Colleges in Eldoret Town
iv. To ascertain the effect of trade payables management practices on financial performance of Middle level Colleges in Eldoret Town

1.4 Research Questions
i. In what way do receivables management practices affect the financial performance of Middle Level Colleges in Eldoret Town?
ii. To What extent does Cash Management practice affect financial performance of Middle Level Colleges in Eldoret Town?
iii. What is the effect of inventory management practices on the financial performance of Middle Level Colleges in Eldoret Town?
iv. How do the trade payable management practices affect the financial performance of Middle Level Colleges in Eldoret Town?

1.5 Significance of the Study
The Education sector plays a major role in the Kenyan economy and is a source of livelihood for millions. Therefore, pegged on the sector’s irreplaceable indispensability, stable synergy is of essence to strengthening and harnessing stakeholders’ collective contributions. The study’s findings is anticipated to contribute in solidifying scholarly contributions towards establishing an ideal working capital management in the context of financial performance on the related Middle level Colleges serving vast interests.

In addition, it is imperative that stakeholders are consistently updated and made to understand institutional weaknesses in order to factually design a responsive policy. An output of this study is therefore important to players both in the sector and outside
especially government agencies (Vision 2030, and EMU), other sectors institutions, individual owners and researchers in advocating and adopting policy guidelines aimed at protecting Middle level Colleges.

The study is significant to the policy makers as it will help them to discern the financial concerns of managing Middle level colleges. Since also Private Middle level Colleges are substitutes to public educational systems, it is in order that their financial sustainability is studied so that policy makers can effectively manage them while regulating their financial performance in order to ensure long term sustainability.

The study significantly impacts on the students studying in these Middle Level colleges and thus it is imperative that there is financial sustainability in these institutions. In instances of institutional failure, it is the students who are learning in the same institutions that will suffer therefore the study will propose measures that can be adopted by these institutions and thereby ensure the continuity of the same colleges.

The parents and guardians of the students learning in these Middle level Colleges will be afflicted by the failure of the colleges as it will curtail their children educational achievement. The recommendations from the study therefore can be used to aid the parents and guardians of the students in these colleges to safeguard their educational investments and consequently their children’s future.
1.6. Scope of the Study

The study focused on analysis of working capital management practices on the financial performance of Middle level colleges in Eldoret Town. The study targeted the 86 finance/managers and Accountants of Middle level colleges in Eldoret Town, Kenya using questionnaires as the research instrument.

The study was geographically limited to the Eldoret town and in particular all the private Middle level Colleges in Eldoret Town. The study area was chosen because Eldoret town is considered as a education hub of western region of Kenya and it easy for the researcher to access the respondents and the researcher is also familiar with the town and getting information from the respondents will be easy.

The study were guided by the following variables; Receivables Management; Cash Management, Payables Management and Inventory Management. Any form of working capital management that are uniquely practised by the individual colleges was deemed to be inconsequential to the study.

The study was limited in time scope to a period of one financial year of 2015. This is because of the need to appreciate the nature of the working capital management practice within the colleges. Using one –year estimates ensures that the study capture the critical application of these practice as they are being applied without any significant change by the actors.
1.7 Limitation of the Study

Some respondents refused to answer questions while others gave incorrect or exaggerated information; therefore the researcher ignored the targeted respondents and moved to other colleges. The unavailability of the audited accounts of the colleges was a significant limitation, thereby the study used unaudited book of accounts as presented by the financial managers of the same institutions.

Some respondents self-reported favourable opinions about the financial performance, therefore influencing on the findings. The researcher purposely handed out at least three questionnaires to three individuals while ensuring that more than two questionnaires are filled during collection.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
This chapter gives an in depth of the related literature review relating to working capital management practices and its effects on financial performance. It covers theoretical literature review, empirical literature review, and conceptual framework of the study.

2.2 Theoretical literature Review
The theoretical framework of this study will be guided by three theories that support the relationship between working capital management components and financial performance. These theories are namely the trade-off theory, agency theory and the cash conversion theory.

2.2.1 Agency Theory
The main theory under consideration is agency theory by Jensen & Meckling (1986) and explains the relationship between the principle and the agent. An agency relationship is a contract under which one or more persons (the principal(s) engage another person to perform some service on their behalf.

According Agency theorists have focused upon the managerial incentive problems that emerge as a result of the separation of the ownership of a company and managerial decision-making. In the context of the company, a major issue is the information asymmetry between managers and shareholders. In this agency relationship, insiders (managers) have information advantage. This means that the owner of the company faces moral dilemmas because they cannot accurately evaluate and determine the value of
decisions made by the management. While the internal management has all the information regarding working capital aspects of the firm, the shareholders rely on this information mainly from the annual financial statement presented either semi-annually or at the end of the year. This information asymmetry brings in agency problems whereby the internal management has key information regarding the company’s working capital management while the external stakeholders (specifically the shareholders) do not have. The management may take advantage of this information and engage in earnings management.

The relevance of agency theory to working capital management could be viewed from the perspective of financial manager, who in most cases is an agent of the owners (principals) of a firm, and who takes all the important decisions regarding all the short-term assets and liabilities of a business. He takes charge of decisions regarding receivables, payables, inventories /stock and liabilities of a firm(Williamson, 1984).

2.2.2 Stakeholder Theory
The stakeholder theory was advanced by Williamson (1984) and presents a model describing what the corporation as a constellation of cooperative and competitive interests possessing intrinsic value. It establishes a framework for examining the connections, if any, between the practice of stakeholder management and the achievement of various corporate performance goals(Donaldson & Preston, 1995).

The stakeholder theory is intended both to explain and to guide the structure and operation of the established corporation. Toward that end, it views the corporation as an
organizational entity through which numerous and diverse participants accomplish multiple, and not always entirely congruent, purposes. The stakeholder theory argues that managers should make decisions so as to incorporate the interest of all stakeholders in a firm (including not only financial claimants, but also employees, customers, communities, governmental officials, and under some interpretations the environment (Jensen, 2001).

The stakeholder theory highlights the relevance of the symbiotic association of firm and various stakeholders, the creditors for instance, provides source of finance to the firm and in exchange expects repayment of their loans on schedule. The stockholders supply the firm’s capital and in return expects a maximized risk-adjusted return from their investment. Employees and managers help firms with required skills, time, as well as human capital requirements in exchange they anticipate good working condition, fair income and remunerations. Customers provide the source of revenue to the firms and in exchange expect to have value for money and satisfactory services. Suppliers are input providers to the firm, and hence expect fair prices and dependable buyers. Stakeholders normally differ with respect to their stake size in firms. The level of individual’s stake depends on the extent of his exchange of relationship and commitments with the firm which is based on specific asset investments (Williamson, 1984).

2.2.3 Cash Conversion Cycle Theory
Cash conversion theory was propounded by Blinder and Maccini (2001), cash conversion cycle theory is the time it takes a company to convert its resource inputs into cash. It evaluates how effectively a firm is managing its working capital. In most cases, a
company acquires inventory on credit, which results in accounts payable. A firm can also sell products on credit, which results in accounts receivable. Cash, therefore, is not involved until the firm pays the accounts payable and collects accounts receivable. So the cash conversion cycle measures the time between outlay of cash and cash recovery (Siddiquee, Khan & Shaem Mahmud, 2009). The shorter the cycle, the less time capital is tied up in the business processes, and thus the better for the company's bottom line (Wang (2002)).

The proponents of this theory argue that a short cycle allows a business to quickly acquire cash that can be used for additional purchases or debt repayment. Businesses attempt to shorten the cash conversion cycle by speeding up payments from customers and slowing down payments to suppliers. Cash conversion cycle can even be negative; for instance, if the company has a strong market position and can dictate purchasing terms to suppliers that it can postpone its payments (Brennan et al., 2003).

2.3 Empirical Review
Empirical research is that which depends upon the experience or observation of phenomena and events. This study was based on the existing relevant literature on working capital management and its effects on financial performance.

2.3.1 Receivables Management Practices and Firm Performance
Efficient receivables management augmented by a shortened creditor’s collection period, low levels of bad debts and a sound credit policy often improves the businesses’ ability to attract new customers and accordingly increase financial performance hence the need for
a sound credit policy that ensures value optimization (Subramony, 2009). Costs of cash discounts and costs of managing credit and credit collections constitute the carrying costs associated with granting a credit which increase when the amount of receivables granted are increased while lost sales resulting from not granting credit constitute the opportunity cost which decrease when the amounts of receivables are increased (Lazaridis & Dimitrios, 2005).

Mathuva (2010) conducted a descriptive study using correlational analysis on the influence of working capital management components on corporate profitability within the listed firms in Kenya. The study revealed that there exists a highly significant negative relationship between the receivable management and profitability hereby reflecting that more profitable firms take the shortest time to collect cash from their customers. The study also revealed that there exists a highly significant positive relationship between the period taken for inventory to be converted into sales vis a vis profitability.

Findings by a study indicated that receivables form a large percentage of the net operating profit. In a study on the relationship between working capital management and financial performance of oil marketing firms in Kenya, the regression analysis showed that oil companies in Kenya had huge investments in inventory and high level of borrowings and consequently, low net of investments in current assets (Mutungi, 2010).
A correlation study in Pakistan by Raheman and Nasr (2007) found that the coefficient on accounts receivable was negative and highly significant. In order to reduce agency problems, the management of a company may strive to minimize the time it takes to receive cash from customers. Sayaduzzaman (2006) also established that the accounts collection period is negatively correlated with all liquidity ratios except the net profit margin although not statistically significant. All these results show that there is a negative relationship between liquidity and accounts receivables.

Lazaridis and Tryfonidis (2006) use a regression model on listed firms in Athens with findings showing that managers can improve liquidity and reduce agency problems by reducing the credit period granted to their customers. These models imply that the higher the profits should lead to more accounts receivable, because companies with higher profits have more cash to lend to customers.

Although accounts receivables are short-term in nature, the policy decisions that create accounts receivables often have a long-term impact on the organization and its financial structure, because, once a receivables policy is determined, it is difficult to come out of it except at the cost of adverse market reactions. Besides, credit policy decisions are part of an integrated approach, and interface actively with production, marketing and finance functions of an enterprise (Samiloglu & Dermigunes, 2008).

However, with growing complexity, payment ambiguity and other factors that drive up costs in service delivery, the management of accounts receivable process continues to
demand more attention (John, 2007). The primary goal of accounts receivables management is to maximize the value of the enterprise by striking a balance between liquidity, risk and profitability. A significant part of receivables management involves the proper selection of customers, because every credit sale involves the risk of delayed payment or non-payment of the value involved (Garcia-Terual & Martinez-Solano, 2007).

2.3.2 Cash Management Practices and Firm Performance

A correlational study by Nyabwanga (2011) focused on the effect of working capital management on financial performance with specific reference to Small Scale Enterprises (SSE’s) in Kisii South District Kenya. Consequently, the findings of the study were that, cash management practices were low amongst SSEs as majority had not adopted formal working capital management routines and their financial performance was on a low average. The study also revealed that SSE financial performance was positively related to efficiency of cash management (ECM), efficiency of receivables management (ERM) and efficiency of inventory management (EIM).

Maathai (2010) sought to establish the relationship between working capital management and profitability of retail supermarket chains in Kenya. Her study consisted of 6 retail supermarket chains in Kenya. The objective of the study was to determine whether there exists a relationship between WCM and profitability. The study showed that in the retail sector, WCM has a significant impact on profitability of firms and plays a big role in value creation for Shareholders as longer cash conversion cycle and average collection period have a negative impact on net operating profitability of a firm.
Discussions by Lazaridis and Tryfonidis (2006) have investigated the relationship between working capital management and corporate profitability of listed companies in the Athens Stock Exchange, where a sample of 131 listed companies for the period of 2001-2004 was used to examine this relationship. The result from regression analysis indicated that there was a statistical significance between profitability, measured through gross operating profit, and the cash conversion cycle. From those results, they claimed that the managers could create value for shareholders by handling correctly the cash conversion cycle and keeping each different component to an optimum level. It asks for continuous monitoring to maintain the optimum level of various components of working capital, such as cash receivables, inventory, and payables (Afza & Nazir, 2009). Thus, ensuring the company attains its targeted profitability index.

Teruel and Solano (2007) tested the effects of working capital management on SME profitability by using 8,872 small and medium-sized enterprises of the period 1993-2002 and demonstrate that managers can create value to firms and shareholders by reducing the number of days in inventory and accounts receivable and by shortening the cash conversion cycle, firms’ profitability significantly improves.

In a study conducted to determine the effect of working capital management on profitability of Indian firms, Sharma and Kumar (2011) used a sample of 263 non-financial firms listed on the Bombay Stock Exchange during 2002 to 2008. Data were analysed using OLS multiple regression. The study found a positive relation between WCM and firm profitability, although the relationship between cash conversion cycle and
ROA was not statistically significant. The study also found that account receivables are also positively related to ROA and that account payables are negatively related to ROA. The results assert that Indian firms can increase Profitability by increasing cash collection cycle.

Deloof (2003) found out through statistics from the National Bank of Belgium that in 1997 accounts payable were 13% of their total assets while accounts receivables and inventory accounted for 17% and 10% respectively. Summers and Wilson (2000) report that in the UK corporate sector more than 80% of daily business transactions are on credit terms. There seems to be a strong relation between the cash conversion cycle of a firm and its profitability. Therefore, it is up to the individual company whether a ‘marketing’ approach should be followed when managing the working capital through credit extension. However, the financial department of such a company will face cash flow and liquidity problems since capital will be invested in customers and inventory respectively. Thus, the strategy adopted by the management should be carefully analysed since it has a direct effect on company profitability.

Study done by Raheman and Nasr (2007) selected a sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of 6 years from 1999-2004 to study the effect of different variables of working capital management on the net operating profitability. From result of study, they showed that there was a negative relationship between variables of working capital management including the average collection period, inventory turnover in days, average collection period, cash conversion cycle and
profitability. Besides, they also indicated that size of the firm, measured by natural logarithm of sales, and profitability had a positive relationship.

Finally, Afza and Nazir (2009) made an attempt to investigate the traditional relationship between working capital management policies and a firm’s profitability for a sample of 204 non-financial firms listed on Karachi Stock Exchange (KSE) for the period 1998-2005. The study found significant difference among their working capital requirements and financing policies across different industries. Moreover, regression result found a negative relationship between the profitability of firms and degree of aggressiveness of working capital investment and financing policies. They suggested that managers could increase value if they adopt a conservative approach towards working capital investment and working capital financing policies.

2.3.3 Inventory Management Practices and Firm Performance
Deloof (2003) and Ajilore (2009) found out that there is a negative relationship between liquidity and inventory conversion period. This implies that the longer the time inventory is tied in the company, the less the amount of working capital available and hence, the lower the profit. At the same time, holding inventories for a longer period of time in the company may lead to increased transaction cost in the company. This has a negative effect on the liquidity of the company. By holding inventories for too long, agency problems may arise since the company is not maximizing the return on the shareholders’ investment.
However, Lazaridis and Tryfonidis (2006) found the negative relationship between the inventory period and liquidity not being statistically significant. Raheman and Nasar (2007) found that the coefficient of inventory turnover in days is negative and highly significant. They further deduce that if inventory takes more time to sell, it will adversely affect firm performance. Deloof (2003) explained that the negative relation between inventory and liquidity can be caused by declining sales, leading to lower profits and more inventories. AutuKaite and Molay (2011) found out that there are some other methods that can ease inventory management such as order quantity method and just-in-time Inventories.

2.3.4 Management of Trade Payables and Firm Performance

Raheman and Nasr (2007) found that the coefficient on accounts receivable was negative and highly significant. In order to reduce agency problems, the management of a company may strive to minimize the time it takes to receive cash from customers. Sayaduzzaman (2006) also established that the accounts collection period is negatively correlated with all liquidity ratios except the net profit margin although not statistically significant. All these results show that there is a negative relationship between liquidity and accounts receivables.

Lazaridis and Tryfonidis (2006) explained that these findings show that managers can improve liquidity and reduce agency problems by reducing the credit period granted to their customers. These models imply that the higher the profits should lead to more accounts receivable, because companies with higher profits have more cash to lend to
customers. This is confirmed by Deloof & Jegers (1996), who found that Belgian companies with a shortage of cash reduce their investment in accounts receivable.

Mutungi (2010) sought to find out the relationship between working capital management and financial performance of oil marketing firms in Kenya registered with the petroleum institute of East Africa within Nairobi and its environs. Her sample consisted of 59 registered oil marketers in Kenya. She noted that management of trade payables decisions have a huge effect on the company’s risk, return and share price.

Study conducted by Uyar, (2009) documents that there is a negative relationship between accounts payable and profitability this is consistent with the view that less profitable firms wait longer to pay their bills. This is also in line with other scholars who argue that there is a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion. These results suggest that managers can create value and increase profitability for their firms by reducing the number of day’s accounts receivable and inventories to a reasonable minimum.

Kiilu (2010) conducted a survey on the working capital management practices among large building construction firms in Kenya. The survey revealed that a majority of surveyed firms had a written statement of leading the amount of cash to hold. i.e. both petty cash and cash at bank. The firms that didn’t have a written statement said that the
cash requirement at a given time determined the amount of cash to hold. One of the main working capital management practices that was observed was the use of cash budgets.

Most studies suggest that paying payables closer to the due date is the best practice (Deloof, 2003; Lazaridis & Tryfonidis, 2006; Sayaduzzaman, 2006; Garcia-Teruel & Martinez-Solano, 2007; Raheman & Nasr, 2007; Falope & Ajilore, 2009). These findings are pegged on the belief that shortening the accounts collection period improves company firm performance. Companies may also opt to the accounts collection period due to competition. This is as a result of intense competition in the industry where companies are forced to grant discounts to their customers to encourage early payments. Conversely, if the bargaining power of customers is high, then a company may be forced to relax its credit policy by lengthening the time it takes to collect payments from its customers. Zinger (2009) called for a careful and an effective analysis of the credit policy especially during periods of credit crisis.

2.5 Summary
Prior studies reported that working capital management may have an important effect on the firm’s financial performance. Shin & Soenen (1998), Lazaridis & Tryfonidis (2006), Raheman & Nasr (2007), among others, measured working capital with cash conversion cycle, which consists of stockholding period, debtors’ collection period and creditors’ payment period. These researchers supported that greater investment in working capital (the longer cash conversion cycle) leads to reduction in the firm’s profitability (Banos-Caballero, 2010, and Nazir & Afza, 2009).
Deloof (2003) used a sample of Belgian firms and found that firms can increase their profitability by reducing the debtor’s collection period and the days-in-inventory period. Wang (2002) used a sample of Japanese and Taiwanese firms and found that a shorter cash conversion cycle would lead to a better firm’s operating performance. Teruel & Solano (2007) took samples of small to medium-sized Spanish firms for the 1996-2002 periods and found that the firms can create value by reducing the days in inventory period and the debtor’s collection period, thus leading to the reduction in the cash conversion cycle.

Summers and Wilson (2000) also stated that more than 80% of the daily business transactions in the UK corporate sector is on credit terms. Deloof (2003) showed that a relatively huge amount of firms’ assets are reserved for working capital. As it can be seen from the aforementioned empirical evidence, there are inconclusive and inconsistent results with regard to the role of working capital management on firms’ financial performance. This is due to the fact that researchers used either the conversion cycle as it relates to the firm’s profitability or they examined only part of the components of the conversion cycle.

2.6 Conceptual Framework
The study developed a conceptual framework to show the relationship between the dependent and independent variables. The independent variables were components of working capital management. These included receivables management practices, cash management, trade payables and Inventory Management. The dependent variable was financial performance. This was determined in terms of inventory holding period,
accounts receivable period, cash conversion period and accounts payable period and financial performance of the colleges. This conceptual framework is shown on figure 2.1.

**Figure 2.1 Conceptual Framework**

Source: (Author, 2016)
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction
This chapter sets out various stages and phases that are followed in completing the study. It covers an overall scheme, plan or structure conceived to aid the researcher in answering the research questions. The chapter specifically has the following subsections; Research design, Target population, Sampling design and sampling frame, data collection Instruments, Data collection procedures and data analysis procedures.

3.2 Research Design
Research design is the scheme outline or plan that was used to generate answers to the research problems (Creswell, 2003). The study adopted a descriptive survey research as it enables the identification and classification of the elements or characteristics of the subject. This was achieved by the fact that the study attempted to describe such things as possible behaviour, attitude, values and characteristics. Further, the descriptive survey is best suited to the study because it allowed the researcher to gain the in-depth information on the working capital management practices in the Middle level Colleges within a relatively short period.

3.3 Target Population
The target population should have some observable characteristics to which the researcher intends to generalize the results of the study (Mugenda and Mugenda, 2003). The target population of this study comprised all Middle level Colleges in Eldoret town that are Registered by the Ministry of Higher Education, Directorate of Technical
Training. According to Ministry of education (2015) there are a total of 43 Middle level Colleges in Eldoret town. The list of the Middle Level Colleges is shown in Appendix III.

3.4 Sampling Design and Sampling frame
According to (Saunders, Lewis and Thornhill, 2009) a census approach enhances validity of the collected data in that the technique is used when there are relatively few number of respondents. Further, private Middle Level Colleges are owned by private proprietors and therefore they are likely to have differences in objectives, operations and management structure, it inclusion provide the study with certain information-rich cases. The study focused on the financial managers/or owner and the Accountants as the respondents who are charged with the duty of managing the colleges’ finances especially the day-to-day operating funds.

A total of 43 registered Middle Level Colleges that represent 100 % of the population were targeted in collection of primary data. Two respondents were used for each of the colleges’ existing at Eldoret Town using random sampling technique.

<table>
<thead>
<tr>
<th>Table 3.1 Target Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
</tr>
<tr>
<td>Owners/Finance Manager</td>
</tr>
<tr>
<td>Financial Accountant/Finance officer</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Source: Researcher (2017)
3.5 Data Collection Instruments

3.5.1 Questionnaire
The study used questionnaires as the tools for data collections. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purposes of gathering information from respondents (Mugenda & Mugenda, 1999). The instrument accorded the researcher the position to replicate results with the close-ended answers with the respondents being able to explain further their experiences in the case of open-ended questions.

3.5.2 Documentary analysis
The study used document analysis in order to gauge the financial performance of the colleges. Thus, the study reviewed secondary data in order to obtained the financial reports of the targeted Middle Level Colleges. The researcher assumed that the financial reports of the Middle level colleges were audited in order to obtain the viable information for this study. Secondary data is the data that have been already collected by and readily available from other sources.

3.6 Validity and reliability of the instruments
Validity addresses the critical issue of the relationship between a concept and its measurement (Depoy & Gitlin, 2011) and is also concerned with the issue of the authenticity of the cause-and-effect relationships (internal validity), and their generalizability to the external environment (external validity) (Sekaran & Bougie, 2010). Reliability is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of a measure. Reliability indicates
the extent to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items (Sekaran & Bougie, 2010).

### 3.6.1 Pilot Testing

The researcher carried out a pilot study in order to pre-test the validity and reliability of data to be collected using the questionnaire. Validity is defined as the degree to which a test measures what it is supposed to measure (Key, 1997). The tendency towards consistency found in repeated measurements is referred to as reliability (Bryman & Bell, 2003).

The researcher selected two colleges, that is on-Rift Valley Technical Training Institute and The Eldoret Polytechnic in Eldoret town for pilot testing in order to test the validity of the research instrument. The clarity of the instrument items to the respondents is necessary to enhance the instrument’s validity and reliability. Furthermore, the aim was to correct inconsistencies arising from the instruments, which were to ensure that they measure the intended result.

### 3.6.2 Validity of the instruments

Though the records are reliable, there are often inconsistencies and inaccuracies, therefore there is a need also to examine the method by which the data were collected and try to ascertain the precision needed by the original (primary) user (Saunders et al., 2009). To assess the validity of the documents, the research made a quick assessment of the source of the data and assessing the authority or reputation of the source. Since the
records reflects the original information as gathered from the primary sources, the data collection instruments can therefore be considered have validity due to their nature.

3.6.3 Reliability of the instruments
Sekaran and Bougie (2010) defined reliability as an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of a measure. The reliability and validity of secondary data are functions of the method by which the data were collected and the source. The important aspect is the entity that is concerned or responsible for the data and to be able to ascertain the reliability of the source of information. In cases where, data in printed publications, it is usually reasonably straightforward that the data can be taken to be reliable (Saunders et al., 2009). After analysis the reliability test became 0.789 which is above the threshold of 0.7 according to chronbach alpha.

3.7 Data Collection Procedures
Before the commencement of the data collection procedure, the researcher sought an introductory letter from the university and regulatory permit from the National Commission on Science, Technology and Innovation (NACOSTI) in order to aid him in seeking access to financial records. Through this, the researcher was able to gain access to the management of the colleges and allow for ease of data collections.

A questionnaire was self-administered hence the researcher despatched them to the respondents, gave them time to complete and then collected them at a later date. The use of a closed ended questionnaire eased up the data collection procedure while saving time.
3.8 Data Analysis and Presentation

After field work, the researcher sorted the fully completed ones and discarded the incomplete ones. The data sheets were then verified and coded. Once the data had been coded, the researcher then analysed data through descriptive and inferential statistics.

The study then used both descriptive and inferential statistical techniques. Descriptive statistics describes the definitive nature of the variables and is carried out through frequency distribution, percentages, means and standard deviation, while inferential statistics used during the study, while correlation, and linear regression analysis. Once data analysis was complete, the information was presented in form of tables, charts, bar graphs, pie charts and frequency tables.

Correlation measures the association between the dependent variable and the independent variables while the regression analysis was used to determine the strength of the relationship between two variables. The correlation analysis was used to measures the associations between the working capital management practises and financial performance of Middle level Colleges while the linear regression analysis was used to determine the strength and direction of the relationship between the predict the working capital management practises and financial performance of Middle level Colleges. This approach was suitable since it explains the causality in the relationships among the various variables in a more efficient manner bringing out the relationship between the key variables in the study.
3.8.1 Study Model
Linear regression analysis was done for Cash conversion cycle, Inventory holding Period, credit collection period and accounts payable period to investigate further, the association between the working capital measures and the financial performance measures.

**Direct relationship**

\[ Y = \beta_{0i} + \beta_i X_i + \varepsilon, \]

Where, \( \beta_{0i} \) is the overall effect of the independent variable on \( Y \); \( \beta_{0i} \) is the intercept for the linear equation and \( \varepsilon \) is the corresponding residuals in the equation (Fairchild & Mackinnon 2009).

The overall regression is as shown below;

\[ Y= \beta_0 + \beta_{1}X_{1}+ \beta_{2}X_{2}+ \beta_{3}X_{3} + \beta_{4}X_{4} + \varepsilon, \]

Where; \( Y \) = Financial performance of private TVET institutions as expressed by operating margin

\( \beta_0 \) = Intercept, which is the value of \( Y \) when \( X \) values are zero.

\( X_1 \) = Cash conversion cycle (CCC)

\( X_2 \) = Inventory holding period

\( X_3 \) = Account receivable period (ARP)

\( X_4 \) = Accounts payable period (APP)

\( \pi \) = Error term normally distributed about the mean of zero

\( \beta_1, \beta_2, \beta_3, \) and \( \beta_4 \) are coefficients for CCC, IHP, ARP and APP respectively.

3.8.2 Operationalization and Measurement of Variables
Operationalizing is done by looking at the behavioural dimensions, facets, or properties denoted by the concept which are then translated into observable and measurable elements so as to develop an index of measurement of the concept (Sekaran & Bougie, 2010). The study will adopt indicators from earlier studies as shown in Table 3.2.
The financial performance measures are the dependent variable and Working capital Management measures are the independent variables. This study used operating margins as a proxy for financial Performance. The major determinants (independent variables) which are Cash Conversion Cycle (CCC), Inventory Holding Period (IHP), Accounts Receivable Period (ARP), and Accounts Payable Period (APP) affects the financial performance (dependent variable) of Middle level Colleges. The Inventory Holding Period, Accounts Receivable Period and Accounts Payable Period were used as proxies for inventory policy, collection period policy and payment policy respectively.

### Table 3.2: Operationalization and measurement of variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Operationalization</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial performance</td>
<td>Dependent</td>
<td>Operating margin ratio</td>
<td>Operating margin = ( \frac{\text{Net income}}{\text{Net sales}} )</td>
</tr>
<tr>
<td>Accounts payables</td>
<td>Independent</td>
<td>Account payable period(APP)</td>
<td>APP = ( \frac{\text{Accounts Payable}}{\text{Cost of sales}} \times 365 )</td>
</tr>
<tr>
<td>Accounts receivables</td>
<td>Independent</td>
<td>Account Receivable Period(ARP)</td>
<td>ARP = ( \frac{\text{Accounts Receivable}}{\text{Sales revenue}} \times 365 )</td>
</tr>
<tr>
<td>Inventory</td>
<td>Independent</td>
<td>Inventory Holding Period(IHP)</td>
<td>IHP = ( \frac{\text{Inventory}}{\text{Cost of sales}} \times 365 )</td>
</tr>
<tr>
<td>Cash management</td>
<td>Independent</td>
<td>Cash Conversion Cycle(CCC)</td>
<td>CCC = Days inventory outstanding + Days sales outstanding - Days payable outstanding</td>
</tr>
</tbody>
</table>

**Source:** Researcher, (2016)

### 3.9 Ethical Considerations

To ensure that the study complies with the ethical issues pertaining research undertaking, a legal and data supplier access requirements on secondary use of datasets was complied with, including provisions relating to presumed consent and potential risk of disclosure of sensitive personal information.
A full disclosure of all the activities concerning the study were provided to the authorities and this involved the study intention which is only for learning purposes. A high level of confidentiality and privacy was observed and the findings of the study are submitted to the University.
CHAPTER FOUR: DATA PRESENTATION AND DISCUSSION

4.1 Introduction
The focal point of this chapter is the summary and the presentation of the data analysed.

It will start with the presentation of the demographic information of the respondents, descriptive statistics and later the inferential statistics. The researcher managed to administer a total of 86 questionnaires to at least two individuals in the finance department of the Middle Level Colleges in Eldoret Town. After sorting and verification, a total of 74 questionnaires were deemed to have sufficient information for analysis, thus representing a total of 86 per cent return rate.

4.2. Demographic Information
4.2.1 Demographic information of the respondents
The demographic information helps the researcher understand the general view of the respondents and composed of the individual and organizational components. The entire respondent’s demographic information is presented in Tables 4.1 and 4.2.

Table 4.1: Respondent’s Demographic Information

<table>
<thead>
<tr>
<th>Gender of the respondents</th>
<th>Number of respondents</th>
<th>Percentage</th>
<th>Cumulative percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>40</td>
<td>54.1</td>
<td>54.1</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>45.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Number of respondents</th>
<th>Percentage</th>
<th>Cumulative percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>31</td>
<td>41.9</td>
<td>41.9</td>
</tr>
<tr>
<td>Degree</td>
<td>32</td>
<td>43.2</td>
<td>85.1</td>
</tr>
<tr>
<td>Masters</td>
<td>11</td>
<td>14.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data(2017)
The Table 4.1 show the primary demographic information of the respondents touching on their gender, age distribution and education level. The survey showed that there are more male respondents than there were females ones. As can be seen 54 per cent of the respondents were male with the remaining 46 per cent being female. This shows that the study captured more male respondents than the female ones indicating that the institutions hire more male individuals as compared to female compatriots.

The distribution of the educational level showed that 43.2 per cent of the respondents had a bachelor’s degree, while 41.9 per cent had a diploma level with the remaining 14.9 per cent having master’s level of education. Since the majority of individuals working at the institutions had a diploma or degree level of education, the implications are that the owners of these institutions preferably hire persons with degree or diploma levels of education.

<table>
<thead>
<tr>
<th>Age of the respondents</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 to 29 Years</td>
<td>13</td>
<td>17.6</td>
<td>17.6</td>
</tr>
<tr>
<td>30 to 34 Years</td>
<td>17</td>
<td>23.0</td>
<td>40.5</td>
</tr>
<tr>
<td>35 to 39 Years</td>
<td>22</td>
<td>29.7</td>
<td>70.3</td>
</tr>
<tr>
<td>40 to 44 Years</td>
<td>19</td>
<td>25.7</td>
<td>95.9</td>
</tr>
<tr>
<td>Over 45 years</td>
<td>3</td>
<td>4.1</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of experience</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
<td>4</td>
<td>5.4</td>
<td>100.0</td>
</tr>
<tr>
<td>2 to 5 Years</td>
<td>24</td>
<td>32.4</td>
<td>32.4</td>
</tr>
<tr>
<td>5 to 9 Years</td>
<td>27</td>
<td>36.5</td>
<td>68.9</td>
</tr>
<tr>
<td>Over 10 Years</td>
<td>19</td>
<td>25.7</td>
<td>94.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Source:** Research Data(2017)
Table 4.2 shows the distribution of the respondents as per the age and the years of experience. The respondents were distributed as per the following age groups; 29.7 per cent fell in the age group 35 to 39 years, 25.7 per cent were aged between 40 to 44 years, with a further 23 per cent were aged between 30 to 34 years with the remaining percentage being 45 years. The age distribution indicates that these institutions have employed moderately young individuals a fact that may be associated with the age distribution of the general working Kenyan population.

Furthermore, the distribution shows that majority of the respondents, 36.5 per cent had worked for 5 to 9 years, 32.4 per cent had 2 to 5-year experience while a quarter of them had worked for over 10 years. The distribution could be attributable to the nature of employment systems within the educational institutions. Individuals who have worked in the same institution for longer periods of time tend to advance their managerial skills and thus the distribution indicates that majority have gained a prerequisite skill that enables to effectively managing the working capital of their institutions.

4.3 Descriptive Statistics on Working Capital Management Practises

4.3.1 Accounts Receivables

Accounts receivables relates to the cash and cash equivalents that the institution acquires from its customers or debtors in exchange for the firm’s product offerings. A shown in Figure 4.1 the sources of receivables as per the respondent’s views show that tuition fees forms the largest source of receivables at 67 per cent, with a further 18 per cent being return of investments and 15 per cent coming from loans and interest from financial
institutions. For instances, Belgian non-financial firms have invested large amounts of cash invested in working capital in accounts receivables and inventories (Deloof, 2003).

![Source of Receivables](image)

**Figure 4.1 Source of Receivables**
*Source: Research Data (2017)*

### 4.3.2 Risk Management Policy
Risk management policy is a strategy that is used by organizations to pre-empt variability in the revenues and it serves to aid the organization plan for any eventuality. The chart in Figure 4.2 shows the distribution of respondents’ view on the aspect of risk management policy. The chart shows that 57 per indicated that a risk management policy exist in their institutions, while 17 per cent believed that there was no risk management policy with a further 26 per cent did not know anything about a risk management policy. This distribution in perception shows that majority of the colleges have a risk management policy that guides the institutions on financial risks. However, empirical evidence by Stulz (2010) shows that the practice of risk management is limited and does not
correspond to the prescriptions of the academic literature. This suggests that there is no standard conventional risk management policy that can be applied uniformly.

![Risk Management Policy](image)

**Figure 4.2 Risk Management Policy**

*Source: Research Data (2017)*

### 4.3.3 Cash Management Aspects

Cash management aspect highlight the various techniques in which the institutions use to manage revenues flows. These techniques differ from organization to organization and include methods used to manage cash flows, budgeting components and many other aspects.
Table 4.3 Cash management Aspects

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rare</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination of cash balance</td>
<td>F</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>47</td>
<td>13</td>
<td>3.837</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>5.4</td>
<td>4.1</td>
<td>9.5</td>
<td>63.5</td>
<td>17.6</td>
<td>0.950</td>
</tr>
<tr>
<td>Preparation of cash budget</td>
<td>F</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>15</td>
<td>47</td>
<td>4.351</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>2.7</td>
<td>6.8</td>
<td>6.8</td>
<td>20.3</td>
<td>63.5</td>
<td>1.052</td>
</tr>
<tr>
<td>Occurrence of cash shortages</td>
<td>F</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>22</td>
<td>20</td>
<td>3.405</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>14.9</td>
<td>13.5</td>
<td>14.9</td>
<td>29.7</td>
<td>27.0</td>
<td>1.403</td>
</tr>
<tr>
<td>Occurrence of cash surplus</td>
<td>F</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>23</td>
<td>37</td>
<td>4.256</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>1.4</td>
<td>2.7</td>
<td>14.9</td>
<td>31.1</td>
<td>50.0</td>
<td>0.907</td>
</tr>
<tr>
<td>Excess cash invested</td>
<td>F</td>
<td>9</td>
<td>7</td>
<td>11</td>
<td>23</td>
<td>24</td>
<td>3.621</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>12.2</td>
<td>9.5</td>
<td>14.9</td>
<td>31.1</td>
<td>32.4</td>
<td>1.351</td>
</tr>
</tbody>
</table>

Source: Research data(2017)

As show in Table 4.3 show the various techniques used by the institutions according to the perceptions of the respondents. The distribution shows that 81 per cent of the respondents affirmed that cash balance determination takes place regularly. This indicates that there is regularity with which cash balances are determined and maintained. In the same extent, 83.8 per cent affirmed that cash budgets are prepared on a regular basis, thus confirming the basic cash management practise within.

Cash shortages occur in some instances as suggested by 56.7 per cent of the respondents, a fact that could be attributable to the nature of the business or the adopted business model in that revenues collection fluctuations are based entirely on demand and economic cycles. Likewise, there are instances where, cash surpluses occur as confirmed by 81 per cent of the respondents, a fact that could be attributable to the same reasons similar to those of cash shortages.
The excess cash is invested by the management as suggested by 63.5 per cent, a fact that is attributable to the practise of handling and management of excess cash in the organization. Studies on small scale enterprises indicate that cash management is critical issues in several Kenya firms based in Kisii town in that these firms hold cash and cash equivalents conservatively (Lwiki et al., 2013), however, empirical studies on Pakistani firms indicate that large amount of cash invested in working capital, therefore it is expected that the way in which working capital is managed will have a significant impact on the profitability of firms (Raheman & Nasr, 2007).

4.3.4 Surplus Cash Investment
Many organizations hold different approaches to management of surplus cash and this may include investments in various vehicles with desired returns. The chart in figure 4.3 shows the distribution on opinion touching on the issue of how the surplus cash was invested. Majority (54%) of the respondents affirmed that cash are invested in the banking system, while 18 per cent were invested in financial markets with a further 9 per cent using the cash for further business expansion. However, the remaining 19 per cent affirmed that surplus cash are invested elsewhere. This suggest that there are varied ways in which surplus cash can be invested by the management of the colleges, however, this is dependent on the rate of return on investments and the instincts of the decision makers. Cash is an indicator of continuing financial health of any institution and play a crucial role within the business and depending on the type of organization it can be invested in various investments vehicles such as deposits, government bonds and many other financial instruments (Padachi, 2006).
4.3.5 Tuition Fees as Accounts Receivables
Accounts receivables management compose of the different ways in which institutions handles the revenue flows. The chart on figure 4.4 shows that distribution of tuition fees as a percentage of accounts receivables. The figure indicates that 67.6 per cent of the colleges had tuition fees forming over 31 per cent of the receivables while 25.7 per cent had receivables comprising between 16 to 30 % with remaining 6.8 per cent having receivables made up of 1 to 15 %. Since tuition fees is the major revenue sources, the policy guidelines on tuition fee payment determine the amount of receivables over a certain period of time.
4.3.6 Receivable Policy

The receivable policy highlights the approach used by the institution to manage the debtor accounts. The distribution shown in Figure 4.5 highlights the perceptions of the respondents on the issue relating to the way these institutions manage debtors. Over 70 per cent of the colleges have a receivable policy of 31 days and over, with a further 20.3 per cent having a receivable policy of 16 to 30 days while 9.5 per cent having a receivable policy of less than 15 days. A receivable policy is set by the financial managers and as such it tends to vary, however, it is also influence by the prevailing business conditions and ongoing practises. A good accounts receivable policy is expected to reduce the number of days for the accounts that are due, however, as the number as the accounts receivables level increases, the level of cash flows that can be accessed by the organization decreases (Michalski, 2012).
4.3.7 Management of Bad Debts
Every organization whether for – profit or Not – for – profit has a portfolio of bad debts, that is, the amounts of monies due from customers whose payments have been delayed for one reason or another. The data figures in Figure 4.6 shows the distribution of bad debts as accounts receivables. The data shows that 86.5 per cent of the colleges had bad debts comprising 10 per cent and less of the receivables with the remaining 12.2 per cent of the colleges having bad debts forming between 11 to 20 per cent. Bad debts are a function of the policy guidelines on accounts receivables but are also influenced by the management. Empirical evidence indicates that management of bad debt in organizations have taken a conservative approach a practice which the firms repeatedly over accrue bad debt expense (Jackson & Liu, 2010).
4.3.8 Account receivable management

Accounts receivable management incorporates all the various ways that the institutions uses to ensure that customers pay their invoices. Good receivables management helps prevent overdue payment or non-payment and therefore a quick and effective way to strengthen the company's financial or liquidity position.
Table 4.4 Accounts Receivable Management

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rare</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment insistence</td>
<td>F</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>32</td>
<td>22</td>
<td>3.837</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>1.4</td>
<td>16.2</td>
<td>9.5</td>
<td>43.2</td>
<td>29.7</td>
<td>1.073</td>
</tr>
<tr>
<td>Credit guidelines</td>
<td>F</td>
<td>4</td>
<td>11</td>
<td>7</td>
<td>37</td>
<td>15</td>
<td>3.648</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>5.4</td>
<td>14.9</td>
<td>9.5</td>
<td>50.0</td>
<td>20.3</td>
<td>1.127</td>
</tr>
<tr>
<td>Prompt invoicing</td>
<td>F</td>
<td>7</td>
<td>1</td>
<td>6</td>
<td>37</td>
<td>23</td>
<td>3.918</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>9.5</td>
<td>1.4</td>
<td>8.1</td>
<td>50.0</td>
<td>31.1</td>
<td>1.143</td>
</tr>
<tr>
<td>Receivables review</td>
<td>F</td>
<td>3</td>
<td>21</td>
<td>16</td>
<td>26</td>
<td>8</td>
<td>3.203</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>4.1</td>
<td>28.4</td>
<td>21.6</td>
<td>35.1</td>
<td>10.8</td>
<td>1.097</td>
</tr>
<tr>
<td>Bad debt review</td>
<td>F</td>
<td>10</td>
<td>5</td>
<td>9</td>
<td>38</td>
<td>12</td>
<td>3.500</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>13.5</td>
<td>6.8</td>
<td>12.2</td>
<td>51.4</td>
<td>16.2</td>
<td>1.241</td>
</tr>
<tr>
<td>Overdue notices</td>
<td>F</td>
<td>0</td>
<td>6</td>
<td>13</td>
<td>31</td>
<td>24</td>
<td>3.986</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>0</td>
<td>8.1</td>
<td>17.6</td>
<td>41.9</td>
<td>32.4</td>
<td>0.914</td>
</tr>
<tr>
<td>Asset attachment</td>
<td>F</td>
<td>17</td>
<td>35</td>
<td>18</td>
<td>4</td>
<td>0</td>
<td>2.122</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>23.0</td>
<td>47.3</td>
<td>24.3</td>
<td>5.4</td>
<td>0</td>
<td>0.827</td>
</tr>
</tbody>
</table>

Source: Research Data (2017)

The data information in table 4.4 shows the distribution of perceptions concerning accounts receivables. The colleges are insisting on payment as affirmed by 73 per cent of the respondents. Insistence on payment is one of ways in which the firms can manage accounts receivables. With the aid of credit guidelines, a firm will be able to reduce the accounts receivable to an optimum level which is conducive to the business. Majority (81.1%) of the respondents affirmed that many colleges practise prompt invoicing as ways to aid in the management of receivables. On the issue concerning, the aspect of receivables review is not done in many colleges since the views were divided. Since most educational institutions are concerned with their cash balance because they can survive only as long as they have sufficient cash to sustain their services, therefore they need to monitor collection rates on their net receivables in order to ensure an adequate cash flow (Chabotar, 2009).
As confirmed by 66.6 per cent of the respondents, review of bad debts takes place regularly. Management of receivables also calls for the review of bad debts in order to identify and delineate into good and bad debts. Notices for overdue debts are put up and circulated with the intention of calling for the settlement of account receivables. Instances of asset attachment are rare if not few in the colleges because of the nature of revenue collection. Further, Juan García-Teruel & Martinez-Solano (2007) assert that organizations can create value by reducing the number of days of account receivables as this will optimize the balance of receivables that the organization has (Lwiki et al., 2013).

4.3.9 Accounts Payable Management

The accounts payable of an organization forms an important working capital account therefore the effective management of accounts payable can enhance a company's short-term cash flow position through the design of optimal timing of payments to suppliers.

Table 4.5 Accounts Payable Management

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rare</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit purchases</td>
<td>F 0</td>
<td>7</td>
<td>12</td>
<td>36</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>% 0</td>
<td>9.5</td>
<td>16.2</td>
<td>48.6</td>
<td>25.7</td>
<td>3.905</td>
<td>0.894</td>
</tr>
<tr>
<td>Payment policy</td>
<td>F 6</td>
<td>5</td>
<td>10</td>
<td>35</td>
<td>18</td>
<td>3.729</td>
<td>1.150</td>
</tr>
<tr>
<td></td>
<td>% 8.1</td>
<td>6.8</td>
<td>13.5</td>
<td>47.3</td>
<td>24.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable review</td>
<td>F 1</td>
<td>12</td>
<td>8</td>
<td>41</td>
<td>12</td>
<td>3.689</td>
<td>0.978</td>
</tr>
<tr>
<td></td>
<td>% 1.4</td>
<td>16.2</td>
<td>10.8</td>
<td>55.4</td>
<td>16.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creditor are paid on time</td>
<td>F 1</td>
<td>0</td>
<td>3</td>
<td>20</td>
<td>50</td>
<td>4.608</td>
<td>0.637</td>
</tr>
<tr>
<td></td>
<td>% 1.4</td>
<td>0</td>
<td>4.1</td>
<td>27.0</td>
<td>67.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data (2017)

The information on table 4.5 highlights the distribution of responses on accounts payable management. The colleges use credit purchases as affirmed by 74.3 per cent of the
respondents. Many at times credit purchasing is a useful practise in the management of working capital in that it allows for efficiency use of cash resources. Majority (71.6%) of the respondents affirmed the presence of a payment policy in the institutions. Accounts payable payment policy helps in the management of working capital by aiding in decision touching on cash disbursements. These colleges seem to carry out a review on accounts payable on a regular basis, a fact that was affirmed by 71.6 per cent of the respondents.

Empirical studies show that in aggregate, the volume of trade credit forms a significant part (17.8%) of total assets for all American firms while in Germany, France and Italy, trade credit represents more than a quarter of total corporate assets, while in the United Kingdom 70% of total short-term debt (credit extended) and 55% of total credit received by firms is made up of trade credit (Bougheas, Mateut & Mizen, 2009) while in Belgian firms, it is 13% of total assets of these firms(Deloof, 2003) Further, the use of credit within the institutions is usually guided by policies which guide the firm on the best approaches to management of the accounts payable. Any change in the level of accounts receivables in a non-profit organization increases the net working capital level and influences costs of holding and managing accounts receivables(Michalski, 2012).

4.3.10 Credit Advancement
Credit advances are forms of contractual agreement in which the institution agrees with the borrower to borrow in advances and repay the lender at some date in the future, generally with interest. Figure 4.7 shows the distribution advances of credit volume by the colleges. The data suggest that 49 per cent of the respondents believed that their institutions received large amounts of credit from the lending institutions, 8 per cent were
of the view that directors/partners while 35 per cent viewed other entities. This indicates that lending institutions forms the majority of the entities extending credit to these colleges. Study on Mauritius educational institutions tend to rely more heavily on owner financing, trade credit and short-term bank loans to finance their needed investment in cash, accounts receivable and inventory (Padachi, 2006) while Deloof, (2003) affirmed that some organizations keep a substantial amounts of short term payables as a source of financing.

Figure 4.7 Credit Volume Advances
Source: Research Data(2017)

4.3.11 Inventory management models
Inventory management models are conventions that attempt to inform the inventory needs and requirements with an aim of minimizing costs resulting from obtaining and holding inventory. Inventory control is an important part of working capital management and since there is no standard solution for management of inventory, however, there are several schools of thought that view inventory and its function differently (Ziukov, 2015).
The data in Figure 4.8 shows the perceptions of respondents on the inventory management model that the colleges use frequently. Majority (55%) of the respondents affirmed Just in Time (JIT) was the most commonly used method, with ABC method being secondly use while EOQ, ERP systems and other approaches being less used. Several inventory models are distinguished by the assumptions made about the key variables: demand, the cost structure, physical characteristics of the system. Some models are deterministic while others are static, however, there is a great deal of uncertainty and variability but each model has its benefits and disadvantages (Ziukov, 2015).

![Inventory Management Model](image)

**Figure 4.8 Inventory Management Model**  
**Source: Research Data (2017)**

### 4.3.12 Reorder Policy

A firm’s reorder is the method used to determine the most efficient way to order inventory. The chart in figure 4.9 shows that perception of the respondents on the issue
concerning presence of a reorder policy in the organization. As suggested by 64 per cent of the respondents, most of these institutions do not have a reorder policy. The indications are that these institutions carry few items of inventory for its operations and as such there is little use for a reorder policy.

Figure 4.9 Reorder Policy
Source: Research Data (2017)

4.3.13 Determinants of Re-order Quantity
Various firms have divergent bases to inform the re-order policy, and thus the chart in figure 4.10 highlights the determinants of the re-order quantities at the colleges. Evidently, there are three most primary determinants of re – order quantities which are ranked as follows; Demand based at 40.5 per cent, item availability at 33.8 per cent and shortage costs at 23 per cent. This implies that these institutions re – order when there is a demand for the item or that the items required are available.
**Determinants of Re-order Quantity**

**Figure 4.10: Determinants of Re-order quantity**

*Source: Research Data (2017)*

4.3.14 Inventory Management

Inventory management is the practice overseeing and controlling of the ordering, storage and use of components that a company uses in the production of the items it sells. Inventory management is also the practice of overseeing and controlling of quantities of finished products for sale. Large amounts of inventory may lead to higher sales while reducing the risk of stock outs, however, it locks up working capital(Deloof, 2003)
Table 4.6 Inventory Management

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rare</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of</td>
<td>F 1</td>
<td>6</td>
<td>0</td>
<td>50</td>
<td>17</td>
<td>4.027</td>
<td>0.827</td>
</tr>
<tr>
<td>inventory budgets</td>
<td>% 1.4</td>
<td>8.1</td>
<td>0</td>
<td>67.6</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of</td>
<td>F 2</td>
<td>14</td>
<td>7</td>
<td>20</td>
<td>31</td>
<td>3.865</td>
<td>1.231</td>
</tr>
<tr>
<td>inventory levels</td>
<td>% 2.7</td>
<td>18.9</td>
<td>9.5</td>
<td>41.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock taking</td>
<td>F 2</td>
<td>9</td>
<td>7</td>
<td>20</td>
<td>36</td>
<td>4.068</td>
<td>1.151</td>
</tr>
<tr>
<td>exercise</td>
<td>% 2.7</td>
<td>12.2</td>
<td>9.5</td>
<td>48.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock out instances</td>
<td>F 15</td>
<td>26</td>
<td>26</td>
<td>3</td>
<td>4</td>
<td>3.770</td>
<td>1.245</td>
</tr>
<tr>
<td></td>
<td>% 20.3</td>
<td>35.1</td>
<td>35.1</td>
<td>4.1</td>
<td>5.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory surpluses</td>
<td>F 6</td>
<td>10</td>
<td>2</td>
<td>31</td>
<td>25</td>
<td>3.797</td>
<td>1.271</td>
</tr>
<tr>
<td></td>
<td>% 8.1</td>
<td>13.5</td>
<td>2.7</td>
<td>41.9</td>
<td>33.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The figures in Table 4.6 show the perception of the respondents on the aspects of inventory management. The figures show that 90 per cent of these institutions prepare inventory budgets as and when required, a fact that is supported 68.9 per cent who affirmed that they were involved in the preparations of inventory levels. Majority (75.6%) affirmed that stock taking was a regular practise in their institutions. Further, these institutions suffer from few stock instances while at most times have surplus inventory in their stores. This indicates that these institutions have good inventory management practises. Inventory poses a significant investment in working capital and as such organizations should judiciously employ varied methods when managing its inventory (Chabotar, 2009). Therefore, organizations can reduce financing costs and/or increase the funds available for expansion by minimizing the amount of funds tied up in current assets (Filbeck & Krueger, 2005).
4.3.15 Considerations for Inventory Re-order
There are certain conditions in which firms use when re-ordering inventory. Some might be based on demand and supply factors while others are firm – specific aspects. The data in figure 4.11 highlights the considerations used when these colleges reorder inventory. As illustrated, supply is the most important considerations at 44.6 per cent with demand projections closely ranking up at 16.2 per cent but there are some instances where there are no definitive considerations.

![Considerations for Inventory Re-order](image)

**Figure 4.11 Considerations to Inventory Re-ordering**

**Source:** Research data(2017)

4.4. Statistics Information on Financial Data
4.4.1 Descriptive Statistics on Financial Information
The analysis produces descriptive statistics which highlight the means of the study variables. The statistics in table 4.7 relates to the mean statistics relating to the study
variables. The institutions had an average accounts receivable period of 36 days, while the average payment period being 31 days. The inventory holding period was on average 27 days with the cash conversion cycle being 33 days.

Table 4.7 Descriptive statistics on Financial Ratios

<table>
<thead>
<tr>
<th></th>
<th>ARP in days</th>
<th>APP in days</th>
<th>IHP in days</th>
<th>CCC in days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>31.03</td>
<td>36.06</td>
<td>27.48</td>
<td>33.36</td>
</tr>
<tr>
<td>SD</td>
<td>15.51</td>
<td>15.26</td>
<td>31.06</td>
<td>26.43</td>
</tr>
<tr>
<td>Maximum</td>
<td>93.59</td>
<td>99.86</td>
<td>165.78</td>
<td>154.98</td>
</tr>
<tr>
<td>Minimum</td>
<td>10.99</td>
<td>2.74</td>
<td>2.52</td>
<td>1.93</td>
</tr>
</tbody>
</table>

Source: Survey data(2017)

4.4.2 Inferential Statistics

The researcher used two statistical analysis tools, that is correlation and linear regression to determine the relationship between the variables.

Table 4.8 Correlation Statistics

<table>
<thead>
<tr>
<th></th>
<th>CCC</th>
<th>APP</th>
<th>ARP</th>
<th>IHP</th>
<th>Operating margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APP</td>
<td>.677*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARP</td>
<td>.683*</td>
<td>.595*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IHP</td>
<td>-.071</td>
<td>-.070</td>
<td>-.071</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Operating margin</td>
<td>.826*</td>
<td>.634*</td>
<td>.522*</td>
<td>-.025</td>
<td>1</td>
</tr>
</tbody>
</table>

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

The correlation statistics in table 4.8 show the relationship between the variable. The operating margin has a significant positive association with cash conversion cycle\(r = 0.826\), accounts payable \(r = 0.634\) and accounts receivable\( r = 0.522\). However, there is
no correlation between the operating margin and inventory management. The positive correlation between the operating margin and the variables; cash conversion cycle, accounts payable, and accounts receivable highlights the fact that any increase or decrease in these variables could be associated with a reduction or improvement in operating margin.

Due to the time lags between expenditures on inventory and accounts payables Deloof, (2003) found a positive relation between gross operating income on the one hand and the measures of WCM (accounts payable and accounts receivable and cash conversion cycle) on the other hand. While (Juan García-Teruel & Martinez-Solano, 2007) found a significant negative correlation between the return on assets and the number of days accounts receivable, days of inventory and days accounts payable as well as cash conversion cycle.

### Effect of Cash conversion cycle on operating margin

Table 4.9 Model Summary and ANOVA Table for CCC

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.826</td>
<td>0.859</td>
<td>.122</td>
<td>1</td>
<td>.122</td>
<td>18.291</td>
<td>.023</td>
</tr>
<tr>
<td>Regression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>.020</td>
<td></td>
<td>37</td>
<td>.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.143</td>
<td></td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Coefficients Estimate

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.228</td>
<td>.023</td>
<td>9.708</td>
<td>.000</td>
</tr>
<tr>
<td>CCC</td>
<td>.581</td>
<td>.202</td>
<td>.437</td>
<td>2.876</td>
</tr>
</tbody>
</table>
The statistic, \( F(1, 37) = 18.291, p< 0.05 \) indicates that the CCC explain the variation in the operating margin. The linear regression model shows positive \( R^2 = 0.859 \) which means that 85% change of operating margin is explained by CCC. However, the test on the beta coefficients of the resulting model shows that, the constant \( \beta_0 = 2.23 \), with the CCC (\( \beta_1 = 0.011, p < 0.05 \)). Thus, operating margin = 2.23 - 0.011 CCC, which implies that a unit increase in CCC reduces the operating margin by 0.01.

**Effect of ARP on operating margin**

Table 4.10 Model Summary and ANOVA Table for ARP

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.355</td>
<td>0.178</td>
<td>Regression</td>
<td>.029</td>
<td>1</td>
<td>.029</td>
<td>12.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>.080</td>
<td>37</td>
<td>.040</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>.109</td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients Estimate</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating margin</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.563287</td>
<td>.7797797</td>
<td>2.00</td>
<td>-1.7918</td>
</tr>
<tr>
<td>ARP</td>
<td>0.297803</td>
<td>.0114897</td>
<td>-0.85</td>
<td>3.059</td>
</tr>
</tbody>
</table>

The statistic, \( F(1, 37) = 12.72, p< 0.05 \) indicates that the ARP explain any of the variation in the operating margin. The linear regression model shows positive \( R^2 = 0.178 \) which means that 17.8 % change of operating margin is explained by ARP. However, the test on the beta coefficients of the resulting model shows that, the ARP (\( \beta_1 = 0.297, p < 0.05 \)). Thus, operating margin = 0.297 ARP. This implies that, a unit increase in ARP increases operating margin by 0.2973
Effect of APP on operating margin

Table 4.11 Model Summary and ANOVA Table for APP

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.522</td>
<td>0.103</td>
<td>Regression</td>
<td>.011</td>
<td>1</td>
<td>.011</td>
<td>16.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>.098</td>
<td>37</td>
<td>.049</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>.109</td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The statistic, F(1, 37) = 16.23, p< 0.05 indicates that the APP explain the variation in the operating margin. The linear regression model shows positive $R^2 = 0.1034$ which means that 10 % change of operating margin is explained by APP. However, the test on the beta coefficients of the resulting model shows that, the constant $\beta_0 = 1.51$, with the APP ($\beta_1 = 0.012$, p < 0.05). Thus, operating margin = 1.51 – 0.01 APP. This implies that, a unit increase in APP reduces operating margin by 0.01.

Effect of IHP on operating margin

Table 4.12 Model Summary and ANOVA Table for IHP

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.694</td>
<td>0.482</td>
<td>Regression</td>
<td>.069</td>
<td>1</td>
<td>.069</td>
<td>2.795</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>.074</td>
<td>37</td>
<td>.025</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>.143</td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The statistic, F(1, 37) = 16.23, p< 0.05 indicates that the APP explain the variation in the operating margin. The linear regression model shows positive $R^2 = 0.1034$ which means that 10 % change of operating margin is explained by APP. However, the test on the beta coefficients of the resulting model shows that, the constant $\beta_0 = 1.51$, with the APP ($\beta_1 = -0.012$, p < 0.05). Thus, operating margin = 1.51 – 0.01 APP. This implies that, a unit increase in APP reduces operating margin by 0.01.
The statistic, $F(1, 37) = 2.795$, $p > 0.05$ indicates that the inventory does not explain any of the variation in the operating margin.

Multiple regression analysis

**Effect of WCP on operating margin**

**Table 4.13 Model Summary and ANOVA Table for WCP**

<table>
<thead>
<tr>
<th>$R$</th>
<th>$R^2$</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.972</td>
<td>0.944</td>
<td>Regression</td>
<td>55.714</td>
<td>3</td>
<td>18.571</td>
<td>197.860</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>3.285</td>
<td>35</td>
<td>0.094</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>59.000</td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coefficients Estimates**

<table>
<thead>
<tr>
<th>Operating margin</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.028</td>
<td>.067</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>-.023</td>
<td>.006</td>
</tr>
<tr>
<td>Account receivables</td>
<td>.057</td>
<td>.009</td>
</tr>
<tr>
<td>Cash conversion cycle</td>
<td>-.003</td>
<td>.002</td>
</tr>
</tbody>
</table>

The statistic, $F(3, 35) = 197.860$, $p < 0.05$ indicates that the ACP, APP and CCC explains the variations in the operating margin. The linear regression model shows positive $R^2= 0.972$ which means that 97% change of operating margin is explained by ARP, APP and CCC. However, the test on the beta coefficients of the resulting model shows that, the constant $\beta_0= 0.028$, with the Accounts payables period ($\beta_1= -0.023$, $p < 0.05$), Accounts receivables period ($\beta_2= 0.057$, $p < 0.05$) and CCC ($\beta_3= -0.003$, $p < 0.05$).
Thus, operating margin = 0.028 - 0.23 APP + 0.057 ARP – 0.003 CCC.

This implies in the long – run, a unit increase in Account payable period reduces the operating margin by 0.023, a unit increase in the Accounts receivables period increases operating margin by 0.057 while a unit increase in CCC reduces operating margin by 0.003.

4.5 Discussion
Since working capital is quite essential for the operations of any business, its management can accrue tangible benefits to the business. However, its management tend to vary from business to business or industry to industry depending on the needs of the business. Raheman & Nasr(2007) found a negative relationship between working capital management and firm’s profitability.

In an educational sector where the business relies on subscription like revenues, low on capital intensive projects, the management of receivables is much easier as it calls for definite receivables over certain periods of time. The major sources of receivables in an education institution is the tuition fees, thus, the challenge to the institution is how it is able to tap into its revenue base regularly. Due to the nature of the business, the organizations face fewer business risks with the exception of economic shocks which are contingent on all economic sectors.

The major important aspect of the working capital management is how the firms manage its liquid assets. The findings show that instructions aptly manage its as per the prevailing
standards of preparations and management of budget, allocation of financial resources to the different projects. Further, a large percentage surplus cash is invested in forms of liquid cash, the challenge is that the returns derived from such investment vehicles is less than optimum or desired returns.

Tuition fees forms the majority of accounts and thus it is prone to business risk posed by the economic fluctuations. However, the institutions can overcome such risk by instituting strategies that may increase capacity utilization. There is also need for a accounts receivable policy that will provide guidelines on how due accounts can translate into working capital. A number of account receivable practices are being used by the institutions, thus the colleges can be said to be applying acceptable standards in its management of working capital.

In the same extent the institutions are also apt in its management of accounts payable which include a payment policy and disbursement patterns. The acceptance of such practices can aid the organization in efficient use of cash and by extension ensure good management of working capital.

With regard to inventory management, the practices used by the institutions are different from the one adopted by business firms, in that these organizations carry few inventory and thus its approaches to the management of the inventory are different. Due to existence of the opportunity to carry essential inventory which are dependent on the
immediate consumptions, the institutions are thus able to gain from the management of inventory.

4.6 Findings
The study findings revealed that the receivables management practises among the education institutions have a significant effect on financial performance of the institutions. The receivables correlate positively with the operating margins therefore any variations in revenue bases has a resultant risk on the financial performance, however, the institutions can mitigate the same risk by employing various forms of resource utilization. Thus, a well designed and implemented working capital management is expected to contribute positively to the creation of a firm’s value.

The results show that the sector has high amounts of liquid cash, which positively relates to the operating margins. However, virtual firms have large amounts of cash as working capital and the way the working capital is handled in its turn significantly impact on profitability (Deloof, 2003). High amounts of liquid cash require investment into portfolio of high returns which then can be readily converted to cash, however, holding cash in instruments of low returns such as banks is disadvantageous to the firms in that they forego returns which are high and over the risk premium levels. Firms may have an optimal level of working capital that maximizes their value.

Further, the inventory management practises of these institutions have an insignificant effect on the operating margins. The systems are simple and effective in that these
organizations need fewer inventory items when compared to other firms in other industries.

Further, the analysis, show the average collection period does not influence the operating margins in the sector. However, the average payment period correlates with operating margin (r = 0.634) while being a major determinant of operating margin. The results show that an increase in the average payment period reduces the operating margin significantly. However, the Pearson correlations do not allow to identify causes from consequences, therefore there is a negative relation between number of days accounts payable and profitability which is consistent with the view that less profitable firms wait longer to pay their bills (Nobanee, 2009).
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary
The study had four objectives and thus the summary of the findings will be discussed as per the objectives.

Objective One: Determine the effect of receivables management practices on financial performance of Middle Level Colleges in Eldoret Town
Due to the dependence on receivables as their revenue bases, most of these institutions have developed efficient systems with which the receivables are converted into working capital. The results suggest that there is efficiency with which the firms collect receivables and as such the management of receivables in the sector has the highest amounts of receivables when compared to other sectors. The analysis shows that the receivables management through the number of days taken for these institutions in the sector to receive payments impacts negatively on the performance of the institutions. The indications are that these institutions are facing a challenge of receivables management and therefore more emphasis on the collecting monies owed.

Objective Two: Assess the effect of Cash Management practices on financial performance of Middle Level Colleges in Eldoret Town
The findings show that the cash conversion cycle in the sector positively relates to the operating margins \( r = 0.826 \) indicate the significance with which these institutions are highly dependent on the cash as a form of working capital in order to ensure continuity in operations. The regression analysis also show that cash conversion cycle determines the
operating margins, thus as the cash conversion cycle increases as the operating margins reduce. The cash conversion cycle is a major determinant of profitability with longer cycles increasing profitability because of higher revenues but a decrease in the cycle having a negative effect on profits (Deloof, 2003). Evidently, the cash conversion cycle in these institutions positively impacts on the performance of these institutions in that these institutions seem to hold a lot of cash and near cash instruments in order to cater for the future. Thus, it can be inferred that these institutions are very good mechanism for an efficient cash conversion cycle which allows them to easily convert the cash easily and thus affording them to effectively management revenue variability.

**Objective Three: Establish the effect of inventory management practices on financial performance of Middle Level Colleges in Eldoret Town**

Regarding the inventory, the analysis shows that there is no correlation between the inventory and the operating margins. This could be due to the institutions holding much fewer inventories than expected. The analysis shows that these institutions are not burdened by inventory management because of the nature of the business which calls for minimal inventory at any one period, thus these institutions are able to efficiently manage the inventory costs by reducing them to the bare minimum.

**Objective Four: Ascertain the effect of trade payables management practices on financial performance of Middle Level Colleges in Eldoret Town**

The regression analysis results showed that the cash conversion cycles and average payment periods affects the operating margins of these institutions. This fact can be
attributable the nature of the business sector which carries high forms of liquid cash and less capital-intensive projects. This is supported by Raheman & Nasr (2007) who showed that reducing the number of days account receivable increase profitability with reduction in inventory having similar effect on profitability. Deloof (2003) showed that the variability in accounts receivable is highly significant with the resultant increase in number of days associate with decline in gross operating income.

5.2 Conclusions
The working capital management practises indicate these institutions have considerably similar practises as those of SMEs. However, the dependence on one revenue stream imply that the institutions use distinct working capital management practises that carries less of inventory but more of the accounts receivable. Further, these institutions are less capital intensive in that they are investing less in capital intensive projects thus are able to benefit from leasing arrangements.

The study findings revealed that the practises of working capital management in the education sector depend on more or less similar sources of revenues which fluctuate wildly according to economic fundamentals (Michalski, 2012). Thus, a well designed and implemented working capital management is expected to contribute positively to the creation of a firm’s value.

Because of the nature of the business, accounts receivable and cash management form the most important aspect of the working capital management. Due to these aspects, these institutions have made the accounts receivables their main aspects of working capital. On
the other hand, cash management also poses a problem in that liquid cash may not be invested in the right instruments.

5.3 Recommendations
The study recommends that educational institutions should develop a policy framework to inform the best practices in the management of working capital. For instance, these institutions hold large amounts of working capital in form of cash, these institutions should be able to invest the cash in instruments that generate higher returns comparably, the institutions stand to gain from such practices.

The uniqueness of the revenue sources imply that these institutions have distinct working capital management practices which have potential risks to the sustainability of the institutions in the long run. Due to these, the study recommends that the institutions introduce new models of working capital management practices that would help mitigate the risk inherent in their revenue sources.

The study findings managed to show that the working capital management practices in Middle level Colleges are significantly different from the profit – making organizations in that some of the aspects of the working capital such as inventory management are minimum. This would positively influence the working capital management.

The overall sustainability of these institutions is pegged on the ability of the management to efficiently manage their revenue streams. Due to these, the study recommends a study that will focus on their financial sustainability.
5.3.1 Policy Recommendations
The regulators of the private Middle level colleges should consider drafting a financial management regulation for the sector in order to manage the variances in the student admissions. These regulations should regulate the number of the institutions that can be setup in specific localities so that institutions have a consistent and sufficient number of admissions per year. Having an open and unregulated number of institutions will reduce the admissions and thus reduce the amounts of revenue earned by these institutions leading to unsustainability in the sector.
REFERENCES


APPENDIX I: LETTER TO RESPONDENTS

TO all Respondents,
30th September, 2016

Dear Sir/Madam,

RE: RESEARCH QUESTIONNAIRE

I am a student at the Kenyatta University pursuing a Master’s in Business Administration (Finance option). I am kindly inviting you to participate in my academic research project that I am conducting as part of the requirement for the award of the degree. Your participation will involve responding to the questionnaire enclosed to the best of your knowledge.

The purpose of this research is to understand the business practices around Working Capital Management applied in the Middle level colleges in Eldoret Town.

Your assistance as the manager/owner/staff will be appreciated to ensure that accurate and relevant information is obtained to assist me to make the correct conclusions and recommendations to help the Colleges to sustain operations during volatile economic periods as well as to maximize financial performance and growth of the institutions.

The information you provide will be kept strictly confidential. Your participation will be highly appreciated. Thank you in advance.

Sincerely,

Paul Yator
P.O. BOX 10353-30100,
Eldoret.
0722-795632
APPENDIX II: QUESTIONNAIRE

PART A: GENERAL INFORMATION
1. What is your position in the college?
   Financial manager [ ]  Financial accountant [ ]

2. Gender of the respondents?
   Male [ ]  Female [ ]

3. Age in years?
   25 to 29 years [ ]  30 to 34 years [ ]
   35 to 39 years [ ]  40 to 44 years [ ]
   45 to 49 years [ ]  More than 50 years [ ]

4. How long have you worked in the College?
   Less than 1 year [ ]  2 to 5 years [ ]
   5 to 10 years [ ]  More than 10 years [ ]

5. What is your leading source of your receivables?
   [ ] Tuition fees
   [ ] Loans and interests
   [ ] Return from other investments

6. Does your college have a risk management policy:
   Yes [ ]  No [ ]  Don’t know [ ]

SECTION B: CASH MANAGEMENT
7. The following statements relate to corporate practices in cash management. To what extent is its application in each of them in the context of your college?

<table>
<thead>
<tr>
<th>Management practice</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination of target cash balance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of cash budgets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occurrence of cash shortages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occurrence of cash surplus</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular bank reconciliations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess cash is invested</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Where do you invest your cash surplus proceeds?
   Bank deposits [ ]  Financial markets [ ]
   Business expansion [ ]  others (specify)…………………………
SECTION C: ACCOUNTS RECEIVABLE MANAGEMENT
9. What percentage of your Expected Tuition fee collections constitutes credit –
   Accounts receivable?
   1 – 15 % [ ]
   16 – 30 % [ ]
   30 % and above [ ]
10. What is your accounts receivable payment policy?
   1 – 15 days [ ]
   16 – 30 days [ ]
   30 days and above [ ]
11. What is the bad debt percentage of the accounts receivable?
   Less than 1% [ ]
   1%-5% [ ]
   5%-10% [ ]
   11%-20% [ ]
   over 21% [ ]
12. The following statements relate to management of accounts receivables practices. To
   what extent is their application to realizing the Colleges’ receivables payments?

<table>
<thead>
<tr>
<th>Management practice</th>
<th>Never 1</th>
<th>Rarely 2</th>
<th>Sometimes 3</th>
<th>Often 4</th>
<th>Very often 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insistence on cash payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting up credit guidelines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt invoicing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review of levels of receivables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review of level of bad debts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sending overdue notices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset attachment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION D: ACCOUNTS PAYABLE MANAGEMENT
13. What is your accounts payable payment policy?
   1 – 15 days [ ]
   16 – 30 days [ ]
   over 30 days [ ]
14. The following statement relates to management practices as regards Accounts
    payables management. To what extent is their application in the context of your
    college?

<table>
<thead>
<tr>
<th>Management practice</th>
<th>Never 1</th>
<th>Rarely 2</th>
<th>Sometimes 3</th>
<th>Often 4</th>
<th>Very often 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buys on credit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting up payment policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review level of accounts payable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay creditors in good time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Rank the following creditors depending on their credit-volume advancement to the
    college
    Suppliers
    Lending Institutions
    Directors /partners
    Any other Specify…………………………………………………………………...
SECTION E: INVENTORY MANAGEMENT
16. What inventory management approaches does the College apply?
   Just in time [ ]  ABC method [ ]  ERP system [ ]
   Inventory models (EOQ) [ ]
17. Do you have a re-order level policy?  Yes [ ]  No [ ]  Don’t know [ ]
18. What influences re-ordering quantities or levels?
   Shortage Costs [ ]  Price Discounts [ ]  Availability [ ]
   Storage Costs [ ]  Demand based on order [ ]
19. The following statement relates to management practices as regards inventory
    management. To what extent is their application in the context of your college?

<table>
<thead>
<tr>
<th>Management practice</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of inventory budgets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation of inventory levels</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Stock taking exercise done</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instances of stock outs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instances of inventory surpluses</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

20. What is the company’s key consideration leading to inventory ordering?
   Actual demand [ ]
   Demand projections [ ]
   Stock replenishment [ ]
   Unpredictable supply [ ]
   No definite consideration [ ]
   Any other Specify……………………………………………………………………

21. What would be your advice to finance practitioners in the sector regarding working
    capital management?
   ........................................................................................................
Section G: Financial Performance
22. Please provide an estimate of the following financial details as per the last ended financial year.

<table>
<thead>
<tr>
<th>Financial Item</th>
<th>Amount (Ksh ‘000')</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Annual Turnover</td>
<td></td>
</tr>
<tr>
<td>4 Total operating expenditure</td>
<td></td>
</tr>
<tr>
<td>6 Inventory</td>
<td></td>
</tr>
<tr>
<td>7 Accounts Payables</td>
<td></td>
</tr>
<tr>
<td>8 Accounts Receivables</td>
<td></td>
</tr>
<tr>
<td>9 Total Assets</td>
<td></td>
</tr>
<tr>
<td>10 Total Current Assets</td>
<td></td>
</tr>
<tr>
<td>11 Total Current Liabilities</td>
<td></td>
</tr>
</tbody>
</table>

Thank you for the Response
APPENDIX III: LIST OF MIDDLE LEVEL COLLEGES IN ELDORET TOWN

1. Alphax College - Eldoret
2. Elgon View College, Eldoret Campus - Eldoret
3. African Institute of Research and Development Studies - Eldoret
4. Aberdeen College of Accountancy - Eldoret
5. Eldoret AIC Training College - Eldoret
6. Nehema Institute of Science and Technology - Eldoret
7. Victory College of Accountancy – Eldoret
8. Kings College of Accountancy - Eldoret
9. Royal Institute of Management Studies
10. Dawn To Dusk Enterprises
11. Kenya Institute of Applied Sciences Ltd
12. Vera Beauty & Fashion College
13. Wareng Institute
14. Eldoret Technical Training Institute
15. Worldwide Institute Of Hospitality And Management
16. African International College - Main Campus
17. A I C Missionary College
18. Cosslink Computer Solution
19. Eldoret Vision Institute Of Technology
20. Eldoret College Of Professional Studies
21. Kenya Institute of Tourism Travel & Hospitality
22. Kenya College of Business Management
23. Neema Institute of Business & Information Technology
24. Discipleship College
25. East African Vision Institute
26. Eldoret Aviation Training Institute
27. Eldoret Mwanganza Institute of Accountancy and Commercial Studies
28. Eldoret Splendid College
29. Eldoret Tourism and Professional College
30. Kenya College of Business Management
31. Kenya Institute of Applied Sciences
32. Kipkaren River Training institute and Development Centre
33. Regions Group College
34. Robin Institute of Business
35. Sport Link College
36. TEC Institute of Management - Eldoret
37. The Promise Computer College of Business and Research Limited
38. Tropical College of Management
39. Excell Institute
40. Savanna College
41. Bartek institute
42. Rift valley college of management and Technology
43. St. Brendan Technical Training Institute
APPENDIX IV: University Authorization Letter

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

FROM: Dean, Graduate School
DATE: 10th November, 2016

TO: Paul Kipruiyot Yator
C/o Accounting & Finance Dept.

REF: D53/OL/5473/2003

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 2nd November, 2016 approved your Research Project Proposal for the M.B.A Degree Entitled, "The Working Capital Management Practices and Financial Performance of Middle Level Colleges in Eldoret Town, Kenya".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

JACKSON LUVUSI
FOR: DEAN, GRADUATE SCHOOL

C.c. Chairman, Accounting & Finance Department.

Supervisors:

1. Dr. John Mungai
C/o Department of Accounting & Finance
Kenyatta University
APPENDIX V: NACOSTI Licence

THIS IS TO CERTIFY THAT:

MR. PAUL KIPRUIYOT YATOR
of KENYATTA UNIVERSITY, 10353-30100
ELDORET, has been permitted to conduct
research in Uasin-Gishu County
on the topic: THE WORKING CAPITAL
MANAGEMENT PRACTICES AND
FINANCIAL PERFORMANCE OF MIDDLE
LEVEL COLLEGES IN ELDORET TOWN,
KENYA

for the period ending:
7th December, 2017

Applicant's Signature

[Signature]

Date Of Issue: 8th December, 2016
Fee Received: Ksh 1000

Permit No: NACOSTI/P/16/85123/15028

Director General
National Commission for Science, Technology & Innovation

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