MODERATING ROLE OF FINANCIAL LITERACY ON THE RELATIONSHIP BETWEEN CASH MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES IN ELDORET TOWN, KENYA.

BY

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DECLARATION

Declaration by the candidate

This thesis is my original work. It has not been submitted to any institution for any academic award and shall not be reproduced in part or full or in any format without written authorization from the author and /or the University of Eldoret.

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Declaration by the supervisors

This thesis has been submitted with our approval as university supervisors.

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DEDICATION

Firstly, I would like to dedicate this thesis to God, who has given me the strength and grace to progress. Also, I dedicate this work to my parents and other family members for their love and continuous encouragement through this academic journey. Finally, I dedicate this work to the University of Eldoret for allowing me to serve and study.

ABSTRACT

Micro, Small and Medium Enterprises (MSMEs) drive economic growth in developing and developed nations. Despite their contributions to economic growth through employment creation, alleviation of poverty, handling the problem of food insecurity and contribution to the Gross Domestic Product in Kenya, they are affected by a series of challenges. These include poor cash management practices, lack of capital, financial illiteracy and technological problems leading to their collapse within a few years of operations. As a result, it was necessary to examine the moderating role of financial literacy on the relationship between cash management practices and the financial performance of MSMEs in Eldoret Town, Kenya. The specific objectives of the study were to determine the influence of; accounting practices, budgeting practices, cash flow management, and financial literacy on financial performance. Finally, the study examined the moderating role of financial literacy on the relationship between; accounting practices and financial performance, Budgeting practices and financial performance, Cash flow management and financial performance. The research was guided by the Decision Usefulness theory, Miller Orr cash management model and Dual processing of financial literacy theory. The study utilized an explanatory research design to explain the cause-effect relationship between the variables. The target population of the study was 72,557 MSMES. The research employed simple random sampling techniques in collecting data from 398 managers/owners of MSMEs using self-administered questionnaires. In addition, factor analysis and Cronbach alpha were applied to test validity and reliability respectively. Using SPSS version 23, a hierarchical regression model was employed in data analysis and testing of the hypotheses. The study revealed that firm age (β=.241, p=0.06) significantly influenced financial performance, while firm size (β=0.090, p=.467) was found to be insignificant. The control variables explain 6.1% of the variance in financial performance, as indicated by R^2=.061. The study shows that accounting practices (β=.379, p=.000), budgeting practices (β=.230, p=.000), and cashflow management (β=.181, p=.002) significantly influenced financial performance. These variables explained 41.6% of the variance in financial performance, as shown by R^2=.416. Additionally, results reveal that financial literacy directly influenced financial performance (β=.107, p=.046, R^2 =.484, ΔR^2=.007). Finally, financial literacy was found to have a moderating influence on the link between; accounting practices and financial performance (β=.054, p=.002, R^2=.501, ΔR^2 =.017), budgeting practices and financial performance (β=.081, p=.032, R^2 =.509, ΔR^2 =.008) and cashflow management and financial performance (β=.106, p=.003, R^2 =.524, ΔR^2 =.015). These findings add some new knowledge to the financial literature. The research aimed to benefit scholars by enhancing their knowledge by using theories, models, and results for future studies. The outcome of this research further provides prudent information to managers, owners, and employees of MSMEs in implementing cash management policies and practices in their operations. The study focused on benefiting policymakers who formulate policies concerning MSMEs' growth, development, and survival. The study recommends that the policy makers should develop training programs that could equip owners/ managers of MSMEs with relevant skills and knowledge in accounting, budgeting and cashflow management, which could enable their businesses to have good financial performance.

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OPERATIONAL DEFINITION OF TERMS

Accounting practices are the techniques used to identify, record, analyze, and communicate financial information. Also, it is viewed as the typical practical application of auditing and accounting policies (Ratemo, 2018). However, in this research, accounting practices are restricted to record keeping, banking practices, computerized accounting as well as internal controls of MSMEs

Budgeting practices involve allocating a firm's financial resources to its units, investments, and activities (Uyar & Bilgin, 2011). Based on this study, the budgeting practices of MSMEs are limited to budget control, financial forecasting, budget planning, and resource allocation.

Cash Management Practices refer to the fundamental measures undertaken by an enterprise to achieve the objectives of cash management, which are not limited to maximizing liquidity and controlling cash flow but also to increasing the worth of cash while reducing the cost of funds (Geteri, 2017). According to this study, cash management practices refer to critical measures undertaken by MSMEs, such as accounting practices, budgeting practices, and cash flow management, to achieve cash management objectives.

Cash management refers to managing credit control, cash position, planning, and cash flow projection (Oteyo, 2018). However, based on this research, cash management refers to monitoring cash in the enterprise to optimize the MSMEs' financial performance.

Cashflow management is the process of analyzing cash inflow and outflow of business operations (Oyieko, 2018). This study defines cash flow management as monitoring, analyzing, and optimizing the net cash receipts of MSMEs.

Financial Attitude is applying financial principles to create and maintain value through decision-making and proper resource management. It also refers to long-term financial planning, including aspects such as individuals' time preferences and willingness to make planned savings (Chaokromthong & Sintao, 2021; Tuffour, Amoako, & Amartey, 2022). The study viewed financial attitude as the MSME managers'/owners' ability to plan and maintain savings.

Financial Behavior refers to financial decisions and actions. It is viewed as the management of savings, expenditures, and budget (Rahman, Isa, Masud, Sarker, & Chowdhury, 2021). The study referred to financial behavior as the level of managers/owners of MSMEs' ability to manage financial resources comprising of the plan to earn, manage as well as control finances

Financial Knowledge refers to understanding vital financial terms and concepts needed to function daily (Tuffour *et al*., 2022). This study referred to financial knowledge as the ability of MSMEs' owners or managers to understand financial concepts, procedures, and ability to solve financial problems.

Financial Literacy is the combination of investors' comprehension of financial concepts, confidence, and capacity to acknowledge financial opportunities and risks, make effective decisions on financial matters, and implement strategies to improve the enterprises' financial well-being (Chepngetich, 2016). However, the researcher referred to financial literacy as the integration of owners'/managers' knowledge, attitude, and behavior with respect to the financial activities of MSMEs.

Financial Performance is viewed as the business's ability to meet its financial objectives, obligations, and commitment to providing service (Ganyam & Ayoor, 2019). According to this research, financial performance is regarded as the extent to which the MSMEs generate profits, increase their sales, and meet short-term obligations.

Liquidity refers to the ability of enterprises to meet short obligations (Reschiwati, Syahdina, & Handayani, 2020). The researcher refers to liquidity as MSMEs' ability to meet short-term liabilities.

Micro, Small and Medium Enterprises (MSMEs) in Kenya are defined as enterprises with less than ninety-nine employees. Notably, micro-enterprises have less than ten employees, small enterprises have a range of ten to forty-nine employees, and medium-size enterprises have 50 to 99 employees (Rop, 2019). This study will adopt the above definition to measure the size of MSMEs.

Profitability refers to the extent to which enterprises yield gain relative to their expenses and measures how well the enterprise can generate profit or gain from an operational process that has been implemented to ensure the continuity of the enterprises in the future (Reschiwati *et al*., 2020). According to this study, profitability refers to the degree to which MSMEs experience financial gain.

ABBREVIATIONS AND ACRONYMS

AGPO Access to Government Procurement Opportunities

CEO Chief Executive Officer

E.C European Commission

GDP Gross Domestic Product

ITC International Trade Cooperation

KIPPRA Kenya Institute for Public Policy Research and Analysis

KNBS Kenya National Bureau of Statistics

MSEs Micro and Small Enterprise

MSMEs Micro Small and Medium Enterprises

NACOSTI National Commission for Science, Technology and Innovation.

ROA Return on Assets

ROCE Return on Capital employed

ROE Return on Equity

ROI Return on Investment

SDGs Sustainable Development Goals

SMEs Small and Medium Enterprises

SPSS Statistical Package for Social Science

UN United Nation

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CHAPTER ONE

INTRODUCTION

1.0 Overview of the Chapter

This chapter presents the background of the study, a statement of the problem, objectives, hypotheses, significance, and scope of the study.

1.1 Background of the Study

Micro, Small and Medium Enterprises (MSMEs) are pertinent to any economy, especially in developing countries (Oluoch, 2016; Susan, 2020). MSMEs have the potential to contribute positively to achieving sustainable development goals (SDGs) regardless of their size (Endris & Kassegn, 2022). SMEs contribute about 60 % of the targets set in the SDGs (Endris & Kassegn, 2022). Moreover, this sector contributes about 83% of SDG 8 (decent work and economic growth) as well as 88% of SDG 9 (industry, innovation, and infrastructure) (ITC,2019). The general assembly recognized MSMEs' vital contributions toward sustainable development by driving economic growth, creating employment and innovations, and addressing social and environmental problems ((Endris & Kassegn, 2022).

In addition, MSMEs contribute to about 90% of businesses and more than 60 to 70% of employment globally. According to existing literature, SMEs account for approximately 58% of total jobs in developed economies (Grondys, Ślusarczyk, Hussain, & Androniceanu, 2021). The sector also accounts for 95% of aggregate employment and 55% of GDP in middle-income countries. Additionally, MSMEs contribute about 65% of aggregate employment and 70% of GDP in low-income countries (Pandey, 2019).

MSMEs' development in the nation helps alleviate poverty, enhance innovation as well as enhancement of social stability and economic welfare (Kidali, 2020; Manzoor, Wei, & Sahito, 2021)

Despite their vital contribution to the economy, most MSMEs face many challenges and collapse within a few months of their operations (Endris & Kassegn, 2022; Oluoch, 2016). Inadequate finance, poor management, level of education, lack of planning, lack of inventory control, insufficient skills in cash management practices, infrastructure problems, marketing problems, technological issues, inadequate training, unfavorable government policies, and corruption problems have been cited as the major causes that affect performance MSMEs resulting to closure (Abdullahi, Jakada, & Kabir, 2016; Ahmad, 2016; Diabate, Allate, Wei, & Yu, 2019; Hamza, Mutala, & Antwi, 2015; Kidali, 2020; Susan, 2020). Therefore, these attracted the researcher's attention to study the moderating role of financial literacy on cash management practices and financial performance of MSMEs in Eldoret Town, Kenya.

The complexity and dynamics of the worldwide business environment are attributed to the rapid technological advancement and stiff competition in the 21st century. This causes uncertainty among enterprises in the global economy, reinforcing the need for businesses to be more circumspect about their success and financial performance (Chelogoi, 2020). Therefore, financial performance is the business's ability to meet its financial objectives, obligations, and commitment to providing service (Ganyam & Ayoor, 2019). It is further perceived as how the firms' financial objectives, policies, and operations are measured in monetary terms and level of achievement (Kivaya, 2022). As a result, financial performance is inevitable in any competitive business environment.

The intensified competition in domestic and global economies has necessitated enterprises to embrace measures to enhance their financial performance. This has been attributed to the fact that the survival and health of MSMEs depend on their financial performance (Chepngetich, 2016; Kirwa & Ngeno, 2020; Obuya, 2017). Financial performance aids the investors, financial institutions, and other lenders in understanding and rating the firm's position on the ongoing concern. Financial performance dimensions such as profits, growth, and liquidity are the main objectives any firm desires to achieve to maximize shareholders' wealth. Therefore, the existence, survival, and financial stability of MSMEs depend on their financial performance (Bărbuță-Mișu, Madaleno, & Ilie, 2019; Obuya, 2017).

Cash management practices have been identified among the factors affecting MSMEs' financial performance (Ahmad, 2016; Hamza *et al.*, 2015; Oluoch, 2016). Therefore, cash management is viewed as the management of credit control, cash position, planning, and cashflow projection (Oteyo, 2018). It is further perceived as cash collection, concentration, and disbursement. Hence, it encompasses an enterprise's level of liquidity and handling of cash, as well as short-term strategies (Kipleting, 2016). On the other hand, cash management practices refer to the real measures undertaken by an enterprise to achieve the objectives of cash management, which are not limited to maximizing liquidity and controlling cash flow but also to increasing the worth of cash while reducing the cost of funds (Geteri, 2017). Therefore, cash management practices constitute; budget practices, internal control systems, and auditing, as propounded by (Geteri, 2017). Kinyanjui, Kiragu, and Riro (2017) identified cash holding practices, cash pooling, and technological use as adequate constructs of cash management practices. Other scholars, Kiai, Kyalo, and Maina

(2020); Placer (2019); Wanjuki, Githui, and Omurwa (2021) identified financial record keeping, bank account operation, cash flow management, liquidity management, cash conversion cycle, cash planning, and cash handling techniques as the components of cash management practices.

Cash management practices are indispensable in every enterprise and have been regarded as the lifeblood of any business (Nwarogu & Iormbagah, 2017). Furthermore, cash management practices are essential for all MSMEs to strengthen their financial performance (Ahmad, 2016; Oluoch, 2016). Moreover, they ensure business solvency and stability. Mohamed and Omar (2016); Pandey (2019) opine that effective cash management practices are very significant for the operation of SMEs. Since they aid in solving issues of cash shortage and generate financial statement plans to support loan applications. Also, it helps the firm keep a financial resources record, better timing of expenditure decisions, and accurate cash flow forecasting. However, several MSMEs lack the adequate skill to manage and monitor their cash management practices, resulting in poor financial performance and an inability to compete in a dynamic environment while increasing branches and growing their sales (Enow & Kamala, 2016; Kinyanjui *et al.*, 2017). Consequently, some MSMEs end up bankrupt and finally collapse after a few years of operation (Mbuva & Wachira, 2019; Naidu & Sri, 2020). Because of these existing problems, the researcher saw the need to study cash management practices (accounting practices, budgeting practices, and cash flow management) on financial performance and incorporate financial literacy as a moderator.

Financial literacy is a vital competency required for MSMEs' development, management, and thriving. Chepngetich (2016) defined financial literacy as the combination of investors'

understanding of financial concepts, their confidence, and their capacity to acknowledge financial opportunities and risks, formulate effective decisions on financial matters, and implement strategies to enrich the financial well-being of the enterprise. Therefore, financial literacy is critical in educating and empowering entrepreneurs to gain knowledge about finance in a manner relevant to their business. It helps entrepreneurs to make informed decisions regarding problems affecting their enterprises. In addition, higher levels of financial literacy among entrepreneurs positively influence MSMEs' financial performance (Otieno, 2016; Ssekakubo, Nkurunziza, Muwanga, & Tumwine, 2022). Financial literacy is postulated to be a prime determinant of the enterprise's failure or success (Topimin & Hashim, 2020). Most scholars Bire, Sauw, and Maria (2019); (Gunawan, 2022); Sohilauw, Nohong, and Sylvana (2020); Yasin, Mahmud, and Diniyya (2020) agree that MSMEs' founders and owners are consistently involved in decision-making processes such as procuring, allocating and utilizing resources. For that reason, these activities often have financial impacts; hence, owners/managers must impart financial knowledge to be efficient and effective (Gunawan, 2022).

The role of SMEs in India has become increasingly significant in recent times under the influence of economic reform from the 1990s during economic liberation (Zhu, Warner, & Sardana, 2020). The sector contributes about 45% of industrial output and 40% of aggregate exports (Mukherjee, 2018). In addition, SMEs employ about 40% of the aggregate population. The Indian government expects a USD 25 trillion contribution from SMEs to its GDP, almost 50% of the targeted GDP (Sodhi & John, 2021). Due to the immense contribution of SMEs to economic development, the government of India is striving to improve social and economic conditions of the rural population and other sectors

by providing measures such as improving the supply chain, upgrading technology, expanding markets, reducing tax brackets, promoting intellectual property rights and enhancing the skills of the entrepreneurs to achieve the underlying objectives (Mukherjee, 2018; Vettriselvan & Balakrishnan, 2014). However, the sector is still subjected to several constraints, such as a lack of managerial skills and entrepreneurial knowledge, lack of adequate finance, lack of timely credits, poor infrastructure, competitive disadvantage, lack of skilled workforce, technological issues, and corruption that hinder SMEs from maximizing their performance and contribution toward national economic development (Mukherjee, 2018; Zhu *et al*., 2020).

The development of SMEs has been one of the prime planks of Jordan's economic development strategies since independence in 1946. SMEs consist of the vast majority of Jordanian Enterprises. This sector accounts for about 98% of manufacturing and service sector firms in the Jordanian economy. They also contribute about 37% of the total employment as well as one-third of the total output in this economy (Al-Mahrouq, 2010). In addition, this sector accounts for 50% of the GDP in Jordan (Smirat & Yousef, 2016). Jordan's government has established rules, laws, and policies that protect the performance of the MSEs, such as protecting local MSEs from the international market and providing licenses for their operations. Despite the government's efforts to encourage most individuals to venture into SMEs, the sector faces a series of challenges affecting its performance. Lack of finance, training, management, and economic problems have been highlighted as significant challenges affecting this sector's performance (Masoud, 2020; Smirat & Yousef, 2016). As a result of these drawbacks, only 13% of SMEs in Jordan live over ten years. Over 67% of SME owners have insufficient knowledge of cash management

practices. They do not record their cash payments and receipts. Also, they do not prepare cash budget or operates bank accounts (Smirat & Yousef, 2016). Therefore, this explains why SMEs in Jordan represent about 60% of the private sector but only contribute about 37% of the total employment.

East Pakistan Small Industrial Corporation (EPSIC) was formed in 1956 to promote SMEs in East Pakistan, present Bangladesh, which gained independence in 1971 (Rahman & Khondkar). Since independence, SMEs have been considered a priority sector of Bangladesh's economy. They form the seedbed of Bangladesh's economy and offer the best chances for this economy to achieve economic growth and fairly distribution of wealth. In Bangladesh, SMEs are enterprises that employ less than 100 people (Chowdhury & Alam, 2017). Therefore, there are about 523,000 SMEs that employ 2.3 million people, which is about 82% of the total industrial labour force and 25% of the aggregate labour force. In recent times, SMEs in Bangladesh have accounted for 90% of industrial units, and their total contribution to export income is about 75% and 31% of GDP (Chowdhury & Alam, 2017). Like any other country, Bangladesh's government has focused on creating and developing a conducive business environment and facilitating SMEs through appropriate policy support and infrastructure development (Hoque, 2018). Even though SMEs are instrumentals in Bangladesh's economic development, enormous growth potential has not been fully realized. Due to Inadequate access to finance, poor management, limited markets, minimum technology skills, inefficient use of accounting information, and poor record-keeping affect their performance, resulting in a high failure rate (Hoque, Awang, & Salam, 2017; Jahur & Quadir, 2012).

The development of SMEs in Germany is globally ranked second in contribution to value addition and employment (Herr & Nettekoven, 2017). Germany's Federal Ministry for Economic Affairs and Energy defines SMEs as enterprises with less than 500 workers. The sector accounts for 99.6% of all firms, 58.5% of aggregate employment, and over 47% of value addition (Herr & Nettekoven, 2017). German government contributes much to the economic development of SMEs through the developed local banking system, which is non-profit oriented, development of a dual vocational system with a combined action of theoretical and practical education. In addition, the government supports SMEs through a government-owned development fund that offers affordable credits (Herr & Nettekoven, 2018). Due to recommended government support number of enterprises filing for insolvency in 2017 dropped by 20,200, which is 6.3% below the figure for 2016, which was about 21,560. SMEs' value-added and employment increased by 20.0% and 11.2 %, respectively; this outperformed large firms, which grew by 15.8 % in value-added and 6.7% in employment (E.C,2018)

SMEs in Ghana account for 92% of business and contribute about 85% of jobs in the manufacturing sector and 50% of the GDP. Additionally, this sector contributes much to economic development and the alleviation of poverty (Donkor, Donkor, Kankam-Kwarteng, & Aidoo, 2018). Despite the vital contributions SMEs have to this nation, various factors compel their advancement in financial performance. For instance, insufficient and poor management of available capital, lack of suitable technology, restriction to access to international markets, cash management practices, financial literacy, and the absence of administration abilities and training (Ameyaw, Korang, Twum, & Asante, 2016; Donkor *et al*., 2018; Hamza *et al*., 2015; Tuffour, Amoako, & Amartey,

2020). Most SMEs in Ghana don't embrace cash budgeting as a tool for planning and controlling cashflows. As a result, 56.4% of SMEs experience cash shortages in their business operations. Most SMEs in Ghana exist in operation for 1-5 years; this represents about 51%. However, only 11.3% of SMEs continue operating for over 15 years (Hamza *et al*., 2015). This reveals a high trend regarding setting up business in Ghana and the high rate of SME failure after a few years. To curb the aforementioned issues, the government attempts to strengthen this sector by promoting joint ventures between foreign and local investors, introducing technological transfer regulations, skills training, and establishing Export Development.

Zimbabwe's economy has struggled to operate steadily since the dollarization in 2009. The country continued to be characterized by enterprise closures, with many employees losing their source of income through retrenchment (Nyoni & Bonga, 2018). Massive loss of jobs has paved the way for the growth and development of SMEs in Zimbabwe. SMEs are the primary means for many families' survival due to high unemployment and the closures of big enterprises. SMEs in Zimbabwe refer to an enterprise that employs 100 and below workers; therefore, they contribute about 60% of employment and 50% of the GDP in Zimbabwe (Nyoni & Bonga, 2018). The government of Zimbabwe has developed various measures to support SMEs, such as facilitating training, developing markets, establishing Small, Micro, and Medium Enterprises Policy and Strategy Framework, and encouraging non-governmental organizations to support the sector (Dlamini & Schutte, 2020). Despite the government efforts, SMEs are affected by a myriad of challenges, such as a lack of management skills, poor accounting practices, access to financial resources, hostile

regulatory environment resulting in high failure rates and poor performance (Karedza, Sikwila, Mpofu, & Makurumidze, 2014; Nyathi, Nyoni, Nyoni, & Bonga, 2018)

SMEs in Egypt are characterized as enterprises with not more than 200 employees. Like any other emerging state, this sector is an essential segment of the Egyptian economy. Small and Micro businesses in Egypt account for 6.3 million employees, and the total production is about EGP 403.8 billion. At the same time, medium enterprises provide job opportunities to about 322.6 thousand workers, with a total production of EGP 98.7 billion (Boushnak, Rageb, Ragab, & Sakr, 2018). Moreover, these enterprises contribute about 80% of the GDP and 75% of national exports. The government of Egypt has developed the Social Fund for Development (SFD) to support the development and performance of SMEs through financing, training owners on management skills, supporting SMEs to adopt new technology and providing consultancy services (Zamzam, 2017). Besides the vital contribution of this sector and government intervention, SMEs face numerous challenges, such as political instability, lack of financial knowledge, economic downturn, and lack of management expertise (Boushnak *et al*., 2018).In addition, inadequate finance has also been pointed out as a big challenge affecting SMEs' performance in Egypt. For instance, only 6% of SMEs have access to loans compared to 18% of large firms, resulting in stagnant growth in this sector.

Ugandan economy defines MSMEs as enterprises that have a maximum of 100 employees. SMEs' contribution to the Ugandan economy is over 90% of the total private sector employment, accounting for about 2.5 million and 20% of GDP (Eton, Mwosi, Okello-Obura, Turyehebwa, & Uwonda, 2021). Due to this vital contribution of this sector, the government of Uganda significantly provides support ranging from capital to input, such

as seeds and animals for rearing and training (Rulangaranga, Basemera, & Isoh, 2020). Despite many interventions that the government of Uganda has put in place to date, there are still hordes of drawbacks affecting the financial performance of SMEs. For instance, Limited access to finance, poor governance, high cost of borrowing, information asymmetry, lack of market, technological issues, lack of government support, and lack of training (Eton *et al*., 2021; Kakembo, Abduh, Hj, & Salleh, 2021). Consequently, most SMEs e fails to celebrate their 5^{th} birthday (Rulangaranga *et al*., 2020).

MSMEs in Kenya are defined as enterprises with 1-99 employees. Micro-enterprises have less than ten employees, whereas small enterprises have a range of ten to forty-nine employees. On the other hand, medium-sized enterprises have fifty to ninety-nine employees (KIPPRA,2016). However, the Micro and Small Enterprise Act 2012 of Kenya views a small enterprise as a firm, industry, trade, service, or business activity with an annual sales turnover ranging from 500000-5,000,000 Kenyan Shillings and whose employees range from 10 to 50. Therefore, MSMEs form a large part of the private sector in Kenya. Over the last few decades, this sector has evolved into a dynamic and vibrant sector of the Kenyan economy (Muturi & Njeru, 2019). This sector plays a vital role in attaining vision 2030, which aims to transform Kenya into a newly industrializing, middle-income country and provide a quality of life to all citizens by 2030 in a clean and secure environment.

MSMEs are the primary driver of the Kenyan economy since they contribute about 85% of total employment, 24 % of GDP, enhance innovation, and poverty eradication (Kamunge, Njeru, & Tirimba, 2014; Muturi & Njeru, 2019; Osano, 2019; Shibia & Barako, 2017). The Ministry of Industrialization, Trade and Enterprise Development of Kenya,

Sessional paper No.05 of 2020 indicates that Micro and Small enterprises (MSEs) account for over 90% of private sector enterprises across various sectors in the country. The sector also creates income opportunities for economically excluded segments of the population, such as people with disabilities, youth, women, low-skilled persons, and individuals who have experience underemployment.

Furthermore, the devolution of governance in Kenya has encouraged MSMEs to leverage their resources and skills by penetrating new markets. The Kenyan government has continued to campaign for developing MSMEs as a platform for reducing unemployment, poverty reduction, and economic growth (Barbengi & Kimutai, 2018). The Government has set aside 30% of all government procurement for youth, women, and persons with disabilities through Access to Government Procurement Opportunities (AGPO), intending to increase market access and improve weak linkage in SMEs' value chain. Moreover, public funds advanced to this sector to address challenges related to financing by introducing the Small and Medium Enterprises Fund, Women Enterprises Fund, Uwezo Fund, Youth Development Fund, and Hustler Fund (Ayuma 2023; KIPPRA 2021). The prime aim of these funds is to cater to the unique needs of different categories which would not access credit from formal sectors because of stringent requirements (KIPPRA,2016). In addition, County governments play a vital role in developing routes through which new and existing SMEs can realize their growth potential (Kitigin, 2017).

Despite the vital contribution to the Kenyan economy and the government's efforts to enhance the performance of MSMEs, this sector faces unlimited challenges, especially concerning regulatory regimes. In addition, entrepreneurial culture is hampered by an unfavourable working environment curtailing SMEs' thriving in Kenya (Kung'u, 2015).

Lack of access to finance, lack of management skills and competence, corruption, inadequate information, inadequate access to training, obsolete technology, and insufficient planning have been identified as drawbacks of MSMEs limiting their development and financial performance (Douglas, Douglas, Muturi, & Ochieng, 2017; Maengwe & Otuya, 2016; Muriithi, 2017; Mwobobia, 2012). Moreover, poor cash management practices have resulted in the limited financial performance of Micro, Small, and Medium Enterprises in Kenya (Enow & Kamala, 2016; Kinyanjui *et al*., 2017). Due to these challenges, a high mortality rate has been seen, with about 2.2 million SMEs closing within the first few years of their operations (Osano, 2019).

Micro, Small, and medium Enterprises in Uasin Gishu county face unique problems that negatively affect their financial performance, diminishing their ability to contribute much to economic development. Tedious registration and certification process, lack of adequate finance and inappropriate technology, lack of planning, improper financial management, and financial illiteracy have been highlighted as issues affecting SMEs' financial performance in Uasin Gishu (Chepngetich, 2016; Gedion, Fredrick, & Sang; Mutunga & Gachunga, 2013; Nyamwamu, 2016; Otieno, 2021). As a result, most MSMEs fail to operate in subsequent years after birth. Cash management practices have also been identified as a problem affecting SMEs' performance in Eldoret Town, resulting in their collapse (Otieno, 2021). The dismal financial performance of MSMEs submits that the potential contribution to employment, GDP, and alleviating poverty is hampered. Consequently, Kenya's objective to achieve vision 2030 remains a dream (Wasonga, Omillo & Omwenga,2020). The continuous dismal performance of MSMEs prompted the researcher to investigate the moderating role of financial literacy on the relationship

between cash management practices and the financial performance of micro, small and medium enterprises in Eldoret town.

1.2 Statement of the Problem

Micro, Small and Medium Scale Enterprises are the backbone of the economic growth of most developed and developing economies (Diabate *et al.*, 2019; Kawira, Mukulu, & Odhiambo, 2019; Tekola & Gidey, 2019). SMEs contribute over 50% and 33% of total employment and national income in developing countries respectively (Barbengi & Kimutai, 2018).In Kenya, the sector contributes more than 85% of the total job creation, and by 2030, the country hopes to be transformed into a middle-income economy (Muturi, 2015; Ombongi & Long, 2018). In addition, the Kenyan economy is required to achieve the objectives of the East Africa Community vision 2050, SDGs, and African Union Agenda 2063. Therefore, if Kenya has to make these leaps, financial performance must be given an upper hand in MSMEs to improve their survival and attract more investors.

However, studies have revealed that MSMEs collapse in their first few years of operation due to a series of challenges that strike their financial performance (Maengwe & Otuya, 2016; Mbuva & Wachira, 2019; Ngetich, 2020). They face systematic decline, as evidenced by the high collapse rate; over 60% collapse in their first year of operation, and only 10 to 15% survive to the third generation (Mwangi, 2018). Massive layoffs and shutting down of MSMEs have been reported, with the trade, hospitality, education, and transport sectors being the most affected. Over 75% of MSMEs risk collapsing due to inadequate cash flow (KIPPRA, 2021). Lack of planning, poor cash management skills, improper financing, inadequate market, government regulations, competition, and financial

illiteracy affect these entities' financial performance (KIPPRA, 2019; Otieno, 2021;Kawira *et al*., 2019). Therefore, if these issues are not intervened, the sector will not contribute much to expectations of commitment policies such as SDGs by the UN, Africa agenda 2063, and vision 2030.

Many scholars have assessed the relationship between cash management practices and financial performance, with findings confirming a positive relationship (Chintha & Prasad, 2021; Naidu & Sri, 2020; Wanjuki *et al*., 2021). However, Eton, Gilbert, Fabian, Benard, and Dennis (2019) found insignificant effects between cash management practices and financial performance. Other scholars, Chepngetich (2016); Esiebugie, Richard, and Emmanuel (2018), investigated the direct impact of financial literacy on SMEs' performance. Aminia, Setionob, Pangaribuanc, and Princesd (2021) researched the effects of cash management practices on the financial performance of SMEs in Indonesia. They recommended that the scope of further research should be more comprehensive.

Limited studies have examined financial literacy involvement in the relationship between cash management practices and the financial performance of MSMEs in Eldoret Town, Kenya. Thus, this study aims to fill the existing gap by introducing financial literacy as a moderator in the relationship between cash management practices and financial performance and will form the basis for further academic studies.

1.3 Study Objectives

The following were the study's objectives.

1.3.1 General Objective

To determine the moderating role of financial literacy on the relationship between cash management practices and financial performance of MSMEs in Eldoret Town, Kenya.

1.3.2 Specific Objectives

i. To determine the influence of accounting practices on financial performance of MSMEs in Eldoret Town, Kenya.
ii. To examine the influence of budgeting practices on financial performance of MSMEs in Eldoret Town, Kenya.
iii. To establish the influence of cash flow management on financial performance of MSMEs in Eldoret Town, Kenya.
iv. To assess the influence of financial literacy on financial performance of MSMEs in Eldoret Town, Kenya
v. To determine the moderating role of financial literacy on the relationship between:
   (a) Accounting practices and financial performance of MSMEs in Eldoret Town, Kenya.
   (b) Budgeting practices and financial performance of MSMEs in Eldoret Town, Kenya.
   (c) Cash flow management and financial performance of MSMEs in Eldoret Town, Kenya.

1.4 Study Hypotheses

H_{01}: Accounting practices have no statistically significant influence on financial performance of MSMEs in Eldoret Town, Kenya.

H_{02}: Budgeting practices have no statistically significant influence on financial performance of MSMEs in Eldoret Town, Kenya.

H_{03}: Cash flow management has no statistically significant influence on financial performance of MSMEs in Eldoret Town, Kenya.

H_{04}: Financial literacy has no statistically significant influence on financial performance of MSMEs in Eldoret Town, Kenya.

H_{05}: Financial literacy has no moderating role on the relationship between:

(a) Accounting practices and financial performance of MSMEs in Eldoret Town Kenya.

(b) Budgeting practices and financial performance of MSMEs in Eldoret Town Kenya.

(c) Cash flow management and financial performance of MSMEs in Eldoret Town Kenya.

1.5 Significance of the Study

The study results aimed at providing the government with a clear understanding of the moderating role of financial literacy on the relationship between cash management practices and the financial performance of MSMEs in the country. This could help the government develop policies such as training managers and owners on accounting practices, budgeting practices and cash flow management that can support MSMEs' financial performance. Also, the study provides prudent information to MSME owners or

managers on how to implement cash management policies and practices and the need to be financially literate for the survival of their business. The policies will influence the decision-making of the managers/ owners on a day-to-day business operation. Finally, the research contributes to the body of knowledge since the scholars will use this study's models, results, and theories to develop new research.

1.6 Scope of the Study

The primary objective of this research was to determine the moderating role of financial literacy on the relationship between cash management practices and the financial performance of MSMEs in Eldoret Town, Kenya. The study utilized accounting practices, budgeting practices and cashflow management as measures of cashflow management. Financial performance was measured by profitability, growth in sales and liquidity. In addition, the researcher employed financial behavior, financial knowledge and financial attitude as indicators of financial literacy. The study employed simple random sampling techniques to administer questionnaires to 398 managers/ owners of MSMEs in Eldoret Town, Kenya, as the selected study area. Moreover, the study was conducted for five months, from May 2023 to September 2023, and an explanatory research design was utilized.

1.7 Limitation and Delimitation

The study is limited to micro, small, and medium enterprises in Eldoret town, and primary data was collected using questionnaires. Moreover, the researcher anticipates challenges such as limited access to information and time limits. Therefore, the researcher hired research assistants who helped collect data to solve the named issues. Also, to avoid the

issue of biases, the researcher paid attention to the underlying problem and enhanced data-gathering techniques. Due to fixed schedules, some respondents did not have adequate time to participate in the study. To handle the underlying problem, the researcher administered the questionnaire through a drop-and-pick-later method so that the research participants could fill out the questionnaire on their own time. Other respondents were resistant to filling out the questionnaire due to trust issues. The researcher assured them that the study was for academic reasons only and that the information provided would be treated with confidentiality. In addition, the research also presented the introduction letter from University of Eldoret, NACOSTI, and County Government of Uasin Gishu permits to the respondents.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The theoretical review and the concepts of financial performance, accounting practices, budgeting practices, cash flow management, and financial literacy are presented in this chapter. Also, the chapter describes the empirical review, literature summary, gaps in literature, and finally, the conceptual framework.

2.1 Theoretical Review

This study was guided by the Decision Usefulness theory, the Miller -Orr model, and the Dual- process of financial literacy theory.

2.1.1 Decision Usefulness Theory

George Staubus developed the decision usefulness model in 1958. This model of accounting provides directions for financial reporting and accounting choices. The theory portrays accounting as a set of procedures that give the decision-makers prudent information for viable decision-making during uncertainties. Under this theory, the prime goal of financial reporting is to provide managers and owners with useful information in making investment decisions. The decision usefulness approach assumes that decision-makers are rational; thus, they choose the action that yields the maximum utility. Therefore, this model highlights well-structured procedures by which decision-makers can make the best decision from their subjective probability. However, in relation to human decision-making and shortcomings of conventional economic understanding, decision usefulness

theory cannot be defined in a manner that allows its application to policy choice at either macro or micro level (Ravenscroft, 2011).

Decision Usefulness Theory has been broadly used in literature. For instance, Puspitaningtyas (2010) researched the decision usefulness approach of accounting and concluded that the concept of this theory plays a vital role in identifying problems for users of financial reports as well as pointing out reliable information that individuals can use to make informed decisions. This is further echoed by Soyinka, Fagbayimu, Adegoroye, and Ogunmola (2017), who assert that financial information must be understandable, comparable, reliable, timely, and verifiable for effective decision-making in the business. Dandago and Hassan (2013) applied the concept of decision usefulness theory in determining if the financial reporting of companies in Malaysia provides useful information to the Inland Revenue Board for income tax determination. The decision usefulness theory is relevant to this study since it depends on recording business transactions intending to help MSMEs make viable decisions relating to improving their financial performance. The approach thus informed the study's first and second objectives (accounting practices and budgeting practices) within the context of MSMEs.

2.1.2 Miller -Orr Cash Management Model

This model was developed by Miller and Orr (1966) to overcome the limitations of Baumol's model, which assumes that cashflows do not vary. Miller and Orr (1966) allow businesses to make realistic assumptions of uncertainty that cash flows are not constant. This model was developed for enterprises with uncertain cash inflow and cash outflow. The model allows upper and lower limits of cash balance to be set, as well as the target

cash balance. Miller and Orr (1966) submit that when the cash balance of the enterprise reaches a higher limit, it purchases marketable securities that enable the firm to return to the desired target balance. On the other hand, when the cash balances hit the lower limit, the enterprise should trade its marketable securities to collect adequate cash to stabilize the situation.

The sentiments of the version assume that the lower limit would be set by management based on the probability of cash shortfall and the willingness of the enterprises to tolerate the effects of cash shortfall. However, the upper limit adopts the formulae of this model, which assumes that cash inflows and outflows are random; their dispersion is usually considered to repeat a pattern exhibited in the past. Miller and Orr (1966) assume that there is no underlying trend in cash balance over time. The daily net cash balance distribution is approximately normal. Each day, the net cash flow could be the expected value of some lower and higher value drawn from a normal distribution. Additionally, the optimal value of high restriction and target balance relies on opportunity cost and the degree of likely fluctuations in cash balances.

Ndirangu (2017); Turgut (2022) used the model in the study and submitted that the model is exemplary and recognizes the uncertainty in cash flows of the business operations. This is further echoed by Samadzadeh (2021), who analyzed and evaluated the economic order quantity model in optimum cash management with the guidance of the Miller -Orr model. On the other hand, González-Díaz, Becerra-Pérez, Guanilo, Ovalles-Toledo, and Cruz-Ayala (2022) applied the concepts of the Miller-Orr model in studying investment decisions according to the Markowitz and Miller model. However, Moraes, Nagano, and Sobreiro (2015) argued that the Miller and Orr model requires the definition of lower limits

as zero or some other positive values since the risk of inadequate cash is associated with a minimum margin of safety and administration choice.

Increasing cash balances is an effort made by MSMEs in their business activities. Thus, if MSMEs manage cash optimally, they can minimize the cases of excess or shortfall of cash, maximizing their financial performance. MSMEs can achieve this objective of maintaining cash balance by using excess cash flow to purchase more investments to provide more benefits (Sa'diyah, 2019). Therefore, this model was relevant to this study since it gives insight into what MSMEs can do to maintain cash balances to continue operating in a dynamic business environment

2.1.3 Dual Process of Financial Literacy Theory

Kahneman Daniel brought forward the Dual Process of financial literacy theory in 2003. The theory advocates that financial decisions can be driven by intuitive and cognitive processes, indicating that financial literacy may not always yield optimal financial decisions. According to the Dual process theory of financial literacy, the behavior of the individual with a high level of financial literacy might be based on the prevalence of the two-thinking style, intuition, which refers to system one and cognition (system 2)(Glaser & Walther, 2014). Intuition is viewed as the ability to get knowledge without inference or the use of reason. Therefore, intuition provides beliefs, judgments, views, or understanding that cannot be empirically verified or rationally justified (Esiebugie *et al.*, 2018).

The decision-makers who base their judgment on intuition prefer to use mental short cuts as they make decisions that tend to be contributed by their emotions. Glaser and Walther (2014) believed that financially literate individuals or investors who depend on their

intuition have a chance to make bad investment decisions. Hence, strong system 1(intuition) decreases the probability of enterprises' investors keeping up with their investment strategies, influencing financial performance. On the other hand, cognition (system 2) refers to mental processing that includes reasoning, comprehending, problem-solving, calculating, and decision-making (Esiebugie *et al*., 2018; Glaser & Walther, 2014). With a high level of cognition, people enjoy thinking and are more likely to search for more vital information related to improving business performance.

The Dual-Process theory has been used widely in various research. For instance, Esiebugie *et al*. (2018) researched SMEs' financial performance and literacy in Benue State, Nigeria, and posits that dual process theory shows that highly cognitive investors seek out information and are likelier to be influenced by relevant messages. Decision-making skills can be boosted by financial literacy training (Esiebugie *et al*., 2018). In addition, Chepngetich (2016) used the Dual processing theory of financial literacy to explore the effect of financial literacy on the performance of SMEs in Kenya. On the other hand, Ye and Kulathunga (2019) used the Dual-Process theory to examine financial literacy's effects on promoting the sustainability of SMEs.Ye and Kulathunga (2019) agreed that financial literacy helps SMEs meet challenges related to business change and financial markets, which results in sustainability. Dual process financial literacy theory was relevant to this study since it shows owners/managers of MSMEs the need to embrace cognition when it comes to decision-making on enterprise operations, which may result in optimizing financial performance.

2.2 The Concept of Financial Performance

Financial performance measures the extent to which the enterprise's resources are utilized to generate revenue. It involves the measurement of the firm's financial weaknesses and strengths (Chelogoi, 2020; Ndirangu, 2017). It is further perceived as a measure of the financial health and performance of the firm (Matar & Eneizan, 2018). Ichsan, Suparmin, Yusuf, Ismal, and Sitompul (2021) pointed out financial performance as a measuring instrument that helps implement the firm's financial resources. Thus, the higher the firm's financial performance, the more efficiently and effectively the enterprises use resources. Bartolacci, Caputo, and Soverchia (2020) argued that financial performance is a vital aspect of the enterprise's performance and significantly affects the management of business operations. Hence, effective financial performance in enterprises facilitates resources for promoting business activities, such as improving production rates and research development.

Marketing and accounting-based measures are used as dimensions of financial performance, which conceptualize the firm's long-term and short-term performance (Barauskaite & Streimikiene, 2021; Devie, Liman, Tarigan, & Jie, 2019; Kivaya, Kemboi, & Odunga, 2020). Several studies have pointed out that financial performance can be measured by return on equity, net profit margin, earnings per share, share prices, and Tobin Q (Bartolacci *et al*., 2020; Devie *et al*., 2019; Kirwa & Ngeno, 2020). However, other studies, for example, Al-Homaidi, Almaqtari, Ahmad, and Tabash (2019); Chintha and Prasad (2021); Gichaaga (2014); Irawati, Maksum, Sadalia, and Muda (2019); Kurfi, Yadudu, and Sabo (2021); Soet (2020) have argued that financial performance can be measured using return on assets and return on equity. On the other hand, Musah and Kong

(2019) evaluated financial performance using ROA, ROE, and ROCE. Financial performance can also be measured using ROI (Ngumi & Njogo, 2017).

Additionally, Sebastian (2018) used growth in sales and profitability as measures of financial performance. Other scholars assert that financial performance can be measured using sales growth, market expansion, and profitability (Tuffour *et al.*, 2020; Zirabamuzale, 2021). Moreover, Yeko (2019) states that productivity, market share, and sales growth are building blocks of financial performance. Nonetheless, Fatihudin (2018); Maisharoh and Riyanto (2020); Ugo and Egbuhuzor (2022a) used liquidity, capital adequacy, solvency, leverage, and profitability as constructs of financial performance. However, limited studies have used sales growth, profitability, and liquidity as financial performance indicators in the context of MSMEs. Thus, this study adopts sales growth, profitability, and liquidity to fill the existing gap.

2.3 The Concept of Cash Management Practices

Cash management is essential for all firms since it strengthens their financial management and survival. Therefore, every enterprise needs to have a high level of cash management practices to meet its short and long-term objectives (Ahmad, 2016). Furthermore, cash management practices are viewed as managing the enterprises' finances to increase the interest gained by maximizing investments and reducing interest paid from borrowed funds (Oluoch, 2016). Other scholars, Kiai *et al*. (2020); Nwarogu and Iormbagah (2017), propound that cash management is how businesses control their cash flow or operating cycles.

Optimal cash management practices ensure the efficient provision of cash resources to streamline the organization's operations. Thus, good cash management practices are vital for any enterprise's business growth, survival, and general success. Kipleting (2016) postulated that cash management is vital for determining the firm's financial status. Thus, cash management involves control and management of the monies of the organization intending to maximize cash availability. This includes policies and regulations of cash that curb and detect malpractices in the organization. Kinyanjui *et al*. (2017) noted that SMEs need adequate cash to meet business operations and obligations to ensure ongoing concerns. However, improper cash management practices have led to the failure of MSMEs.

There are numerous indicators of cash management practices. For instance, Hamza *et al*. (2015); Muthama (2016) assert that cash management practices can be evaluated by financial record keeping, cash budgeting, and bank account maintenance. Kinyanjui *et al*. (2017) pointed out technology, cash holding, and cash pooling practices as dimensions of cash management. Moreover, Njeru Mugambi Duncan, Njeru, Member, and Tirimba (2015) identified that cashflow forecasting, members' deposits, cash budgeting, and liquidity management policy are vital cash management dimensions.

On the other hand, Ahmad, Ahmad, and Abdullah (2018) advocate that cash management can be measured using cash receipts, balances, and payments. Cash management practices include planning, usage, and handling techniques (Placer, 2019). However, Kiai *et al*. (2020) identified cash planning, cash controlling, and liquidity risk management as measures of cash management practices. The components of cash management practices include banking, cash budgeting, cash flow forecasting, and cash conversion cycle

(Wanjuki *et al*., 2021). Thus, to fill the existing literature gaps, this study used accounting practices, budgeting practices, and cash flow management as building blocks of cash management practices in the context of MSMEs.

2.3.1 The Concept of Accounting

Accounting practices are any computation used to prepare financial statements (Abd, 2009). It is further perceived as practices used to identify, record, analyze, and communicate financial information. It is also considered the typical practical application of auditing and accounting policies (Ratemo, 2018). According to Tahat, Omran, and AbuGhazaleh (2018), each nation has distinctive accounting practices. Accounting is an essential unit of any enterprise since it helps them to keep track of their financial numbers and transaction events. Also, it provides meaningful and valuable information about the financial matters of the economic entity, which can be analyzed and used for decision-making.

Further, accounting practices are essential since several accounting functions, such as bookkeeping, are tied to legislative obligations (Loikkanen, 2018). However, MSMEs' accounting systems lack the required standards, leading to improper performance assessment, creating loopholes for mismanagement, and eventually collapsing within a few years of their operations (Mwangi, 2011; Udoh & Okon,2021). Existing literature reveals various indicators of accounting practices. For instance, Omar (2015) pointed out that accounting practices can be evaluated by the firm's bookkeeping activities, financial statements, and internal audits. However, Ratemo (2018) contends that accounting

practices can be measured using bookkeeping, verification of accounting data, and cash flow analysis.

Existing literature identifies record-keeping, budgeting, and internal control as vital indicators of accounting practices (Manei & Omagwa, 2019). In addition, Baskar (2018) evaluated accounting practices using accounting systems and recording documents, financial statements, accounting methods, and the basis of accounting. Accounting practices can also be appraised using management accounting, financial auditing, and financial reporting (Lukumay & Wako, 2018). Moreover, Emmanuel (2014) identified accounting data, software, and internal control as constructs of accounting practices. Therefore, this study adopted record-keeping, banking practices, and computerized accounting as measures of accounting practices in MSMEs.

2.3.2 The Concept of Budgeting

Budgeting is the process of allocating a firm's financial resources to its departments, investments, and activities (Uyar & Bilgin, 2011). Budgeting practices have emerged as one of the most effective and broadly used tools for controlling and planning enterprises' activities. Armitage, Lane, and Webb (2020); Uyar and Bilgin (2011); Uyar and Kuzey (2016); Zor, Linder, and Endenich (2019) reveal that budgets play essential roles in the organization. For instance, the most prominent benefits of budgeting are; performance evaluation, controlling variances, forecasting the future, assisting in profit maximization, and finally, helping in decision-making. Eton, Fabian, and Benard (2018) noted that budgeting stabilizes profitability levels, enhances the capacity to predict the likelihood of acquiring cash, and ensures that expenditures align with plan cash flow. Additionally,

Kamau and Mungai (2020) noted that budgeting enables organizations to determine how much credit they need to give their potential clients without liquidity risks.

Existing literature identifies budget planning, coordination, controlling, and evaluation as dimensions of budgeting practices (Pimpong & Laryea, 2016). On the other hand, Kamau, Rotich, and Anyango (2017) studied the budgetary process's effects on state corporations' budget performance in Kenya. The researcher pointed out budgetary participation, feedback, sophistication, and budget control as ideal indicators of the budgetary process. Eton *et al.* (2018) pronounced that financial planning, resource allocation, and expenditure management are vital budgeting dimensions. Ngumi and Njogo (2017) identified capital expenditure, operating expenditure, human resources, and income variance as budget indicators. Further, Sebastian (2018) pointed out budget planning and control as a dimension of budgeting. To fill the gap in the existing literature, the researcher adopted budgeting control, financial forecasting, budgeting planning, and resource allocation as indicators of budgeting practices.

2.3.3 The Concept of Cashflow Management

Businesses require sufficient resources to be stable and fully utilize them to enhance their overall performance. Cashflow management is the firm's most liquid resource, representing the lifeblood for the growth and survival of SMEs (Ali & Mukhongo, 2016). Thus, cash flow management is the process of analyzing the cash inflow and outflow of business operations (Oyieko , 2018). Cash flow is regarded as the net amount of cash and cash equivalent of an organization’s payments and receipts (Musah & Kong, 2019). Thus, management needs to understand the concept of cash flow management since it helps

predict how much cash will be available and determine the amount required to cover operating expenses (Costa, Pinto, Nunes, & Lemes, 2019; Güleç & Bektaş, 2019)**.**

Empirical review shows that cash flow management is a significant tool that ensures the organization's solvency and protects the business against financial distress (Plaskova *et al*., 2020). In addition, a cash flow statement aids in improving the effectiveness and efficiency of personnel decision-making in terms of the firm's earning capability, financial planning, and spending, which in turn influence financial performance. According to Muraya (2018), free cash flow is a financial tool that helps gauge the financial performance of enterprises. It shows the cash availability after considering how much the enterprise has spent on recurrent expenditure, financial activities, and investment.

Existing studies Atieh, Alshehadeh, and Ashour (2020); Ayoub, Jammoul, and Mekdessi (2017); Mudey (2018); Oyieko (2018); Soet (2020); Ugo and Egbuhuzor (2022a) advocates that operating, investing and financing activities are vital dimensions of cash flow management. Similarly, Ndungu and Oluoch (2016) evaluated cash flow management with cash flow from operating, investing, financing, and free cash flow. However, Yeko (2019) evaluated cash flow management using account receivable management, account payable management, and credit management. On the other hand, cash planning, controlling, and liquidity management are appraisals of cash flow management (Ali & Mukhongo,2016). Therefore, to fill the existing literature gaps, the researcher adopted cashflow from operating, investing, and financing activities as measures of cash flow management in the context of micro, small and medium enterprises.

2.4 The Concept of Financial Literacy

Financial literacy is viewed as knowledge and understanding of financial concepts, principles, skills, and the ability to apply such knowledge to make effective decisions (Esiebugie *et al.,* 2018). Further, it is defined as the individual's ability to make informed decisions regarding management and the use of financial resources (Tuffour *et al*., 2020). Small and medium enterprises are the backbone of many economies worldwide. Therefore, poor financial literacy among founders of SMEs negatively influences the operation and performance of the business. Financial literacy is a required entrepreneurial skill that enables enterprises to perform financially and survive in a dynamic business environment (Tuffour *et al*., 2020).

Previous studies assert that financial literacy can be assessed using financial behaviour, attitude, and knowledge (Esiebugie *et al*., 2018; Garg & Singh, 2018; Menike, 2018). Tuffour *et al*. (2020) identified financial awareness, attitude, and knowledge as financial literacy components. In addition, financial literacy can be appraised using borrowing and budgeting literacy (Chepngetich, 2016). However, Usama and Yusoff (2019) argued that the ideal constructs of financial literacy are; financial awareness, saving, diversification, risk management, debt management, bookkeeping, and access to credit facilities. Therefore, to contribute to the body of knowledge, the researcher adopted financial knowledge, financial behavior, and attitude as perfect dimensions of financial literacy, which was utilized as a moderating variable in this study.

Based on the empirical review findings, financial literacy has been used as the moderator in various studies. For instance, Kalaipriya (2018); Okello Candiya Bongomin, Mpeera

Ntayi, Munene, and Akol Malinga (2017) used financial literacy as a moderator in determining the relationship between access to finance and the growth of SMEs.Owusu, Ismail, and Osman (2019) also used financial literacy as a moderator to link the growth of SMEs in Ghana and the availability of financial resources. On the other hand, Yang, Ishtiaq, and Anwar (2018) examined enterprise risk management practices and firm performance, the mediating role of competitive advantages, and moderating role of financial literacy. Thus, the researcher contributed to the body of knowledge by introducing financial literacy as a moderator in examining the impact of cash management practices on financial performance of MSMEs

2.5 Empirical Review

This section reviews prior studies concerning the variables used in this study.

2.5.1 Accounting Practices and Financial Performance

Alvarez, Sensini, Bello, and Vazquez (2021) conducted a study on management accounting practices and the performance of SMEs in the hotel industry in Argentina. The study utilized a stratified sampling method, and questionnaires were administered to gather data from 200 participants. In addition, the research employed a quantitative research approach. The results highlighted positive and significant relationships between management accounting practices (strategic management accounting, decision support system, performance evaluation, and cost accounting systems) and hotel business performance. The study revealed that the users of accounting tools perform better than non-users in hotel industries in Argentina.

Chukwuma and Egbuhuzor (2017) studied accounting practices and the performance of SMEs in River State, Nigeria. Structured questionnaires guided data collection from the SMEs staffs to achieve the objectives. Using SPSS, spearman rank correlation was utilized in data analysis. The study revealed no relationship between record keeping, payroll practices, and budgeting practices as a measure of accounting practices on SME performance in River State, Nigeria.

Maziriri (2017) studied how management accounting practices influence SMEs' business performance in Gauteng province, South Africa. The study sought to determine how accounting practices influence MSEs' performance; a quantitative research approach was adopted. Additionally, a survey research design was used, and questionnaires were administered to collect data from 380 SME managers and owners selected through simple random sampling. Moreover, the study adopted a multiple regression model to analyze the relationship between variables. The results revealed that management accounting practices, dimensions such as performance evaluation, strategic analysis, and costing systems positively influence SME performance in South Africa.

Lukumay and Wako (2018) studied the impact of accounting practices on SMEs' financial performance in Ilala District, Tanzania. The researchers adopted a descriptive research design and stratified random sampling. Structured questionnaires were used to collect primary data from 291 SMEs. Data analysis was conducted using SPSS version 20. Inferential and descriptive statistics were used to analyze quantitative data. The study concluded that accounting practices positively impact SMEs' financial performance in Tanzania.

Omar (2015) determined the impact of accounting practices on remittance companies' financial performance in Mogadishu, Somalia. The primary objective of the research was to assess how financial statements, internal audits, and bookkeeping affect the financial performance of remittance companies in Mogadishu, Somalia. Questionnaires to 97 employees out of the target population of 130 employees. Stratified and simple random sampling was used to include the required study participants. The study used multiple regression and stepwise models in data analysis to establish relationships between variables using SPSS. The results found that accounting practices are positively associated with the financial performance of remittance companies in Somalia.

Manei and Omagwa (2019) studied the influence of accounting practices on the financial performance of secondary schools in Makueni county in Kenya. Researchers adopted a census design and utilized the purposive sampling method. Primary and secondary data were gathered from 44 secondary schools. Data analysis was done using SPSS version 21. Multiple regression models and descriptive statistics were utilized to analyze variables. The study found that accounting practices were positively and significantly related to the financial performance of secondary schools.

Nanjala, Manini, and Kamau (2018) explored the influence of accounting control practices and firm size on the financial performance of SMEs in Eldoret Town, Kenya. They utilized a descriptive research design guided by the stakeholders' theory. Stratified random sampling was used to sample 171 managers /owners out of the target population of 300 SMEs owners/managers who were the beneficiaries of Equity Bank Financial knowledge for Africa. Data collection was aided by structured questionnaires and analyzed using inferential and descriptive statistics. The research’s findings showed a significant strong

positive relationship between accounting control practices dimensions (cash control, revenue control, and inventory control) and the financial performance of SMEs in Eldoret Town, Kenya.

2.5.2 Budgeting Practices and Financial Performance

Naira, Radmanb, and Ahamadc (2020) studied the effects of the budgeting process, including budgetary participation, control evaluation, and planning, on the financial performance of SMEs in Yemen. Convenience sampling was employed in the research, and questionnaires were administered to collect primary data from 200 participants. Data collected was analyzed using Structural Equation Modelling (SEM) Amos and descriptive statistics using SPSS. The result revealed that the budgeting process positively impacts the financial performance of SMEs in Yemen.

Le and Nguyen (2020) examined the impact of budgetary goal characteristics on the performance of Vietnamese SMEs. The study focused on determining the impact of budgetary goals on profit growth directly and indirectly through managerial performance. In this study, data was collected using questionnaires from the survey with 197 department managers and supervisors of the 80 SMEs. The direct model, with the aid of quantitative research methods and exploratory factor analysis, revealed that characteristics of budgetary goals significantly contributed to profit growth. The study demonstrated that managerial performance mediates the relationship between budgetary goal characteristics and financial performance. On the other hand, budgetary goal characteristics had a positive but insignificant impact on sales growth as an indicator of financial performance.

Nwanyanwu and Ogbonnaya (2018) explored the relationship between financial performance and budgetary control among SMEs in River Estate, Nigeria. Primary and secondary methods to gather information from 63 participants were determined using the Taro Yemen formula. Complementary use of non-parametric and parametric techniques was utilized in data analysis. The study found that budgeting control practices significantly influence financial performance. It concluded that budgetary control practices could drive the growth and sustainability of SMEs.

Sebastian (2018) used a descriptive research design to investigate how budgeting influences the financial performance of manufacturing companies in Tanzania. The research measured financial performance with growth in sales and profits against budgeting planning and control. Further, purposive sampling was utilized to sample 75 manufacturing firms. Data was collected using self-administered questionnaires and analyzed with ordinary least squares and Lisrel Estimates. The result revealed that budgeting practices significantly influence financial performance.

Ngumi and Njogo (2017) adopted a descriptive research design to assess the impact of budgeting practices on the financial performance of insurance companies in Kenya. Convenience sampling was used to sample 23 insurance companies from the target population of 45 reinsurance and insurance companies registered by 2010. Secondary data was used to analyze the relationship between variables with the help of descriptive and inferential statistics, specifically regression and correlation analysis models. The study measured financial performance using return on investment, while budgeting practices were determined using capital expenditure, operating expenditure, human resources, and income variances. The results revealed that capital expenditure, operating expenditure, and

human resources negatively and significantly affect the financial performance of Kenyan insurance firms. However, income variance had a significant, positive effect on the firms' financial performance.

2.5.3 Cash flow Management and Financial Performance.

Alslehat and Al-Nimer (2017) determined the relationship between cash flow management and the financial performance of Jordanian insurance firms. The study used secondary data from 2009- 2013 and analyzed reports of a target population of 23 companies. A quantitative research design was adopted, and data was analyzed using SPSS. A simple regression model and descriptive statistics were employed in data analysis. Independent variables were cash balance and net cash flow from financing, operating, and investing activities. Return on assets was used as an indicator of financial performance. Findings revealed that net cash flow derived from investment and operating activities affects ROA. However, there was a weak and insignificant relationship between cash balances and financial activities on financial performance represented by ROA.

Ugo and Egbuhuzor (2022b) explored how cash flow management influences the financial performance of the pharmaceutical industry in Nigeria. Financial performance was measured using liquidity with the help of the current ratio, while the independent variables were financing, operating, and investing activities. Researchers adopted an ex-post research design and census sampling technique. They used a secondary data collection method to collect the required data from ten pharmaceutical companies. Moreover, Pairwise Granger Causality tests and multiple regression analysis in EViews 10 software were used in data analysis. Findings showed that operating and investing activities

positively impact financial performance, but the impact was insignificant. On the other hand, financial activities significantly and negatively impact financial performance.

Nangih, Ofor, and Ven (2020) determined the link between cash flow management and the financial performance of quoted gas and oil companies in Nigeria. The study was anchored on the stakeholders' theory and employed an ex post facto research design. Data used in the research was collected from the financial reports of five selected listed firms with the help of the purposive sampling technique for five years (2013-2018) in Nigeria. Multiple regression models and correlations were used in data analysis. The results indicated that cash flow from investment and operating activities was insignificant. Negative impact on profitability. In contrast, cash flow from financing activities positively and significantly impacted the performance of the selected Nigerian gas and oil companies.

Yeko (2019) researched how cash flow management affects the financial performance of Tororo Cement in Uganda. The researcher used account receivable, accounts payable, and credit management as building blocks of the independent variable. Financial performance was measured by sales growth, market share growth, the productivity of employees, and production increases. A survey and case study design were used in the study. Purposive and random sampling techniques were used to select 50 participants from the target population of 57. Interviews and questionnaires were used to collect data. Results showed that cash flow management had a significant impact on financial performance.

Soet (2020) determined the impact of cash flow management on the financial performance of mutual funds in Kenya. Operating, financing, and investing activities were used as independent variables against return on asset and return on equity. Researchers used explanatory and causal research designs. Six-year (2011-2016) financial reports of 22 firms

were used to extract secondary panel data. The census method was used in the research since the number of mutual funds in Kenya is small. The result of the research revealed that operating, investing activities, and the size of the firm had a positive influence on financial performance. However, financing cash flow management significantly and negatively impacted financial performance.

2.5.4 Financial literacy and financial performance

Hendrawaty, Widiyanti, and Sadila (2020) examined the influence of C.E.O financial literacy on the corporate financial performance of SMEs in Indonesia by mediating the role of sources of investment decisions. The study used the purposive sampling method, and primary data was collected by administering questionnaires to 400 respondents, of which 376 agreed and responded. The direct effects results indicated that C.E.O financial literacy has a significant positive effect on corporate financial performance; the indirect effect reveals that sources of investment decisions significantly mediated the relationship between the financial literacy of C.E.O and financial performance.

Tuffour *et al*. (2020) explored the effect of managers' financial literacy on SMEs' performance (non-financial and financial) in Ghana. The study utilized financial knowledge, awareness, and attitude as dimensions of financial literacy, while financial performance was measured by profit, revenue, and sales growth. Non-financial performance was measured by employee satisfaction, customer increase, market size, brand loyalty, and competitive advantage. The study employed a quantitative research approach and a cross-sectional research design. Primary data were obtained from 200 respondents using questionnaires, and descriptive and inferential models were utilized in

analyzing variables. The study revealed that financial literacy significantly affects SMEs' performance.

Zirabamuzale (2021) investigated the effects of financial literacy on the financial performance of micro and small-sized enterprises in Uganda. Financial literacy was measured using investment, budgeting, and borrowing literacy, while financial performance was measured using profit growth, market expansion, and sales growth. The study adopted a cross-sectional survey design where qualitative and quantitative data were collected using questionnaires and interviews. The study utilized a stratified sampling method to sample 201 respondents from the target population of 420 MSEs. Moreover, qualitative data were analyzed using content analysis, while quantitative data was analyzed using descriptive statistics and regression analysis with the aid of SPSS. The study revealed that investment and borrowing literacy positively and significantly influence financial performance. However, budgeting literacy insignificantly influences financial performance. Generally, the study found that financial literacy significantly influences financial performance.

Otieno (2016) explored the impact of financial literacy on the financial performance of SMEs in Kenya. Access to bank services, bookkeeping, entrepreneurship skills, and personal saving skills were utilized as constructs of financial literacy against return on equity, profit growth, and sales revenue turnover. Further, the study used a stratified sampling technique to sample 100 respondents from a target population of 334 SMEs. Also, the study adopted a descriptive research design. Moreover, the study used questionnaires to collect primary data, which was analyzed using a descriptive and

inferential model such as a multiple regression model. The results of this study revealed that financial literacy positively influences financial performance.

2.6 Summary of Literature and Research Gaps

A thorough literature review on accounting practices, budgeting practices, cash flow management, and financial literacy in relation to financial performance was performed, leading to the identification of multiple gaps. These gaps in the literature are presented in **Table 2.1.**

Table 2.1 Summary of Literature Review and Gaps.

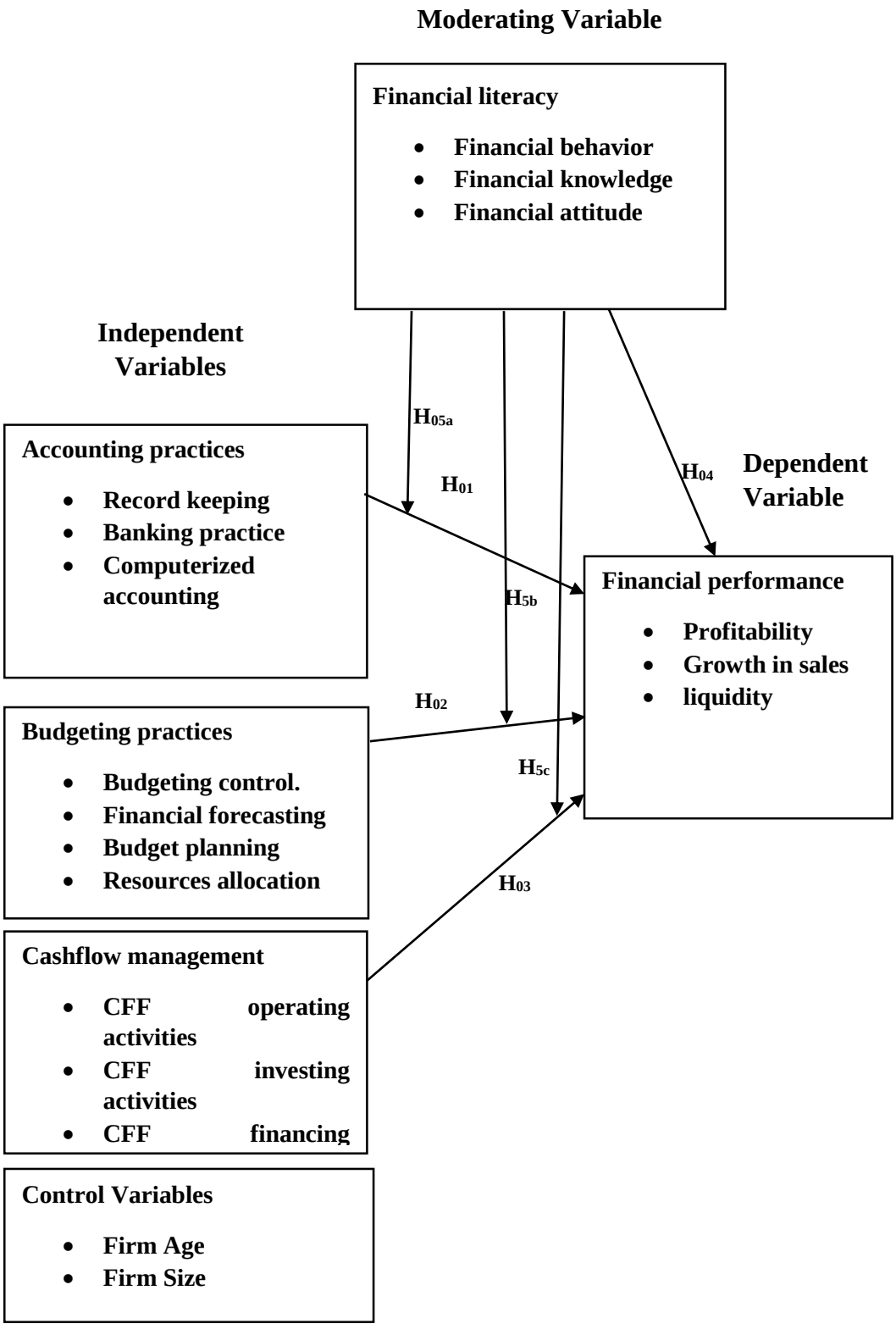
Authors	Topic	Methodology	Findings	Knowledge Gaps
Alvarez *et al*. (2021)	Management accounting practices and performance of SMEs in hotel industries in Argentina.	Using a stratified sampling method, questionnaires were administered to collect data from a sample of 200 SMEs in Argentina. Adopted quantitative research	Management accounting practices significantly influence the performance of SMEs	The reviewed study targeted SMEs in the hotel industry in Argentina using stratified sampling. The current study incorporated financial literacy to fill existing gaps with a sample size of 364 respondents.
Lukumay and Wako (2018)	Impact of accounting practices on the financial performance of SMEs in Tanzania	Using a descriptive research design, a stratified random sampling method was utilized. Questionnaires were used to collect data, which was analyzed using descriptive and inferential statistics with the help of SPSS version 20	Results indicated that accounting practices positively impact SMEs' financial performance.	The reviewed study was done in Tanzania using a descriptive research design. The reviewed research focused only on accounting practices. The current research was done in Kenya, focusing on MSMEs using explanatory research design to fill conceptual and methodological gaps.
Omar (2015)	Effects of accounting practices on the financial performance of remittance companies in Somalia	Administered questionnaires to a sample of 97 with a target population of 130. Stratified and simple random sampling was utilized	Results indicate a positive relationship between accounting practices and financial performance.	The reviewed study was done in Somalia with financial statements, internal audits, and bookkeeping as independent variables. The current research was conducted in Kenya, focusing on banking practices and computerized accounting; therefore, the study filled contextual, methodological, and conceptual gaps.

Naira *et al*. (2020)	Influence of the budgeting process on the financial performance of SMEs in Yemen	The study adopted convenience random sampling, and questionnaires were administered to collect data from 200 respondents.	Budgeting processes positively influence financial performance.	The study reviewed was done in Yemen and focused on budgetary control, participation, evaluation, and planning without any moderating and control variables. However, the current research was done in Kenya, focusing on additional dimensions such as financial forecasting and resource allocation; thus, this study filled contextual gaps.
Sebastian (2018)	Effects of budgeting on the financial performance of selected manufacturing firms in Tanzania	The descriptive research design was utilized, and purposive sampling was used to select a sample of 75 manufacturing companies.	The results reveal that budgeting significantly influences financial performance.	The study was reviewed in Tanzania, and a descriptive research design was utilized. The current study was based on an explanatory research design.
Yeko (2019)	Effect of cash flow management on the financial performance of Tororo cement in Uganda	The adopted survey and case study research design utilized purposive and random sampling methods to sample 50 respondents. Data was collected using secondary and primary methods	The results indicate that cashflow management significantly affects financial performance	The study reviewed was done in Uganda on a cement company using accounting receivables, account payables, and credit management as dimensions of cash flow management. The current study was done in Kenya on MSMEs, and the independent variable was cash flow from operating, investing, and financing activities using an explanatory research design. Filled existing contextual and methodological gaps
Hendrawaty *et al.* (2020)	Influence of C.E.O financial literacy on the corporate financial performance of SMEs in Indonesia by	Used the purposive sampling method, and primary data was collected by administering	Both direct and indirect effects indicate that financial literacy significantly affects	The study reviewed was conducted in Indonesia with the role of investment decision as a moderating variable. The current

	mediating the roles of investment decisions	questionnaires to 400 respondents	corporate financial performance.	study used financial literacy as the moderating variable.
Zirabamuzale (2021)	Effects of financial literacy on the financial performance of micro and small enterprises in Uganda	A cross-sectional research design and stratified sampling method were used to sample 201 respondents out of a target population of 420	The study reveals that financial literacy significantly influences financial performance.	The reviewed study was done in Uganda using a cross-sectional research design. The reviewed research utilized financial literacy as an independent variable. The current study was conducted in Kenya using an explanatory research design and filled conceptual and methodological gaps.

2.7 Conceptual Framework

From the summary of previous studies, there are clear methodological, contextual, and conceptual research gaps to be filled. Most of the research conducted has focused much on the direct effects, that is, effects of accounting practices, budgeting practices, cashflow management, and financial literacy on financial performance. However, there is limited evidence from the literature that focuses on financial literacy as a moderating variable on the effect of cash management practices and the financial performance of MSMEs. Therefore, the study filled available gaps by developing a conceptual framework shown in **Figure 2.1** below.



Source: Cham, Cheah, Ting and Memon (2021) modified by researcher, (2023)

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter entails; the research design, study area, target population, sample size, sampling design, data collection instrument, measurement of the study variables, reliability and validity of the instrument, data processing techniques and analysis, presentation, regression assumptions, and ethical considerations.

3.1 Research Design

Research design is viewed as a plan that provides the underlying structure to integrate all study segments to produce credible results free from bias and maximally generalizable (Dannels, 2018). It is further perceived as an overall plan linking the conceptual research problems to the pertinent and achievable empirical research (Asenahabi, 2019). Dannels (2018) submits that a research design aids in determining how the respondents or participants are selected, what variables are included, and how data are collected and analyzed.

There are numerous research designs, for instance, correlation, descriptive, exploratory, and explanatory. Correlation research is a non-experimental quantitative design in which the researcher uses correlation statistics to measure the degree of association or relationships between two or more variables (Asenahabi, 2019). On the other hand, descriptive research design aims to portray a clear profile of events, persons, or even situations (Stangor & Walinga, 2019). Contrarily, an exploratory research design is

conducted when information about a phenomenon is unavailable (Thomas & Lawal, 2020). It helps to find out what is happening to seek new insight and assess the phenomenon in a new light.

Finally, the explanatory research design establishes the causal relationships between variables (Rahi, 2017). This study utilized explanatory research design since it looks for the reasons and causes and provides evidence to support or refute the explanations or predictions. Additionally, it helps get fresh insight into a situation to extend, elaborate or test a theory. On that account, its prime objective is to identify issues and main variables in the given research problem, which was the main focus of this study.

3.2 Study Area

This study focused on micro, small, and medium enterprises within Eldoret town in Uasin Gishu county. Eldoret Town is a principal Town in the Rift Valley region that serves as the capital of Uasin Gishu County. This town ranked as the fifth most populated area in the country after Nairobi, Mombasa, Nakuru, and Ruiru (KNBS, 2019). Based on the 2019 national census, the population of Eldoret town increased from 289380 in 2009 to 475,716 in 2019. Furthermore, Eldoret Town is surrounded by prime agricultural land and acts as a trading Centre for Uasin Gishu's economy. The Town is also a local manufacturing hub with many nationally recognized manufacturing companies such as Rupa Textiles, Kenya pipeline company, Raiplywoods, and wheat and corn factories. Therefore, this area was selected for this study to generate homogeneity of related business sectors in a similar location. **APPENDIX V** shows the boundaries of Eldoret town.

3.3 Target Population

The target population is the group of participants who are similar in one way or more ways, forming the subject of the study (Howe & Robinson, 2018). The target population is the aggregate of elements from which a sample is selected. The researcher focused on the owners/managers operating MSMEs within Eldoret Town, Uasin County, with a target population of 72,557 MSMEs as per the count government of Uasin Gishu Trade, Investment, Industrialization and Tourism Department (2023).

3.4 Sample Size

Sampling refers to choosing participants for the research to generalize the entire population (Simiyu, Bonuke, & Komen, 2020). Thus, the key objective of sampling was to get a representative group that could help the researcher gain information that could generalize the population when faced with limitations such as funds, time, and other related resources required for the research. On the other hand, sample size refers to the representative of the population (Chaokromthong & Sintao, 2021). The appropriate sample size for the study was obtained using the Yamane (1967) formula since the population of this study was known, as submitted by Chebii (2017).

Moreover, the formula assumes a precision level of 5% and a confidence level of 95%. This is further supported by Taherdoost (2017), who stated that the typical confidence level in management research could be 95% or 99%. Therefore, based on Yamane's formula given below, the sample size was n=398

$$\mathbf{n=}\ \frac{N}{1+N(e)^2}$$

$$\mathbf{n} = \frac{72557}{1+72557(.05)^2}$$

$$\mathbf{n} = 398$$

Where; **n**=sample size, **N**=population size, ***e***=margin error (0.05)

3.5 Sampling Design

Sampling design is a plan for obtaining a sample from a given population. It also refers to techniques and procedures that research will adopt to select study subjects (Singh & Masuku, 2014). Hence, sampling design helps to determine the number of items to be included in the sample. The research adopted probability sampling techniques, giving each unit an equal chance to be selected. In an attempt to obtain a fair representation of the general population, the choice of MSMEs was made using simple random sampling techniques. The researcher used simple random sampling to select respondents (managers/owners of the MSMEs). Acharya, Prakash, Saxena, and Nigam (2013) argued that a simple random sampling design reduces biases in the sample selection. In addition, it also enhances internal and external validity.

3.6 Data Collection Instruments

Data are raw facts obtained by the researcher to be used in the study. Hence, collecting accurate data is essential for maintaining the integrity of any research (Simiyu *et al.*, 2020). Thus, selecting reliable data collection methods and well-defined guidelines for their

proper use minimizes the errors that may result from the final analysis of the results. This study utilized a structured questionnaire to collect data, and the drop-and-pick-later method was applied while administering questionnaires. Dewaele (2018) defined a questionnaire as a tool of various questions designed to gather useful information from the respondents. The questionnaire was carefully designed to cover relevant variables of the study, and this helped the researcher assess the moderating role of financial literacy on the relationship between cash management practices and financial performance of MSMEs in Eldoret Town, Kenya.

3.7 Measurement of Variables

The Likert scale is one of the most fundamental and frequently used psychometric tools in the economy, politics, sociology, psychology, information systems, and much more research (Taherdoost, 2019). This research adopted the seven Likert scale based on the suggestion of various scholars who argued that it provides a variety of options which leads to an increase in the probability of meeting the objective reality of the respondents (Al-Mandil, 2016; Altuna & müge Arslan, 2016; Chelogoi, 2020; Joshi, Kale, Chandel, & Pal, 2015). The 7 –point Likert scale reveals more description about the motif and therefore appeals practically to the faculty of the reason of the participants. In addition, the 7-point Likert scale performs better than the 5-point Likert scale, as suggested by (Altuna & müge Arslan, 2016; Joshi *et al*., 2015).

3.7.1 Dependent and Independent Variables

The dependent variable, financial performance, refers to how well the enterprise utilizes assets from its prime business to generate revenue. It had nineteen items adopted and used

in this study with few modifications to meet the study's objectives. The items were adopted from Arinda (2019); Chepngetich (2016); Eton *et al*. (2019); Kirwa and Ngeno (2020). On the other hand, Cash management practices as a predictor variable had three constructs, namely; accounting practices with scale items adopted from Emmanuel (2014); Ibrahim (2017); Uwonda and Okello (2015), while budgeting practices items were adopted from Ibrahim (2017); Mungal (2015) and lastly cash flow management, scale items are adopted from Eton *et al.* (2018); Mungal (2015); Uwonda and Okello (2015).

3.7.2 Moderator variable

Financial literacy, as the moderating variable, is a blend of the individual's skills, behavior, awareness, knowledge, and attitude that is required to make sound financial decisions to achieve financial well-being. Financial literacy has three constructs, financial knowledge, behavior, and financial attitude, adopted from Garg and Singh (2018); Ibrahim (2017); Tuffour *et al*. (2020). Financial knowledge refers to the ability to understand and effectively use various financial skills and concepts, while financial behavior is viewed as the management of savings, expenditures, and budgets (Rahman *et al.*, 2021). On the other hand, a financial attitude refers to a personal inclination towards financial matters. It is an ability to plan and maintain saving accounts and business matters (Rai, Dua, & Yadav, 2019). Therefore, financial literacy utilized twenty-four items adopted from Ibrahim (2017); Otieno (2016); Susan (2020).

3.7.4 Covariates

Two constructs were controlled in this study: firm age and size, in order to get the net effect of cash management practices, financial literacy, and financial performance of MSMEs.

Previous studies found that firm size and age have a significant influence on an enterprise's financial performance (Blackburn, Hart, & Wainwright, 2013; Chelogoi, 2020; Pervan, Pervan, & Ćurak, 2017; C. Yang, Singh, & Wang, 2020).

3.8 Reliability and Validity of Research Instruments

Reliability and validity describe the psychometric features of the research instruments. Reliability and validity are applied to instruments such as rating scales and screening tools (Andrade, 2018). In addition, they measure the correctness and relevance of the data. According to Sürücü and Maslakçi (2020), the research instrument may be reliable without being valid. Nonetheless, a valid measuring instrument can be considered reliable. Hence, reliability alone is not enough to ensure validity. For these reasons, the researcher tested both the reliability and validity of the instrument intended to use. To enhance reliability and validity of the research instrument, the researcher trained four research assistants for three days who helped to issue questionnaires to participants of this study.

3.8.1 Reliability of the Research Instruments

According to Andrade (2018), reliability is the degree of consistency and accuracy with which an instrument measures variables. Therefore, the reliability of the research instrument is the extent to which the instrument yields consistent results and data subjected to repeated trials under the same conditions. It is further viewed as the extent to which the data analysis procedures and collection methods produce consistent output (Chebii, 2017). Sürücü and Maslakçi (2020) submit that it is quite difficult to get the same results due to differences in the time the research instrument is applied as well as the change in the

population and the sample size. However, a strong positive correlation between the results of the measuring instrument indicates reliability.

Moreover, different approaches are used to determine the reliability of the measuring instrument, for instance, test-retest reliability, alternative forms, and internal consistency tests. Internal consistency tests can be applied in three ways: alpha reliability coefficient (Cronbach's Alpha Coefficient and Kuder-Richardson-20 and 21), split half, and item-total correlations. The Cronbach's Alpha coefficient is the most popular approach used in various studies to test internal consistency. The Cronbach's Alpha coefficient of the value approaching +1 indicates a high level of internal consistency (Sürücü & Maslakçi, 2020). In this study, the questionnaire was tested for reliability using the Cronbach Alpha coefficient to determine the internal consistency of items. The Cronbach's Alpha value of 0.7 and above was considered a good indicator of the scale's internal consistency.

3.8.2 Validity of the Instrument

According to Duckett (2021), validity refers to the extent to which an instrument measures what it is designed to measure. Thus, validity shows the degree to which results obtained from data analysis represent the phenomenon under the study. It is further perceived to determine whether the instrument measures the behaviors or the quality it is intended to measure. Also, it measures how well the measuring instrument performs its function (Sürücü & Maslakçi, 2020). Therefore, this study employed face, content, criterion-related, and construct validity. Face validity occurs when the researcher typically verifies the measuring instrument by asking an expert to evaluate the instrument's intent (Duckett,

2021). The supervisors assessed the measuring instrument on the relevance of the questions to the study's objectives to test face validity.

On the other hand, content validity helps the researcher to assess or evaluate whether the expression in the measuring instrument represents the phenomenon intended to be measured (Souza, Alexandre, & Guirardello, 2017; Sürücü & Maslakçi, 2020). The content validity reveals the extent to which each item in the measuring instrument serves the purpose. Mohajan (2017) submits that a questionnaire should include a sufficient set of items covering the whole concept; hence, the more the scale items represent the domain of the concept being measured, the greater the content validity. However, no statistical test exists to determine whether a measuring instrument adequately covers the required content. Thus, the researcher verified content validity by conducting a literature review to determine the content that should be covered and by asking the supervisors to evaluate the instrument representativeness of the content.

Mohajan (2017) argued that criterion-related validity predicts future or current performance. Therefore, criterion-related validity deals with the relationship between scale scores and some specific, measurable criterion. This is further supported by Souza *et al.* (2017), who argued that predictive validity is when the criterion is measured in the future, while concurrent validity is when the criterion determines the current performance. Souza *et al.* (2017) further revealed that a correlation coefficient could test criterion validity. Hence, a value close to 1.00 indicates a correlation between variables, whereas a value close to 0.00 suggests no correlation. However, correlation coefficients equal to 0.7 and above are desirable. The researcher determined criterion validity using correlation results as independent variables explain the dependent variable.

Finally, construct validity is the extent or degree to which the instrument measures the concept, idea, behaviour, or quality (theoretical construct) required to measure(Sürücü & Maslakçi, 2020). Furthermore, construct validity is broadly categorized into hypothesis testing, cross-cultural validity, and structural or factorial validity. This study utilized factorial validity since it provides tools to evaluate the correlation in many variables. It also defines the factors, that is, the variables related to each other.

According to Souza *et al.* (2017), factorial validity can be verified by confirmatory factor analysis (CFA) rather than exploratory factor analysis (EFA). Since confirmatory factor analysis (CFA) verifies how well the analyzed variables represent a small number of the construct and is used to confirm the structural model of the instrument. However, EFA is a tool to explore the dimensions of a group of items; that is, it provides the researcher with only the necessary number of factors to represent the data. Based on the argument of Souza *et al.* (2017), factorial loads must be at least 0.5, and if an item presents a value under 0.5, it should be dropped from the factorial model. Therefore, the researcher adopted the above concept in examining construct validity.

3.8.3 Pilot Study

A pilot test was carried out to detect the limitation in design and instrumentation as well as provide proxy data for a selection of probability samples (In, 2017). It is viewed as a small feasibility study designed to test various aspects of the methods planned for the primary investigation (Lowe, 2019). The pilot study helped to improve the main study's quality and efficiency (Ismail, Kinchin, & Edwards, 2018). Connely (2008) advocates that the pilot study sample should be 10% of the sample projected for the prime study. Therefore, the pilot study was conducted within Kitale town, Trans Nzoia County, Kenya, since the

features of business activities in these towns are the same. The pilot study results revealed the instrument was reliable and valid with Cronbach's alpha of 0.933, and all factor loads were greater than 0.5, as argued by Souza et al. (2017); therefore, no item was dropped in the study at this stage **(APPENDIX VI).**

3.9 Data Processing, Analysis, and Presentation

This section presents the concepts of how the researcher processed, analyzed data and how the researcher presented the study's final findings.

3.9.1 Data Processing

Data processing comprises coding the response, cleaning, screening the data collected, and selecting appropriate data analysis methods for testing the hypotheses, as cited by (Simiyu *et al*., 2020). Coding data refers to transforming collected data into a set of meaningful, cohesive categories (Wicks, 2017). Therefore, each item in the questionnaire was assigned a code and entered into the Statistical Package for the Social Sciences (SPSS) version 23 for analysis. On the other hand, screening and cleaning data helped the researcher to check the accuracy, completeness, data distribution and enhanced the validity and reliability of measurements.

3.9.2 Data Analysis and Presentation

Data analysis refers to the critical analysis and interpretation of figures and numbers and attempts to find a rationale behind the emergence of the main findings (Chebii, 2017). Data analysis aims to get a deeper understanding of collected data, determine consistent patterns, and summarize the relevant details revealed in the research (Chebii, 2017). The researcher

used descriptive statistics such as standard deviation, mean, and frequency distribution to analyze data regarding respondents' profile information and measuring items. Cronbach's Alpha coefficient was conducted to check the instrument's reliability and internal consistency. Factor analysis was conducted and items that met decision criteria were transformed to form real variables, which helped the researcher to test hypotheses. In addition, a correlation coefficient test was conducted to assess the relationship between the variables. Moreover, through the help of SPSS version 23, the researcher used hierarchical regression analysis to test variables' direct and moderation effects on financial performance. Finally, the study findings were presented through percentages, graphs, tables, descriptions, and discussions.

3.10 Assumptions of Regression Model

The statistical model is a simplification of reality expressed in mathematics language. Hence, to achieve this simplification, all statistical models make assumptions (Casson & Farmer, 2014). Therefore, various regression model assumptions are important to test and assess the reliability of the result before making any conclusions. Consequently, when the assumptions are not achieved, the result may be inaccurate, resulting in type I error, which occurs when the researcher rejects the null hypothesis when it is true, while type II error is when the investigator accepts the null hypothesis when it is false. Therefore, the researcher tested linearity, normality, homoscedasticity, multi-collinearity, and autocorrelation assumptions.

3.10.1 Linearity

The linearity assumption requires that the relationship between outcome and predictor variables be approximately linear (Casson & Farmer, 2014). Linearity was tested using a P-P scatter plot of scores represented by a straight line.

3.10.2 Normality

A normality test assesses whether sample data has been drawn from a normally distributed population. Uttley (2019) advocated that a series of diagnostic tests rather than black-and-white judgment must be tested to confirm whether the data collected for the study is sufficient to meet the assumption of normal distribution. In regression analysis, the residuals (errors between the predicted and actual values) must be normally distributed, but not the actual variables. The distribution of a data set can be visually inspected using histograms, quantile-quantile plots(Q-Q), and box plots. A histogram represents a data set by indicating the count of values within an equally sized range, while Q-Q plots compare actual data against expected data. If data collected were from a normal distribution, it would be represented by a straight line on the Q-Q plots. However, any deviation from a straight line indicates a deviation from a normal distribution.

On the other hand, a box plot is where a solid horizontal line indicates the median value within the box (Uttley, 2019). Furthermore, normality is defined by a mean of 0 and a standard deviation of 1 (Hickey, Kontopantelis, Takkenberg, & Beyersdorf, 2019). Normality can also be tested by skewness and kurtosis. Skewness affects the test of means; therefore, as a rule of thumb for normality, it should be within +2 to -2. On the other hand, Kurtosis refers to the peakedness of distribution with an acceptable range of +2 to -2

(Garson, 2012). Therefore, the researcher tested normality using histograms, skewness, and kurtosis.

3.10.3 Homoscedasticity

Hickey *et al*. (2019) submit that inference errors are equal for all predictor variables when using a regression model. Therefore, homoscedasticity refers to equal levels of variance maintained between dependent and independent variables and can be tested by Levene's test (Al-Mandil, 2016). Moreover, Al-Mandil (2016) further argued that the assumption of homoscedasticity is closely associated with the normality test; hence, if normality is achieved, then the relationship between variables is said to be homoscedastic.Levene's test of homogeneity of variances is the most common test of the homoscedasticity assumption that each group of one or more categorical independent variables has the same variance on an interval dependent (Garson, 2012). As a rule of thumb, if the value of Levene's test or Sig>0.05, then the variance is said to be homogeneous, while if the value of Levene's test is less than 0.05, then the variance is not homogeneous (Asrial *et al*., 2022). Thus, Levene's test examines the null hypothesis, which suggests the equality of variance in different groups. However, the assumption of homogeneity of variances can be violated when the null hypothesis is rejected (Al-Mandil, 2016). In this case, homoscedasticity could be checked by visually examining a plot of the standardized residual by the standardized predicted values (Simiyu *et al*., 2020). Therefore, the researcher utilized p-p plots to check for homoscedasticity.

3.10.4 Multicollinearity

According to Hickey *et al*. (2019), collinearity refers to a situation where one predictor is linearly determined fully or partially by another. Therefore, multicollinearity refers to the situation where independent variables are highly correlated (R≥.9)(Al-Mandil, 2016). According to (Garson, 2012), intercorrelation among the predictors above .80 indicates a possible problem. Multi-collinearity assessment can be achieved using the tolerance and variance inflation factors (Garson, 2012; Simiyu *et al*., 2020). According to Al-Mandil (2016), tolerance addresses the amount of variability in the predictor variables that is not justified by other independent variables. If the tolerance value is less than the cut-off value of .20, the predictor should be dropped from the analysis due to multicollinearity. On the other hand, the variance inflation factor (VIF) can be used as a lieu or substitute for tolerance since VIF is the reciprocal of tolerance. Therefore, the square root of VIF represents the degree or extent to which the standard error has been increased because of multicollinearity. In addition, VIF > 4.0 signals a multicollinearity problem (Hickey *et al.*, 2019).

3.10.5 Autocorrelation

Autocorrelation refers to the correlation between members of a series of observations ordered in time (time series) or space (cross-sectional data) (Chelogoi, 2020). A series correlation indicates that the model variables violate the regression assumptions. To test autocorrelation, Durbin-Waston will be utilized (Chen, 2016; Islam & Erum, 2019). Uyanto (2020) states that the Durbin Waston test performs better in the regression model without lagged dependent variables and reduces with increasing autocorrelation and

sample sizes. In addition, Durbin-Waston ranges between 0-4, and as per the rule of thumb, if Durbin- Watson ranges between 1.5 to 2.5 indicates no autocorrelation problem. Thus, the researcher used the Durbin Waston concept to test for autocorrelation.

3.11 Model Specification

A hierarchical regression model determined the linear relationship between the predictor variables (Accounting practices, budgeting practices, and cashflow management) and the outcome variable (financial performance). Moreover, hierarchical regression analysis also examined the moderating effect of financial literacy on the relationship between:

(a) Accounting practices and financial performance

(b) Budgeting practices and financial performance

(c) Cashflow management and financial performance

Therefore, several regression models were built by adding variables to the previous model at each step. The main objective is to determine whether newly added variables show a significant increase in R^2, as submitted by (Van -Dusen & Nissen, 2019). The regression equation was in the form:

Model 1: $Y=\beta_0+\beta_1$firm age $+\beta_2$firm size $+Ɛ$……. R^2

Model 1 was used to evaluate how much variance is explained by covariates.

Model 2: $Y=\beta_0+C+\beta_1X_1+\beta_2X_2+\beta_3X_3+Ɛ$…… ΔR^2

In model 2, the independent variables were added to the first model to examine how much variance is explained by the independent variable while holding covariates constant.

Model 3: $Y=\beta_0+C+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4M+Ɛ$……. ΔR^2

In Model 3, the model tested the variance accounted for by the moderator in the dependent variable while holding predictor variables and covariates constant.

Model 4: $Y=\beta_0+C+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4M+\beta_5X_1M+\mathcal{E}\ldots\ldots\ldots\ldots\ldots..\Delta R^2$

This model tested the effect of the independent variable (accounting practices) on the moderator (financial literacy) while controlling covariates, direct effects of the moderator as well as other predictor variables (budgeting practices and cashflow management)

Model 5: $Y=\beta_0+C+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4M+\beta_5X_1M+\beta_6 X_2 M+\mathcal{E}\ldots\ldots\ldots\ldots\ldots...\Delta R^2$

Model 5; tested the effect of the independent variable (budgeting practices) on the moderator (financial literacy) while controlling covariates, direct effects of the moderator, as well as other predictor variables (accounting practices and cashflow management)

Model 6: $Y=\beta_0+C+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4M+\beta_5X_1M+\beta_6X_2M+\beta_7X_3M+\mathcal{E}\ldots\ldots\ldots\ldots\Delta R^2$

Model 6; tested the effect of the independent variable (cashflow management) on the moderator (financial literacy) while controlling covariates, direct effects of the moderator as well as other predictor variables (budgeting practices and accounting practices)

Where:

Y=Dependent variable (financial performance)

B_0= The constant, **$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$** are parameters of estimate

$\mathcal{E}$ = Error term

C = Covariates (size and age of the business)

X_1= Accounting practices

$\mathbf{X_2}$=Budgeting practices

$\mathbf{X_3}$=Cashflow management

M= Moderator (financial literacy)

3.12 Ethical Considerations

Ethics is the standard that separates worthy and non-worthy contact from the general public (Reijers *et al.*, 2018). The researcher presented to respondents the introduction letter from the University of Eldoret and the permit from NACOSTI and Uasin Gishu county Government to assure the respondents that the information they provided was only for academic reasons. Before administering questionnaires, participants were informed that their participation was voluntary. Additionally, integrity, honesty, sincerity, and informed consent were incorporated into the study's data collection phase (Simiyu *et al*., 2020). The anonymity and confidentiality of the respondents were respected by ensuring the data collection instruments did not bear the respondents' names. The researcher avoids deception and plagiarism by citing and referencing all sources of information to acknowledge and protect the rights of intellectuals (Rohwer, Wager, Young, & Garner, 2018). Finally, the researcher took the initiative to collect, analyze and present data required to fulfill the study objectives without manipulation.

CHAPTER FOUR

RESULTS PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter entails the analysis of data collected related to the study's variables using the research tools discussed in the previous chapters. The chapter also presents the research findings, analysis, presentation, and interpretation.

4.1 Response Rate and Missing Data

The data of this study was collected from owners/managers of micro, small and medium enterprises (MSMEs) in Eldoret town, Kenya, with the aid of four trained research assistants between 19th May and 19th June 2023. Three hundred and ninety-eight (398) questionnaires were administered to the respondents; however, only three hundred and twenty (320) were collected from the field. After screening the data gathered, only 304 questionnaires were well-filled, representing 76% of the total questionnaires administered. However, 16 were not completely filled and hence were dropped from the study, representing about 4 % of the questionnaires issued, as shown in **Table 4.1**. According to Kazzazi, Haggie, Forouhi, Kazzazi, and Malata (2018), a response rate of 50% and above is considered viable for the study. The study had a 76% response rate; hence, data collected was viable to proceed to the analysis.

Missing data is viewed as the observations in the data collection instrument that exist but have not been captured or captured and then lost (Simiyu *et al.*, 2020). Missing data may cause bias and reduce the results' efficiency (Madley-Dowd, Hughes, Tilling, & Heron, 2019). The researcher and his assistants reduced the presence of missing values in the field

by quickly cross-checking if all questionnaire items had been addressed upon receiving the questionnaire from the respondents. If the questionnaire had not been filled out well, the respondent's attention was drawn and asked to act on an unanswered question(s). In addition, before the beginning of data analysis, descriptive statistics, specifically frequency, was conducted to check if any missing values were missing during data entry, and any missing values were rectified immediately.

Table 4.1: Response Rate

Categories	**No. of Questionnaires**	**Percentage %**
Effective Questionnaires	**304**	**76**
Unreturned Questionnaires	**78**	**20**
Returned and Defective	**16**	**4**
Total	**398**	**100**

4.2 Demographic Information of Respondents

This section presents the demographic characteristics of the respondents of this research. The demographic information section is essential since it provides the data concerning respondents and is necessary to determine whether the individuals in the study are representative samples of the target population for generalization purposes (Ray & Rubenstein,2020). Without including participants' information, researchers’ risk assuming the stance of absolutism, which believes that the phenomena of interest are the same regardless of their profile. Therefore, providing detailed information about participants' profiles enables the researcher to move towards universalism, which acknowledges that universal psychological processes may manifest differently based on demographic data

(Hammer, 2011). The examination of 304 participants of this research in regard to gender, age, level of education, duration of business in operation, and size of the business measured by the number of employees is revealed in **Table 4.2**

4.2.1 Gender

The research sought to examine the gender of the participants to ensure fair engagement of participants in terms of their gender. The result of the study indicated that the majority of Micro, Small and Medium Enterprises (MSMEs) owners /managers were male, with 67.4% (n=205), while the females were explained by 32.6% (n=99). This could be due to a lack of seed capital to start and operate the business.

4.2.2 Respondent's Age

Otieno (2016) argued that different age categories are believed to have different views on various issues. The researcher used different age groups to ensure the study consisted of multiple opinions from different age brackets. The study's outcome revealed that most respondents were within the age bracket of 26-30 years, representing 37.5% (n=114), followed by 27.3% of the participants aged between 21-25 years (n=83). The respondents aged 31 to 35 years were explained by 20.7% (n=63). The fourth respondent Category was those aged above 35, representing 12.5% (n=38); finally, those below 20 years were the least in this study, with 2.0% (n=6). This indicates that most of the respondents in this research were youth aged 35 years and below, representing 87.5% (n=266).

4.2.3 Level of Education

The level of education explains an individual's understandability of different issues (Onyango, 2018; Otieno, 2016). The study's findings revealed that the majority of the

respondents had a degree, representing 39.1%, (n=119), 32.2%(n=98) of the respondents in this study held a diploma certificate, 16.1% (n=49) had a certificate, and 12.5% (n=38) had other qualifications. Based on the education status statistics, the research posits that most MSMEs were in the position to make viable choices in relation to questions highlighted in the questionnaire.

4.2.4 Firm Age

The study also aimed to examine how long enterprises have been in operation. The findings in **Table 4.2** show that the majority of MSMEs had operated for less than 5 years, accounting for 45.1% (n=137), 39.1%(n=119) of MSMEs had run for 5 to 10 years, and 9.9% (n=30) of the enterprises have been in operation for the period between 10 and 15 years. The study further indicated only 18 of 304 MSMEs have been in operation for more than 15 years, accounting for 5.9% of the total respondents. This clearly reflects the high mortality rate of MSMEs, which could be caused by lack of cash management practices, financial illiteracy, and unfavorable government policies, among other factors.

4.2.5 Firm Size

The findings on the firm size measured by the number of employees established that out of 304 respondents, 203 were owners/managers of Micro enterprises represented by below 10 employees, accounting for 66.8%, followed by 10-49 employees representing small businesses, which was represented by 26.6 % (n=81). Medium enterprises represented by 50- 99 employees were the least, indicating a 6.6% (n=20). The findings revealed that there is a high rate of start-ups, but a minimal number of these enterprises grow to another level

of MSMEs classes. This might be due to poor financial performance measured by profitability, sales growth, and the enterprises' liquidity position.

Table 4.2: Demographic Information of the Respondents

Demographic Factor		Frequency	Percentage %
Gender	Male	205	67.4
	Female	99	32.6
Total		**304**	**100**
Age	Below 20 years	6	2.0
	21-25 years	83	27.3
	26-30 years	114	37.5
	31-35 years	63	20.7
	Above 35 years	38	12.5
Total		**304**	**100**
Level of Education	Certificate	49	16.1
	Diploma	98	32.2
	Degree	119	39.1
	Other qualification	38	12.5
Total		**304**	**100**
Firm age	Below 5 Years	137	45.1
	5-10 Years	119	39.1
	10-15 years	30	9.9
	Above 15 years	18	5.9
Total		**304**	**100**
Firm size	Below 10 Employees	203	66.8
	10-49 Employees	81	26.6
	50-99 Employees	20	6.6
Total		**304**	**100**

4.3 Descriptive Statistics for the Study Variables

The outcome, predictor and moderator variables were subjected to descriptive statistics analysis (mean and standard deviation). The outcome variable was financial performance, and predictor variables were accounting practices, budgeting practices, and cash flow management, whereas financial literacy was used as the moderator in this study.

4.3.1 Descriptive Statistics for Financial Performance Items

Financial performance had three building blocks: profitability, growth in sales, and liquidity. The variable had nineteen measurement items presented on a Likert scale with seven points. The results show that most of the businesses focused on increasing business return on investment; this had the highest mean of 5.37 and a standard deviation of 1.503. The respondents also agree that the business utilized resources to generate revenue, with a mean of 5.01 and a standard deviation of 1.509. Other measurement items had an above-average mean, indicating that questions were evenly responded to. However, the item “if the business has employed more sellers to increase profits” scored the least mean of 4.18 with a standard deviation of 1.751, and this shows that the number of sellers in the enterprises depends on the nature of the business; hence, some MSMEs have few sellers, but they perform well financially as compared to those with many sellers as indicated in **Table 4.3**

Table 4.3: Mean and Standard Deviation for Items on Financial Performance

Measuring Items	Mean	Std. Deviation
The business focuses on increasing return on investment	5.37	1.503
The business utilizes its resources to generate revenue	5.01	1.509
Our customers have been increasing over time	4.79	1.528
The business' sales level has been growing over time	4.72	1.568
This business does not run into bankruptcy	4.65	1.913
Our business has registered growth in turnover, resulting in an increase in earnings	4.64	1.520
Our profits have been increasing over time	4.62	1.509
We often purchase more than previous purchases	4.47	1.573
The profits from the business are higher compared to the liabilities	4.47	1.552
The business has grown significantly in terms of operating profits over the last three months	4.46	1.694
The business market size has increased in a new market, leading to more income	4.37	1.667
The proportion of profit we save keeps increasing	4.37	1.563
The business generates sufficient cash through sales that meet immediate obligations	4.33	1.560
Our revenues often exceed the expenses we incur	4.31	1.556
The business earnings per share have increased over the last year	4.30	1.660
This business avoids exposure to financial risks	4.29	1.679
The business has a stable financial position	4.27	1.681
Our business has a favorable liquidity position	4.19	1.598
The business has employed more sellers to increase profits	4.18	1.751

Source: Research Data (2023) n=304 *Scale 1=Strongly Disagree;7 Strongly Agree

4.3.2 Descriptive Statistics for Accounting Practices Items

Fifteen items were used to measure accounting practices with three dimensions: record keeping, banking practices, and computerized accounting with the aid of the seven Likert scale. **Table 4.4** indicates that most of the participants in this study ensure safe custody of cash through banking, scoring a mean of 4.93 and a standard deviation of 1.847. This was closely followed by the measurement item indicating that computerized banking services

have fastened the mode of transactions, representing a mean of 4.85 and a standard deviation of 1.847. Other items that were used to measure accounting practices scored above the average mean, but most of the respondents were in disagreement that businesses had regular computerized audits performed by qualified auditors, scoring a mean of 4.11 and a standard deviation of 1.902.

Table 4.4: Mean and Standard Deviation for Items on Accounting Practices

Measuring Items	Mean	Std. Deviation
I ensure safe custody of cash through banking	4.93	1.908
Accounting package services have fastened the mode of transactions	4.85	1.847
I perform financial analysis to determine business performance	4.79	1.666
I record all the assets of the business	4.74	1.788
We do effective bookkeeping	4.71	1.711
The filing system of accounting supporting documents is well-kept in a secure area	4.67	1.890
There is an efficient banking internal control system in the business	4.65	1.741
We review our financial statements every month using computer packages	4.54	1.822
I prepare financial statements for our business	4.50	1.837
We prepare a separate business cash book from the petty cash book	4.48	1.840
Computerized banking services have helped me to acquire loan statements	4.45	1.829
I usually do bank reconciliation	4.45	1.961
I keep business records using computer systems	4.40	1.954
The enterprises have clear written accounting policies and procedures	4.39	1.972
The business has regular computerized audits performed by qualified staff	4.11	1.902

Source: Research Data (2023) n=304 *Scale :1=Strongly Disagree;7 Strongly Agree

4.3.3 Descriptive Statistics for Budgeting Practices Items

Table 4.5 below indicates that most respondents agreed that budgets are used as a guide to new investment, representing a mean of 5.10 and a standard deviation of 1.643. In addition,

the respondents also agree that budgeting helps to control inventory, with a mean of 4.96 and a standard deviation of 1. 630. Out of twenty-one items measuring budgeting practices, the data revealed that the measuring item "We normally spend more money than what we budgeted for" scored the lowest, with a mean of 4.29 and a standard deviation of 1.808.

Table 4.5 Mean and Standard Deviation of Items on Budgeting Practices

Measuring Items	Mean	Std. Deviation
Budgets are used as a guide to new investment	5.10	1.643
Budgeting helps to control inventory	4.96	1.630
Budgets are used as estimates for additional capital	4.96	1.705
The business ensures its expenditures are explained and justified	4.94	1.610
Budgets are used as a basis for effective revenue and cost control	4.91	1.716
I prepare budgets to help monitor business performance	4.88	1.781
The business ensures program reviews and budgetary control	4.80	1.601
We normally work within our budget in both income and expenditure	4.80	1.624
Long-term financial target influences the management of expenses	4.78	1.681
We always purchase what is budgeted for	4.72	1.668
Budget systems and processes are included in disaster recovery and business continuity arrangements	4.72	1.814
In our business, we prepare written financial objectives of what we want to achieve	4.70	1.711
The business avoids non-business expenses	4.70	1.670
In our business, we follow weekly/monthly/quarterly plans for expenses	4.70	1.556
Our budget is normally prepared continuously	4.67	1.624
In business, we normally forecast our transactions before we budget	4.64	1.635
We budget based on the previous budget	4.57	1.650
The business sticks to prepared budgets during the implementation	4.51	1.615
The business always budgets for petty cash	4.45	1.682
The business allows employees to participate in the budgeting process	4.30	1.767
We normally spend more money than what we budgeted for	4.29	1.808

Source: Research Data (2023) n=304 *Scale 1=Strongly Disagree;7 Strongly Agree

4.3.4 Descriptive Statistics for Cashflow Management Items

The cashflow management variable had three constructs with thirteen statements posed to the respondents, as indicated in **Table 4.6.** The statistics showed that most of the respondents could manage their business's day-to-day operations, scoring the highest mean of 5.33 with a standard deviation of 1.532. Additionally, there was agreement among the owners/managers of MSMEs they keep updated cashflow statements for their business, pocketing a mean of 5.15 and a standard deviation of 1.6.22. However, the results further revealed that the item “the business had adequate free cash flow” scored the lowest mean of 4.46 and standard deviation of 1.457; this indicates that most MSMEs lack adequate cash to run their business, possibly due to poor cash management practices. All the statements had a mean value with a standard deviation of more than one; this portrays disparity in the opinions among those who filled out the questionnaires in relation to the measuring items.

Table 4.6 Mean and Standard Deviation of Items on Cashflow Management

Measuring Items	Mean	Std. Deviation
I can easily manage the day-to-day operations of our business	5.33	1.532
We keep updating cashflow statement for our business	5.15	1.622
It is easy to plan and control cash flow	5.07	1.475
The business avoids giving too many credits	5.05	1.549
The business often checks its interest credit policies	4.86	1.613
The business cash flow is positively improving	4.80	1.368
The business matches its cash outflows with inflows	4.76	1.541
The business has a sustainable cash flow	4.74	1.507
Cashflow forecasting duration is flexible	4.71	1.568
The business prepares cash flow projections	4.59	1.546
The redundant assets are turned into cash	4.56	1.656
Our business has enough cash reserves	4.56	1.490
The business has adequate free cash flow	4.46	1.457

Source: Research Data (2023) n=304 *Scale 1=Strongly Disagree;7 Strongly Agree

4.3.5 Descriptive Statistics for Financial Literacy Items

Table 4.7 shows mean and standard deviation measuring items relating to financial literacy. The mean of the item “I plan to use saving for future growth” was the highest, scoring a mean of 5.33 with a standard deviation of 1.519. The result further revealed that the respondents were aware that how they manage business money today will influence ongoing concerns of their enterprises, scoring a mean of 5.19 with a standard deviation of 1.553. however, the statement “We have insurance coverage to protect our business against uncertainties” had the lowest score with a mean of 4.57 and a standard deviation of 1.821. This indicates why some MSMEs do not recover from financial distress in case of any uncertainty.

Table 4.7 Mean and Standard Deviation of Items on Financial Literacy

Measuring Items	Mean	Std. Deviation
I plan to use my savings for future growth	5.33	1.519
The way I manage business money today will influence ongoing concerns of the business	5.19	1.553
I analyze financial performance periodically	5.18	1.588
It is important to establish a financial target for the future prosperity of the business	5.17	1.602
Preventing risks ensures the security of my business	5.14	1.635
My savings reduces reliance on credits	5.13	1.509
My social environment contributes much to my financial management skills	5.13	1.614
I keep financial reserves in case of uncertainties	5.11	1.511
I am aware of the costs and benefits of accessing credit	5.08	1.481
I prepare written financial objectives of what I want to achieve in business	5.01	1.513
I save a portion of the business income to generate interest	4.99	1.563
I understand basic accounting knowledge	4.99	1.551
Information from financial statements helps me to make decisions for the prosperity of the business	4.93	1.580
I am familiar with basic financial concepts that are needed to make viable investment decisions	4.91	1.522
Long term financial budget influences the management of business expenses	4.89	1.534
I understand the effect of inflation and interest rates on the loans I borrow	4.89	1.604
I can calculate the loan interest rate	4.86	1.594
I can determine the total debt position of the business	4.84	1.534
Our business follows a weekly or monthly plan for expenses	4.80	1.589
Making a risky decision will add value to business returns	4.78	1.611
I have adequate knowledge to prepare and balance ledger accounts.	4.77	1.571
I have participated in training programs for financial management skills	4.72	1.721
I can access finance at a minimum cost	4.62	1.594
We have insurance coverage to protect our business against uncertainties.	4.57	1.821

Source: Research Data (2023) n=304 *Scale 1=Strongly Disagree;7 Strongly Agree

4.4 Descriptive Statistics for the Study Constructs

Numerous measuring items were posed to the respondents through a structured questionnaire to measure each construct used in this study: financial performance, accounting practices, budgeting practices, cash flow management, and financial literacy. The mean value of financial performance is 4.60, explained by the standard deviation of 1.00 with skewness and kurtosis of- 0.42 and 0.76, respectively. The results further revealed that accounting practices had a mean score of 4.57 and a standard deviation of 1.31 with Skewness of -0.47 and kurtosis of -0.13. The results in **Table 4.8** indicate that budgeting practices had a mean of 4.74 with a standard deviation of 1.11 and skewness and kurtosis of -0.700 and 0.37, respectively. The study's findings further indicated that cash flow management had a mean of 4.83 and a standard deviation of 1.01, accounting for the skewness of -0.29 and Kurtosis of -0.11. Finally, the data revealed that financial literacy had a mean of 4.97 with a standard deviation of 1.09, represented by skewness of -0.65 and kurtosis of -0.15.

Table 4.8 Descriptive Statistics for the Variables

Variables	Mean	Std Deviation	Skewness	Kurtosis
Financial Performance	4.6026	1.00414	-.417	.076
Accounting Practices	4.5776	1.30671	-.474	-.131
Budgeting Practices	4.7434	1.11477	-.699	.365
Cashflow Management	4.8298	1.01059	-.290	-.106
Financial Literacy	4.9735	1.08671	-.646	-.148

Source: Research Data (2023) n=304 *Scale ;1 strongly disagree;7=strongly Agree

4.5 Reliability Test for the Research Instrument

The study utilized measures from already tested constructs. However, it was necessary to examine the research instrument to check if all items measured the behaviors or the quality it intended to measure. The reliability shows a researcher's faith in the data collected using a research tool, that is, the extent to which a measuring tool controls for random error (Mohajan, 2017). Cronbach's alpha is the most used method to assess the internal consistency reliability estimates. Cronbach's Alpha is the average of all possible split-half reliability estimates of an instrument (Lakshmi & Mohideen, 2013). Generally, the coefficient varies from 0 to 1, but values below 0.7 indicate unsatisfactory internal consistency reliability (Bajpai, 2014; Lakshmi & Mohideen, 2013). The study tests the reliability of each variable, as discussed below.

4.5.1 Reliability Test for Financial Performance

Table 4.9 shows the overall Cronbach's alpha for the 19 financial performance items of Micro, Small and Medium Enterprises as 0.905, which is within an acceptable range. The items in Table 4.9 helped the researcher check whether any item needed to be dropped to improve Cronbach's alpha. Corrected item-total correction indicates the association of the item with the total score on the other items. Cronbach's alpha, if an item is deleted column, measures the value of Cronbach's alpha coefficient after the removal of the corresponding item (Hajjar, 2018). Values of an item-total correction help to show discrimination in the questions used in the study. Values 0.19 and below may indicate the question is not discriminating well, while values ranging between 0.2 and 0.39 indicate good discrimination. Finally, values of 0.4 above indicate perfect discrimination. However,

Hajjar (2018) advocated that the value of corrected item-total correlation above 0.30 is considered viable. The results revealed that all measuring items of financial performance met the standard of Cronbach's alpha of more than 0.7 and corrected item-total correlation of more than three. However, the item " the business focus on increasing return on investment had the least corrected item-total correlation of 0.313, which is good discrimination as submitted by (Hajjar, 2018). Removing this item will only increase Cronbach's alpha from 905 to 906.

Table 4.9: Reliability for Financial Performance

Cronbach's alpha .905 **Total number of items 19**	**Corrected Item-Total Correlation**	**Cronbach's Alpha if Item Deleted**
The business focuses on increasing return on investment	.313	.906
The business has grown significantly in terms of operating profits over the last three months	.688	.896
The business earnings per share have increased over the last year	.633	.898
The profits from the business are higher compared to the liabilities	.595	.899
The business utilizes its resources to generate revenue	.519	.901
Our business has registered growth in turnover, resulting in to increase in earnings	.634	.898
Our profits have been increasing over time	.616	.898
Our revenues often exceed the expenses we incur	.502	.901
The proportion of profit we save keeps increasing	.563	.900
The business market size has increased in a new market	.616	.898
The business has employed more sellers to increase profits	.466	.903
The business' sales level has been growing over time	.570	.900
Our customers have been increasing over time	.634	.898
We often purchase more than previous purchases	.527	.901
The business generates sufficient cash through sales that meet immediate obligations	.561	.900
Our business has a favorable liquidity position	.574	.899
This business avoids exposure to financial risks	.393	.904
The business has a stable financial position	.594	.899
This business does not run into bankruptcy	.462	.903

4.5.2 Reliability Test for Accounting Practices

A reliability analysis was conducted on accounting practices comprising 15 items. The data in **Table 4.10** reveals that Cronbach's alpha is at an acceptable range, α=0.929. The table further guides the researcher to decide whether any items need to be dropped by cross-checking Cronbach's alpha if the item deleted column and if any item has less than 0.3. Based on the findings, as displayed in Table 4.10, all the items are worthy of retention since in case of any deletion may result in a decrease in alpha value.

Table 4.10: Reliability Test for Accounting Practices

Cronbach's Alpha .929 **Total number of items 15**	**Corrected Item-Total Correlation**	**Cronbach's Alpha if Item Deleted**
I ensure safe custody of cash through banking	.579	.926
There is an efficient banking internal control system in the business	.644	.924
I usually do bank reconciliation	.664	.924
I prepare financial statements for our business	.698	.923
I perform financial analysis to determine business performance	.629	.925
We do effective bookkeeping	.752	.922
We prepare a separate business cash book from the petty cash book	.726	.922
I record all the assets of the business	.561	.927
We review our review financial statements every month using computer packages	.778	.921
Computerized banking services have helped me to acquire loan statements	.628	.925
Accounting package services have fastened the mode of transactions	.633	.925
I keep business records using computer systems	.551	.927
The filing system of accounting supporting documents is well-kept in a secure area	.718	.922
The business has regular computerized audits performed by qualified staff	.610	.925
The enterprises have clear written accounting policies and procedures	.689	.923

4.5.3 Reliability Test for Budgeting Practices

The reliability test was carried out on budgeting practices measuring scale comprising 21 items, which helped to check the degree of consistency and accuracy with which an instrument measures variable. The findings in **Table 4.11** reveal that these items produced an overall Cronbach's alpha of 0.931. The table further revealed that no items failed to

meet the decision criteria ($r \geq 0.3$, $\alpha \geq 0.7$). However, the item "We normally spend more money than what we budgeted for" scored the least total correction of 0.342. If this item is removed, Cronbach's alpha will improve by .002.

Table 4.11: Reliability Test for Budgeting Practices

Cronbach's Alpha 0.931 **Total number of Items 21**	**Corrected Item-Total Correlation**	**Cronbach's Alpha if Item Deleted**
I prepare budgets to help monitor business performance	.644	.927
The business ensures its expenditures are explained and justified	.661	.927
The business ensures program reviews and budgetary control	.656	.927
The business sticks to prepared budgets during the implementation	.628	.928
The business always budgets for petty cash	.571	.929
The business avoids non-business expenses	.566	.929
In our business, we prepare written financial objectives of what we want to achieve	.649	.927
Long-term financial target influences the management of expenses	.676	.927
In our business, we follow weekly/monthly/quarterly plans for expenses	.639	.927
The business allows employees to participate in the budgeting process	.515	.930
We always purchase what is budgeted for	.546	.929
In business, we normally forecast our transactions before we budget	.572	.929
We budget based on the previous budget	.575	.929
Our budget is normally prepared continuously	.568	.929
We normally work within our budget in both income and expenditure	.611	.928
We normally spend more money than what we budgeted for	.342	.933
Budgeting helps to control inventory	.675	.927
Budgets are used as a basis for effective revenue and cost control	.690	.926
Budgets are used as a guide to new investment	.684	.927
Budgets are used as estimates for additional capital	.652	.927
Budget systems and processes are included in disaster recovery and business continuity arrangements	.601	.928

4.5.4 Reliability Test for Cashflow Management

The reliability test result on cashflow Management with 13 items produced a Cronbach Alpha of 0.890, as displayed in **Table 4:12.** The findings helped the researcher decide whether any items should be dropped to increase Cronbach's alpha. Moreover, the corrected item-total correlation column indicates how each item correlates with the overall questionnaire score. The findings showed that item (10) had the least correlation of 0.400 and $\alpha > 0.890$; therefore, if this item is deleted, Cronbach's alpha will increase to 0.891.

Table 4.12: Reliability test for Cashflow Management

Cronbach's .890 **Total Number of items 13**	**Corrected Item-Total Correlation**	**Cronbach's Alpha if Item Deleted**
I can easily manage the day-to-day operations of our business	.500	.886
It is easy to plan and control cash flow	.626	.880
The business has a sustainable cash flow	.629	.880
Our business has enough cash reserves	.606	.881
The business cash flow is positively improving	.567	.883
The business has adequate free cash flow	.606	.881
The business prepares cash flow projections	.640	.879
The business matches its cash outflows with inflows	.600	.881
The business often checks its interest credit policies	.650	.879
The business avoids giving too many credits	.400	.891
The redundant assets are turned into cash	.538	.885
Cashflow forecasting duration is flexible	.695	.877
We keep updating cashflow statement for our business	.537	.885

4.5.5 Reliability Test for Financial Literacy

Table 4.13 shows the overall Cronbach's alpha of 0.948 for financial literacy, comprising 24 items. All items had $\alpha < 0.948$ except one, which had $\alpha > 0.950$ with the least correlation

score of 0.323. If item two (2) is removed, the study Cronbach alpha will increase from 0.948 to 0.950.

Table 4.13: Reliability Test for Financial Literacy

Cronbach's Alpha .948 **Total number of items 24**	**Corrected Item-Total Correlation**	**Cronbach's Alpha if Item Deleted**
I analyze financial performance periodically	.570	.946
We have insurance coverage to protect our business against uncertainties.	.298	.950
I am aware of the costs and benefits of accessing credit	.673	.945
I can calculate the loan interest rate	.580	.946
I understand basic accounting knowledge	.635	.946
I have adequate knowledge to prepare and balance ledger accounts.	.645	.945
Information from financial statements helps me to make decisions for the prosperity of the business	.743	.944
I am familiar with basic financial concepts that are needed to make viable investment decisions	.767	.944
I prepare written financial objectives of what I want to achieve in business	.683	.945
Long term financial budget influences the management of business expenses	.717	.945
Our business follows a weekly or monthly plan for expenses	.629	.946
I can access finance at a minimum cost	.616	.946
I can determine the total debt position of the business	.652	.945
I understand the effect of inflation and interest rates on the loans I borrow	.718	.945
I save a portion of the business income to generate interest	.696	.945
My savings reduces reliance on credits	.639	.946
I keep financial reserves in case of uncertainties	.671	.945
I plan to use my savings for future growth	.706	.945
It is important to establish a financial target for the future prosperity of the business	.693	.945
The way I manage business money today will influence ongoing concerns of the business	.740	.944
Making a risky decision will add value to business returns	.532	.947
I have participated in training programs for financial management skills	.586	.946
Preventing risks ensures the security of my business	.652	.945
My social environment contributes much to my financial management skills	.565	.946

4.6 Factor Analysis

Factor analysis is a measure of construct validity. Validity refers to the extent to which the research tool measures what it is intended to measure and is categorized into internal and

external validity (Hajjar, 2018; Lakshmi & Mohideen, 2013). Internal validity reveals whether the study outcomes are legit based on how data was recorded and analyzed and how the samples were selected. On the other hand, external refers to whether the study's findings can generalize to different settings, measures, or situations (Lakshmi & Mohideen, 2013). Factor analysis operates on the belief that observable as well as measurable variables can be reduced to fewer latent variables that share common variance and are unobservable, which is majorly known as reducing dimensionality.

Besides placing items into meaningful groups, factor analysis is essential in mapping, scaling, hypothesis testing and data transformation. Exploratory and confirmatory factor analysis are two main techniques of factor analysis. Exploratory Factor Analysis (EFA) tries to uncover complex patterns by exploring the dataset and testing prediction. It works better with a larger sample size, whereas Confirmatory Factor Analysis (CFA) attempts to confirm the hypothesis and use a path analysis diagram to explain variables and factors (Sarıçam, 2018; Yong & Pearce, 2013). Based on the above argument, this study used exploratory Factor analysis.

4.6.1: Assumptions of Factor Analysis

Before performing factor analysis, the data must have univariate and multivariate normality, and univariate and multivariate outliers should not exist. For something to be named, a factor should have at least three variables; however, this depends on the study's design. In addition, the researcher should check whether there is a linear relationship between the factor and variables when examining correlation (Yong & Pearce, 2013). In addition, the sample size should be heterogeneous, with at least 300 participants, and the

variables subjected to factor analysis should have at least five to ten observations. The Correlation should be $r \geq 0.3$. Finally, it is essential to check the absence of multicollinearity and singularity within the dataset by looking at squared multiple correlations (SMC). Variables with singularity problems squared multiple correlations are close to zero, whereas multicollinearity issues are shown when SMC is close to 1.0 (Yong & Pearce, 2013).

4.6.2 Factor Analysis for Financial Performance

After observing all assumptions mentioned above, Factor analysis was conducted on 19 items measuring financial performance to establish a number of items that loaded to specific dimensions, which were later used to test hypotheses. Five Items with factor loading less than 0.5 were removed to increase construct validity, resulting in three components, as argued by (Souza *et al.*, 2017). Exploratory factor analysis was utilized, and Kaiser-Olkin's measure of sampling adequacy was 0.874 above the threshold of 0.6, as submitted by Sarıçam (2018). Bartlett's test Sphericity must be significant for the suitability of data. The findings in **Table 4.14** indicate that Bartlett's test sphericity was significant with a Chi-square of 1773.486, at (df=91, P=.000). Given these tests, it clearly shows that data was valid to test for the hypotheses.

Table 4.14: Rotated Components Analysis for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.				.874
Bartlett's Test of Sphericity	Approx. Chi-Square			1773.486
	Df			91
	Sig.			.000
Dimensions and measurement items	Component 1to 3	1	2	3
Component 1-Profitability				
The business has grown significantly in terms of operating profits over the last three months.		.786		
The business earnings per share have increased over the last year.		.842		
Our business has registered turnover growth, resulting in an increase in earnings.		.709		
Our profits have been increasing over time.		.630		
The business market size has increased in a new market, leading to more income.		.646		
The business has employed more sellers to increase profits.		.581		
Component 2-Growth in Sales				
The business' sales level has been growing over time.			.705	
Our customers have been increasing over time.			.764	
We often purchase more than previous purchases.			.755	
The business generates sufficient cash through sales that meet immediate obligations.			.651	
Component 3-Liquidity				
Our business has a favorable liquidity position.				.684
This business avoids exposure to financial risks.				.771
The business has a stable financial position.				.740
This business does not run into bankruptcy.				.650

The factor loading used for each item of financial performance was clustered into profitability, growth in sales, and liquidity. The result in Table **4.15** shows that 14 items resulted in three components. Component 1 was loaded as profitability with six measuring items with an initial eigenvalue of 5.748, explained by a variance of 41.054. Component 2 was growth in sales, four items loaded under it with an eigenvalue of 1.479 and variances

of 10.567, and finally, liquidity emerged as component three with an eigenvalue of 1.213 and variance of 8.665 representing four items. An eigenvalue greater than 1 indicates that each factor can explain more variation than individual dimension. The table further revealed that three dimensions explain more than 60% cumulative variance of financial performance.

Table 4.15 Eigen Values and Variance of Financial Performance

Component	Initial Eigen Values	Total% of variance	Cumulative %
Profitability	5.748	41.054	41.054
Growth in sales	1.479	10.567	51.621
Liquidity	1.213	8.665	60.286

4.6.3 Factor Analysis for Accounting Practices

The factorability of 15 accounting practice items was analyzed, as shown in **Table 4.16.** The principal component extraction with varimax rotation examined 15 measuring items. The results revealed Kaiser-Meyer Olkin (KMO) of 0.912, greater than the required threshold. This indicates that the sample size was adequate for the study. In addition, the table further shows that Barlett's test of sphericity is significant, with a p-value of 0.000, degree of freedom of 105, and a chi-square of 2718.569. Results revealed that all items measuring accounting practices were loaded under three dimensions; thus, no item was dropped from the study.

Table 4.16: Rotated Components Analysis for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.				.912
Bartlett's Test of Sphericity	Approx. Chi-Square			2718.569
	Df			105
	Sig.			.000
Dimensions and measurement Items	Components 1-3	1	2	3
Component 3-Banking Practices				
I ensure safe custody of cash through banking.				.883
There is an efficient banking internal control system in the business.				.837
I usually do bank reconciliation.				.605
Component 1-Record Keeping				
I prepare financial statements for our business.		.687		
I perform financial analysis to determine business performance.		.818		
We do effective bookkeeping.		.754		
We prepare a separate business cash book from the petty cash book.		.770		
I record all the assets of the business.		.539		
Component 2-Computerised Accounting				
We review our financial statements every month using computer packages.			.508	
Computerized banking services have helped me to acquire loan statements.			.650	
Accounting package services have fastened the mode of transactions.			.553	
I keep business records using computer systems.			.659	
The filing system of accounting supporting documents is well-kept in a secure area.			.639	
The business has regular computerized audits performed by qualified staff.			.772	
The enterprises have clear written accounting policies and procedures.			.762	

Table 4.17 shows that 15 measuring items of accounting practices resulted in three factors; bookkeeping, computerized accounting, and banking services. These factors had respective initial eigenvalues of 7.539,1.259 and 1.092, and they are explained by variances of

50.263%, 8.392% and 7.278%. Three dimensions explained about 66 % variance of accounting practices.

Table 4.17 Eigen Values and Variance of Accounting Practices

Component	Initial Eigen Values	Total % of Variance	Cumulative%
Record keeping	7.539	50.263	50.263
Computerized Accounting	1.259	8.392	58.655
Banking Practices	1.092	7.278	65.933

4.6.4 Factor Analysis for Budgeting Practices

Budgeting practices had 21 items subjected to exploratory factor analysis to examine the dimension of a group of items. **Table 4.18** shows that out of 21 items, only three failed to score a factorial load of at least 0.5 and, therefore, were dropped from the study to enhance construct validity. The result further revealed that the KMO measure of sample adequacy was 0.917, and Bartlett's test was significant with a Chi-Square of 3341.680 (p-value. 000, df 171), confirming the appropriate factor analysis for the dataset.

Table 4.18: Rotated Components for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.					.917
Bartlett's Test of Sphericity	Approx. Chi-Square				3341.680
	Df				171
	Sig.				.000
Dimensions and measurement Items	Components 1-4	1	2	3	4
Component 2: Resource Allocation					
I prepare budgets to help monitor business performance.			.719		
The business ensures its expenditures are explained and justified.			.818		
The business ensures program reviews and budgetary control.			.812		
The business sticks to prepared budgets during the implementation.			.760		
The business always budgets for petty cash			.611		
Component 4: Budget Planning					
In our business, we prepare written financial objectives of what we want to achieve.					.626
Long-term financial target influences the management of expenses.					.712
Our business follows weekly/monthly/quarterly plans for expenses.					.759
The business allows employees to participate in the budgeting process.					.572
Component 3: Financial Forecasting					
We always purchase what is budgeted for				.727	
In business, we normally forecast our transactions before we budget.				.649	
We budget based on the previous budget.				.757	
Our budget is normally prepared continuously.				.588	
We normally work within our budget in both income and expenditure.				.656	
Component 1: Budgeting Control					
Budgeting helps to control inventory.		.735			
Budgets are used as a basis for effective revenue and cost control.		.807			
Budgets are used as a guide to new investments.		.805			
Budgets are used as estimates for additional capital.		.777			
Budget systems and processes are included in disaster recovery and business continuity arrangements.		.708			

Table 4.19 shows remaining 19 items measuring budgeting practices were sorted and categorized into four components: component 1, budgeting control, with an eigenvalue of 8.512 and variance of 44.802%; component 2, resource allocation scoring an eigenvalue of 1.631 with variance of 8.584%; component 3, financial forecasting, with an eigenvalue of 1.513 and variance of 7.961% and finally component 4 budget planning also had an initial eigenvalue of 1.081 and variance of 5.691%. Cumulatively, these dimensions explained about 67% variance in budgeting practices.

Table 4.19 Eigenvalue and Variance for Budgeting Practices

Component	Initial Eigenvalues	Total % of Variances	Cumulative %
Budgeting Control	8.512	44.802	44.802
Resource Allocation	1.631	8.584	53.387
Financial Forecasting	1.513	7.961	61.348
Budget Planning	1.081	5.691	67.039

4.6.5 Factor Analysis for Cashflow Management

Cashflow management was one of the predictor variables with 13 measuring items. The items were exposed to principal component extraction with varimax rotation to check whether construct validity had been achieved. **Table 4.20** shows that KMO measured sampling adequacy was 0.843. The results further revealed that Bartletts' test was significant in this research, with Chi- Square of 1270.139 at 55 degrees of freedom and a significant level of p=.000. Two items were removed from the study since they did not

achieve the threshold of 0.5. The remaining 11 items formed three components: Cashflow from investing activities, financing activities, and cash flow from operating activities, represented by components 1,2 and 3, respectively.

Table 4.20 Rotated Components for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.				.843
Bartlett's Test of Sphericity	Approx. Chi-Square			1270.139
	Df			55
	Sig.			.000
Dimension and measuring items	Components 1-3	1	2	3
Component 3: CFF Operating Activities				
I can easily manage the day-to-day operations of our business.				.910
It is easy to plan and control cash flow.				.841
Component 2: CFF Financing Activities				
Our business has enough cash reserves.			.773	
The business cash flow is positively improving.			.661	
The business has adequate free cash flow.			.841	
The business prepares cash flow projections.			.623	
Component 1: CFF Investing Activities				
The business often checks its interest on credit policies.		.572		
The business avoids giving too many credits.		.694		
The redundant assets are turned into cash.		.729		
Cashflow forecasting duration is flexible.		.735		
We keep updating the cash flow statement for our business.		.657		

In addition to the above, **Table 4.21** indicates that three dimensions had an initial eigenvalue above 1.0. For instance, cash flow from investment activities has the highest eigenvalue of 4.667 with a variance of 42.428%, followed by cash flow from financing activities, which had the eigenvalue of 1.241, explained by an 11.284 %variance, and cash flow from operating activities had the least eigenvalue of 1.119 explained by 10.177%

variance. The three dimensions explained about 64% of the variance in cash flow management.

Table 4.21: Eigen Value and Variance of Cashflow Management

Component	Initial Eigen Value	Total% of variance	Cumulative %
Cashflow from Investing Activities	4.667	42.428	42.428
Cashflow from Financing Activities	1.241	11.284	53.712
Cashflow from Operating Activities	1.119	10.177	63.888

4.6.6 Factor Analysis for Financial Literacy

Table 4.22 shows 20 items that were transformed into variables to test the hypothesis after removing four items that did not meet the rule of thumb of factor loads ≥ 0.5. The findings indicated that three components emerged from the data collected: financial behavior, financial knowledge, and financial attitude as components 1,2 and 3, respectively. The table further revealed a KMO of 0.936 with significant Bartlett's test represented by a Chi-Square of 3573.291, df =190, and p-value of 0.000.

Table 4.22: Rotated Component Analysis for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.				.936
Bartlett's Test of Sphericity	Approx. Chi-Square			3573.291
	Df			190
	Sig.			.000
Dimension and measuring items	Components 1-3	1	2	3
Component 2 Financial Knowledge				
I am aware of the costs and benefits of accessing credit.			.645	
I can calculate the loan interest rate.			.783	
I understand basic accounting knowledge.			.818	
I have adequate knowledge to prepare and balance ledger accounts.			.750	
Information from financial statements helps me to make decisions for the prosperity of the business.			.654	
I prepare written financial objectives of what I want to achieve in business.			.588	
Component 1 Financial Behavior				
Our business follows a weekly or monthly plan for expenses.		.548		
I can access finance at a minimum cost.		.616		
I can determine the total debt position of the business.		.646		
I understand the effect of inflation and interest rates on the loans I borrow		.634		
I save a portion of the business income to generate interest.		.733		
My savings reduces reliance on credits.		.685		
I keep financial reserves in case of uncertainties.		.655		
I plan to use my savings for future growth.		.603		
It is important to establish a financial target for the future prosperity of the business.		.619		
Component 3 Financial Attitude				
The way I manage business money today will influence ongoing concerns of the business.				.569
Making a risky decision will add value to business returns.				.689
I have participated in training programs for financial management skills.				.606
Preventing risks ensures the security of my business.				.740
My social environment contributes much to my financial management skills.				.794

The findings further revealed that the three dimensions of the financial literacy component had an initial eigenvalue greater than 1.0 (9.454,1.743,1.108), as indicated in **Table 4.23.**

Financial behavior, knowledge, and attitude are explained by the variance of 47.270%, 8.714%, and 5.539%, accordingly. However, they cumulatively explained about 62% of the variance in financial literacy.

Table 4.23 Eigenvalue and Variance of Retained Items

Component	Initial Eigenvalue	Total % of variance	Cumulative %
Financial Behavior	9.454	47.270	47.270
Financial Knowledge	1.743	8.714	55.984
Financial Attitude	1.108	5.539	61.523

4.7 Analysis of Outliers

Before further analysis, the researcher checked for discordant or outliers in the data collected. An outlier is viewed as data that appears to deviate markedly from other sample datasets in which it occurs, making it harder to fit the desired model (Boukerche, Zheng, & Alfandi, 2020). Outliers are perceived as extreme values on one variable (univariate outlier) or multivariate outliers, a combination of anomalies to at least two variables (Leys, Delacre, Mora, Lakens, & Ley, 2019). Outliers are further classified into error, interesting and influential outliers. Therefore, to detect the presence of univariate outliers in this study, the researcher applied median absolute deviation, whereas multivariate outliers were detected using the Mahalanobis distance (Leys *et al*., 2019). The extreme outliers were removed from the study to improve the inference of results; consequently, questionnaires were reduced from 304 to 302.

4.8 Correlation Analysis

Correlation analysis is perceived to be the association between two or more quantitative variables. It is based on the assumption of a linear relationship between the variables (Gogtay & Thatte, 2017). The correlation coefficient values range between -1(strong negative relationship) and +1(strong positive association), while a correlation coefficient of zero indicates that there is no linear relationship between variables (Akoglu, 2018). The correlation coefficient can be determined using Karl Pearson's correlation coefficient (r) or Spearman's rank correlation coefficient. The study utilized Karl Pearson's coefficient to examine the relationship between the real variables, as shown in **Table 4.24.** The study's findings indicate that accounting practices had a strong positive relationship with financial performance (r=0.627, P=0.01). The second relationship between budgeting practices and financial performance had a strong correlation coefficient of 0.579 and p-value =0.01. The cash flow management and financial performance had a strong correlation coefficient of 0.553 at a significant level of p=0.01. Financial performance and financial literacy had the weakest link but were positively related (r=0.468, p=0.01). The table further revealed no multicollinearity problem since the intercorrelations among the variables were below 0.80 (Garson, 2012).

Table 4.24 Pearson Correlation Analysis

Variable (n=302)	Financial performance	Accounting Practices	Budgeting Practices	Cashflow Management	Financial Literacy
Financial performance	1				
Accounting Practices	.627**	1			
Budgeting Practices	.579**	.601**	1		
Cashflow Management	.553**	.578**	.634**	1	
Financial Literacy	.468**	.450**	.558**	.555**	1

** Correlation is significant at the 0.01 level (2 Tailed)

4.9 Testing Assumption for Regression Analysis

Regression analysis it a mathematics way of sorting out variables that have an impact (Gallo, 2015). It is further viewed as a statistical tool for estimating the association among variables with reason and result relation (Uyanık & Güler, 2013). Most of the time, regression analysis is run to examine the relationship between two or more constructs that have cause-and-effect relations as well as for prediction purposes (Gogtay, Deshpande, & Thatte, 2017; Uyanık & Güler, 2013). Like any other statistical model, regression analysis makes assumptions such as linearity, normality, homoscedasticity, multicollinearity and autocorrelation (Alita, Putra, & Darwis, 2021). When these regression assumptions are not achieved, the study will likely be inaccurate and the researcher may make wrong inferences due to type 1 type 11 errors. To avoid the consequences mentioned prior, the researcher checked for regression assumptions before testing the hypotheses, as discussed below.

4.9.1 Linearity

A statistical model is a summary of reality expressed in mathematical language. To achieve simplification, all statistical model makes assumptions; therefore, regression analysis assumes that the relationship between variables is linear (Casson & Farmer, 2014). Previous studies have shown that if the association between predictors and outcome variables is not linear in nature, it may result in wrong inferences (Al-Mandil, 2016; Casson & Farmer, 2014; Ernst & Albers, 2017).To test the assumption of linearity, the researcher utilized scatter plots by visual inspection of p-p plots to verify whether the variables were linearly related, as submitted by Casson and Farmer (2014). The linearity assumption of regression analysis is met when the relationship between variables is linear and the scatter plot of the score is represented by a straight line rather than a curve (Al-Mandil, 2016; Hickey *et al.*, 2019). **Figure 4.1** indicates that scatterplots clustered around the trend line in a linear form, indicating that there is a positive relationship between the variables; hence, the assumption of linearity of variables was fulfilled.

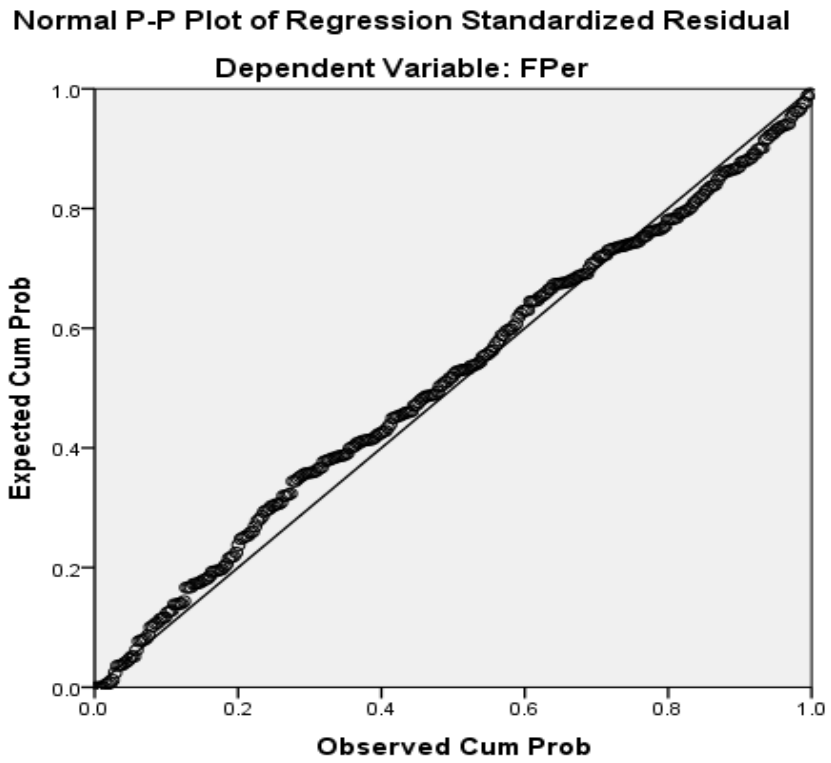


Figure 4.1 Test for linearity

4.9.2 Normality Test

In statistics, it is tradition to believe or assume that the observations are normal. If the assumption of normality is violated, it may lead to invalid inferential statements, suboptimal estimators, and inaccurate predictions (Das & Imon, 2016). A series of diagnostic tests must be conducted to check whether the data gathered for the research is worth meeting the assumption of normality (Uttley, 2019). To test for the normality in this study, the researcher adopted Skewness, kurtosis, and histograms as suggested by (Oppong & Agbedra, 2016; Uttley, 2019). **Figure 4.2** shows that data used in this research was drawn from a normally distributed population; this is evident by the bell-shaped curve as advocated by (Das & Imon, 2016).

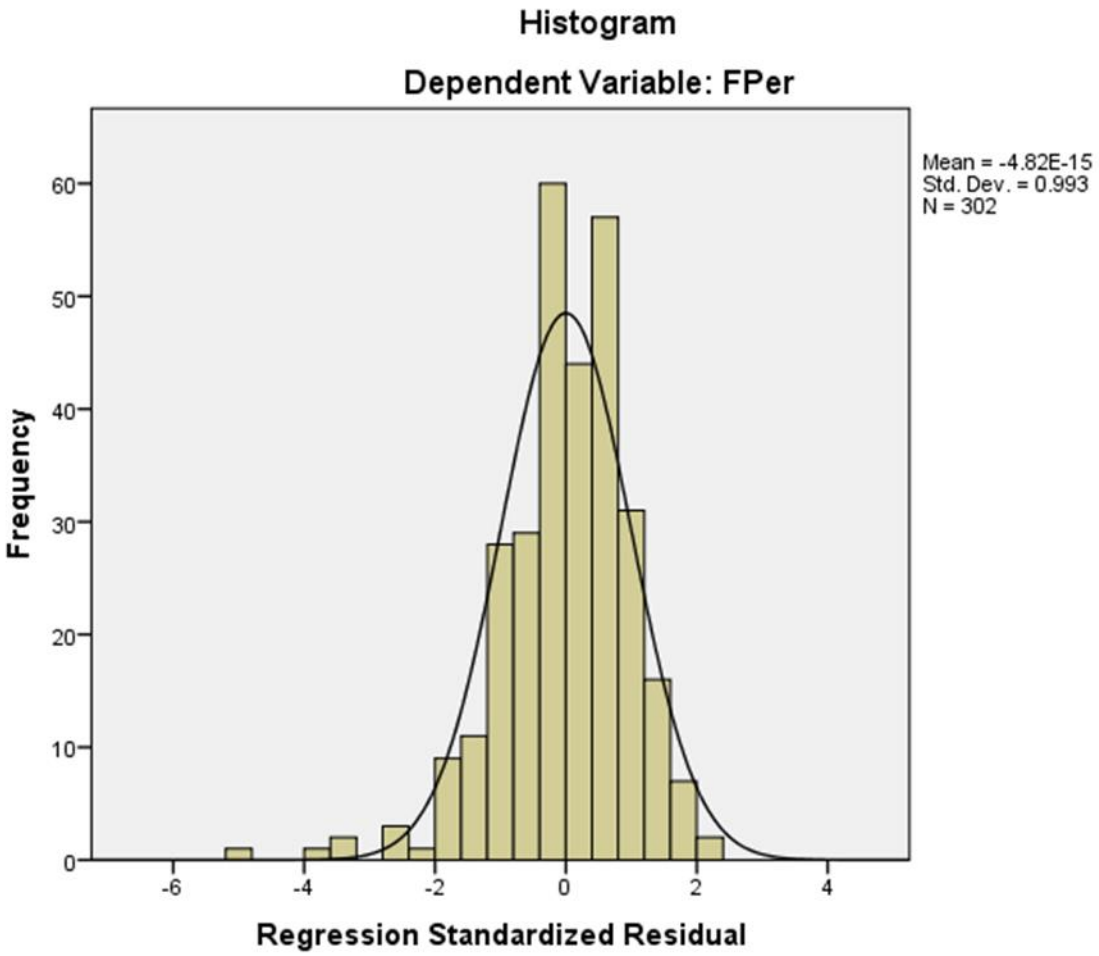


Figure 4.2 Normality Test Histogram

The study further tested for normality assumption using skewness and kurtosis. Skewness characterizes the degree of given distribution around the mean, whereas kurtosis is perceived to be the peakedness or flatness of a distribution compared with a normal distribution (Čisar & Čisar, 2010; Garson, 2012; Mishra *et al*., 2019). As a rule, skewness and kurtosis should range between +2 to -2. (Garson, 2012). Findings in Table **4.25** shows skewness and kurtosis, indicating that data was normally distributed with skew values ranging from -0.341 to -0.596. Kurtosis values were also within the acceptable margin, ranging from 0.344 to -0.480.

Table 4.25 Normality test

Variables	Skewness	Kurtosis
Financial performance	-.341	.062
Accounting Practices	-.570	.120
Budgeting Practices	-.681	.344
Cashflow Management	-.148	-.280
Financial Literacy	-.596	-.035

4.9.3 Testing for Homoscedasticity

Homoscedasticity occurs when an equal level of variance is maintained between predictor and outcome variables, which can be tested using Levene's test, box plots, and scatterplots (Al-Mandil, 2016; Flatt & Jacobs, 2019; Garson, 2012). Violations of homoscedasticity can result in Type 1 error. When using a scatterplot to test the homogeneity of variance, most points should concentrate around zero (Ernst & Albers, 2017; Flatt & Jacobs, 2019). This study used the scatterplot concept to examine the constant variance of the error term. **Figure 4.3** reveals that standardized residual values quoted against standardized predicted values are scattered around zero, showing that the assumption of homoscedasticity has been met.

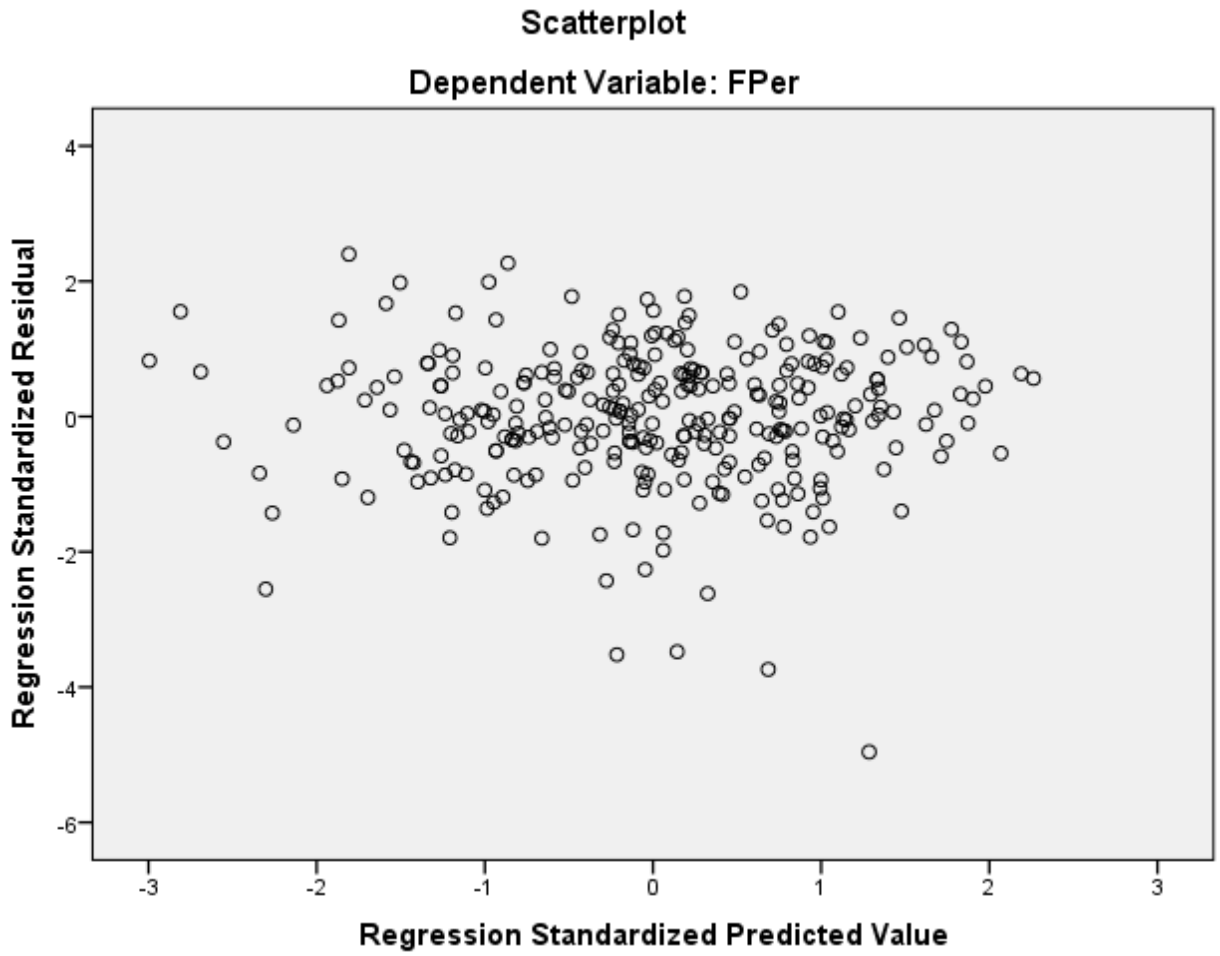


Figure 4.3 Homoscedasticity Test

4.9.4 Multicollinearity Test

Multicollinearity occurs when two or more independent variables are highly correlated and provide redundant information about a response. Multicollinearity increases the standard error of coefficients and nonsensical parameter estimates and reduces reliability (Muriuki & Ombaba, 2018). Multicollinearity was tested using the Variance Inflation Factor (VIF) and tolerance level, as suggested by Al-Mandil (2016); Hickey *et al.* (2019). Many scholars Al-Mandil (2016); Daoud (2017); Garson (2012); Hickey *et al*. (2019), suggested that to

ensure the absence of multicollinearity, tolerance should be>0.2 and VIF<4.0. **Table 4.26** indicates that tolerance values of all the predictor variables are greater than 0.2 and VIF values are less than 4.0, demonstrating that variables are optimally correlated and, hence, no multicollinearity problems in this study.

Table 4.26: Multicollinearity Test

Variables	**Collinearity Statistics**	
	Tolerance	**VIF**
Accounting Practices	.570	1.754
Budgeting Practices	.476	2.099
Cashflow Management	.496	2.017
Financial Literacy	.617	1.621

4.9.5 Autocorrelation Test

To test Autocorrelation, the researcher utilizes Durbin Watson, whose values range between 0 and 4 (Flatt & Jacobs, 2019; Islam & Erum, 2019). Durbin Waston coefficient measures residual difference over time, and values less than one show that successive error terms are positively related, while a value of Durbin Waston greater than three indicates that error terms are negatively correlated. Hence, Durbin Waston should range between 1.5 to 2.5 (Alnabulsi & Salameh, 2021; Flatt & Jacobs, 2019). The results of the current study in **Table 4.27** shows the Durbin-Waston coefficient of 1.902, which is within the acceptable range; this indicates that the value of one observation was not affected by the value of another observation.

Table 4.27: Testing for Autocorrelation Assumption

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.695[a]	.482	.475	.70382	1.902

4.10 Hypotheses Testing

Hypotheses testing is a technique used to examine a possible conclusion from two different and likely conflicting hypotheses (null and alternative Hypothesis) (Ilakovac, 2009). The study examined seven formulated hypotheses at a 5% significant level and 95% confidence interval. The study also applied the concept of p-value to test the hypotheses. The P-value indicates the degree to which the data conforms to the pattern predicted by the test hypothesis and all the other assumptions used in the test. The P- value less than or equal to 0.05 means that the tested hypothesis is false and should be rejected; however, if p >0.05, it indicates that the test hypothesis is true and should be accepted (Greenland *et al*., 2016). Moreover, the beta coefficient from the statistical model shows the slope, which describes the relationship between variables. Before testing the hypotheses, the researcher checked for model fit, as shown in **Table 4.28,** which was significant at ($p \leq .05$; $p \leq .01$; $p \leq .001$)

4.10.1 Results for Direct Effects on Control Variables

A hierarchical regression model was utilized to test the effects of control variables on the outcome variable. Results in **Table 4.28, Model 1** indicate that firm age ($\beta = .241$, $P = .006$) significantly affects financial performance. However, Firm size ($\beta = .090$, $P = .467$) was found to be insignificant. The result in Table 4.28 further showed that control variables had R^2 of 0.061 and ΔR^2 of 0.61, and the model was significant at $p \leq 0.001$, $F = 9.730$. This

implies that control variables explain a 6.1% variation in financial performance. Therefore, if covariates are not controlled, it may result in making wrong inferences.

4.10.2 Hypotheses H_{01}, H_{02}, H_{03}: Effects of Predictor Variables to Financial Performance

Table 4.28, Model 2 shows the inclusion of independent variables in statistical analysis. This was meant to test the direct effect of accounting practices, budgeting practices, and cashflow management on financial performance as indicated by H_{01}, H_{02}, and H_{03} while holding control variables (firm age and size) constant. The study's results in **Table 4.28, Model 2** reveal a significant model fit of $F=78.557$, $p \leq 0.001$. This implies that all predictor variables significantly affect financial performance. In addition, the model was explained by a coefficient of determination $R^2= 0.477$ with $\Delta R^2 =0.416$. The R-Square change of 0.416 shows that accounting practices, budgeting practices, and cash flow management explains approximately 42% of the variation in financial performance. Moreover, the result in **Table 4.28, Model 2** shows that accounting practices ($\beta=.379$, $p=.000$), budgeting practices ($\beta=.230$, $p=.000$), and cashflow management ($\beta=.181$, $p=0.002$); significantly and positively influence financial performance. Based on these findings, Hypotheses H_{01}, H_{02}, and H_{03} are all rejected by the study.

4.10.3 H_{04}: Financial Literacy has Significant Influence on Financial Performance

The study tested the direct effect of a moderating variable (financial literacy) on financial performance by holding control and predictor variables constant. The results in **Table 4.28, model 3** indicate a model fit of F- statistics =4.010, which was significant at $p \leq 0.05$. The study's findings also show that the relationship between financial performance and

financial literacy had a coefficient of determination (R^2=0.484), implying that all variables in Model 3 account for 48.4% of the variance in financial performance. This model further shows ΔR^2=0.007, indicating that holding other factors in the model constant financial literacy explains approximately 1% of the variance in financial performance**.** The results in Table 4.28, Model 3 further reveal that the involvement of financial literacy in direct effect had β=0.107 and p=0.046, which met the decision criteria p≤0.05 as submitted by McLeod (2019). Since the statistical model was significant, we rejected the null hypothesis. Thus, financial literacy positively and significantly affects the financial performance of Micro, small, and medium enterprises.

4.10.4 H_{05a}: Moderating Effect of Financial Literacy on the Relationship between Accounting Practices and Financial Performance

Results in **Model 4 of Table 4.28** reveals the findings of the first interaction of financial literacy as depicted in H_{05a} while holding constants controls, predictor variables, and moderator. Results showed in model 4 reveal an increased R^2 =0.501, implying that all the variables in this model account for about 50% of the variance in financial performance. This model also indicates ΔR^2=0.017, revealing that the interaction term contributes 1.7% of the variance in financial performance. Additionally, the F- statistics of this model was F= 9.883, significant at p ≤ 0. 01. The results also reveal a positive and significant moderating effect of financial literacy on the interaction between accounting practices and financial performance. The results of the interaction indicate a β=0.054, which was significant at p=.002. Based on these results, H_{05a} is rejected, and the conclusion is made that financial literacy moderates the relationship between accounting practices and financial performance. These findings are further illustrated by **Figure 4.4**, which shows

that at low levels of accounting practices, the two categories of enterprises with both low and high levels of financial literacy have the same financial performance. However, as accounting practices increase, financial performance increases in both enterprises, but the increase is higher with enterprises that embrace a higher financial literacy than those with low financial literacy.

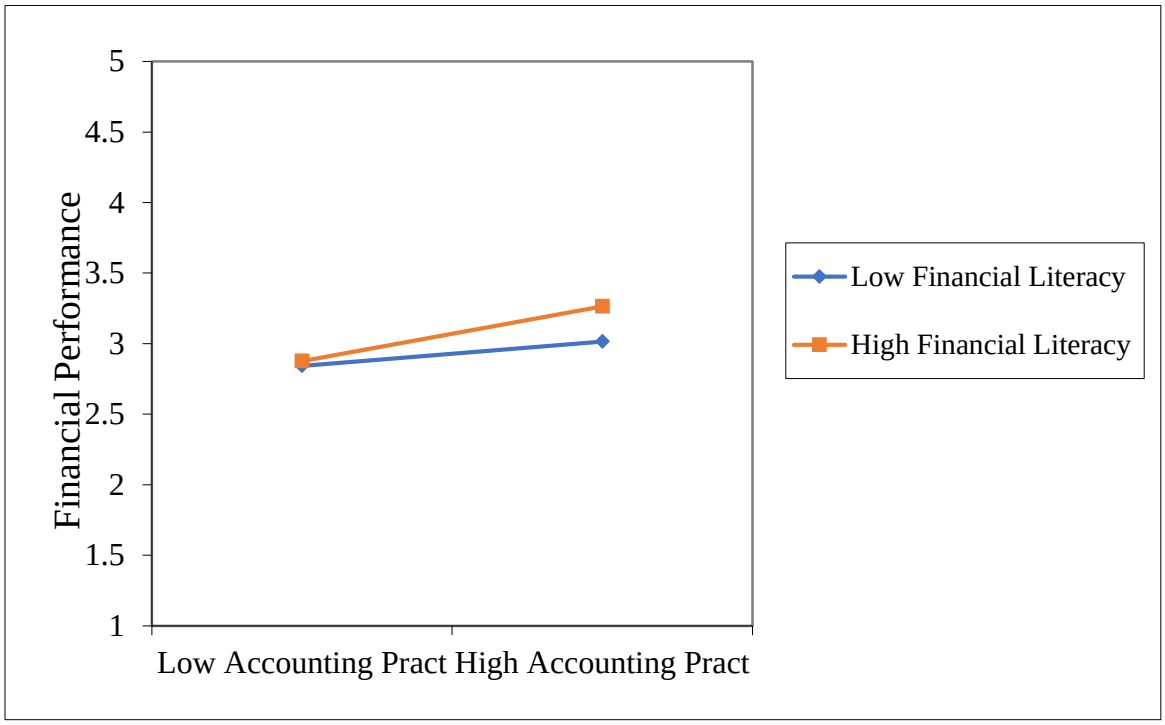


Figure 4.4: Graphical presentation of the Moderating Effect of Financial Literacy on Accounting Practices and Financial Performance

4.10.5 H_{05b}: Moderating Effect of Financial Literacy on the Relationship Budgeting Practices and Financial Performance

Table 4.28, Model 5 tested the moderating effect of financial literacy on the link between budgeting practices and financial performance while holding other variables in this model

constant. Results in Table 4.28, model 5 reveals a model fit of F-statistics =4.649, which was significant at $p \leq .05$. The results of Table 4.28, model 5 further show that the interaction among variables has an increased R^2 of 0.509, meaning that all the variables in this model explain 51% of the variance in financial performance. The Results further indicate a $\Delta R^2=0.008$, indicating that the interaction process contributes approximately 1% of the variance in financial performance. Findings also show that the interaction between financial literacy on budgeting practices and financial performance was significant and indicated by $\beta=0.081$ and $p=0.032$. Since the p-value is less than 0.05, H_{05b} is rejected. The findings of this interaction are further illustrated by **Figure 4.5,** which reveals that at low levels of budgeting practices, enterprises' financial performance is higher for enterprises that embrace high levels of financial literacy than those with low financial literacy. As budgeting practices increase in these enterprises, financial performance increases. However, the increase is higher with enterprises that have invested much in high financial literacy than those with low financial literacy.

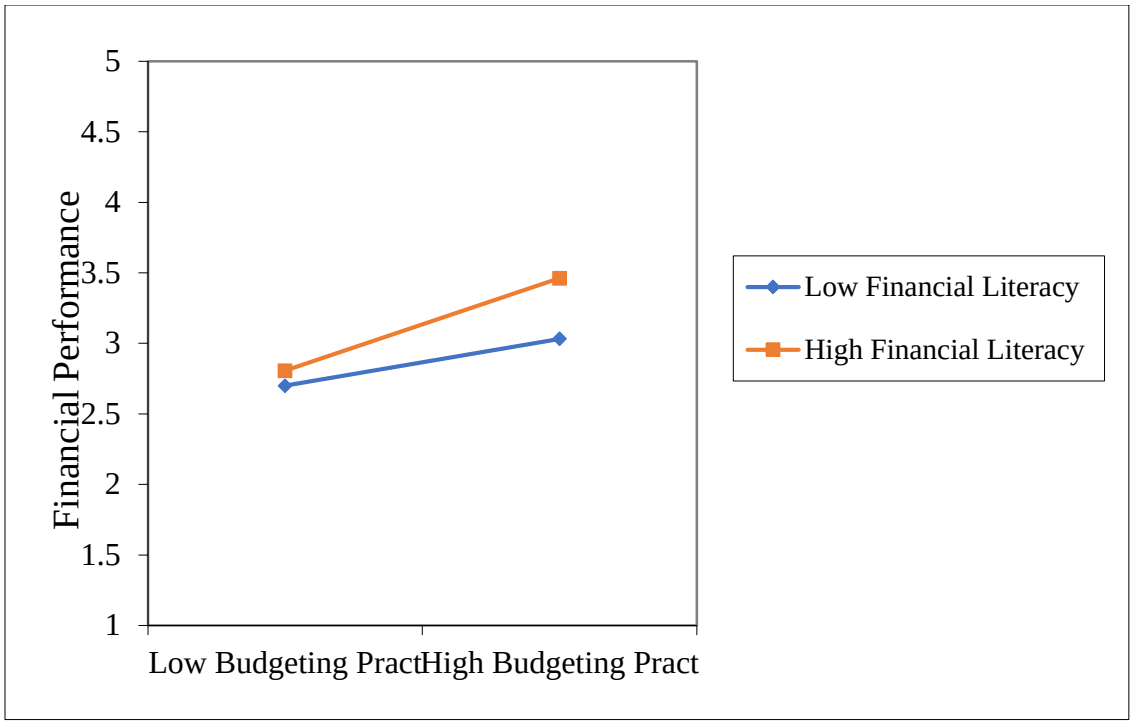


Figure 4.5: Graphical Representation of the Moderating Effect of Financial Literacy on Budgeting Practices and Financial Performance

4.10.6 H_{05c} Moderating Effect of Financial Literacy on the Relationship between Cashflow Management and Financial Performance

In **Model 6** of **Table 4.28,** the researcher tested the moderating effect of financial literacy on the relationship between cash flow management and financial performance. Before testing the hypothesis, the researcher checked for model fit, and the results in **Table 4.28** indicated that F-statistics = 9.121, significant at p≤. 0.01. The results further show an improved R^2 =0.524, implying that the variables in this model contribute to 52.4% of the variance in financial performance. The change in R-Square (ΔR^2=0.015) reveals that the interaction process explains 1.5% of the variance in financial performance. The interaction results also show a positive and significant effect of financial literacy on the relationship

between cash flow management and financial performance of MSMEs, as evident by β=0.106, p=0.003; thus, the null hypothesis H_{05c} was rejected. The results are further illustrated by **Figure 4.6,** which reveals that at a low level of cashflow management, enterprises' financial performance is higher for those enterprises that have highly embraced financial literacy than those that do not embrace financial literacy, but as the cashflow management increases, financial performance increases in both enterprises however the increase is high with the enterprises that have invested highly financial literacy than those with low levels of financial literacy.

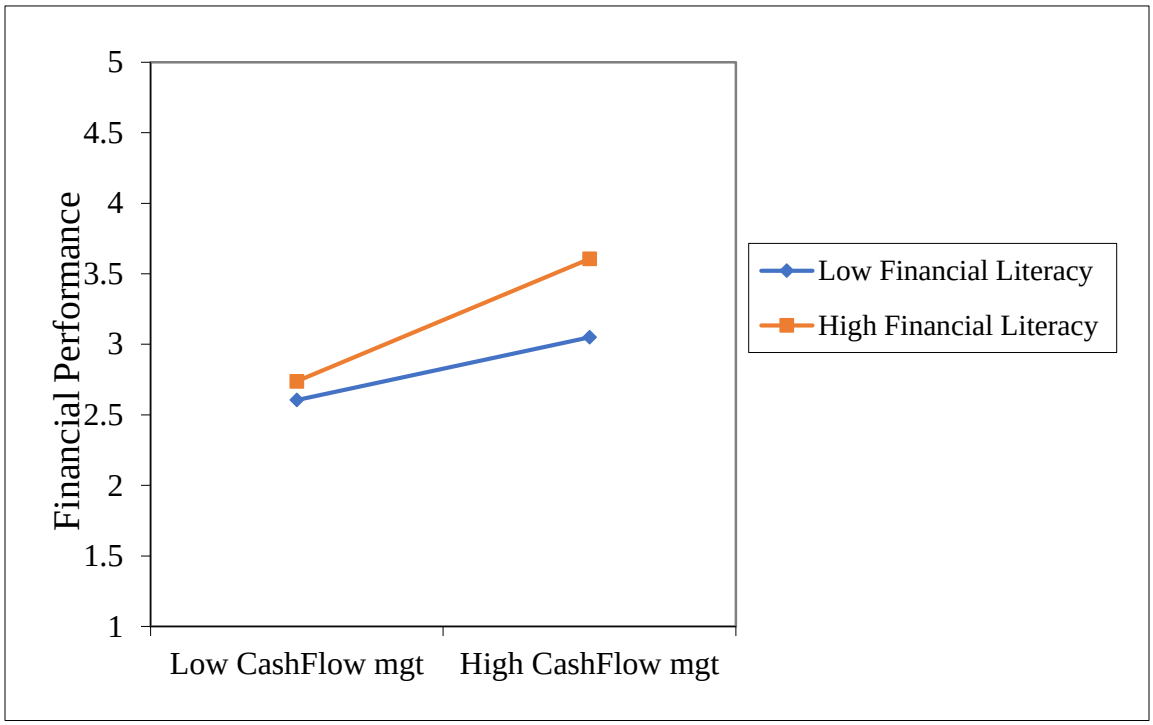


Figure 4.6: Graphical Representation of the Moderating Effect of Financial Literacy on cashflow management and Financial Performance

Table 4.28 Hierarchical Regression Results

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	B	P-value	β	P-value	β	P-value	β	P-value	β	P-value	β	P-value
Constant	-.551	.000	-.087	.446	-.090	.424	-1.286	.001	-1.620	.000	-1.979	.000
Firm Age	.241	.006	-.012	.863	-.019	.782	-.047	.484	-.053	.427	-.064	.329
Firm Size	.090	.467	.077	.407	.088	.339	.061	.503	.065	.473	.068	.446
Accounting practices			.379	.000	.371	.000	.014	.914	.431	.063	.578	.014
Budgeting practices			.230	.000	.196	.001	.177	.004	-.242	.236	.008	.969
Cashflow management			.181	.002	.148	.014	.114	.058	.128	.033	-.328	.044
Financial literacy					.107	.046	-.071	.357	-.134	.103	-.172	.037
Accprac*FL							.054	.002	-015	.678	-.047	.211
Budprac*FL									.081	.032	.022	.597
Cashflo*FL											.106	.003
R^2	.061		.477		.484		.501		.509		.524	
ΔR^2	.061		.416		.007		.017		.008		.015	
F	9.730***		78.557***		4.010*		9.883**		4.649*		9.121**	

Dependent variable: financial performance; p≤0.5. Note: significant *p≤.05; **p≤.01; ***p≤.001

Accprac=Accounting Practices, Budprac= Budgeting Practices, Cashflo=Cashflow management, FL=Financial Literacy

Table 4.29: Summary Results of Hypotheses Tests

	Hypotheses	Beta	P-values	Decision
H_{01}	Accounting practices have no significant influence on financial performance	.379	.000	Rejected
H_{02}	Budgeting practices have no significant influence on financial performance	.230	.000	Rejected
H_{03}	Cash flow management gas no significant influence on financial performance	.181	.002	Rejected
H_{04}	Financial literacy has no significant influence on financial performance	.107	.046	Rejected
H_{05a}	Financial literacy has no moderating influence on the relationship between accounting practices and financial performance	.054	.002	Rejected
H_{05b}	Financial literacy has no moderating influence on the relationship between budgeting practices and financial performance	.081	.032	Rejected
H_{05c}	Financial literacy has no moderating influence on the relationship between Cashflow management and financial performance	.106	.003	Rejected

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

This chapter summarizes the research findings, discussion, conclusion, and recommendations for future research.

5.1 Summary of the Research Findings

The general objective of this study was to determine the moderating role of financial literacy on the relationship between cash management practices and the financial performance of Micro, Small, and Medium Enterprises in Eldoret Town, Kenya. Cash management had three constructs (accounting practices, budgeting practices, and cashflow management) that were directly linked to the outcome variable (financial performance) then the moderator (financial Literacy) was introduced in the relationship between predictor variables and dependent variables. Before testing the hypotheses, the researcher examined the influence of the covariates on the outcome variable. The results revealed that control variables (firm age and firm size) had an R^2 of 0.061; this implied that control variables explained 6.1% of the variance in financial performance. Thus, to make the correct inference, covariates were controlled in this study. The study findings further indicate that accounting practices (H_{01}, β=0.379, p=0.000), budgeting practices (H_{02}, β=0.230, p=0.000), cashflow management (H_{03}, β=0.181, p=0.002) all have a significant and direct effect on the financial performance of MSMEs. Also, the results have shown

that financial literacy had a positive and significant direct effect on financial performance (H_{04}, β=0.107, p=0.046).

Additionally, the study examined the moderating effect of financial literacy on the relationship between accounting practices and financial performance, budgeting practices and financial performance, and cashflow management and financial performance. The findings of the study revealed that financial literacy moderate the relationship between accounting practices and financial performance (H_{05a}, β=0.054, p=0.002), budgeting practices and financial performance ($H_{05b,}$ β=0.081, p=0.032), and cashflow management and financial performance (H_{05c}, β=0.106, p=0.003). Therefore, based on the above evidence, all null hypotheses were rejected, and alternative hypotheses were accepted.

5.2 Discussions

This section reviews how the current study relates to the prior research.

5.2.1 Effect of Accounting Practices on Financial Performance

The result of the current study indicates that accounting practices positively and significantly influenced the financial performance of MSMEs. The result is in agreement with previous studies done by other scholars. For instance, Lukumay and Wako (2018); Manei and Omagwa (2019); Wach and Tarus (2021) agreed that accounting practices have a significant influence on financial performance. Okafor and Daferighe (2019) found out that accounting practices influence performance; thus, for the MSMEs to thrive, there is a need to implement effective and efficient accounting practices coupled with good control procedures.

The current results are backed up by the idea of Nyathi *et al*. (2018) that accounting practices can be used for decision-making that positively influences the performance of SMEs. The results are similar to those of Somathilake and Ranathunga (2021), who found that accounting record-keeping practices positively affect financial performance. This is further echoed by Nsoke, Okolo, and Ofoegbu (2021), who advocated that applying accounting practices concepts results in business growth. Accounting practices are significant to the well-being of SMEs (Okafor & Daferighe, 2019). As a result, the increase in the use of accounting practices aids in reducing the mortality rate of the MSMEs (Nyathi *et al.,* 2018) since the success or failure of any business depends on keeping accurate records and timely accounting information that gives a clear picture of the business well-being (Zotorvie, 2017). However, the study conducted by Chimy and Forzeh (2021) revealed an insignificant but positive relationship between accrual accounting practices and financial performance.

5.2.2 Effect of Budgeting Practices on Financial Performance

The hypothesis postulated that budgeting practices have no significant effect on the financial performance of MSMEs. However, the result of the current study indicates that budgeting practices have a positive and significant impact on financial performance. The findings align with Nelima (2019); Sebastian (2018), who confirmed that budgeting positively affects financial performance. Nwanyanwu and Ogbonnaya (2018); Schubert and Kirsten (2021) also confirmed that budgetary controls significantly influence the financial performance of SMEs. The current study backs up the work of Pimpong and Laryea (2016), who studied the effect of budgeting on the financial performance of non-banking institutions. Pimpong and Laryea (2016) further opine that budgeting plays an

essential role in the general performance of enterprises since it provides sensitive information that helps owners/managers allocate scarce resources and evaluate the business's performance.

In addition, this study's findings align with the results of Agbenyo, Danquah, and Shuangshuang (2018); Onduso (2013), who found that budgeting affects financial performance. The current findings are supported by the argument of Isaboke and Kwasira (2016) that the policies or rules on which the budget is based are significant and affect the financial output of the Enterprises. The findings of the study also concur with the argument of Abongo (2018), whose study on the effects of the budgeting process on the financial performance of the top 100 small and medium firms shows a positive and significant influence of the budgeting process on the financial performance According to Mutungi (2017) the budget planning help to make control easier which results to improved performance of the enterprises. Additionally, Mbogo, Jimmy, and Olando (2021) suggested that the financial performance of MSEs can be enhanced by deploying strategic action in budgeting practices. However, the results contradict the findings of Ngumi and Njogo (2017), who conducted a study on budgeting practices' influence on the financial performance of insurance companies. The budgeting practices were measured by human resources, income, operating, and capital expenditure variances. Out of these constructs, only income variance had a positive and significant effect on financial performance, but the rest of building blocks had a negative and significant effect on financial performance.

5.2.3 Effect of Cashflow Management on Financial Performance

The findings indicate that cash flow Management positively and significantly influences the financial performance of micro, small, and medium enterprises. This study supports previous studies which have shown cashflow management has a direct effect on financial performance. For instance, Stom and Wepukhulu (2019) confirmed that cashflow management positively and significantly influences financial performance. The current study is in line with Alslehat and Al-Nimer (2017); Mburu (2022); Soet (2020), who established that cashflow management constructs (operating and investing activities) had a positive influence on financial performance.

The findings are further supported by Chivuyi and Abuga (2023), who investigated the effect of cash flow management on the financial performance of SACCOS. Furthermore, these results are supported by Yeko (2019), whose findings show that cash flow management significantly affects financial performance. Soet, Muturi, and Oluoch (2018) argued that cash flow management is vital to the enterprise's financial performance. Failure to acquire and manage cash can result in the collapse of the business. However, the findings of the current study are in contrary view to the discovery of Muraya (2018); Odhowa and Mutswenje (2022); Ugo and Egbuhuzor (2022a), whose results showed that cashflow management has an insignificant effect on financial performance. Also, the finding is contrary to Soet *et al.* (2018), who found that financing cash flow management has a negative effect on financial performance.

5.2.4 Effect of Financial Literacy on Financial Performance

The examine whether financial literacy has a direct significant effect on financial performance. The result of Hypothesis **H_{04}** revealed that financial literacy has a positive and significant effect on financial performance. Literature has shown that a high level of financial literacy enables enterprises to run efficiently, resulting in better financial performance. Moreover, financial literacy allows owners/ managers to make viable decisions on monetary matters, resulting in healthy business (Jemal, 2019). Thus, these results agree with Jemal (2019), who points out that financial literacy positively and significantly influences the financial performance of medium and small enterprises.

The current study's findings also concur with the arguments of Otieno (2016), whose study on the impact of financial literacy on the financial performance of SMEs in Ruiru town in Kenya shows a significant influence in the relationship between the variables. This is further supported by Zirabamuzale (2021), who points out that financial literacy among the owners/managers of enterprises enhances the financial performance of the business. Yakob, Yakob, Bam, and Ahmad Rusli (2021) further clarify that managers/owners with financial literacy skills have a better understanding of business-related parameters such as investment, savings, and debt management, which result in good financial performance. C.E.O Financial literacy has also been found to positively and significantly influence financial performance. The results also support the work of Zulkieflimansyah *et al*. (2020), who advocated that financial literacy has a prudent duty in developing and enhancing the financial performance of SMEs.

5.2.5 The Moderating Effect of Financial Literacy on the Relationship between Accounting Practices and Financial Performance

Hypothesis **H_{05a}** postulated that financial literacy has no moderating effect on the link between accounting practices and the financial performance of MSMEs. The study findings indicated that financial literacy and accounting practices significantly directly affect financial performance. The result further revealed that financial literacy has a conditional effect on the relationship between accounting practice and financial performance with β=0.054, p=0. 002. These results show that managers/owners with adequate financial skills handle accounting issues, resulting in good financial performance. The managers/owners who do not have the requisite financial knowledge about their enterprise's finance may lack the skills to direct the business's financial affairs. Consequently, the business may collapse(Tuffour *et al*., 2022). Little is known about financial literacy as a moderator in the relationship between accounting practice and financial performance. Thus, these findings provide new knowledge in the body of literature.

5.2.6 The Moderating Effect of Financial Literacy on the Relationship between Budgeting Practices and Financial Performance

In Hypothesis, **H_{05b}**, the researcher examined whether financial literacy could strengthen or even diminish the relationship between budgeting practices and the financial performance of MSMEs. The findings indicate a positive and statistically significant interaction between budgeting practices and financial performance with the involvement of financial literacy (β=0.081, p=0.032). The results clearly show that financial literacy significantly strengthens the relationship between budgeting practices and financial

performance. Thus, there is a need for owners of MSMEs to be knowledgeable on matters relating to budgeting practices. Kulathunga, Ye, Sharma, and Weerathunga (2020) posit that financial literacy enables managers /owners to utilize financial aspects in the enterprise's decisions, resulting in an improvement in the business's performance. In addition, financial literacy is believed to be powerful intellectual capital in MSMEs' performance. The involvement of financial literacy in the association between budgeting practices and financial performance helps contribute to the scarce empirical literature investigating budgeting in micro, small, and medium enterprises.

5.2.7 The Moderating Effect of Financial Literacy on the Relationship between Cashflow management and Financial Performance

The current study's findings reveal that financial literacy has a moderating role in the relationship between cash flow management and the financial performance of MSMEs (β=0.106, p=0.003). The results bring new insight into the literature as the involvement of financial literacy increases coefficient determination to R^2 =0.524 (Moderating model) compared with the direct effect model with R^2 =0.474. Current research results further reveal that financial literacy strengthens the relationship between cash flow management and the financial performance of MSMEs. Failure to raise adequate cash on time leads to bankruptcy and, finally, the death of the enterprises (Soet et al., 2018). Thus, owners /managers need to be financially literate to understand the net cash inflow and outflow from the business operations and to check the business's ability to generate cash to sustain its activities.

5.3 Conclusion of the Study

The main objective of this study was to determine the moderating role of financial literacy in the relationship between cash management practices and the financial performance of MSMEs. The predictor variable had three primary constructs: accounting practices, budgeting practices, and cash flow management. Financial literacy was introduced in the relationship between predictor variables and the outcome variable to serve as a moderator. In the statistical model, firm size and age served as control variables. The specific purpose of the study was to investigate the direct effect of accounting practices, budgeting practices, and cash flow management on financial performance.

The study also examined the direct effect of financial literacy on financial performance. Furthermore, to contribute to the body of knowledge, the study examined the moderating effect of financial literacy on the relationship between accounting practices and financial performance, budgeting practices and financial performance, and cashflow management and financial performance. The study's findings concluded that accounting practices, budgeting practices, cash flow management, and financial literacy positively and significantly affected financial performance. The results also confirmed that financial literacy has a conditional or moderating effect on the relationship predictor and outcome variables.

5.4 Theoretical Implications of the Study

The study supports the theories and contributes to existing literature. The current research confirms what has already been established by other scholars; for instance, accounting practices, budgeting practices, cashflow management, and financial literacy have a

significant direct effect on the financial performance of MSMEs. On the other hand, the study also provides new findings or knowledge to the literature that financial literacy moderates the relationship between accounting practices and financial performance, budgeting practices and financial performance, and cashflow management and financial performance.

The study findings agreed with Decision Usefulness Theory, which claims that financial transactions are needed to make viable decisions relating to enriching financial performance. The study confirmed that micro, small, and medium enterprises operate in a dynamic environment and cashflow varies; thus, there is a need to prepare cashflow statements to monitor the movement of cash as well as to set cash balance with the aim of avoid running short of cash which significantly affects the financial performance of MSMEs, this is in line with the Miller-Orr cash management model. Finally, the results concur with the Dual process of financial literacy theory that cognitive managers or owners can help their enterprises achieve the goal of financial performance by making decisions based on shreds of evidence such as the book of accounts, budgets, and cash balances, among others.

5.5 Policy Implication of the Study

The outcome of this study may help policymakers (County and National Government) concerning the policy and strategies to be formulated and implemented to reduce the mortality rate of micro, small, and medium enterprises. The study's finding reveals that financial literacy influences the financial performance of MSMEs. Therefore, for the MSMEs to nourish, owners or managers need financial knowledge relating to access and

management of funds (Susan, 2020). Thus, policymakers should develop training programs that can help owners /managers of the business to be equipped with cash management practices, which may reduce the business's mortality rate. Furthermore, the government and other stakeholders providing financial literacy training in Kenya should include technological skill modules. Through acquiring technology skills by owners/managers of MSMEs, they will be able to market their products online and embrace the use of accounting packages, as a result enriching financial performance and cash management practices, hence reducing the chances of closure.

Additionally, the government is trying to mitigate the financial constraint issues through different fund platforms such as the Hustler fund, Uwezo fund, youth development fund, and women enterprises fund, among others (KIPPRA,2021; Ayuma, 2023). However, there is still a high death rate of MSMEs due to poor cash management practices, such as a lack of book keeping skills, poor budgeting techniques, and failure to prepare cashflow statements, which results in mixing business finances with personal cash. To mitigate these, the government needs to develop and provide financial systems that could help owners or managers of the MSMEs to monitor the movement of money in the business. As a result, the system developed can help the government increase the recovery rate of loans issued to MSMEs. On the other hand, there will be no misuse of funds by the MSMEs' owners/managers, leading to good financial performance. The Kenyan government needs to develop and create awareness of an e-commerce platform where the MSMEs owners can trade and even generate financial statements without the physical handling of cash, and this could help in creating a broader market as well as minimizing issues of poor cash management.

5.6 Managerial Implication of the Study

Generally, the results revealed that cash management practices significantly affect the financial performance of MSMEs. The current study suggests that managers/ owners should equip themselves with the basic skills of accounting practices, budgeting practices, and cashflow management statements, which can be actualized through installing computerized accounting packages. If the business is financially stable, it can hire an external specialist to oversee its health and perform different statistical models to forecast future performance. Additionally, owners/managers should invest their surplus in short-term securities such as treasury bonds, commercial papers, and short-term mutual funds to avoid misuse of surplus cash or keeping large cash balances in non-yielding accounts. The impact of COVID-19 pandemic on different economies has been severe. Thus, managers and owners must be equipped with emerging financial skills to change from traditional business methods by developing hybrid portfolios, selling differentiated products, and adopting online trade.

5.7 Recommendations for Further Studies

The current study was conducted on micro, small and medium enterprises (MSME) in Eldoret town, Kenya, aiming at a target population of 72,557 MSMEs with a sample size of 398. Thus, due to the limited geographical scope, future research can replicate the current study in a broader scope in different areas since it may reveal different results. In addition, the research utilized a structured questionnaire to collect data from a selected sample. The future study could use secondary and primary data, which could help improve the study findings. Furthermore, the current research focused on MSMEs only; however,

financial performance is significant to all firms; therefore, the study suggests that future studies focus on large firms. The study only focused on cash management practices and financial literacy as factors directly influencing financial performance. The prospective research should look at other factors, such as access to finance, government policies, technology, innovation, intellectual capital, and patent rights. The current study focused on the moderating effect of financial literacy on the relationship between cash management practices and financial performance. Future research can introduce other moderators such as corporate social responsibility, technological literacy, environmental concerns, governance mechanism, firm characteristics, investment decisions, and gender, among others, using the same predictor and outcome variables. Finally, future studies can also introduce a mediator in the current model.

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APPENDICES

Appendix I. Introduction letter

I am a student from the University of Eldoret pursuing a Master's degree in business management (finance option). 1 am conducting research on the **cash management practices, financial literacy, and performance of small and medium enterprises in Eldoret Town, Kenya.** Therefore, I humbly seek your permission to collect data that will enable me to address the study's objectives. The information you will provide is specifically for academic purposes, and strict ethical principles will be adhered to.

Thank you for your kind participation.

With regard,

Thadeus Owino Onyango.

Appendix II: Questionnaire.

This questionnaire will be used to gather information for study. You are one of the selected respondents for this research to help gather information on the **Moderating Role of Financial Literacy on the Relationship between Cash Management Practices and the Financial Performance of Micro, Small and Medium Enterprises in Eldoret Town, Kenya.** Kindly provide your honest responses to all the items in this questionnaire. Your information will be treated with strict confidentiality. Thank you for your willingness to be part of this study.

Instructions:

These questionnaires consist of printed pages.

Please tick (V) in the appropriate box and where applicable.

Section A: Demographic Profile

1) Gender □ Male □Female
2) Age □ Less than 20 □ 21-25 □26-30 □31-35 □above 36
3) Highest level of qualification
   □ Certificate □ Diploma □ Degree □ other qualification
4) Duration business has been in operation

   □ Below 5 years □ 5-10 years □10-15 years □ above 15 years

5) Number of employees in the business
   □ Below 10 □ 10-49 □ 50-99

Section B

Please rate the statements below according to your agreement using the seven-point Likert scale: 1=Strongly Disagree, 2=Disagree,3=Slightly Disagree, 4= Neutral, 5=Slightly Agree, 6= Agree, 7=Strongly Agree.

Financial Performance

NO	STATEMENTS	1	2	3	4	5	6	7
	Profitability							
1	The business focuses on increasing return on investment.							
2	The business has grown significantly in terms of operating profits over the last three months.							
3	The business earnings per share have increased over the last year.							
4	The profits from the business are higher compared to the liabilities.							
5	The business utilizes its resources to generate revenue.							
6	Our business has registered growth in turnover, resulting in to increase in earnings.							
7	Our profits have been increasing over time.							
8	Our revenues often exceed the expenses we incur							
9	The proportion of profit we save keeps increasing.							
10	The business market size has increased in a new market, leading to more income.							
11	The business has employed more sellers to increase profits.							
	Growth in Sale							
12	The business' sales level has been growing over time.							
13	Our customers have been increasing over time.							
14	We often purchase more than previous purchases.							
15	The business generates sufficient cash through sales that meet immediate obligations.							
	Liquidity							
16	Our business has a favourable liquidity position.							
17	This business avoids exposure to financial risks.							
18	The business has a stable financial position.							
19	This business does not run into bankruptcy.							

Accounting practices

NO	STATEMENTS	1	2	3	4	5	6	7
	Banking Practices							
1	I ensure safe custody of cash through banking.							
2	There is an efficient banking internal control system in the business.							
3	I usually do bank reconciliation.							
	Record Keeping							
4	I prepare financial statements for our business.							
5	I perform financial analysis to determine business performance.							
6	We do effective bookkeeping.							
7	We prepare a separate business cash book from the petty cash book.							
8	I record all the assets of the business.							
	Computerized Accounting							
9	We review our financial statements every month using computer packages.							
10	Computerized banking services have helped me to acquire loan statements.							
11	Accounting package services have fastened the mode of transactions.							
12	I keep business records using computer systems.							
13	The filing system of accounting supporting documents is well-kept in a secure area.							
14	The business has regular computerized audits performed by qualified staff.							
15	The enterprises have clear written accounting policies and procedures.							

Budgeting Practices

NO.	STATEMENTS	1	2	3	4	5	6	7
	Resource Allocation							
1	I prepare budgets to help monitor business performance.							
2	The business ensures its expenditures are explained and justified.							
3	The business ensures program reviews and budgetary control.							
4	The business sticks to prepared budgets during the implementation.							
5	The business always budgets for petty cash.							
	Budget Planning							
6	The business avoids non-business expenses.							
7	In our business, we prepare written financial objectives of what we want to achieve.							
8	Long-term financial target influences the management of expenses.							
9	In our business, we follow weekly/monthly/quarterly plans for expenses.							
10	The business allows employees to participate in the budgeting process.							
	Financial Forecasting							
11	We always purchase what is budgeted for							
12	In business, we normally forecast our transactions before we budget.							
13	We budget based on the previous budget.							
14	Our budget is normally prepared continuously.							
15	We normally work within our budget in both income and expenditure.							
16	We normally spend more money than what we budgeted for							
	Budget Control							
17	Budgeting helps to control inventory.							
18	Budgets are used as a basis for effective revenue and cost control.							
19	Budgets are used as a guide to new investments.							
20	Budgets are used as estimates for additional capital.							
21	Budget systems and processes are included in disaster recovery and business continuity arrangements.							

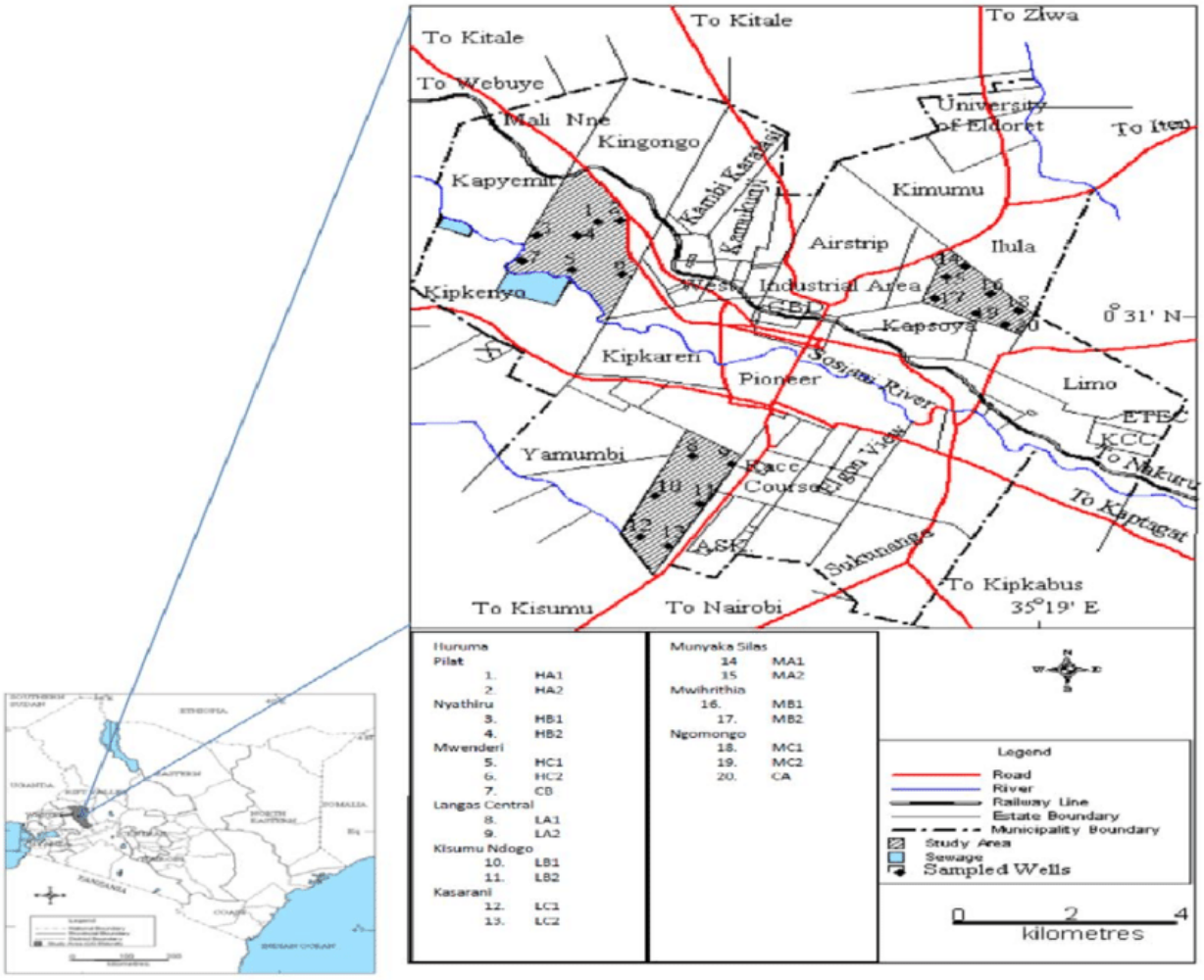
Cashflow Management

NO	STATEMENTS	1	2	3	4	5	6	7
	Cashflow from Operating Activities							
1	I can easily manage the day-to-day operations of our business.							
2	It is easy to plan and control cash flow.							
3	The business has a sustainable cash flow.							
	Cashflow from Financing Activities							
4	Our business has enough cash reserves.							
5	The business cash flow is positively improving.							
6	The business has adequate free cash flow.							
7	The business prepares cash flow projections.							
8	The business matches its cash outflows with inflows.							
	Cashflow from Investing Activities							
9	The business often checks its credit policies.							
10	The business avoids giving too many credits.							
11	The redundant assets are turned into cash.							
12	Cashflow forecasting duration is flexible.							
13	We keep updating cash flow statements for our business.							

Financial Literacy

NO	STATEMENTS	1	2	3	4	5	6	7
	Financial Knowledge							
1	I analyze financial performance periodically.							
2	We have insurance coverage to protect our business against uncertainties.							
3	I am aware of the costs and benefits of accessing credit.							
4	I can calculate the loan interest rate.							
5	I understand basic accounting knowledge.							
6	I have adequate knowledge to prepare and balance ledger accounts.							
7	Information from financial statements helps me to make decisions for the prosperity of the business.							
8	I am familiar with basic financial concepts that are needed to make viable investment decisions.							
9	I prepare written financial objectives of what I want to achieve in a term of a business.							
10	Long-term financial budget influences the management of business expenses.							
	Financial Behavior							
11	Our business follows a weekly or monthly plan for expenses.							
12	I can access finance at a minimum cost.							
13	I can determine the total debt position of the business.							
14	I understand the effect of inflation and interest rates on the loans I borrow for the business.							
15	I save a portion of the business income to generate interest.							
16	My savings reduces reliance on credits.							
17	I keep financial reserves in case of uncertainties.							
18	I plan to use my savings for future growth.							
19	It is important to establish a financial target for the future prosperity of the business.							
	Financial Attitude							
20	The way I manage business money today will influence ongoing concerns of the business.							
21	Making a risky decision will add value to business returns.							
22	I have participated in training programs for financial management skills.							
23	Preventing risks ensures the security of my business.							
24	My social environment contributes much to my financial management skills.							

Appendix III: Map of the study area.



Source; Muyoma & Tsingalia (2015)

Appendix IV: Spss original results

Pilot Study Reliability Test

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.933	.935	92

SPSS Regression Analysis Results

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.247[a]	.061	.055	.97219947	.061	9.730	2	299	.000
2	.691[b]	.477	.468	.72907142	.416	78.557	3	296	.000
3	.696[c]	.484	.474	.72539253	.007	4.010	1	295	.046
4	.708[d]	.501	.489	.71471143	.017	9.883	1	294	.002
5	.713[e]	.509	.495	.71031745	.008	4.649	1	293	.032
6	.724[f]	.524	.509	.70067342	.015	9.121	1	292	.003

a. Predictors: (Constant), Firm Size, Firm Age

b. Predictors: (Constant), Firm Size, Firm Age, Zscore(AccPr), Zscore(CasFlo), Zscore(Budpr)

c. Predictors: (Constant), Firm Size, Firm Age, Zscore(AccPr), Zscore(CasFlo), Zscore(Budpr), Zscore(FinLit)

d. Predictors: (Constant), Firm Size, Firm Age, Zscore(AccPr), Zscore(CasFlo), Zscore(Budpr), Zscore(FinLit), X1

e. Predictors: (Constant), Firm Size, Firm Age, Zscore(AccPr), Zscore(CasFlo), Zscore(Budpr), Zscore(FinLit), X1, X2

f. Predictors: (Constant), Firm Size, Firm Age, Zscore(AccPr), Zscore(CasFlo), Zscore(Budpr), Zscore(FinLit), X1, X2, X3

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.551	.145		-3.789	.000
	Firm Age	.241	.087	.207	2.762	.006
	Firm Size	.090	.123	.055	.728	.467
2	(Constant)	-.087	.114		-.763	.446
	Firm Age	-.012	.068	-.010	-.173	.863
	Firm Size	.077	.092	.047	.830	.407
	Zscore(AccPr)	.379	.056	.379	6.799	.000
	Zscore(Budpr)	.230	.059	.230	3.898	.000
	Zscore(CasFlo)	.181	.058	.181	3.132	.002
3	(Constant)	-.090	.113		-.800	.424
	Firm Age	-.019	.067	-.016	-.277	.782
	Firm Size	.088	.092	.054	.957	.339
	Zscore(AccPr)	.371	.056	.371	6.663	.000
	Zscore(Budpr)	.196	.061	.196	3.223	.001
	Zscore(CasFlo)	.148	.060	.148	2.470	.014
	Zscore(FinLit)	.107	.053	.107	2.002	.046
4	(Constant)	-1.286	.396		-3.245	.001
	Firm Age	-.047	.067	-.040	-.701	.484
	Firm Size	.061	.091	.037	.670	.503
	Zscore(AccPr)	.014	.126	.014	.108	.914
	Zscore(Budpr)	.177	.060	.177	2.938	.004
	Zscore(CasFlo)	.114	.060	.114	1.900	.058
	Zscore(FinLit)	-.071	.077	-.071	-.922	.357
	X1	.054	.017	.529	3.144	.002
5	(Constant)	-1.620	.423		-3.827	.000
	Firm Age	-.053	.067	-.045	-.795	.427
	Firm Size	.065	.091	.040	.718	.473
	Zscore(AccPr)	.431	.231	.431	1.869	.063
	Zscore(Budpr)	-.242	.203	-.242	-1.188	.236
	Zscore(CasFlo)	.128	.060	.128	2.139	.033
	Zscore(FinLit)	-.134	.082	-.134	-1.636	.103
	X1	-.015	.036	-.148	-.416	.678
	X2	.081	.037	.738	2.156	.032
6	(Constant)	-1.979	.434		-4.558	.000
	Firm Age	-.064	.066	-.055	-.978	.329
	Firm Size	.068	.089	.042	.763	.446
	Zscore(AccPr)	.578	.233	.578	2.482	.014
	Zscore(Budpr)	.008	.217	.008	.039	.969
	Zscore(CasFlo)	-.328	.162	-.328	-2.024	.044
	Zscore(FinLit)	-.172	.082	-.172	-2.097	.037
	X1	-.047	.037	-.459	-1.254	.211
	X2	.022	.042	.202	.529	.597
	X3	.106	.035	.925	3.020	.003

a. Dependent Variable: Zscore(FPer)

Appendix V: Permit letters

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **606344**

Date of Issue: **31/May/2023**

RESEARCH LICENSE

This is to Certify that Mr.. Thadeus Owino Onyango of University of Eldoret, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Uasin-Gishu on the topic: Moderating Effect of Financial Literacy on Cash Management Practices and Financial Performance of Micro, Small and Medium Enterprises in Eldoret Town ,Kenya for the period ending : 31/May/2024.

License No: **NACOSTI/P/23/26448**

606344

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OFFICE OF THE DEPUTY VICE-CHANCELLOR (ASA)

SCHOOL OF BUSINESS, ECONOMICS AND MANAGEMENT SCIENCES
DEPARTMENT OF BUSINESS MANAGEMENT

REF: UOE/B/BBM/PG/032

DATE: 22nd May, 2023

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: DATA COLLECTION – OWINO THADEUS ONYANGO (SBUS/BBM/M/005/21)

The bearer of this letter is a postgraduate student in the Department of Business Management. The student is ready to undertake data collection for the period of three months on the research entitled *"Moderating Effect of Financial Literacy on Cash Management Practices and Financial Performance of Micro, Small and Medium Enterprises in Eldoret Town, Kenya."*

Any assistance given to him will be highly appreciated.

Yours faithful

HOD
Business Management
Dept.
UNIVERSITY OF ELDORET

DR. ZACHARIA SHITOTE
HEAD, DEPARTMENT OF BUSINESS MANAGEMENT

REPUBLIC OF KENYA
COUNTY GOVERNMENT OF UASIN GISHU

Tel. NOs:direct line:053-2016215
053-2016000
053-2016125

Fax: +254-053-2062884
Website:www.uasingishu.go.ke
Email:info@uasingishu.go.ke

When Replying, Please Address to:
County Secretary
Uasin-Gishu County
P.O. Box 40 – 30100
Eldoret, Kenya.

REF: UGC/ADM.1/31/GEN/2023/VO.1 (116) **DATE**: 8 June, 2023

Thadeus Owino Onyango,
P.O. Box 1125-30100,
ELDORET

AUTHORIZATION TO CARRY OUT RESEARCH WITHIN UASIN GISHU COUNTY

Your letter dated 6 June, 2023 on the above subject is in reference.

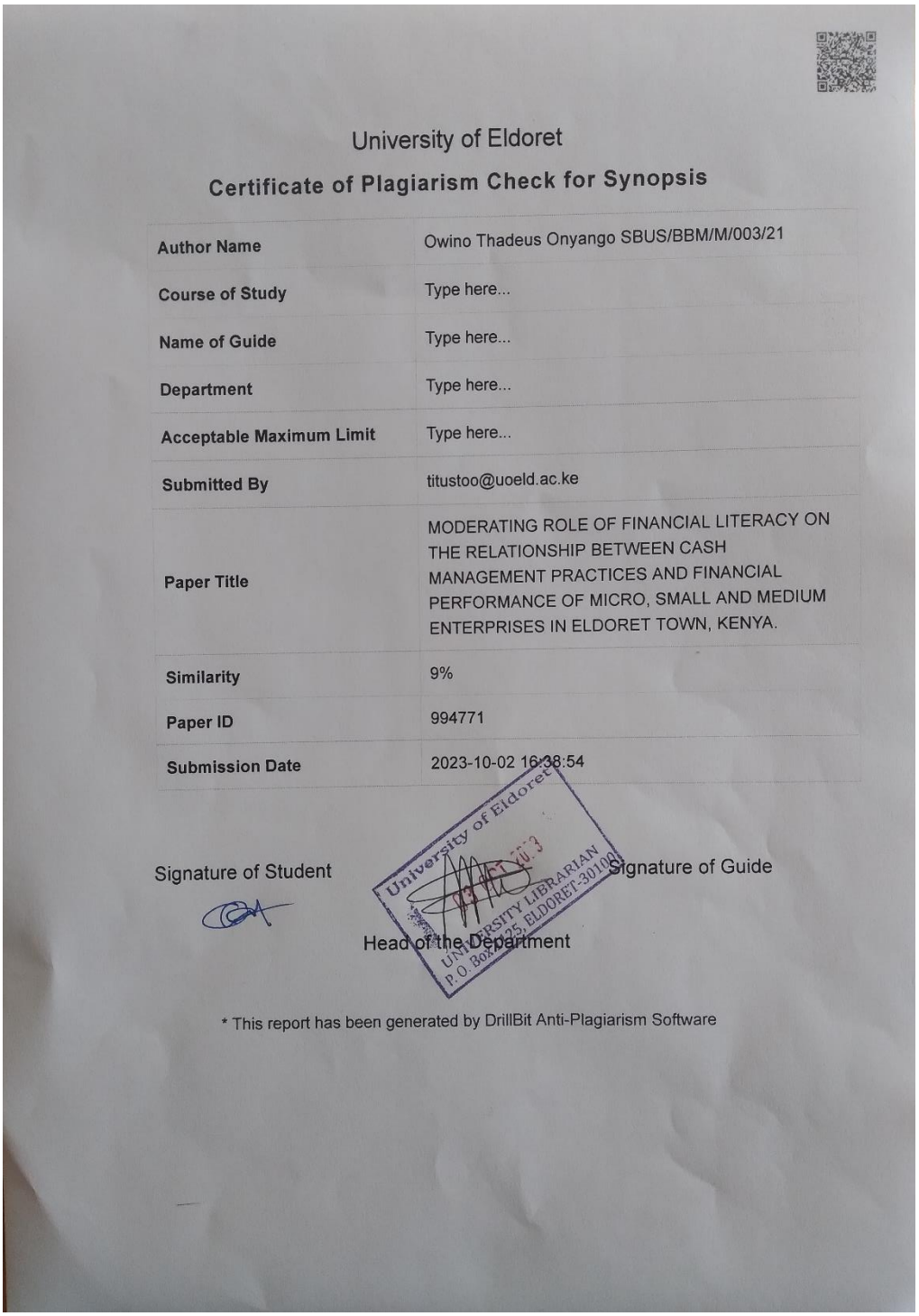
Authority is hereby granted to you to carry out your research on "Moderating effect of financial literacy on cash management practices and financial performance of Micro, small, and Medium Enterprises in Eldoret town" for your academic purposes. You are requested to share your findings with the Office of the undersigned as they may be useful in informing and addressing any challenges faced in the Counties.

By copy of this letter, the Chief Officer, Trade, Investment and Industrialization, Tourism, is requested to assist you accordingly.

Edwin Bett
COUNTY SECRETARY/
HEAD OF COUNTY PUBLIC SERVICE

Copy: Chief Officer, Trade, Investment & Industrialization, Tourism

Appendix VI: Similarity report



University of Eldoret

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Course of Study	Type here...
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Department	Type here...
Acceptable Maximum Limit	Type here...
Submitted By	titustoo@uoeld.ac.ke
Paper Title	MODERATING ROLE OF FINANCIAL LITERACY ON THE RELATIONSHIP BETWEEN CASH MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES IN ELDORET TOWN, KENYA.
Similarity	9%
Paper ID	994771
Submission Date	2023-10-02 16:38:54

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