Assessing the Impact of Financial Literacy and Digital Capability on the Performance of Small and Medium Enterprises in Ghana

By

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DECLARATION

To the best of my knowledge, I confirm that the work in this thesis is my original work undertaken for the degree of Doctor of Philosophy in the Faculty of Business and Law of De Montfort University. I confirm that no material of this thesis has been submitted for any other degree or qualification at any other university. I also declare that parts of this thesis have been submitted for publications and conferences.

…11/12/2023…

Signature   Date

Senyo Agbanyo

DEDICATION

I dedicate this to Almighty God for the strength and wisdom provided me throughout the entire project.

I also dedicate this work to my lovely wife, Mrs Betty Yeboah for your enormous support throughout the years. Your patience and sacrifices and encouragement made this happen.

Finally, to my lovely children, Jessica and Kevin for keeping me going with your warm words.

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TABLE OF CONTENT

DECLARATION i
DEDICATION ii
ACKNOWLEDGMENT...iii
TABLE OF CONTENT iv
LIST OF TABLES xii
LIST OF FIGURES xiv
LIST OF ABBREVIATIONS AND ACRONYMS... xv
LIST OF PUBLICATIONS xvi
ABSTRACT xvii
CHAPTER ONE: INTRODUCTION TO THE STUDY 1
1.0 Introduction 1
1.2 The Aim and Objectives of this Research 10
1.2.1 The Research Aim 10
1.2.2 The Research Objectives 10
1.3 The Research Questions 11
1.4 Contributions and Justification of the Study 12
1.4 Implications of the Study 14
1.5 Organisation of Study 15
CHAPTER TWO: CONCEPTUALISATION OF FINANCIAL LITERACY AND HYPOTHESES DEVELOPMENT 17
2.1 Introduction 17
2.2 Human Capital Development and SME Performance 21
2.3 The Core Dimensions of Financial Literacy 27
2.3.1 Financial Knowledge 27
2.3.2 Financia Behaviour 28
2.4 Financial Literacy: Why does it Matter to SMEs? 29
2.4.1 Financial Literacy Supports Effective SME Debt Management 29
2.4.2 Financial Literacy and SME Investment Decision-Making 31
2.5 The Global Perspective on Financial Literacy 33
2.5.1 Financial Literacy Programmes in Developed Countries 34
2.5.2 Financial Literacy Programmes in Africa 36

2.6 Approaches to Financial Literacy Acquisition.. 38
2.7 Conceptualising Financial Literacy 44
2.8 Proposed Conceptual Framework 47
2.8.1 Background of the Conceptual Framework 47
2.8.2 Measurement of Financial Literacy 48
2.9 Variable Definition and Hypotheses Development.. 52
2.9.1 Interest Rates and SME Performance.. 52
2.9.2 Debt Management and SME Performance.. 54
2.9.3 Inflation and SME Performance 56
2.9.4 Insurance Literacy and SME Performance.. 57
2.9.5 Investment Knowledge and SME Performance.. 59
2.9.6 Effective Budgeting and SME Performance 60
2.9.7 Record-keeping Behaviour and Financial Performance 61
2.9.8 Effective Risk Management and SME Performance.. 63
2.9.9 Savings Behaviour and SME Performance 65
2.9.10 Digital Capability and SME Performance 66
2.10 SME Performance Measurement 68
2.10.1 SME Performance.. 68
2.10.2 Sales Growth 70
2.10.3 Profitability 70
2.10.4 Employment Growth 72
2.10.5 Customer Satisfaction.. 72
2.11 Control Variables.. 74
2.11.1 Manager's Age and SME Performance.. 74
2.11.2 Gender and SME Performance.. 75
2.11.3 Educational Level of Managers and SME Performance 76
2.11.4 Industry Category.. 77
2.12 Conclusion 82
CHAPTER THREE: FINANCIAL LITERACY IN GHANA.. 85
3.1 Introduction 85
3.2 Overview of Financial Literacy in Ghana 87
3.2.1 Literacy Rate in Ghana 87
3.2.2 Financial Literacy in Ghana.. 91

3.2.3 The Effect of Financial Literacy on Loan Repayment in Ghana 96
3.3 The General Overview of the Ghanaian SME Sector.. 98
3.4 The Challenges of Ghanaian SMEs 101
3.4.1 Inadequate Access to Credit Facilities 101
3.4.2 Weak Human Resource Capability 102
3.4.3 Weak Digital Capability 103
3.5 Financial Literacy Programmes in Ghana 105
3.5.1 Governmental Financial Literacy Initiatives 105
3.5.2 Non-Governmental Financial Literacy Programmes 108
3.6 Conclusion 112
CHAPTER 4: THE THEORIES THAT UNDERPIN THE STUDY 114
4.1 Introduction 114
4.2. The Knowledge-Based Theory and SME Performance in Ghana 115
4.3 Classification of Knowledge.. 120
4.3.1 Tacit Knowledge 120
4.3.2 Explicit Knowledge... 122
4.4 Institutional Theory and Financial Literacy in Ghana 123
4.4.1 Regulatory Institutions and Financial Literacy in Ghana........................... 125
4.4.2 Normative Institutions and Financial Literacy in Ghana............................ 127
4.4.3 Cognitive Institutions and Financial Literacy in Ghana 129
4.5. Conclusion 133
CHAPTER 5: ADOPTED RESEARCH DESIGN AND METHODOLOGY 135
5.1 Introduction 135
5.2 Research Design.. 137
5.2.1 Research Philosophy 138
5.2.1.1 Positivism 140
5.2.1.2 Interpretivism.. 142
5.2.1.3 Realism 143
5.2.2 Justification for Adopting Pragmatism 144
5.3 The Research Approach... 146
5.3.1 The Deductive Approach.. 146
5.3.2 Inductive Approach 147

5.3.3 The Abductive Approach 148
5.3.4 The Justification for Adopting the Abductive Research Approach 149
5.4 Research Strategy and Methodology... 149
5.4.1 Qualitative Strategy.. 150
5.4.2 Quantitative Strategy 151
5.4.3 A Mixed Strategy 152
5.4.4 The Justification for Adopting the Explanatory Sequential Triangulation ... 155
5.5 The Research Setting... 156
5.5.1 The Research Population... 158
5.5.2 Unit of Analysis 159
5.5.3 The Sampling Criteria 159
5.5.4 The Sampling Technique 161
5.5.5 Sample Size Determination.. 163
5.5.6 The Sampling Procedure 165
5.5.7 Sources and Types of Data.. 165
5.6. Measurement of Financial Knowledge Construct... 166
5.6.1 Knowledge of Interest Rates 166
5.6.2 Knowledge on Inflation... 166
5.6.3 Knowledge on Risk Diversification 167
5.6.4 Debt Literacy 167
5.6.5 Investment Literacy.. 168
5.6.6 Insurance Literacy.. 168
5.7 Measurement of the Financial Behaviour Construct 169
5.7.1 Budgeting Behaviour.. 169
5.7.2 Record-Keeping Behaviour 169
5.7.3 Risk Management Behaviour 170
5.7.4 Savings Behaviour 170
5.8 Digital Capability 171
5.9 Control Variables.. 171
5.9.1 Firm Age 172
5.9.2 Industry Categorisation 172
5.9.3. SME Manager's Educational Attainment 173
5.9.4 Gender... 173
5.10. Performance Measurement 174

5.10.1 Profitability 176
5.10.2 SME Sales Growth 176
5.10.3 Employment Growth 177
5.11 Research Instruments 177
5.11.1 Survey Questionnaire 177
5.11.2 The Interview Questionnaire 179
5.12 Research Data Collection 179
5.12.1 Quantitative Data Collection 180
5.12.2 Qualitative Data Collection 181
5.13 Data Analysis Technique 182
5.13.1 Quantitative Data Analysis 182
5.13.2 Qualitative Data Analysis 183
5.14 Pilot Study 184
5.15 Validity and Reliability Tests 186
5.15.1 Constructs Validity 186
5.15.2 Constructs Reliability 188
5.16 The Exploratory Factor Analysis (EFA) 192
5.16.1 The Exploratory Factor Analysis for Financial Knowledge Construct 193
6.16.2 The Exploratory Factor Analysis for financial Behaviour Construct 196
5.17 The Measurement Model Assessment 199
5.17.1 Reliability and Convergent Validity Tests 200
5.17.2 Discriminant Validity Test 202
5.17.3 Criteria for Assessing Measurement Model 204
5.18 Ethical Considerations 207
5.19 Conclusion 208
CHAPTER 6: PRESENTATION AND DISCUSSION OF THE QUANTITAVE FINDINGS 210
6.1 Introduction 210
6.2 Demographic Analysis 211
6.2.1 Gender Analysis of Participants 211
6.2.2 Age of Participants 212
6.2.3 Educational Level of Participants 213
6.2.4 Respondent's Role in Business 215

6.3 Business Profile 216
6.3.1 Business Categorisation 216
6.3.2 Sources of Capital.. 217
6.3.2 Total Capital Invested 218
6.3.3 Business Registration 219
6.3.4 Business Ownership Registration of SMEs 220
6.3.5 Business Age.. 221
6.4 Construct Descriptive Statistics 222
6.5 Justification for Using Structural Equation Modelling Technique (PLS-SEM)... 226
6.6 Model Predictive Power, Predictive Relevance and Fit.................................. 228
6.7 Structural Model Assessment... 229
6.8 The Impact of Financial Knowledge on SME Performance 234
6.8.1 Knowledge on Interest Rates and SME Performance 234
6.7.2 The Impact Knowledge of Inflation on SME Performance 236
7.7.3 The Impact of Debt Management Literacy on SME Performance.............. 239
6.7.4 The Impact of Insurance Literacy on SME Performance 241
7.7.5 The Impact of Investment Literacy on SME Performance 243
6.7.6 The Impact of Risk Diversification Knowledge on SME Performance........ 245
6.*8* The Impact of Financial Behaviour on SME Performance.............................. 247
6.8.1 The Effect of Budgeting Behaviour on SME Performance 247
6.8.2. The Impact of Record-Keeping Behaviour on SME Performance............ 249
6.8.3 The Impact of Risk Management Behaviour on SME Performance........... 251
6.8.4 The Impact of Savings Behaviour on SME Performance........................... 254
6.9 The Impact of Managerial Digital Capability on SME Performance 256
6.10 The Effect of SME Financial Knowledge and Behaviour on Digital Capability 258
6.10.1 The Effect of Financial Knowledge on Digital Capability Development of SMEs.. 258
6.10.2 The Effect of Financial Behaviour on Digital Capability of SMEs 261
6.11 The Mediating Effect of Managers' Digital Capability on SME Performance .. 263
6.11.1 Budgeting, Employment Growth and the Mediating Effect of Digital Capability of SMEs 265
6.11.2 Interest Rates, Employment Growth and the Mediating Effect of Digital Capability... 265

76.11.3 Interest Rates, Profitability and the Mediating Effect of Digital Capability of SMEs ... 266
6.11.4 Risk Diversification, Employment Growth and the Mediating Effect of Digital Capability of SMEs ... 267
6.11.5 Risk Diversification, Profitability and the Mediating Effect of Digital Capability ... 268
6.11.6 Risk Management, Employment Growth and the Mediating Effect of Digital Capability ... 268
6.11.7 Risk Management, Profitability and the Mediating Effect of Digital Capability ... 269
6.11.8 Savings, Employment Growth and the Mediating Effect of Digital Capability of SMEs ... 270
6.11.9 Savings, Profitability and the Mediating Effect of Digital Capability of SMEs ... 271
6.12 The Effect of Control Variables on SME Performance ... 272
6.12.1 The Effect of Age, Gender, Education and Industry Category on SME Profitability ... 272
6.12.2 The Effect of Age, Gender, Education and Industry Category on SME Sales Growth ... 273
6.12.3 The Effect of Age, Gender, Education and Industry Category on SME Employment Growth ... 275
6.13 Conclusion ... 276
CHAPTER 7: DICUSSION OF QUALITATIVE RESULTS ... 278
7.1 Introduction ... 278
7.2 Financial Knowledge and SME Performance ... 279
7 .3 The Impact of Financial Behaviour on SME Performance ... 290
7.4 Digital Capability and SME Performance ... 297
7.5 Conclusion ... 305
CHAPTER EIGHT: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS ... 307
8.1 Introduction ... 307
8.2 Summary of Results ... 309
8.2.1 Financial Knowledge and SME Performance ... 311
8.2.2 Financial Behaviour and SME Performance ... 314
8.2.3 The Impact of Managers' Digital Capability on SME Performance ... 317
8.2.4 The Effect of Control Variables on SME Performance ... 318
8.3 The Validated Model ... 324

8.4 Contribution to Knowledge 318
8.5 Implications for Policy and Practice 319
8.5.1 Implications for Policy 319
8.5.2 Implications for Practice 320
8.5.3 Implications for Researchers 321
8.6 Limitations of the Study 322
8.7 Future Research Direction 322
References 324

LIST OF TABLES

Table 2.1 Summary of hypotheses 80
Table 3.1: Percentage of persons 15 years and older who have ever attended school across all regions. 88
Table.3. 2: Percentage variation of persons 15 years and older who have ever attended school in urban compared to rural areas. 90
Table 3.3: Type of financial institution in which accounts are held by the region. 93
Table 3.4: Percentage savings rate by regions 95
Table 3.5. Percentage of households with members holding insurance policy/cover .. 96
Table 3.6: Quarterly GDP Growth in Ghana 98
Table 3.7: GDP growth and the sectoral drivers between 1991-2016. 99
Table 5.1: Designs for mixed-method strategy 154
Table 5.2: The Quantitative Study Sample Size Determination 164
Table 5.3: Sample size Determination for the Quantitative Study 164
Table 5.4: Reliability test of financial knowledge construct for the pilot study 185
Table 5.5: Reliability test of financial behaviour construct for the pilot study 185
Table 5.6 Summary of Reliability Test for Financial Knowledge Construct 189
Table 5.7 Summary of Reliability Test for Financial Behaviour Construct 191
Table 5.8: KMO and Bartlett's Test for financial Knowledge Construct 194
Table 5.9: Total Variance Explained for financial Knowledge Construct 194
Table 5.10: KMO and Bartlett's Test for financial behaviour construct 196
Table 5.11: Total Variance Explained for financial behaviour construct. 197
Table 5.12 Reliability and convergent validity results 201
Table 5.13: Discriminant validity by Heterotrait-Monotrait Ratio (HTMT) criterion 203
Table 5.14: Discriminant validity by Fornell-Larcker criterion 204
Table 6.1: Gender distribution 211
Table 6.2: Age of participants 213
Table 6.3: Educational level of participants 214
Table 6.4: Respondents' role in business 215
Tabble 6.5: Business/Industry Categories 216
Table 6.7: Total Capital Invested 219
Table 6.8: Business Registration 220
Table 6.9 Ownership Structure 221
Table 6.10: Business Age 222
Table 6.11 Construct descriptive statistics for Financial Literacy variables and Digital Capability 224
Table 6.12: Construct descriptive statistics of Outcome Variables 225
Table 6.13: Model's explanatory power 228
Table 6.14: Model's predictive relevance 229
Table 6.15: Direct path results 232
Table 6.16: Indirect path (Mediating effects) results 263
Table 8.1 Summary of Hypotheses Testing Results 320

LIST OF FIGURES

Figure 2.1: A hypothesised path for examining the relationship between financial knowledge, financial behaviour, digital capability and SME performance. 79

Figure 5.1: Scree plot for financial knowledge construct 196

Figure 5.2: Scree plot for financial behaviour construct.. 199

Figure 5.3 Measurement model 206

Figure 6.1: Structural model estimates.. 231

Figure 8.1: The validated model of the impact of Financial Knowledge, Financial Behaviour and Digital Capability on SME performance 318

LIST OF ABBREVIATIONS AND ACRONYMS

SMEs	Small and Medium Enterprises
SEM	Structural Equation Modelling
PLS	Partial Least Square
AVE	Average Variance Extracted
PLS-SEM	Partial Least Square Structural Equation Modelling
QUAN/QUAL	Quantitative/Qualitative
NCFEWs	National Community Financial Education Workshops
FLEC	Financial Literacy and Education Commission
FSD	Financial Sector Deepening
GDHS	Ghana Demographic and Health Survey
GSS	Ghana Statistical Service
NBSSI	National Board for Small Scale Industries
MASLOC	Microfinance and Small Loans Centre
SEC	Securities and Exchange Commission
GSIA	Ghana Securities Industry Association
GSE	Ghana Stock Exchange
GIZ	German Agency for International Cooperation
DANIDA	Danish International Development Agency
SPEED	Support Programme for Enterprise Empowerment and Development
RAFiP	Rural and Agricultural Finance Programme
ACDEP	Association of Church-based Development
FFH	Freedom from Hunger
GIPC	The Ghana Investment Promotion Centre
SSNIT	The Social Security and National Insurance Trust
VAT	Value Added Tax

LIST OF PUBLICATIONS

1. Atiase, V.Y., **Agbanyo, S**., Ameh, J.K., Sambian, R.M. and Ganza, P., (2022). Creating value for whom? Digitization and governance practices of non-traditional export firms in Africa. *Strategic Change*, *31*(1), pp.31-44.

2. Atiase, V., **Agbanyo, S**., Ganza, P., Ameh, J. and Sambian, R., (2023). Understanding SME financial resilience and survivability in Africa. In *Entrepreneurial Financial Resilience and Financial Innovation in a Turbulent Era* (pp. 106-133). Edward Elgar Publishing.

3. Atiase, V.Y., Sarpong, D., **Agbanyo, S**. and Ameh, J.K., (2022). Crafting Organisational Resilience Through Managerial Performance. In *The African Context of Business and Society* (pp. 77-94). Emerald Publishing Limited.

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ABSTRACT

Over the past decade, there has been an increasing scholarly work on financial literacy (FL) and digital capability (DC) for Small and Medium Enterprise (SME) managers specifically for developing countries. It is believed that developing these capabilities could be a significant step in enhancing SMEs survival rate. Drawing on the Knowledge-Based View (KBV) and the Institutional Theory, this study aims to investigate how the FL and DC of SME managers influence business performance in the Ghanaian context.

The study adopts a pragmatic philosophical stand with a sequential explanatory triangulated strategy. Using a structured questionnaire in a survey, primary data was collected from 499 SME managers in Ghana using a stratified random sampling technique. Secondly, using an interview technique, qualitative data was collected from ten (10) SME managers in line with the pragmatic research paradigm. The Partial Least Square Structural Equation Modelling (PLS-SEM) was deployed to analyse the quantitative data through Smart PLS version 4. The Statistical Package for Social Scientists (SPSS) was also used to conduct the Exploratory Factor Analysis (EFA) in validating the variable items given its optimal statistical package that provides comprehensive output from a principal components analysis. Regarding the qualitative data, thematic analysis was used. The study measured the impact financial knowledge construct using six (6) main variables such as inflation, insurance, interest rates, risk diversification, investment and debt management on the performance of SMEs in the areas of

sales, employment and profitability. Secondly, the effect financial behaviour construct using variables such as savings (SB), risk management (RMB), budgeting (BB), and record keeping (RKB) were also examined on the performance of the sampled SMEs. Lastly, Digital Capability (DC) was tested as a mediation variable in the relationship between FL, and SME performance.

The results show that managers' knowledge of interest rates exerts a significant positive effect on profitability. Also, managers' Knowledge of inflation exerts a statistically significant positive effect on SME profitability and sales growth. In addition, managers' debt literacy also exerts a statistically significant positive effect on employment growth. Furthermore, Knowledge of risk diversification exerts a statistically significant effect on sales growth. On financial behaviour, managers' risk management behaviour emerged to have a statistically significant positive effect on SMEs profitability and sales growth. Finally, savings behaviour showed statistically significantly positive effect on both SME profitability and sales growth.

On the mediating effect, the path analysis shows that the application of Knowledge on interest rates, risk diversification, risk management behaviour, budgeting behaviour and savings behaviour exert a significant indirect effect on SME employment growth through the application of digital capability. Also, the application of Knowledge on interest rates, risk diversification, risk management and savings behaviour exert a significant indirect effect on the profitability of SMEs through the application of digital capability.

This study has made three important contributions. The study adds to the body of knowledge on financial management by investigating how SME financial literacy contributes to managers' sound financial management behaviour to improve SME performance. The study also contributes to the digital transformation literature by exploring how the use of digital literacy can enhance SME performance and streamline their operations. From the theoretical perspective, the study presents how the Knowledge-Based View strengthens the acquisition of explicit and tacit knowledge leading to a high SME financial performance. Also, through Institutional Theory, this study presents a strong argument on how the regulatory, normative, and cognitive institutions impact on managers' financial behaviour and the general business outlook. Lastly, the study significantly improved methodology by using an explanatory sequential triangulation strategy that ensures that both quantitative and qualitative strategies are deployed to validate and complement the weaknesses of each other to add depth, breadth, and richness to the study outcomes.

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.0 Introduction

This thesis seeks to investigate the impact of SME managers' financial and digital capability on SME performance. Despite the economic importance of SMEs through job creation and social development, their attrition rate remains a concern for both practitioners and researchers (Calvino et al., 2015, Ye and Kulathunga, 2019; Motta, 2020). This attrition is usually attributed to the lack of the requisite skillset by SME managers which is needed to successfully manage these SMEs. This implies that the positive impact of Financial Literacy (FL) remains underexplored, particularly in developing countries (Graña-Alvarez et al., 2022). It has been argued that inadequate managerial capability and lack of financial literacy skills are the major causes of SME failures in most developing countries (Haliassos et al., 2020). More so, research evidence established that most SME managers do not implement the much-needed standard business practices due to the lack of effective business training (Mckenzie and Woodruff, 2014). Such training could equip SME managers with skills such as effective record keeping, risk management, credit management, budgeting and savings behaviour to improve SME performance at a satisfactory level. This is because Dawuda (2015) posits that most SME managers have poor record-keeping behaviour, hence, they are unable to predict and understand business performance. This implies that for SMEs to have the best chance of survival and meet their growth objectives successfully, they must acquire FL skills in making informed financial decisions (Graña-Alvarez et al., 2022).

Evidence suggests that most SMEs in developing countries are formed out of economic need and often, their managers do not usually have the necessary financial literacy skills to manage these businesses successfully (Baporikar et al., 2016). This has raised concern among many scholars to understand the root causes of SME failure and how the sector could be supported to provide opportunities through job creation and contribution to national economic development (Burgstaller and Wagner 2015; Padachi and Lukea Bhiwajee, 2016). This is because SMEs constitute more than 90 per cent of all businesses and contribute about 50 per cent to Africa’s GDP (Mwanza and Benedict, 2018). In Sub-Saharan Africa, SMEs account for more than 95 per cent of all firms (Abisuga-Oyekunle et al. 2020). In Ghana, SMEs account for about 92 per cent of all businesses and contribute about 70 per cent to the GDP and provide over 80 per cent of all employment (Quartey et al., 2017). These contributions are significant and there is a need for the SME sector to be supported fully to develop capabilities that enable the SMEs to continue to play their leading role in economic development.

Despite the enormous contributions by SMEs to the economic development of Ghana, most of them lack international exposure which thereby, limits their market share and their growth agenda (Asare, 2014). SMEs' inability to increase their market share is impacting their job creation ambition with most of them unable and unwilling to hire new staff (Zaato et al., 2020). Evidence suggests that three out of every five SMEs fail before their 5th anniversary, and this continues to raise concern about the survival and performance of most Ghanaian SMEs. This study focuses mainly on SMEs given that their growth and survival are crucial for employment generation, social development and the general economic outlook of Ghana. It is, therefore, important that the study focuses on SMEs with a robust FL policy agenda that supports the growth and development of SMEs given that the sector remains underdeveloped, unsupported across sub-Saharan Africa and Ghana is not an exception (Abisuga-Oyekunle et al. 2020).

Based on the above arguments, this study excludes all micro enterprises as most operate informally. Even though over 45% of Ghanaians live in rural areas and rely heavily on micro-enterprises for their livelihoods, evidence suggests that they are unrecognised by formal or governmental institutions (Osei-Boateng and Ampratwum, 2011) and unsupported by policymakers (Boafo et al., 2015). This implies that micro-enterprises fall off the radar of policymakers, economists and international organisations (Kwakwa, 2012) and are, therefore unregulated. On the other hand, SMEs have a better-organised system and are registered with most of them able to pay taxes to the government, therefore, making it possible to collect data on them with ease compared to micro-enterprises.

While it is right to focus on the development and the growth of SMEs, there is inconsistency in how SMEs are defined and classified. For example, in Ghana, the National Board for Small Scale Industries (NBSSI) defines and classifies SMEs as businesses that have 30–99 employees and an Assets value of up to US$ 100,000 (Zaato et al., 2020). Many other multilateral Institutions, however, use different metrics to define an SME. For example, the World Bank defines an SME as a business with a maximum number of 300 employees with a maximum revenue or turnover of $15,000,000. The African Development Bank also defines an SME as a business with a maximum of 50 employees (Gibson and Van der Vaart, 2008). However, given that this study is conducted in the context of Ghana, NBSSI classification and definition is adopted.

If SMEs are to continue to make a positive impact on the economic development of Ghana, the sector must be supported to improve managers' FL skills. The impact of FL on SMEs is well documented. First, SME FL skills are a key tenet for entrepreneurial activities as this enables managers to implement effective record keeping, budgeting, savings and risk management strategies, and investment diversification to promote sustainable growth (Ye and Kulathunga, 2019; Li and Qian, 2020). This implies that SME managers' FL enhances their ability to mitigate risks that threaten business survival and adopt standard business practices to improve performance. According to Buchdadi et al. (2020), managing risk effectively is critical to the survival of SMEs. It is also important that SMEs are aware of the risks that are associated with their business environment. According to Riepe et al. (2022), FL enables managers to become more loss-averse in avoiding taking necessary business steps to prevent business failure.

As SMEs grow, substantial financial resources are required to expand, innovate and improve their survival rates (Ye and Kulathunga, 2019). However, the lack of FL skills has made it challenging for most SMEs to access credible financial sources compared to larger organisations (Ahlstrom et al., 2018). This means that SME managers with financial literacy skills are able to demonstrate their creditworthiness with effective accounting management practices to acquire working and operating capital from financial institutions to improve performance (Hossain et al., 2020). This means that FL is a precondition that enhances managers' knowledge, skills, and capabilities to acquire and manage financial resources effectively.

Even though several empirical studies have been conducted on Ghanaian SMEs, covering areas such as innovation (Tuffour et al., 2018), human resource capabilities (Adomako et al., 2016) and managerial leadership (Tuffour et al., 2019), only a few studies focused on investigating the impact of financial literacy skills on SME performance. The findings from these studies produced mixed results. While some of the studies established a significant positive effect of financial literacy skills on SME performance (Agyapong and Attram, 2019; Tuffour et al., 2022), other studies provided a contrary view and failed to establish any linear relationship between managers' FL skills and SME performance (Fowowe, 2017; Kumalasari and Asandimitra, 2019; Sibanda et al., 2018). These mixed results have created a knowledge gap that needs to be investigated. This research, therefore, seeks to investigate and open a new debate on the importance of FL skills on the performance of SMEs in the Ghanaian context.

In Ghana, SMEs face numerous challenges including access to funding, poor infrastructure and weak markets which result in slow growth (Asare 2014). Despite the efforts by successive Ghanaian governments to address some of these challenges with initiatives such as access to loans and skill training through the Microfinance and Small Loans Centre (MASLOC) and the National Board for Small Scale Industries, SMEs are still failing and the majority of them are not sustainable (Agyapong and Attram, 2019). This trend needs averting as a flourishing economy requires a thriving SME sector (Macht and Robinson, 2009).

SMEs usually face challenges relating to access to funding and developing a strong customer base. Empirically, this has been attributed to their inadequate digital capabilities (Troise et al., 2022). This is because the technological revolution has brought about new ways of interaction between consumers and SMEs where values are exchanged in the market. (Ferreira et al., 2019). This implies that SME managers' digital capability offers opportunities to improve performance and develop agility and innovation (Cenamor et al., 2019). More importantly, financial institutions have introduced innovative ways of delivering financial services to SMEs such as using contactless payments, cash management apps, digital channels, and online banking services (Sanders, 2022). Also, most lenders have deployed digital technology in lending, financial and insurance advising due to changes in customer behaviour (Vives, 2017). Thus, for SMEs to take the opportunity of these novel ways of financial service delivery and have access to finance to improve their business operations, managers' digital capability development should be of priority.

Traditionally, most SMEs in developing countries are resource-constrained, but those with the ability to invest in resource acquisition tend to consider investment in knowledge resources as insignificant (Seo and Kim, 2020). But SME knowledge resources are central to effective strategic decision making leading to their survivability and financial performance (Kengatharan, 2019; Grillitsch et al., 2019). More importantly, SMEs that have access to a broad knowledge base perform better compared to those with limited knowledge assets (Subramanian et al., 2016; Mohammadi et al., 2017).

While SMEs must invest to develop a broad knowledge base to improve performance, the institutional setting and the environment within which SMEs operate influence their organisational or entrepreneurial behaviours (Bruton et al., 2009). It is, therefore, necessary to understand those environmental dimensions that shape SMEs' strategies and actions to improve performance, particularly, those institutional factors that favour the acquisition of FL skills leading to effective implementation of financial management practices. Drawing from the above discussion, the Knowledge-Based View (KBV) and Institutional Theory (IT) have formed the theoretical pillars of this study.

1.1 Problem Statement

FL has become an important knowledge resource that enhances SME managers' capabilities to effectively manage financial resources to enhance performance (Kulathunga et al., 2020). As a result, training on accounting management practices such as recordkeeping, budgeting, savings, risk management and planning have emerged as a significant step to enhance FL skills and improve SME performance (Karlan and Valdivia 2011; De Mel et al., 2014; Drexler et al., 2014; Nyamboga et al., 2014). Empirically, FL is considered as an important skill set for SME performance in developed economies (Hussain et al., 2018; Stella et al., 2020), nevertheless, its impact in developing countries is yet to be fully explored. In recent years, the alarming rate of SME failure in developing countries triggered research interest in this area (Bongomin et al., 2017; Ye and Kulathunga, 2019). Despite the huge interest by scholars in investigating the impact of FL on SME performance, there is no consensus on how FL should be defined and measured (Remund, 2010; Knoll and Houts, 2012). This has created a major challenge for many scholars on how FL should be conceptualised to meet the need of businesses (Kimiyaghalam and Safari, 2015). This implies that many researchers struggle to understand which items should be used to effectively measure FL skills across the board (van Rooij et al., 2011). In the context of Ghana, the situation is not different. This is significant as SME managers can only contribute to their business growth agenda if they are financially literate which would enable them to implement the recommended financial management practices to improve financial performance (García-Pérez-de-Lema et al., 2021).

This implies that SME managers must make financial decisions based on standard business practices and carefully evaluate financial implications that could have a significant impact on SMEs' growth, capital structure, operations and in the worst-case situation, insolvency (Hussain et al., 2018). As a direct response to the above SME challenges, this study, therefore, justifies that improving SME managers’ financial knowledge on interest rates, investment analysis, insurance uptake, debt management and inflation could help improve their financial behaviour. This is because the effective application of financial knowledge leads to the implementation of standard business management practices such as effective record-keeping, budgeting, risk management and savings which support SME financial performance.

Even though Ghana was one of the first African countries that start the implementation of the National Strategy for Financial Literacy Programme in 2009, only 32 per cent of the adult population is financially literate (Klapper et al., 2015). More importantly, it is estimated that only 40 per cent of Ghanaian SMEs survive beyond 5 years of operation (Peprah et al., 2016) which as discussed above could be partly associated with the lack of financial literacy skills. Given that most SMEs in Ghana are formed as a result of economic need, if a higher proportion of the population remains financially illiterate, the rates of SME failures could be huge. It is, therefore, important that enough research is conducted in this domain leading to effective policy implementation that will improve the SME sector significantly.

Based on the aforementioned concerns, this research developed and proposed an empirical model to investigate the impact of Financial Knowledge (FK), Financial Behaviour (FB), and Digital Capability (DC) of managers on SME performance in Ghana as an attempt to enhance the performance of the SME sector. Therein, issues of interest rates, investment analysis, inflation rate, debt management skills, insurance, budgeting, record-keeping, risk management and savings were examined.

1.2 The Aim and Objectives of this Research

1.2.1 The Research Aim

This study aims to investigate three main constructs namely financial knowledge, financial behaviour and Digital Capability and how these impact on SME performance in Ghana. First, financial knowledge is measured using SME managers' knowledge of interest rates, investment analysis, insurance uptake, debt management and inflation. Secondly, financial behaviour is measured through the SME managers' record-keeping behaviour, risk management, budgeting and savings as standard business practices to improve performance. Finally, emerging digital technology was observed as a barrier to SME performance in Ghana (Oláh, et al., 2019). Therefore, digital capability is engaged as a mediating variable by exploring various digital skills of SME managers that contribute to SME performance.

1.2.2 The Research Objectives

This research is designed to establish the following interrelated objectives:

1. To assess the impact of SME manager's knowledge of interest rates on firm performance
2. To examine the impact of SME manager's investment knowledge on firm performance
3. To investigate the impact of SME manager's insurance knowledge on firm performance
4. To assess the impact of SME manager's knowledge of risk diversification on firm performance

5. To assess the impact of SME manager’s debt management literacy on firm performance
6. To assess the impact of SME manager’s record-keeping behaviour on firm performance
7. To establish the impact of SME manager’s saving behaviour on firm performance
8. To establish the impact of SME manager’s budgeting behaviour on firm performance
9. To examine the impact of SME manager’s risk management behaviour on firm performance
10. To assess the impact of SME manager’s digital capability on firm performance

1.3 The Research Questions

The main research questions that underpin this study are as follow:

1. What is the impact of SME manager’s investment knowledge on firm performance?
2. What is the impact of SME manager’s knowledge of interest rates on firm performance?
3. What is the impact of SME manager’s insurance knowledge on firm performance?
4. What is the impact of SME manager’s knowledge of risk diversification on firm performance?
5. What is the impact of SME manager’s debt management literacy on firm performance?

6. What is the impact of SME manager's record-keeping behaviour on firm performance?
7. What is the impact of SME manager's saving behaviour on firm performance?
8. What is the impact of SME manager's budgeting behaviour on firm performance?
9. What is the impact of SME manager's risk management behaviour on firm performance?
10. What is the impact of SME manager's digital capability on firm performance?

1.4 Contributions and Justification of the Study

This study has made three significant contributions. First, the study contributes significantly to the financial management literature, where financial literacy skills are seen to be a prerequisite to the development and performance of SMEs particularly in the context of developing countries (Drexler et al., 2014; García-Pérez-de-Lema et al., 2021). The study, therefore, explored how SME financial knowledge contributes to effective financial management behaviour leading to SME performance. From the conceptual framework proposed, it is anticipated that knowledge of interest rates, inflation, debt management, investment and insurance would effectively support the decision-making process of SME managers leading to performance outcomes. Moreover, in terms of the contribution to literature, the study also contributes to the entrepreneurial literature by highlighting the importance of human capital development to promote the SME sector (Drexler et al., 2014). Strong research in this area is needed to address SME managers' financial capability shortcomings which are causing the sector to fail. (Ye and Kulathunga, 2019). Specifically, the study, therefore, contributes to knowledge of the wider human capital development issues in Ghana and Africa as a whole. Moreover, SME managers' digital capability in developing economies remains extremely under-researched (Peerally et al., 2022). This study also contributes to the digital transformation literature by investigating how SME managers' DC enhances performance and streamline firm operations. In addition, the study also contributes to performance management literature, mostly in developing countries. Given that performance and growth in the SME sector have become a major concern for many entrepreneurship researchers, this study is an important contribution in this direction.

Second, theoretically, from the Knowledge-Based View perspective, the optimum financial literacy level of the SME manager strengthens the explicit and tacit knowledge of the firm leading to a high financial performance. Again, from the Institutional theory perspective, SMEs encounter a host of institutions including regulatory, normative and cognitive ones which seek to transform their financial behaviour and general outlook. From this theoretical perspective, the study highlighted the importance of these institutions in legitimizing SME activities and behaviour in search of various economic opportunities.

Methodologically, this study also made a significant contribution by adopting an explanatory sequential triangulation strategy that ensures that the qualitative study validates the quantitative study for robustness of the research findings. This is because an explanatory sequential triangulation strategy combines both quantitative and qualitative data in a triangulation form to add depth, breadth and richness to the study findings (Denzin and Lincoln, 2018). More importantly, triangulation establishes the traditional view that quantitative and qualitative research are often mutually complimentary (Bryman, 2008).

1.4 Implications of the Study

This study has practical and policy implications. First, the study offers SME managers a better insight into the importance of FL and DC in the management of their firms. Thus, these skills enhance their ability to make sound decisions leading to higher returns on their investment. Based on this, managers' application of financial knowledge improves their financial management practices such as record-keeping, budgeting, risk management practices and savings behaviour. It is, therefore, crucial that SME managers make efforts to improve their managerial competencies by acquiring financial literacy skills that enhance their practices. Also, managers should be committed to self-directed learning and organisational training to improve their knowledge and capabilities.

In policy-wise, the study offers a valuable implication to the Ghanaian Ministry of Trade and Industries, the National Board for Small Scale Industries (NBSSI) and other non-governmental organisations supporting SMEs in Ghana. These institutions need to increase their effort towards the provision of FL and DC to the sector to curb the high attrition rate. This would also support the national economic development agenda in employment growth and contribution to the national Gross Domestic Product (GDP).

1.5 Organisation of Study

The thesis is organised into nine chapters. Below is the breakdown of the chapter contents.

Chapter one presents the introduction and the general background of the study. The research rationale, aim and objectives which this study aims to answer in addition to the significant contributions of this study is also presented in this chapter.

Chapter two presents the related literature on financial literacy and SME performance. This chapter specifically considers the importance of human capital development and how this helps SMEs acquire financial literacy skills to improve firm performance and growth.

Chapter three is the context chapter which specifically investigates the SME sector in Ghana. The chapter discusses the financial literacy rates in Ghana and how these impact SME contributions to the economic development of Ghana. The chapter further considers the financial literacy initiatives in Ghana.

Chapter four presents the theories that underpin this study. Specifically, Knowledge-Based View and the Institutional theory are discussed extensively.

Chapter five discusses the proposed conceptual framework that underpins the study. Also, the major hypotheses developed for this study is presented in this chapter.

Chapter Six discusses the relevant research design, the research philosophy, the approach and the method adopted for this study. The chapter further discusses the various constructs as well as the questionnaire design, the data collection and analysis techniques adopted. In this chapter, the reliability and validity tests in addition to the exploratory factor analysis are also discussed. Lastly, ethical concerns about this study are also presented.

Chapter Seven analyses the results and present the discussions of the quantitative findings in relation to the existing literature. Both the direct and indirect path results are analysed and discussed to understand the effect of the independent variables on the dependent variables.

Chapter eight analyses the qualitative findings in line with the extant literature.

Chapter nine is the concluding chapter which summarises the important findings from this study. This chapter further presents the main contribution to knowledge, and the implications for policy, practice and researchers. Lastly, the limitations and recommendation for future research is also presented in this chapter.

The next chapter discusses the conceptualisation of financial literacy and presents the framework that underpins this study. The various hypotheses developed to establish the impact of financial knowledge and financial behaviour on SME performance is also presented.

CHAPTER TWO: CONCEPTUALISATION OF FINANCIAL LITERACY AND HYPOTHESES DEVELOPMENT

2.1 Introduction

The ramifications of FL in the SME sector in the modern economy are well documented (Thomas and Spataro, 2018). This chapter seeks to renew the debate on the importance of FL skills for individuals and SME managers to enhance their financial decision-making and improve performance. FL promotes financial inclusion, financial stability, and flawless financial markets to help households and businesses alike make informed financial decisions (Lusardi and Mitchell, 2014; Agyapong and Attram, 2019). But the significance of FL in SMEs has largely been overlooked particularly in the context of developing countries. Given that SMEs play a fundamental role in job creation, innovation and economic development in developing countries, there is a need to engage with all the vital instruments and channels that promote financial literacy in SMEs (World Bank, 2018). This is because operating a successful SME sector helps create an admirable economic position for many countries (Burgstaller and Wagner, 2015; Nason and Wiklund, 2018). Yet, across the globe, the sector is mainly characterised by a relatively high rate of failure which is predictable in most cases (Storey et al., 2016; Quartey et al., 2017). This is because the high rate of SME failures is often attributed to slow growth, low sales and lack of expansion, which raises questions about their performance which poses a major threat to the global economic stability (Agyapong and Attram, 2019). In newly created small firms, for example, the rate of failure is observed to be ten times higher compared to well-established large firms and 50 per cent of the failures usually occur within two and half years of operation (Burgstaller and Wagner, 2015; Ying et al., 2019). Based on this, SMEs must be well supported, particularly the newly created ones to ensure sustainability in the global economy. Empirically, the absence of growth is a clear indication that a business could be on the verge of failure and in the worst-case scenario, has no chance of survival (Storey et al., 2016). Building SMEs' FL skills could provide an answer to some of the underlined causes of business failures seen across the sector.

The impact of financial literacy on SME financial performance is well documented. For example, Ye and Kulathunga (2019) postulate that FL skills enable SME managers to develop effective risk strategies by building substantial financial reserves and diversifying investment opportunities to promote the financial sustainability of SMEs. This does imply that the lack of FL skills could be the reason for SME failures, particularly in developing countries (Hossain,2020). Empirically, it has been established that SMEs with high performance and success rates have managers with optimal levels of financial literacy (Bruhn and Zia, 2011). This is because acquiring FL helps would-be entrepreneurs and existing ones to formulate critical decisions on the impact of sales on costs and evaluate the necessary risk strategies within the business that promote sustainable growth, particularly in the current competitive market (Bruhn et al., 2010; Carpena *et al.,* 2011). However, most SME managers possess limited knowledge in financial management practices, taxation issues, accounting processes, business planning, financial analysis to set financial goals and credit management which are necessary skill sets in promoting SME performance (Wise, 2013; World Bank Group, 2018). This situation presents a serious challenge for managers of SMEs in their quest to enhance business performance. This calls for SME managers to develop requisite human capital, specifically, financial management skills which are guided by effective financial literacy skills to effectively propel business growth and improve financial performance (World Bank Group, 2018). If the dynamics of SMEs are to change and to ensure that this sector remains economically vibrant, urgent intervention is, therefore, required to support this sector with tailored financial literacy programmes to help entrepreneurs assess their business trends and promote sustainable growth (Ying et al., 2019; Anwar and Ali Shah, 2020).

This chapter, therefore, provides an overall framework for investigating the impact of FL skills on SME performance in Ghana. Two main theories namely, KBV and IT are used to explain the model development. The overreliance on firm physical and financial resources to improve SME performance is rapidly changing. As knowledge-based resources are hard to imitate, socially complex and heterogeneous (Wiklund and Shepherd 2003; Nonaka et al., 2006; Kulathunga et al., 2020), financial literacy has emerged as a significant tool to improve SME performance and competitive advantage particularly, those operating in developing countries such as Ghana (Hussain et al., 2018; Ye and Kulathunga, 2019). In the previous chapter, knowledge has been acknowledged as a firm’s strategic resource in today’s fast-evolving and complex business environment (Kengatharan, 2019; Grillitsch et al., 2019). The literature also highlights that the delivery and management of SMEs in Ghana has been significantly impacted by manager's inadequate financial literacy skills (Agyapong and Attram, 2019; Tuffour et al., 2020). This means that having sound financial knowledge helps SMEs to effectively allocate resources, keep up-to-date records of business activities, manage risks, and budget properly to meet their financial obligations (Eniola and Entebang, 2016).

Evidence also suggests that several institutional actors such as the regulatory, normative and cognitive institutions affect the development of formal structures in an SME by impacting its decision-making processes. This impact usually is positive whereby SMEs legitimise their operations thereby improving their performance (Erastus et al., 2014). However, in some cases, these institutional structures do have a negative impact on SMEs. This is because institutions can provide a real incentive for SMEs to either flourish or shrink their economic activities significantly (North, 1990). This implies that the regulatory, normative and cognitive institutions have the potential to either create favourable or unfavourable conditions for SMEs to acquire financial literacy skills.

From the above-raised arguments, this study presents a robust theoretical argument to conceptualise and proposed a validated model to investigate the impact of financial literacy skills on SME performance. Furthermore, from proposed conceptual framework, the hypotheses of the study that aim to answer the research questions are presented.

The chapter is organised as follows. First, the importance of human capital development and its significance in promoting a robust SME sector leading to sustainable financial performance, particularly in developing countries is discussed. In addition, other forms of capital such as the financial and social capital are also analysed and discussed to establish how this influence the SME sector to improve performance. Secondly, the chapter presents the main concepts and the dimensions of financial literacy and discusses their significance to the survival and performance of SMEs, particularly in developing countries context. Thirdly, this chapter also explores the global trend of FL and discusses possible causes of why financial literacy rates in developing countries are so low compared to the rest of the world. Furthermore, the chapter discusses the background to the conceptual framework. In addition, variables definition and hypothesis development is also presented. Finally, the chapter discusses the control variables of the study and how these impact on SME performance.

2.2 Human Capital Development and SME Performance

For an organisation to thrive and improve its financial performance, strategic thinking which demands creativity, foresight and insight must be at the forefront of the organisational policy agenda (AlQershi, 2021). This means that effective strategic decisions and creativity could be developed when an organisation adopts a policy to invest in employees' capability development. Adopting such a policy could explain why some organisations succeed while others fail. Empirically, strategic acumen is critical for knowledge identification and application and helps businesses explore where knowledge can be sourced to improve performance (Audretsch and Belitski, 2021). From a developing country's perspective, some SMEs are formed out of economic need and more often, the managers are perhaps out of work or set up these businesses for income supplement purposes without adequate knowledge for strategic planning to sustain their businesses (Baporikar et al., 2016). But to sustain a new business and improve its financial performance requires knowledge, skill, experience, and innovativeness, thus, a firm’s human capital in other to provide value for the owner and the national economic development (AlQershi, 2021).

There have been significant changes in global economic activity in recent years and this implies that skills and knowledge that were once considered vital are no longer deemed viable in today’s labour or job market. As a result, human capital development has become a more valuable asset for managers to acquire prerequisite skills and knowledge as a performance-driven tool (Suroso and Anggraeni, 2017). Research evidence suggests that most employees’ capabilities in the SME sector are largely dormant or undiscovered and therefore, investment in knowledge and skill resources as the primary capital should be parallel to the traditional capital, such as land, equipment and raw material to create added value (Wu and Chen, 2014). The above evidence has renewed the debate of SMEs to seek to invest in capability building to develop robust human capital if performance is to be enhanced in this sector (Chatterjee, 2017). Motivated by this statement, if performance in SMEs is to improve significantly, specific human capital development in the form of FL skills is required to solve financial management challenges that most SMEs often face (Brixiová et al., 2020).

Numerous efforts have been made by several researchers to define human capital and investigate its impact on firm performance. According to Onkelinx et al. (2016), human capital is the ‘aggregate knowledge, skills, abilities, and other competencies of an organizational workforce. Likewise, the study by O’Mahony (2012) referred to human capital as a “technology” embedded in people necessary to support an organisation to grow and remain productive. From a different perspective, human capital is also referred to as both cognitive and non-cognitive ability which managers acquire either through education or experience in undertaking any task successfully (Lofstrom et al., 2014). These diverse viewpoints reiterate the need for SMEs to invest in human capital development as a core organisational strategy necessary for entrepreneurial success. For example, SME managers need skills to develop a good business plan, manage credit effectively, and use basic accounting and inventory management systems to improve performance (Ye and Kulathunga, 2019). However, evidence suggests that most SME managers do not possess effective FL skills to competently carry out the above-mentioned everyday business activities (Eniola and Entebang, 2017; Agyapong and Attram, 2019; Abadi et al. 2021). Evidence also suggests that SMEs cannot extract key information or certain vital clues from a financial statement to establish the performance trends of their businesses (Ye and Kulathunga, 2019). It could be argued that managers’ inability to extract certain key information about the business could deny them the opportunity to put appropriate measures in place to promote growth. Every business manager aims to grow a sustainable and financially viable enterprise, thus, being productive and remaining in business (Mano et al., 2012). However, with SMEs struggling to remain in business due to their low productivity (Storey et al., 2016), FL should be central to SME financial decision-making strategy in today's competitive business market (Eniola and Entebang, 2017).

Two main types of human capital are observed in an organisation, namely the "general" which is often found across organisations and "specific" which is firm related (Ganotakis, 2010; Peng et al., 2015). While "General" human capital is usually associated with and measured by the educational qualifications and experience that the staff or managers possess (Morris et al., 2017), "specific" human capital on the other hand refers to specific business education, skills, industry-related experience and managerial experience (Ganotakis, 2010). Based on these two definitions, FL could be classified as a "specific" human capital given its specific nature to help managers make informed financial decision-making to improve SME performance. But a previous empirical study suggests that every successful manager must as a strategic choice, follow specific processes of searching and identifying, exploring and assembling all vital resources and take advantage of perceived opportunities to improve productivity and growth (Chadwick, 2017). Given that managers have a critical role in assembling all vital resources and taking advantage to explore specific opportunities to improve performance, it is, therefore, prudent that organisations invest in both types of human capital by ensuring that managers monitor and control any adopted strategies that are compatible with the firm's capability and growth agenda (Morris et al., 2017).

A robust firm's human capital is beneficial on many fronts. First, Human capital increases SME managers' capabilities to uncover and exploit great business opportunities which could propel the business on a growth trajectory (Rauch and Rijsdijk, 2013). Given that human capital is the skills and knowledge that an individual possesses either through experience or on-the-job training and education and when applied appropriately in venturing activities, it could lead to firm growth and performance significantly (Wiklund et al., 2009). This is because the effective application of knowledge, skills and experience could enable SME managers to obtain other useful resources such as financial and physical capital which are pivotal in improving productivity (Unger et al., 2011). The concept of human capital has become more critical, particularly in the current business environment which is full of volatility and thereby forcing businesses to alter strategies to align between the changes in the environment and the firm's structures, systems and processes to improve performance (Muda and Rahman, 2016). Based on this argument, one could imply organisations that invest significant resources to develop their human capital stock are more likely to strive, grow profits and survive any uncertainty compared to those that do not.

Secondly, human capital enables entrepreneurs and managers to be innovative in their management practices (McGuirk et al., 2015), deal with any possible uncertainty by implementing effective risk management systems and have a better understanding of regulations which could positively or negatively affect the business outcome (Hogendoorn et al., 2019). Finally, beyond the arguments of resource acquisition, managers' human capital could impact SMEs' internationalisation agenda (Buzavaite and Korsakiene, 2019; Purkayastha et al., 2021). This is because the knowledge or skill possessed as human capital could help influence strategic decision-making to scale up their narrow-defined agenda and engage in value chain activities to improve revenue growth (AlQershi, 2021). While human capital is inextricably linked to SME performance and life cycle or survival rates (Muda and Rahman, 2016), it could be argued that this positive correlation is exaggerated. This is because human capital development and firm performance in the context of developed economies might not apply to emerging market firms given that some corporate governance standards are strictly needed and followed to scale up performance (Purkayastha et al., 2021). This means that certain business standards are sometimes not adhered to in developing countries which creates major challenges for SMEs' life cycle. It could be argued that most economies in developing countries are undergoing significant institutional transformations and as a result, such a situation disrupts their policy agenda, business operational standards and growth agenda (Chittoor et al., 2015). Inevitably, irrespective of organisational human capital development, such significant disruption to business operations and growth plans could pose a huge challenge for most businesses to thrive. In light of the above argument, it could be argued that there is a fragmentation in the literature, and this could be attributed to the way studies are conceptualised, the type of indicators used to measure organisational performance and more importantly, the contexts in which the study is carried out such as industry, country, and age of the business. (Unger et al., 2011). Despite the above argument, human capital development should be an integral part of firms’ growth agenda.

Despite the importance of human capital development to SME performance, it is equally vital that firms consider other forms of capital such as financial, social and psychological rather than focusing only on human capital development to remain successful (Newman et al., 2014).

2.3 The Core Dimensions of Financial Literacy

2.3.1 Financial Knowledge

The ability of Managers to demonstrate specific business management knowledge is known to have a significant impact on the firm's performance (Soriano and Castrogiovanni, 2012). This implies that SME managers' specific financial literacy skills could be the main driver to optimal financial performance. As discussed earlier, financial knowledge and FL are two different terms (Lind et al., 2020). The study by Huston (2010), strongly argued that using financial knowledge and FL as one dimension is misleading because "Financial knowledge is an integral dimension of, but not equivalent to, FL". This is because financial knowledge is a key component of FL which enhances individuals' capability to understand major financial concepts and languages such as inflation, deposits, the time value of money, risk diversification, interest rates, debt, assets and investment, which are considered pivotal for an individual or firm financial decision making (Huston, 2017). Given that people with high levels of financial knowledge might not necessarily act upon their knowledge, financial knowledge could be an insufficient drive for responsible financial behaviour (Tang and Baker, 2016). Nevertheless, sufficient financial knowledge is essential to ascertain whether individuals or organisations can compare financial products and services and make applicable, well-informed financial decisions (Morgan and Trinh, 2019). Research evidence argues that a sufficient degree of financial knowledge coordinates the attitudes that influence financial management behaviour (OECD, 2012; Tang et al, 2015). This implies that individuals with financial knowledge are more likely to pay their credit card bills timely and avoid late fees, save for retirement and consult with financial advisors to build credible financial behaviour when in doubt (Rostamkalaei and Riding, 2020). However, it is worth noting that even though financial capability relies on financial knowledge, the ability and the opportunity to act on financial knowledge could sometimes be impacted by the psychological characteristics of the individual or SME managers (Tang et al, 2015). For example, overconfident managers can perceive certain business trading information differently which could lead to rational or irrational investment decisions to maximise returns (Mukherjee and De, 2019). Evidence suggests that overconfidence could lead to business failures as some managers fail to thoroughly assess personal investment skills and knowledge which are critical for the financial markets before making their investment decisions (Daniel and Hirshleifer, 2015). This could imply that rather than some SME managers assessing what impact the lack of financial knowledge could have on their investment returns or the overall business outcome, some could simply attribute any failures to bad luck.

2.3.2 Financia Behaviour

Financial behaviour is defined as the capability to analyse and comprehend the wider impacts of financial decisions on oneself, family and the community as a whole and be able to take precautions but capitalise on full opportunities to make effective cash management decisions such as budgeting, savings and risks management to mention a few (Tezel, 2015). Empirically, individuals' financial behaviours are strongly linked to their financial knowledge (Atkinson and Messy, 2012). This means that to exercise good financial behaviour, one must possess an in-depth knowledge of financial concepts (Lind et al., 2020). This, therefore, illustrates that financial behaviour is a valuable and fundamental component of FL. As positive financial behaviour is significantly linked to business performance, the ability of an SME manager to create and stick to an appropriate budgeting system, develop an effective savings culture, manage risks effectively and keep records of up-to-date business activities could help identify any future adverse financial implications which are detrimental to business growth (Bhushan, 2014; Hastings and Mitchell, 2020). Based on this, it is, therefore, important that individuals and business managers desist from certain financial behaviours such as late payment of bills, inappropriate budgeting for future expenditures and choosing financial products without proper scrutiny as these could lead to financial struggle for businesses and in a worse case, insolvency (Atkinson and Messy, 2012; Morgan and Trinh, 2019).

2.4 Financial Literacy: Why does it Matter to SMEs?

2.4.1 Financial Literacy Supports Effective SME Debt Management

Operating and managing a successful SME requires sound FL skills to avoid insolvency (Ye and Kulathunga, 2019). In recent years, individuals and businesses have been inundated with new financial products which require optimal FL skills to make sense of it all and avoid getting into debt (Agyapong and Attram, 2019). Given that most people in developing countries rely on SMEs for their livelihood, the FL policy agenda must be adopted and implemented to ensure that debt is kept under control to improve the SME sector (Xu and Zia, 2012). Evidence suggests that a greater financial knowledge could provide a better understanding of financial concepts which could help increase financial resilience reduce risks in their businesses and prevent individuals from taking on too many debts (Wise, 2013; Klapper and Lusardi, 2020). Uncontrolled debt could lead to unexpected personal shocks, therefore, individuals or SME managers with higher "debt literacy" are better equipped with the knowledge to prevent future debt and are also more likely to pay their credit cards or business loans timely and in full (Lusardi and Tufano, 2015; Hossain, 2020). This implies that FL could serve as a preventative measure for controlling indebtedness for individuals and businesses alike (Anderloni and Vandone, 2011; Wise, 2013). However, empirical study suggests that some debts are more driven by emotional factors, such as overconfidence, impulsivity in consumer attitudes, and social comparison leading to the inability to perceive the long-term effects of ill debt decisions (Anderloni and Vandone, 2011). Empirically, most young people also have little knowledge about their student loans and most have no knowledge about the interest the loan accrued over time (Lusardi, 2019). This implies that young people will struggle with financial management skills in later years which will thereby affect their ability to manage a business profitably. With debt becoming an everyday source of financing for most households and SMEs, FL matters on many fronts.

2.4.2 Financial Literacy and SME Investment Decision-Making

Understanding financial concepts could improve confidence in SME managers to undertake any investment decisions which is normally associated with higher returns (Almenberg and Dreber 2015; Lusardi et al.,2017). The complexity of the current financial market requires in-depth fundamental financial knowledge such as knowledge of interest rates, inflation, investment, risk diversification and applying them to make a systematic investment decision that improves business sustainability and growth (van Rooij et al., 2011; Klapper and Lusardi, 2020). As argued by Schmeiser and Seligman (2013), a high level of FL triggers investment decisions and wealth creation over time. In some cases, investors are required to declare any credit card delinquency, and the probability of bankruptcy before taking up an investment (Cole et al., 2016). This means that SME managers will be aware of their legal rights and obligations to understand all financial investment products that maximise profit as a result of their FL skills. This is because financially literate business managers or investors are more likely to understand investment-related information and identify potential fraudulent investment products appropriately that could cause their entire businesses to fail (Sun et al., 2020). Evidence suggests that consumers who are equipped with a high level of FL are empowered to scrutinise and question any financial products and their impact, thereby contributing to greater sanity in the financial services sector, better standards, and a sound business environment (Lusardi et al., 2017).

From a broader perspective, FL cannot only be limited to individuals or businesses as a high level of FL within the population could have a considerable influence on the confidence and efficiency of the financial systems (Klapper and Lusardi, 2020). This means that when financially literate SME managers make the best investment decision, this could lead to a significant contribution to the national economy, instil confidence in the financial system and ultimately support SMEs to meet their growth objectives (Burgstaller and Wagner, 2015; Nason and Wiklund, 2018). This implies that FL could have far-reaching consequences for the stability of the whole economy and businesses at large (Jappelli, 2010).

In addition, FL could not only be limited to household or SME financial decision-making but also how people and businesses engage in public policy discussion and make precise decisions on such policies (Magistro, 2020). Active engagement in any public policy by individuals and businesses is pivotal for their accurate investment decisions. Evidence suggests that a high degree of FL helps individuals and SME managers to analyse the precise estimated costs and benefits of certain major economic policies such as the budget statement which could have a significant impact on people's economic status and SME performance (Fornero and Lo Prete, 2019). Recent empirical evidence suggests that those who are financially literate (higher-income earners and highly educated) are more likely to support policies such as free trade compared to the least financially literate individuals (Magistro, 2020). Based on this, it is important that FL policies are designed to target everyone to stimulate public policy engagement to improve their investment decision-making.

2.5 The Global Perspective on Financial Literacy

The challenges of the 21st century have made FL a critical skill for every thriving economy across the globe, but disparities in FL rates have been observed even in the major developed economies (Klapper and Lusardi, 2020). Notably, in Germany, the UK and the Netherlands an estimated 65% of the adult population are considered to be financially literate. But Denmark and Sweden have the highest FL rates in the EU, standing at 70% (Klapper and Lusardi, 2020). On average, 52% of adults are financially literate across the EU. Despite the EU having the highest FL rates among its member states, Portugal and Romania are considered to have the lowest scores standing at 26% and 22 % respectively. These figures represent the below-average score globally prompting the EU to make FL a prominent policy agenda which is mainly driven by its fast-ageing population which could ultimately put pressure on the pension system (Batsaikhan and Demertzis, 2018). While the EU countries performed better in the financial literacy score, the figure remained stubbornly low in the US. Empirical evidence suggests that only 57% of the US adult population is considered to be financially literate and this is widespread, especially among people with lower socioeconomic status (Lusardi and Mitchell, 2014). This implies that any SME owner/manager from lower socioeconomic status could find it challenging to make informed financial decisions regarding their businesses.

It is even important for governments in the developing world particularly, Africa to analyse financial illiteracy rates among the population. Policymakers and scholars alike have called for policy changes particularly, among developing regions due to the complexity of financial information and products which many individuals and businesses find challenging to understand to make informed financial decisions (Xu and Zia, 2012). Across Africa, South Africa emerged to have the highest financially literate rates, with 42% of adults considered to be financially literate (Klapper and Lusardi, 2020). But in Ghana, only 32% of adults are considered financially literate. While 26% of adults are considered to possess FL skills in Nigeria, the lowest-performing countries are Somalia and Sudan, with only 15% and 21% of their adults considered financially literate respectively (Klapper et al., 2015). The above analysis shows a significant disparity between the developed and developing countries' FL rates. Given the known ramifications of the lack of financial literacy on individuals and businesses, it is important that governments across the world, particularly those in developing countries take pragmatic steps to narrow the FL gap within the population and across countries to generate global economic activities that improve livelihood.

2.5.1 Financial Literacy Programmes in Developed Countries

The EU has embarked on several schemes to promote FL, especially as disparities exist among its member states (Klapper and Lusardi, 2020). Many reasons have led the EU to make FL a prominent policy agenda. First, the population within the EU is growing, putting pressure on the pension system. Secondly, there is an overwhelming mortgage debt across euro-area households. Lastly, the EU aims to promote an inclusive growth agenda; therefore, financial literacy could help access the benefits of such economic growth (Batsaikhan and Demertzis, 2018). Based on the above, the EU initiated a targeted FL programme for refugees as a key step to enhancing financial inclusion and social integration (Batsaikhan et al., 2018). Migration plays a crucial role in providing the labour force that will improve economic growth. As a result, the developed nations deemed it vital to provide a targeted FL programme not only to help in economic development but also to provide a sound foundation for this population group to understand the need to take up job opportunities, save, navigate the financial system, set up a business and prepare for their retirement (Rostamkalaei and Riding, 2020).

Also, FL has been introduced in schools at a young age, notably in the Flemish Community in Belgium, where the financial curriculum was introduced and made compulsory in the secondary school curriculum in 2010 (OECD, 2012). Purposive or tailored programmes are believed to be better and need-driven in supporting specific community needs. Empirically, when FL is introduced at a younger age, significant improvements are observed in individuals' budgeting behaviour (Bruhn et al., 2011). FL is believed to have both educational and behavioural aspects, so the EU deemed it crucial to understand the effect of an early educational strategy on the financial behaviour of individuals in the later years. Furthermore, for an effective policy agenda, the EU is using the European Central Bank's Household Finance and Consumption Survey to promote, monitor and better understand member countries' needs (Batsaikhan and Demertzis, 2018).

In the U.S., FL Education Commission (FLEC) (2020) consider financial literacy as an important skill for many Americans which could unlock the foundations of economic opportunity and power a robust economy, particularly as many

Americans face significant financial uncertainties due to the impact of COVID-19. FL was once a distant priority in many schools in America, but given the recognised need for increased FL, this has been mandated into curricula in primary and secondary schools across the country (Harnisch, 2010). This is to (FLEC, 2020). The National Strategy in the US is to ensure that educators and other service providers provide targeted financial literacy programme which promotes the skills of current and future consumers and ensures any financial services and products designed is not simply to improve financial knowledge, but rather to improve consumers' financial choices and outcome.

Both the EU and the US strategies are centred on educational settings to deliver value-added financial literacy programmes and services to facilitate the integration of a new generation of informed citizens to make prudent financial decisions. Evidence suggests instilling FL in the early years could help individuals plan and save for their future and contribute to their retirement (Harnisch, 2010).

2.5.2 Financial Literacy Programmes in Africa

Many governments and other stakeholders across Africa have realised the challenges of financial illiteracy in the continent and as a result, countries have now initiated or are in the process of engaging in the development of FL programmes to mitigate the direct impact of financial illiteracy. While there are no comprehensive cross-country data on FL across Africa, emerging data from Kenya and South Africa have shown evidence of the challenges of the lack of financial literacy skills that the continent faces (Atkinson and Messy, 2012). Despite some FL initiatives rapidly gaining global recognition, many of such policies across many African nations are weak compared to other parts of the world (OECD, 2013).

South Africa’s FL initiative emerged as the best across Africa. National Community Financial Education Workshops (NCFEWs) which is one of the initiatives that target low-income adults in rural areas ensure people have a basic understanding of concepts such as budgeting, credit/debit, saving, insurance, and pension, as well as financial management and decision-making. The success of this initiative is reflected in the OECD FL measurement pilot, where South Africans display moderate levels of FL on many indicators across four areas such as knowledge and understanding, managing money, financial planning and selecting financial products (Atkinson and Messy, 2012).

In Ghana, an extensive National Strategy for FL was launched in 2009, aimed explicitly at Consumer Protection in the Microfinance Sector. The initiative focused on three main things such as observing National Financial Literacy Week, roadshows in rural areas and educating school children on savings and loans through printed educational materials (OECD, 2013). There are also plans to enhance financial education in upper primary and Junior High schools.

Kenya has also introduced the National Strategy for Financial Education by the Central Bank of Kenya, partnering with the Financial Sector Deepening (FSD) Trust. There is also a pension education campaign initiated by public authorities but led by the Retirement Benefits Authority. In Nigeria, the World Bank and the Central Bank of Nigeria collaborated with local NGOs and developed an entertainment programme as a financial education tool to raise consumer awareness of the rights and obligations of both financial institutions and consumers themselves (OECD, 2013). Explicitly, such initiatives are needed across the continent to help SME managers and individuals acquire in-depth FL skills to scale up performance. While these initiatives are welcome, more is needed to be done to improve FL skills across the continent, particularly if the performance of SMEs is to improve significantly. This is because even with these initiatives, SMEs across developing countries continue to record an absence of growth with some on the verge of failure and no chance of survival (Storey et al., 2016; Ye and Kulathunga, 2019).

2.6 Approaches to Financial Literacy Acquisition

Successful Entrepreneurs often explore business opportunities, develop new business models, and are always innovative in production processes but self-confidence is one of the most important entrepreneurial attributes to undertake such activities (Bhatti et al., 2021). But for SME managers to be able to build such needed confidence and undertake an entrepreneurial activity with precision, they must assimilate and develop knowledge, skills, and values to succeed. FL skills stood the test and provided opportunities to identify and seize important business opportunities to promote a sustainable business (Brixiová et al., 2020). There are several ways that SME managers could acquire FL skills and improve their firms' performance.

First, there is a renewed debate on entrepreneurial education and training to ensure that business managers are equipped with the standard skill set to improve performance. In the economic sense, training does bring a higher return in employee productivity and firm profitability (Georgiadis and Pitelis, 2016). This implies that training serves as an agent of change to enable entrepreneurs to acquire FL enabling entrepreneurs to grow their businesses, expand their capabilities, and remain profitable. While entrepreneurial training could leave SMEs with a huge financial burden, undertaking any entrepreneurial activities without the required skills could equally have a huge future financial implication on the firm. Given that FL is understood to be a decisive skill set for all entrepreneurial economic activities and helps managers make informed financial decisions to achieve desired performance business outcomes (Abad-Segura et al., 2019), managers must be encouraged to invest in entrepreneurial training. For example, the significance of entrepreneurial training on accounting management practices such as recordkeeping, budgeting, savings, risk management and planning has been emphasised by previous researchers (Karlan and Valdivia 2011; Drexler et al. 2014; De Mel et al. 2014). More significantly, the study by Nyamboga et al. (2014) investigated the impact of training on SME managers and established that training in respect of booking keeping, credit management, and budgeting improved the ability of SMEs to repay their loans significantly. Similarly, Amoah and Mungai (2020) posit that effective training for SME managers enhances their identification of risks and how to mitigate them. While training emerged as a driver for entrepreneurial success, a previous study posits that training does not seem to have any significant impact on women entrepreneurs (Brixiova et al., 2020). In the same vein, evidence suggests that while business training is linked to the performance of men (in terms of sales), there are no such observed association with higher sales among women entrepreneurs (Brixiova and Kangoye, 2016). Despite these mixed views in the literature, FL training emerged to have a positive impact on the acquisition of business knowledge and practice (Cho and Honorati, 2014). Likewise, Miller et al. (2015) posit that FL training has a positive effect on savings outcomes, but no effect on debt default by managers.

In most developing countries, evidence suggests that most SME managers do not implement the necessary business practices which are deemed standard practice to improve performance (Drexler et al, 2014). Evidence also suggests that in most cases, there is no proper record, and household and business finances are mixed, illustrating the rudimentary nature of business practices among most SMEs (McKenzie and Woodruff, 2014). Based on this, business training programmes should be a popular policy option for SMEs to improve performance and survivorship. This is because firms that fail to provide training to their employees, will fail to be competitive, particularly in the SME sector (Panagiotakopoulos, 2011).

Despite the importance of training to SMEs, workforce development or training still poses a huge challenge, particularly in the areas of digital and FL skills acquisition which are critical for SMEs' success in the current business market (Ozkan-Ozen and Kazancoglu, 2021). For example, in the last decade, there has been a massive increase in digital financial information which created requirements for technological structures and workforce skills, particularly for SMEs to improve performance (Andreou and Anyfantaki, 2021; Kass-Hanna et al., 2022). Even though budget constraints have emerged as one of the challenges facing most SMEs, they should be encouraged to make budgetary provisions to ensure workforce training remains their top priority (Unger et al., 2011).

Secondly, FL could be acquired through coaching. Coaching has also emerged as a platform for SME managers through effective networking to acquire new skills or knowledge and share practices on what works and doesn't from experienced and skilled individuals. This is because according to McCarthy and Milner (2013), coaching helps shape management behaviour to identify opportunities and implement acceptable leadership procedures which are guided by appropriate theories from an experienced manager. This means that coaching improves confidence among junior staff and encourages them to be actively involved in organisational strategy meetings where goals and key decisions are discussed and set (Larsson and Vinberg, 2010). Based on this, the knowledge and confidence gained from experienced colleagues can help inexperienced managers undertake a specific task without having to spend so much if this is to be done externally. This is a perfect opportunity for SMEs that find it challenging due to their financial constraints and are unable to invest in human capital development through organised training to acquire standard business management skills to improve performance. Evidence suggests that better financial practices by SME managers in developing countries are attributed to the level of business knowledge they acquired (Berge et al., 2015).

Furthermore, formal education could also provide a means by which SME managers acquire their FL knowledge and skills. This implies that managers' level of education could play a significant role in the strategic decision-making process. This is because the context in which strategic business decisions are made necessitates broad conceptual and theoretical knowledge to achieve the desired outcome (Sánchez, 2013). It is perceived that an entrepreneur's formal education is a key source of acquiring knowledge that enhances the development of conceptual and theoretical background to formulate entrepreneurial attitudes, abilities, and skills that trigger new venture creation and successful management (Martin et al., 2013; Piperopoulos and Dimov, 2015). Given that entrepreneurship education focuses on good business management and financial management skills that are embedded in FL, encouraging SME managers to take up entrepreneurship education could help them acquire strategic skills to improve performance (Sar, 2017; Saptono, 2018).

It has been argued that managers' distinct ability is to screen and refine information effectively and respond to it favourably to improve productivity and performance (Wihler et al., 2017). Evidence suggests that FL skills create opportunities for managers to explore and refine business opportunities which could improve performance (Li and Qian, 2019). Empirically, SME managers lack financial management knowledge and sometimes fail to identify and analyse their expenses against their income accordingly (Karadag, 2015). However, an empirical study established that highly educated individuals are more likely to be more financially knowledgeable with a better knowledge of investment opportunities (Wagner, 2019). In the same vein, evidence suggests that young entrepreneurs with a sound business education possess broader knowledge and information about other sources of finances which could be relied upon to improve performance (Seghers et al., 2012). This implies that entrepreneurial education which is taught at a higher education level could bring a huge cultural shift in entrepreneurship by ensuring that financial skills and management skills which are the needed skill sets for successful entrepreneurship could be acquired. Based on this, the lack of entrepreneurial education implies a lack of FL which could lead to poor financial decision-making (Morgan and Trinh, 2019).

Finally, this study also considers peer-to-peer learning as one of the prominent ways that SMEs could acquire certain key skills such as FL. Peer-peer learning serves as an instrumental organisational development support that could enable SME managers to come together to share knowledge, discuss opportunities, and challenges and test ideas within a supportive peer-learning environment (Muhammed and Zaim, 2020). Peer-peer learning acts as a horizontal knowledge-sharing mechanism which is explorative to develop the necessary intellectual capital for innovation and capabilities building such as FL skills (Sung and Choi, 2018; Massingham et al., 2019). One of the challenges for many SMEs is how to build their intellectual capital and how they can better facilitate knowledge sharing to improve performance (Muhammed and Zaim, 2020). Given that peer-to-peer learning is explorative, managers can explore and discuss their skills gaps that can affect organizations' innovation performance in a supportive peer environment and subsequently, share common solutions that could improve their financial performance. Evidence suggests that when organisations adopt an organic structure that promotes horizontal knowledge sharing, it promotes their intellectual capabilities significantly (Ramezan, 2011).

Given that peer-to-peer is less power distance where knowledge can be shared among peers freely, this creates greater opportunities for frequent and comfortable interaction where both tacit and explicit knowledge can be shared with ease (Weidenfeld and Williams, 2016). Such an opportunity could allow SMEs to learn from previous setbacks that contribute to business failure and use them to create significant advantages to improve financial performance (Gray and Jones, 2016). Even though peer-to-peer could deliver real-time opportunities to support SME managers in their quest to upscale their knowledge and practices such as cash-flow management, record-keeping, and financial planning, it could equally generate conflicts due to unhealthy competition which could dim business confidence and performance.

2.7 Conceptualising Financial Literacy

Conventionally, literacy empowers and allows individuals to analyse rationally and take critical positions on issues (Gee, 2008). This implies that an individual with a degree of specific literacy could possess a degree of skills and knowledge and perform a particular task with ease and confidence. The economic and social environment is rapidly changing with individuals requiring optimal financial skills to make critical decisions about their finances (Lusardi and Tufano, 2015). This means that people must seek knowledge and up-to-date information on saving, inflation, risk diversification, interest rates, debt, assets, investment, risk management and budgeting to be able to make proper financial management decisions (Lusardi and Mitchell, 2014). Previously, many relied on their employers or governments to make retirement or pension security decisions for them. In recent years, such decisions have been shifted to individuals, but this requires knowledge and skills for such informed decisions to be made (Batsaikhan and Demertzis, 2018). Also in recent years, access to credit products have become easily available, however, optimum financial literacy skill required to ensure that individuals avoid paying high transaction fees and higher interest rates on any loan secured which could result in high debts (Lusardi and Tufano, 2015). This implies that there is an enormous associated risk with financially illiterate SME managers, therefore, promoting basic concepts of FL should be made a priority (Klapper and Lusardi, 2020).

Financial portfolios and the financial market have become complex to navigate, impacting significantly on SME managers' investment activities (van Rooij et al., 2011). Globally, it is estimated that 3.5 billion adults lack an understanding of basic financial concepts and this trend is predominantly in developing countries (Klapper and Lusardi, 2020). While most SMEs in developing countries are formed as a result of economic need, understanding the reasons why such gaps exist could enhance the provision of target interventions using an internationally accepted tool such as the FL programme to provide confidence in their economic activities (Calvino et al., 2015). To provide effective and tailored FL support for the world's financially illiterate individuals and help them develop effective financial decision-making skills, many scholars have tried to understand the major concepts of FL (Huston 2010; Nicolini and Haupt, 2019). But from the extant literature, financial literacy lacks a universally accepted definition and uniform measure (Huston, 2010; Remund, 2010; Knoll and Houts, 2012). As a result, this has led many researchers to conceptualise and define FL differently.

For example, Huston (2010) proposes that FL consists of both knowledge and application of specific skills to deal with personal finance. However, Remund

(2010) adopted a different perspective and suggested that both the immediate and long-term impact should be considered when defining FL. According to this study, FL is defined as “the degree to which one understands major financial concepts and confidently manage personal finances better both in the short-term and long-term, while mindful of life events and changing economic conditions” (Remund, 2010). From this definition, one could argue that the concept of FL changes when different social settings and times are put into perspective. Adopting a different viewpoint, the OECD (2011) considers FL as a combination of knowledge, awareness, skill, behaviour and attitude that an individual requires to make an informed financial decision for the benefit of an individual and society as a whole. In the same vein, Atkinson and Messy (2011) described FL as a blend of awareness, knowledge, skills, attitude and behaviour necessary to make a sound financial decision and manage any financial challenges with confidence. These two definitions could imply that financial skill is the ability to apply financial knowledge, so a lack of financial knowledge does imply a lack of financial skills as one cannot apply the knowledge one does not possess (Nicolini and Haupt, 2019). But from a different perspective, it is possible that individuals with extensive financial knowledge could equally fail to apply this knowledge to improve their financial position. This is because the recent 2008 financial crash demonstrated that professionals who are considered to possess a high level of financial knowledge did not understand new financial products and their associated investment risks. Therefore, the belief that a high level of financial knowledge precedes a high level of FL could be highly debatable because the application of that knowledge is pivotal to the process.

2.8 Proposed Conceptual Framework

2.8.1 Background of the Conceptual Framework

Developing an effective and reliable instrument to measure financial literacy construct with its corresponding conceptual model is important for future research. Research on SMEs' growth is not scarce (Storey, 1994; Wiklund et al., 2009), but managers' financial literacy skills and it is impact on SMEs' financial performance are yet to be extensively explored, particularly in developing countries context like Ghana. More widely, researchers struggle to understand which items and how many questions should be used to get a proper financial literacy measure (Van Rooij et al., 2011). This implies that there is a lack of unified financial literacy measurement tools across the literature which creates a huge challenge for the research community in this area of research. Proposing a standardised financial literacy measure could benefit the SMEs significantly in understanding what is required from the sector given that every SME owner/manager at a stage will inevitably make decisions on resource acquisition, allocation and utilisation which requires effective budgeting, savings, and risk management and record keeping behaviour (Eniola and Entebang, 2016). For SME managers to deliver a real benefit to their business growth agenda, this means they are required to implement the above-mentioned wide range of recommended financial management practices that lead to an improved financial performance (García-Pérez-de-Lema et al., 2021). This is because empirical evidence suggests that an SME's ability to take decisive actions and create or produce an acceptable level of outcomes denotes performance (Eniola and Entebang, 2015). More importantly, taking any financial decision without satisfactorily evaluating its financial implications could have a negative impact on SMEs' growth mission, capital structure, operational structure and in the worst-case situation, insolvency (Hussain et al., 2018). This justified the importance of improving SME managers' financial literacy by exploring and proposing an effective framework leading to an effective measurement tool. But to achieve this, it is important to explore how financial literacy is conceptualised and measured across literature and identify any potential gaps in previous studies. Exploring potential gaps in previous studies could help propose a standardised framework leading to an effective tool for measuring SME managers' level of financial literacy skills that promote effective financial performance in this sector.

2.8.2 Measurement of Financial Literacy

From the extant literature review, it emerged that some SME managers in developing regions such as Ghana lack financial literacy skills to keep effective financial records, manage budgets to avoid over-indebtedness and implement effective risk management strategies that improve financial performance and survivability of their businesses (Ye and Kulathunga, 2019; Tuffour et al., 2020). Despite this unique problem in developing countries, many scholars are divided in their opinions on how financial literacy should be measured (Remund, 2010; Knoll and Houts, 2012; Kimiyaghalam and Safari, 2015). Widely, it has been established that items used to measure financial literacy constructs are mainly grouped into either knowledge-based or behaviour-based (Huston, 2010).

Categorising financial literacy measure items under these broad areas could be justified given that financial Knowledge is considered as the capability to understand personal and wider financial concepts while financial behaviour is the ability to make wise financial decisions with confidence (French and Mckillop, 2016).

From the extant literature, the majority of studies use financial literacy and financial knowledge interchangeably, but financial knowledge and financial literacy are two different terms (Lind et al., 2020). For example, Ye and Kulathunga (2019) investigate the impact of financial Literacy on SME sustainability from a developing countries' perspective. The study measures financial literacy using inflation, exchange rates, interest rates and future values as the independent variables. However, such variables represent knowledge that managers must have or possess to make prudent financial decisions. Also, Liu et al., (2021) investigate the impact of entrepreneurs' financial literacy on innovation within SMEs, and measure financial literacy using knowledge on inflation, risk diversification, risk/return and investment knowledge. Using variables such as inflation, exchange rates, interest rates and future values are considered under financial knowledge. This implies that both Ye and Kulathunga (2019) and Liu et al., (2021) measured financial knowledge as their main construct but failed to measure financial behaviour creating a gap in their empirical models. This is because financially knowledgeable individuals develop better financial behaviour to manage their finances prudently (Rai et al., 2019; Balasubramnian and Sargent, 2020). Therefore, financial knowledge and financial behaviour are two constructs and should be measured separately.

In addition, Agyapong and Attram (2019) investigate the effect of SME managers' financial literacy on the performance of SMEs in the Cape Coast Metropolis in Ghana. This study measures financial literacy using financial management, debt, savings, insurance, and investment as the independent variables. Considering the stated variable, this study combined both financial knowledge and financial behaviour variables in measuring FL. For example, savings is considered as a behaviour variable. This is because financially knowledgeable SME managers tend to display a high degree of confidence in their financial ability and save to improve performance (Babiarz and Robb, 2014). Combining both financial knowledge and behaviour variables creates confusion as individuals' financial behaviours are strongly linked to their financial knowledge (Atkinson and Messy, 2012). This means that financial knowledge and behaviour should be measured separately. This is because for an individual to exercise good financial behaviour and make informed financial decisions, one must have sound knowledge (Lind et al., 2020). This, therefore, creates a gap in their empirical model.

Also, Tuffour et al., (2020) investigated the impact of financial literacy and its impact on SME financial performance and measured financial literacy as financial awareness, knowledge and attitude which were adopted from Eniola and Entebang, (2017). The study measures financial knowledge but not the financial behaviour that leads to prudent financial decision-making. Empirically, financial literacy goes beyond financial knowledge (Kimiyaghalam and Safari, 2015). Even though Tuffour et al., (2020) measured financial knowledge, measuring behaviour could have provided an understanding of the application of managers' knowledge.

Explicitly, financial literacy is measured differently across studies and such disparities in conceptualising financial literacy continue to divide opinions among scholars on how financial literacy should be measured. But, measuring both financial knowledge and financial behaviour creates an opportunity for SME managers to test their knowledge and exercise prudent financial behaviour. As expressed by Hilmersson and Johanson (2020), SMEs' ability to acquire relevant knowledge does lead to capabilities development that improve optimal performance.

Financial knowledge is an important determinant of one's level of financial literacy that enables individuals to save, conduct budgetary activities, effectively manage risks and keep up-to-date records of business activities. Measuring financial knowledge and financial behaviour as a separate construct provides an opportunity for SME managers to test their degree of financial knowledge and use it effectively to make prudent financial decisions (Lusardi and Mitchell, 2014). This implies that financially knowledgeable managers could be financially illiterate if they fail to apply knowledge to improve SME performance. As stated by Huston (2010), "Financial knowledge is an integral dimension of, but not equivalent to, financial literacy". Based on the above, this current study proposes a systematic design of financial literacy instrument that sufficiently considers personal financial knowledge and its application to provide an in-depth understanding of how knowledge could be applied to formulate acceptable financial behaviour. Based on this, the current study proposes two main constructs, namely, financial knowledge and financial behaviour to underpin the proposed model.

2.9 Variable Definition and Hypotheses Development

2.9.1 Interest Rates and SME Performance

There is a direct link between the cost of borrowed funds and firm performance (Dalbor and Lee, 2017). As SMEs struggle to acquire working capital, the high cost of acquiring this fund could make it challenging for them to improve performance and in worst cases, expedite their insolvency. Based on this, SME managers' knowledge of interest rates and how these impact SME performances have been the focus of attention for many scholars (Barakat et al., 2016). Interest rates as a macroeconomic factor is beyond the control of any SME management (Dioha et al., 2018). It is, therefore, important to highlight the impact of interest rates on business performance around employment, sales growth and profitability and how SME managers could apply their knowledge of interest rates to make prudent financial decisions. This is because managers' knowledge of interest rates enhances their strategic decision-making in business financing, investment and operations to promote financial performance (Eniola and Entebang, 2016).

SMEs are often branded risky and non-creditworthy, and this puts them in an increasingly difficult position to acquire loans where any loans are obtained, the lending rates burden SMEs and increase their risk of default (Korutaro Nkundabanyanga et al., 2014). This does imply that higher interest rates are linked to increasing debt which may lead SMEs to abandon their quest to secure credit that meets their growth and performance ambitions. Evidence suggests that an individual's adequate level of knowledge of interest rates helps them understand the detrimental effect of the high cost of borrowing and to make prudent financial decisions (Atkinson and Messy 2012). Also, managers' knowledge of interest rates could make them to be aware of all components of loan agreements, including the interest, and loan processing which is critical to avoid falling into unnecessary debt and insolvency (Lusardi and de Bassa Scheresberg, 2013). Generally, the lack of financial knowledge is the main challenge for managers' inability to understand to cost of borrowing and associated financial products (García-P´erez-de-Lema et al., 2021). Based on the above evidence, the following hypotheses are developed as below:

H1a: *Knowledge of interest rates has a positive significant relationship with digital literacy of SME manager.*

H1b: *Knowledge of interest rates has a positively significant relationship with digital literacy of SME manager.*

H1c: *Knowledge of interest rates has a positive significant relationship with of SME profitability.*

H1d*: Knowledge of interest rates has a positive significant relationship with SME sales growth.*

2.9.2 Debt Management and SME Performance

Arguably, SMEs are often blamed for their inability to mobilise funds to meet their growth agenda, but labelling SMEs for their failures while they should be supported is convenient and too simplistic (Domeher et al., 2014). This is because access to credit continues to be a major constraint for SMEs particularly, those operating in developing countries such as Ghana (Quartey et al., 2017). Empirically, firms with bank loans and trade credit are able to stimulate their sales and become more profitable (Martínez-Sola et al. 2014; Andrieu et al., 2018). SMEs' ability to ensure that they acquire a satisfactory debt level that is easily manageable is critical for them to achieve profitability and firm value. This is because SMEs with too much debt will inevitably have problems in repaying their debts which will affect their financial performance. But the reality is that most SME managers lack financial and debt literacy to enhance their understanding of loan terms, and how to repay them promptly (Lusardi and Tufano, 2015). In the same vein, Addaney et al. (2016) posit that the major causes of debts among SMEs are the lack of knowledge of the terms of the loans applied for, the inability to manage any limited resources wisely and work within budgets to avoid high expenditure which subsequently builds debts and inevitably lead to non-performance. This does suggest debt management literacy improves repayment. While some SMEs continue to struggle to secure the needed funds to meet the growth objectives (Campello and Larrain, 2016), digital credit uptake is increasing access to credit to those previously excluded. However, the lack of financial literacy is equally increasing default rates among SME borrowers using digital credit (Tarus and Tarus, 2023). This means that regardless of the availability of bank loans and any form of trade credit for SMEs to stimulate their sales and become more profitable, their ability to manage debts should be a priority. Based on this, SME managers must be encouraged to acquire financial literacy skills that enhance their understanding of how to adopt appropriate debt management strategies to reduce insolvency and drive performance (Hamid and Loke, 2021). This is because productivity and insolvency are both influenced by effective debt management strategies which are less common in SMEs, particularly those in developing countries such as Ghana (Nyamao et al. 2012; Eniola and Entebang, 2016; Li and Qian, 2019). Based on these, a hypothesis is developed as below:

***H2a**: Debt literacy knowledge has a significant positive relationship with digital literacy of SME manager.*

***H2b**: Debt literacy knowledge has a significant positive relationship with employment growth of SMEs.*

H2c*: Debt literacy knowledge has a significant positive relationship with SME profitability.*

H2d*: Debt literacy knowledge has a significant positive relationship with SME sales growth*.

2.9.3 Inflation and SME Performance

Inflation in the global economy has reached a worrying high level for consumers and businesses (Bunn et al., 2022). It is opined that inflation in the business environment has a significant impact on the growth of SMEs, particularly in developing countries (Olawale and Garwe, 2010). It is, therefore, vital that SME managers understand the impact of an inflationary economy on their firms' performance (Ipinnaiye et al., 2017). Inflation drives prices of goods and services which leads to reduced sales (Doan et al., 2020; Khan, 2022). A reduction in sales figures implies a dip in consumer confidence which affects SMEs profitability significantly (Rashid and Saeed, 2017). Evidence also suggests that inflation affects firms' investment plans (Vatavu, 2014). It is, therefore, imperative that managers understand how inflation uncertainty effect price changes and affects investment decision-making and formulate strategies that minimise the inflation impact (Wang et al., 2016). This is important as firms struggle to plan ahead leading to an uneconomical resource allocation (Bunn et al., 2022). According to Tanaka et al. (2020), SMEs' inability to predict economic uncertainties could affect their productivity and profitability. This is because when SMEs cannot predict future prices, it creates uncertainty in sales, supply chain and employment (Forsythe et al., 2020). Given that financial literacy is a prerequisite skill that enhances SMEs' strategic decision-making, it is, therefore, important that managers possess a healthy financial literacy skill that enables them to mitigate inflation impact on their businesses. Managers are required to make difficult financial decisions, (Drexler et al., 2014), and as explained eloquently by Lusardi and Mitchell (2014), financial literacy enables individuals to process economic information and make prudent financial decisions. Based on the above arguments, the following hypotheses are developed as below:

***H3a**: Knowledge of inflation has a significant positive relationship with digital literacy of SME manager.*

***H3b**: Knowledge of inflation has a significant positive relationship with SME employment growth.*

***H3c**: Knowledge of inflation has a significant positive relationship with SME profitability.*

***H3d**: Knowledge of inflation has a significant positive relationship with SME sales growth*.

2.9.4 Insurance Literacy and SME Performance

The lack of knowledge on insurance policies compounds SMEs' challenges to improve performance. This is because insurance provides an important financial resource for SMEs in the event of uncertainties to improve performance (Garba et al., 2022). Evidence suggests that some banks tend to demand insurance coverage from SMEs as a form of guarantee to protect the borrowed funds they obtain as working capital (Asai, 2019). Empirically, insurance literacy is significantly inadequate among some SME managers which is compounded by insufficient product knowledge (Driver et al., 2018). It is pivotal that SME managers understand the effect of insurance and its literacy on sustainable growth and financial performance of their businesses. But through adequate knowledge of insurance literacy, managers can understand certain detrimental impact of a risky occurrences and select the best insurance policy that satisfactorily cover any unforeseen risky events and continue operating business activities to optimize profit. Evidence suggests that effective insurance policy has a significant effect and the survival and development of SMEs, particularly in developing countries (Le et al., 2020). From a risk management perspective, this means that insurance uptake could serve as a safeguard against unforeseen circumstances and, thereby, protect SME assets. It is argued that insurance value of a firm is often determined by the extent to which the firm needs such insurance. But SME managers' ability to determine such value is largely dependent on their financial literacy that enhances the insurance up take (Xu and Zia, 2012). Given that managers often fail to make informed financial decision about their businesses due to the lack of financial literacy skills (Drexler et al., 2014), this implies that financially illiterate managers might fail to take up an insurance cover as a risk management strategy against any unforeseen circumstances. Based on the evidence above, hypotheses are developed as below:

***H4a**: Knowledge on business insurance has a significant positive relationship with digital literacy of SME manager.*

***H4b**: Knowledge on business insurance has a significant positive relationship with SME employment growth.*

***H4c**: Knowledge on business insurance has a significant positive relationship with SME profitability.*

***H4d**: Knowledge on business insurance has a significant positive relationship with SME sales growth.*

2.9.5 Investment Knowledge and SME Performance

Investments are usually strategic decisions that determine how businesses invest their capital to help build sustainable competitive advantage and maximise profit. Even though SMEs’ investment plans could involve high levels of risk, when such decisions are taken with complete confidence, they help improve performance and promote SME survivability (Harris et al., 2016; Alkaraan, 2016). But for such a decision to be made with precision to improve SMEs' financial outcomes, a higher degree of financial literacy is required to avoid putting SMEs' investment capital at risk (Steinbach et al., 2017). Research indicates that making wise investment decisions and the ability of SMEs to participate in the stock market are significantly influenced by a high level of financial literacy (van Rooij et al., 2011; Amari and Jarboui, 2017; Sivaramakrishnan et al., 2017; Liu et al., 2021). Evidence also suggests that financial literacy skill is significantly linked with portfolio diversification and investment outcomes (Von Gaudecker, 2015; Bianchi, 2018). SME managers are considered key personnel in the firm as they are the sole strategic decision-makers of the business. This implies that managers’ human capital is critical to improve SME performance. This means that managers’ financial literacy skills could represent an important resource for effective investment decision-making that propels SME performance (Zhao and Thompson, 2019). This implies that managers ability to make effective investment decision-making, SMEs can raise their financial capital portfolio which is a significant indicator of financial performance.

Evidence suggests that firms' internal resources, such as customer size and investment capital are decisive factors in SMEs' investment decision-making (Appiah et al., 2019). However, SME managers lack the financial knowledge to understand these factors and be able to make strategic investment decisions to improve their investment ambitions (Ye and Kulathunga, 2019; Abadi et al., 2021). Based on the above argument, financial literacy could represent a strategic resource for SMEs to unlock their investment opportunities and promote firm financial performance. As a result of these discussions, a hypothesis is developed as below:

H5a: *Knowledge of investment analysis has a significant positive relationship with the digital capability of SME manager.*

H5b: *Knowledge of investment analysis has a significant positive relationship with SME employment growth.*

H5c: *Knowledge of investment analysis has a significant positive relationship with SME profitability.*

H5d*: Knowledge of investment analysis has a significant positive relationship with SME sales growth*.

2.9.6 Effective Budgeting and SME Performance

Over the past decades, budgeting has emerged as one of the widely used monitoring tools for planning, controlling, and forecasting organisational revenues and expenses (Oyadomari et al., 2018). The unpredictability of the financial market is not new in business management (Otley and Soin, 2014), therefore, the ability of SME managers to compare the budget with the actual revenue by using the income statement to identify any variation could be crucial in measuring performance. However, evidence suggests that there is a significant variation in financial management practices due to firm sizes, geographical location and institutional setting with high-income countries and larger firms doing better compared to SMEs operating in the developing countries (Andor et al., 2015). This implies that SMEs in developing countries like Ghana may be less likely to implement effective budgeting strategies to improve performance. While budgeting practices lead to an effective saving culture in SMEs, the ability to budget and save depends on a higher degree of financial literacy skills (Hauff et al., 2020). With so much volatility in the current business market, managers must acquire financial knowledge to implement effective financial management practices such as budgeting to meet their growth objectives. Based on the discussion above, the study presents the following hypotheses:

H6a*: Budgeting skill has a significant positive relationship with digital literacy of SME manager.*

H6b: *Budgeting skill has a significant positive relationship with SME employment growth.*

H6c: *Budgeting skill has a significant positive relationship with SME profitability.*

H6d: *Budgeting skill has a significant positive relationship with SME sales growth*.

2.9.7 Record-keeping Behaviour and Financial Performance

SMEs' records such as sales, profitability, valuable business contracts, and certain key customer information play a vital role in understanding SME performance trends (Kamal et al., 2015). However, evidence suggests that most SMEs fail to keep records of vital business activities (Giné and Mansuri, 2014).

This implies that the majority of SMEs could find it challenging to make quick financial decisions if there is no reference point guiding their decision-making. It is also opined that most SMEs, especially those in developing nations, are unable to segregate their personal and corporate accounts (Drexler et al., 2014). This also implies that the majority of SME managers may find it extremely difficult to determine the state of their business success and make any growth plan to improve performance. For example, an effective accounting system should provide thorough results of business operations which might serve as a strong supporting statement for potential creditors to obtain funding to improve performance (Aladejebi and Oladimeji, 2019). Evidence also suggests that an up-to-date record-keeping of vital business activities helps SMEs make informed plans and identify potential risks that could impact on their ability to expand (Mwebesa et al., 2018).

However, the optimum level of financial literacy of managers affects SMEs' capability to maintain effective records of their economic activities. According to the World Bank Group (2018), most SMEs in developing nations lack the required financial literacy skills to manage business operations. This explains why some SMEs in developing economies struggle with record-keeping. Additionally, the lack of financial literacy skills may make it difficult for SMEs to embrace novel methods of maintaining financial records (Li and Meyer-Cirkel, 2021). Unlike larger organisations, some SMEs' have seen their operations disrupted due to their inability to adopt an innovative system to store certain business records to meet the digitalised market demand. For example, many organisations adopt cloud computing systems as a record-keeping tool which offers increased opportunities for collaboration and potential cost savings to boost financial performance (Lin et al., 2014; Pillen and Eckard, 2022). Based on the above discussion, the study hypothesises that:

***H7a**: Record-keeping behaviour of SME manager has a significant positive relationship with digital literacy.*

***H7b**: Record-keeping behaviour of SME manager has a significant positive relationship with SMEs employment growth.*

***H7c**: Record-keeping behaviour of SME manager has a significant positive relationship with SME profitability.*

***H7d**: Record-keeping behaviour of SME manager has a significant positive relationship with SME sales growth.*

2.9.8 Effective Risk Management and SME Performance

Effective risk management practices have emerged as a significant step for SME competitiveness as these help business managers identify potential risks which could cause significant loss to the business (Yang et al., 2018). Effective risk management reduces operation cost, enhances the allocation and utilisation of resources and helps identify potential fraud (Soin and Collier, 2013). Based on this, managers must take pragmatic steps to mitigate any potential business risks if performance is to be improved (Yilmaz and Flouris, 2017). Empirically, businesses with optimum risk management practices outperform those without (Callahan and Soileau, 2017; Zou and Hassan, 2017). More importantly, effective risk management also helps managers identify diverse business opportunities and help make the best investment decisions to improve financial performance (Agrawal, 2016). While the importance of effective risk management in businesses has been explored extensively in developed economies, its impact on SME performance in developing world has not received the needed attention (Farrell and Gallagher 2015). Evidence suggests that financial literacy skills are linked to effective risk management practices (Yang et al., 2018). However, the majority of SMEs lack financial literacy which thereby, affects their risk management strategies (Agyapong and Attram, 2019; Ye and Kulathunga, 2019). One of the major challenges SMEs in developing countries fail to implement risk management strategies is due to the lack of resources (Brustbauer, 2016). This is because risk management increases cost and SMEs that are resource-constrained are unable to develop the needed skills and capabilities to implement effective risk management strategies (Asgary et al., 2020). However, for SMEs to thrive, they must adopt a systematic approach that identifies, assesses, monitors and manages potential risks that could bring stability and helps reduce SME failures (Gao et al., 2013; Chakabva et al., 202). Based on the above argument, the study proposed the following hypotheses:

H8a: *Risk management behaviour of SME managers has a positively significant relationship with digital literacy.*

H8b: *Risk management behaviour of SME manager has a significant positive relationship with SME employment growth.*

H8c: *Risk management behaviour of SME manager has a significant positive relationship with SME profitability.*

H8d: *Risk management behaviour of SME manager has a significant positive relationship with SME sales growth.*

2.9.9 Savings Behaviour and SME Performance

Scholars have always argued that despite the challenge that SMEs face in accessing working capital as loans, they could achieve their financial flexibility by having cash reserves or savings to enhance their growth ambitions (Martínez-Sola et al., 2018). This implies that SMEs' ability to save cash could provide a financial cushion that enhances their strategic financial decision-making to improve performance (Dao and Maggi, 2018). For example, savings could help SMEs finance profitable and strategic investments to enhance their profits (Dimitropoulos et al., 2020). Also, managers can invest the extra cash obtained through savings into fast-selling products to boost sales and their profit margin (Doan, 2020; Rocca and Cambrea, 2019). However, given that most SMEs in developing countries have limited cash due to the unavailability of credits (Quartey et al., 2017), they might not be able to make significant investment decisions to improve performance. As explained by Duchin et al. (2010), firms with low cash reserves are unable to invest to improve performance. This implies that savings help SMEs to be ready for any contingency and overcome any potential opportunistic problems to improve operational performance (La Rocca et al., 2019). But SMEs' ability to save depends on their financial literacy skills (Murendo and Mutsonziwa, 2017). This could imply that SME managers who are financially knowledgeable display a high degree of confidence in their financial ability to report emergency funds to improve performance (Babiarz and Robb, 2014). Based on the above discussions, the study proposed the following hypotheses:

H9a: *Savings behaviour of SME manager has a significant positive relationship with digital literacy.*

H9b: *Savings behaviour of SME manager has a significant positive relationship with SME employment growth.*

H9c: *Savings behaviour of SME manager has a significant positive relationship with SME profitability.*

H9d: *Savings behaviour of SME manager has a significant positive relationship with SME sales growth.*

2.9.10 Digital Capability and SME Performance

Human capital has emerged as a central value in terms of knowledge, experiences and skills which enhances productivity. With digital skills gathering pace in many businesses (Oggero et al, 2020), SMES must revolutionise the way their business activities are carried out to remain competitive. This is because technological innovation and digital information have brought about novel ways of acquiring and transferring other skills and knowledge regarding business practices leading to higher levels of organisational performance and effectiveness (van Hemert et al., 2013). This implies that adopting digital technologies as the way business is transacted enables business managers or potential investors to enter financial markets with more ease and confidence than ever before (Li and Meyer-Cirkel, 2021). But while digital literacy is gathering pace in most big companies, its acknowledgement, acquisition, and application by SMEs in Ghana to improve performance are very minimal (Donkor et al., 2018). SMEs are known for their immense contribution to the national economic growth of Ghana; therefore, the digital illiteracy of most SME managers could lead to SMEs' economic contributions faltering. This is because digitalisation epitomizes today's business competitiveness, therefore, SMEs' inability to adopt digitalised business practices could pose a huge challenge for them to measure their entrepreneurial performance to a greater extent. For example, the introduction of electronic commerce (e-commerce) which is a revolutionary tool for businesses globally to share information within a social network and at the same time conduct business transactions using a telecommunications network is limitedly adopted across SMEs in Ghana despite its significant cost-effectiveness (Saffu et al., 2007). Evidence suggests that e-commerce adoption increases market share, sales, customer satisfaction, and business efficiency by helping easy access to a new market (Xuhua et al., 2019). This implies that SME digital literacy is vital for a firm competitive advantage and financial performance. Empirically, digital literacy is significantly linked to financial literacy skills which are woefully inadequate in SMEs to improve performance (Rahman et al., 2016; Mabula and Ping, 2018; Li and Meyer-Cirkel, 2021). Digital literacy and most financial products are inextricably linked which suggests that the lack of digital skills could prevent SME managers from engaging with financial services with confidence (Andreou and Anyfantaki, 2021).

Also, the digital revolution has forced many businesses to adopt electronic record-keeping to improve performance. SMEs' ability to keep financial information electronically provides an effective way to manage their finances with ease and improve performance. However, the lack of adequate managerial capability, financial constraints and the unwillingness of some managers to learn new skills prevent many SMEs from adopting digital and technological innovations in their businesses (Donkor et al., 2018; Mabula and Ping, 2018). It is expected that managers' digital capability would enhance financial literacy and improve firm performance. Based on the above discussions, the study proposed the following hypotheses:

H10a: *Digital capability of SME manager has a significant positive relationship with SME employment growth.*

H10b: *Digital literacy of SME manager has a significant positive relationship with SME profitability.*

H10c: *Digital literacy of SME manager has a significant positive relationship with SME sales growth.*

2.10 SME Performance Measurement

2.10.1 SME Performance

Performance measurement has been revolutionised over the years from a financial focus to include broadly other business characteristics to ensure that more appropriate measures and concepts are understood and applied across businesses for effective business management. Although this is positive development, identifying and measuring organisational performance in the current environment has become more complex due to other business characteristics (Nawanir et al., 2013). For example, business performance has been defined as a set of analytical processes that the management follows to achieve pre-selected business goals (Zin and Abd Manaf, 2019). Performance is also defined as activities and steps that managers take based on their goal and objectives based on key set performance indicators (Sebestova and Lejková, 2020). Evidence suggests that SME managers are the most critical resource of a firm, and their ability and commitment to growth are pivotal in shaping business performance (Hansen and Hamilton, 2011). It is worth noting that performance indicators measure business performance, but they are different from business objectives and strategies (Maté et al., 2017). Most commonly, performance is measured objectively within the parameters of profitability, efficiency, productivity, and competitive advantage (Raymond et al., 2011). But in recent years, performance has also been measured under a subjective lens by using stakeholders' satisfaction levels and the effectiveness of a firm's human resources (Omran et al., 2021). Regardless of what performance measures are used, it is fundamental that SMEs implement effective and relevant performance management system to ensure their survival and growth, particularly in the constantly evolving market (Otheitis and Kunc, 2015; De Waal, 2021).

Given the prominent role that SMEs play in the flourishing global economy, the ability to grow and improve their financial performance has been placed in the spotlight. As a result, there is a need for SMEs to adopt effective performance measures to help monitor business strategies such as business objectives, marketing strategy, finance, human resources and investment strategies which are effective decision-making factors to improve performance (Blackburn et al., 2013; Park et al., 2019). SME performance can be measured in different ways. Below are some examples of measuring performance across organisations.

2.10.2 Sales Growth

Sales growth has attracted special interest in business research due to its crucial role in determining the sustainability and financial performance of SMEs (Blackburn et al., 2013). As growth indicates business success (Storey et al., 2016), sales growth could help firms break even and establish a long-term strategy to improve financial performance (Tieber, 2018). This implies that an increase in sales could help SME managers formulate a performance strategy that reflects a long-term increase in revenue and, thereby, puts the firm in a competitive edge over others. It is, therefore, important that firms have relatively stable sales levels to boost the profitability that enables them to secure loans to meet their growth agenda (Rakasiwi et al., 2017). Given that a drop in sales signifies a decline in revenue, SMEs must focus on how to improve a firm's knowledge endowment and innovation capabilities that account for sales growth in businesses (Uhlaner et al., 2013). Based on this, sales growth is a critical performance measurement tool in business. It is, therefore, important that SME managers acquire relevant skills that enhance business sales. Evidence suggests that training helps improve sales, particularly when the business is undergoing difficult seasons (Drexler et al., 2014; Valdivia, 2015). This raises the importance of human capital development in SMEs which has not received the needed attention.

2.10.3 Profitability

Profitability denotes performance in any business as this measures the ability of the business to generate profits in comparison to its expenses which is normally expressed as a relative measure (Krause and Arora, 2019). For any business, net profit indicates profitability after the deduction of all costs and expenses. This is critical for SME managers as this indicates the survival of the business (Marr, 2012). Profitability could also be measured using the gross profit margin which is the per cent of revenues that remain after deducting the cost of goods sold. It is a valuable financial measurement for managers as this indicates the efficiency with which the business can produce and sell one or more products before extraneous costs are deducted (Marr, 2012). A business may be more efficient at producing and selling one product than another so it is, important to calculate the gross profit margin for each product if the business can differentiate the direct costs of producing each product from the others. However, this could be a major challenge for many SME managers, particularly those in developing countries due to a lack of skill set.

In developing countries, many people, particularly women are likely to be drawn into self-employment due to labour market imperfections (Xu and Zia, 2012). Even though self-employment is considered a significant way for women's economic empowerment, most women may have very low optimal efficient skills to manage their new ventures effectively. Lack of access to finances has often been blamed for SME failures in developing countries (Quartey et al., 2017), but rather than concentrating too much on physical capital to reverse the rate of failures in SMEs, the focus should be on how to improve the skill level of individuals, particularly women through business training (De Mel et al., 2014). This training could be FL which is woefully inadequate in SMEs to improve business practices.

2.10.4 Employment Growth

Employment growth also provides a significant measure of business performance (Michna, 2009). Given the significant role SMEs play in economic development, there is a growing interest from scholars to examine and measure SME performance in relation to employment growth (Musah, 2017; Adomako and Nguyen, 2020). Measuring firm growth in terms of employment is crucial as an increase in staff numbers addresses unemployment concerns which improves productivity issues (Mahmutaj and Krasniqi, 2020). Although the literature has revealed the importance of employment growth as a firm's performance measure, it is equally important that employment growth reflects the prerequisite skills and knowledge required to make prudent financial decisions to enhance business performance (Agyapong and Attram, 2019; Ye and Kulathunga, 2019). This implies that when firms aim to improve performance through employment growth, strategies must be put in place to ensure human capital development. Human capital development could be an important process of structural change to growth in SMEs as growing firms often create employment opportunities that denote performance.

2.10.5 Customer Satisfaction

Customer satisfaction has emerged as a key indicator in recent years for evaluating firm performance (Tieber, 2018). Customer satisfaction quantifies how a firm can fulfil the expected and implied expectations of customers as this indicates the content of the products and services delivered by the firm, thereby putting the firm as a preferred provider of goods and services (Krause and Arora, 2019). This is important as perceptions, and opinions of customers and actual customer behaviours could lead to new customer acquisition, customer retention and repurchase intentions which could ultimately promote SME performance (Williams and Naumann, 2011). This means that other customers' recommendations of the product could lead to a comparison of that product with the firm's competitors to build a strong customer base. Even though it could be argued that the link between satisfaction and repurchase intention could be based on the type of product purchased, evidence suggests that customer satisfaction is a reflection of the economic value of a product (Cuevas-Vargas et al., 2019). Based on this, businesses must adopt strategies that provide a better understanding of the needs of clients to increase revenues which can be attributed to customers buying additional products and services and, thereby, leading to the financial performance of SMEs. This is because high customer satisfaction leads to a higher customer base that could lead to an increase in the cash flows, and a reduction in any associated risks (Williams and Naumann, 2011). This means that the transaction satisfaction of customers in addition to the interaction or relationship satisfaction is crucial for firms' survivability and performance (Eisingerich et al., 2014; Jones et al., 2014). The aforementioned evidence strongly suggests that customer satisfaction could affect SME performance significantly given that customers will often go back to buy a product from companies or will always refer someone to products that satisfy their needs (Suchánek et al., 2015; Otto et al., 2020). Despite these known benefits of customer satisfaction to business performance, most SMEs find it difficult to measure the relationship between customer satisfaction and profit.

2.11 Control Variables

2.11.1 Manager's Age and SME Performance

The complexity of current financial products and markets has made it difficult for individuals at older ages particularly when cognitive skills may be declining to make an informed financial decision (Banks, 2010). Empirically, financial literacy skills are found to be lower among adults aged 65 and over and this trend is not only observed in developing countries but also developed ones (Klapper and Lusardi, 2020). Given that the degree of financial literacy skills decreases with increasing age, this could impact SME financial performance significantly particularly when the business is managed by an older age group. It is, therefore, important to understand some key determinants of SME growth to formulate effective strategic decisions. Evidence suggests that youthful managers tend to focus on higher growth due to their lower risk aversion and minimal attention to the status quo (Belenzon et al., 2019). This does suggest that younger managers could adopt a more aggressive strategy to promote growth compared to the older age group. But one could also argue that older managers tend to be more cautious as their main focus is on business survivability rather than taking risks. As financial literacy skills decrease with increasing age, this implies that financial knowledge could be lowered in older age groups leading to financial behavioural biases leading to irrational financial decisions (Baker et al., 2019). This also means that older SME managers could face age-graded constraints when seeking financial assistance in the form of loans due to credit rationing challenges to meet their growth objectives (Gielnik et al., 2017). This is because evidence suggests that older age groups are less likely to seek opportunities to build their human capital via school or other training programmes (Bavafa et al., 2019). Given that financial literacy is a key skill for SME managers to implement effective financial management practices and helps secure loans as working capital to improve performance, managing SMEs by old manager older managers could prove challenging which could help them improve their financial literacy, managing an SME by older managers could prove challenging. Based on these arguments, age could have a significant influence on SME performance.

2.11.2 Gender and SME Performance

Globally, it is estimated that 35% of men are financially literate, while women account for only 30% (Klapper and Lusardi, 2020). Consistently, the trend that women are less financially capable than men is reported across many studies (Lusardi and Mitchell, 2014; Hasler and Lusardi, 2017; Preston and Wright, 2019) and this uncomfortable position of less financial literacy skills by women increases their vulnerability to poverty, particularly in developing countries, where most household's financial knowledge is less adequate (Klapper et al., 2015). On this evidence, gender could play a significant role in SME survivability and financial performance. This is because financial literacy is a vital resource for effective financial decisions making and given that women are less financially literate compared to their male counterparts, SME survivability and financial performance could be questioned when an SME is managed by a woman. Research evidence also suggests that men tend to invest more confidently compared to females and this disparity could be a result of the high financial knowledge that men possess and perhaps understand major financial concepts compared to women (Kumar and Goyal, 2016). Traditionally, females are highly risk-averse (Rai et al., 2019) which explains the difference in their investment decision-making. Given that effective investment decisions-making is very important for SMEs financial portfolio, an ill financial investment decision could cost the business significantly and lead to insolvency.

Conventionally, certain cultural, social, and environmental factors within an organisations force men and women to adopt different strategies in managing businesses (Ali et al., 2020). For example, studies attribute the observed gender gap in financial literacy to degrees of household financial responsibility (Hsu, 2016), educational attainment (Lusardi and Mitchell, 2014), income and occupation (Lusardi et al., 2010), industry and union membership status (Preston and Wright, 2019) which are often dominated by men.

2.11.3 Educational Level of Managers and SME Performance

Both financial literacy and a higher level of education are found to be positively and significantly related (Morgan and Trinh, 2019). This implies that the higher the level of managers' educational attainment, the greater the level of financial knowledge that leads to positive financial behaviour (Karadag, 2017). It is also suggested that one of the greatest assets of successful entrepreneurship is the entrepreneur's human capital obtained through education (Millan et al., 2014). This is also supported by the human capital theory which explains that entrepreneurial education is crucial in developing certain specific or general skills that could influence the profitability and productivity of a firm (Szilagyi and Schweiger 1984; Reuber and Fischer 1999).

This is because the higher education knowledge gained enhances the managerial capacity to develop better business strategies to gain a competitive advantage (Soriano and Castrogiovanni, 2012). For example, managers with higher education could use their knowledge to acquire the needed resources efficiently at a reduced cost to improve performance. Also, the educational attainment of managers could influence a firm's openness toward innovativeness that promotes higher performance concerning sales or profitability (Rauch and Rijsdijk, 2013). Evidence suggests that managers' educational attainment is correlated with higher financial literacy (Klapper and Lusardi, 2020). Research also established that SME managers with higher human capital are more likely to be more financially knowledgeable to explore better investment opportunities and undertake other financial activities with confidence (Wagner, 2019). Based on the above discussion, SME managers must be encouraged to improve their educational level and also invest to acquire the needed human capital that drives positive financial performance.

2.11.4 Industry Category

Generally, SMEs in Ghana are classified into various categories such as transport and distribution, general trading, agriculture, manufacturing, construction, general services, hotels and restaurants and education. The industry in which an SME finds itself could determine its financial performance and growth (Parker and Praag, 2012). For example, in 2018, the industry sector recorded the highest growth of 10.5 per cent, followed by the agricultural sector with 4.8 per cent growth (World Bank, 2019). This implies that SMEs in these two sectors could be the best performing SMEs in Ghana. As financial literacy is linked to SME performance, it could mean that SMEs in these sectors have better investment and saving strategies which drive their financial performance (Agyapong and Attram, 2019; Ye and Kulathunga, 2019). This underscores why SME managers should acquire financial literacy skills to promote growth and improve the performance of the sector.

Based on the above variable definition and the corresponding hypotheses presented, Figure 5.1 below illustrates the empirical model that underpins this study:

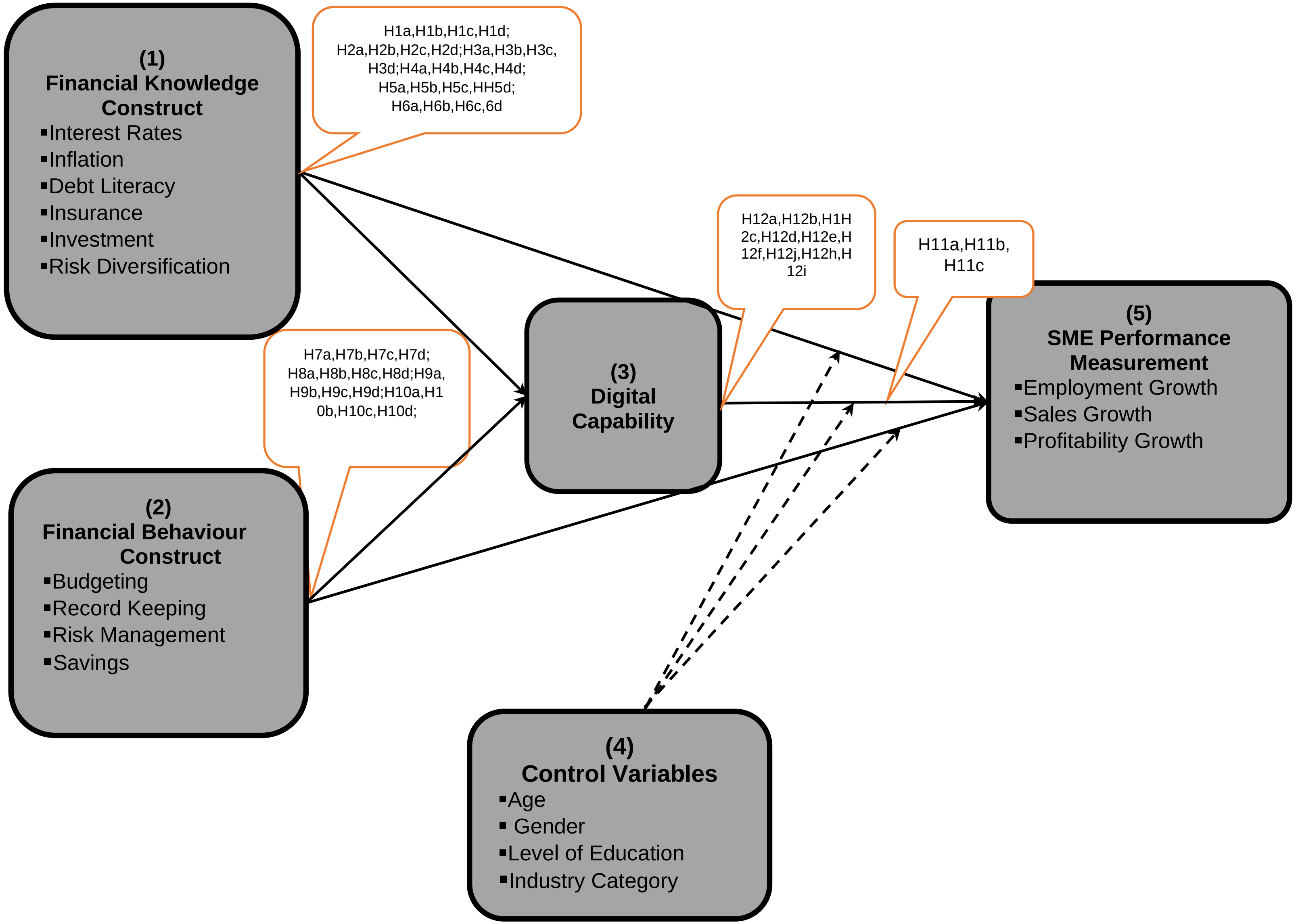

Figure 2.1: A hypothesised path for examining the relationship between financial knowledge, financial behaviour, digital capability and SME performance.

Based on the above conceptual framework developed, Table 5.2 below illustrates the hypothesised paths that are tested:

Table 2.1 Summary of hypotheses

Constructs	Label	Hypotheses
Financial Knowledge	***H1a***	*Knowledge of interest rates has a significant positive relationship with digital literacy of SME managers*
	H1b	*Knowledge of interest rates has a significant positive relationship with SME employment growth.*
	H1c	*Knowledge of interest rates has a significant positive relationship with SME profitability*
	H1d	*Knowledge of interest rates has a significant positive relationship with SME sales growth*
	H2a	*Debt literacy knowledge has a significant positive relationship with digital literacy of SME managers*
	H2b	*Debt literacy knowledge has a significant positive relationship with SME employment growth*
	H2c	*Debt literacy knowledge has a significant positive relationship with SME profitability*
	H2d	*Debt literacy knowledge has a significant positive relationship with SME sales growth*
	H3a	*Knowledge on inflation has a significant positive relationship with digital literacy of SME managers*
	H3b	*Knowledge of inflation has a significant positive relationship with SME employment growth*
	H3c	*Knowledge of inflation has a significant positive relationship with SME profitability*
	H3d	*Knowledge of inflation has a significant positive relationship with SME sales growth*
	H4a	*Knowledge of business insurance has a significant positive relationship with digital literacy of SME managers*
	H4b	*Knowledge of business insurance has a significant positive relationship with employment growth of SMEs*
	H4c	*Knowledge of business insurance has a significant positive relationship with profitability of SMEs*
	H4d	*Knowledge of business insurance has a significant positive relationship with SME sales growth.*
	H5a	*Knowledge of investment analysis has a significant positive relationship with digital literacy of SME managers*
	H5b	*Knowledge of investment analysis has a significant positive relationship with SME employment growth*
	H5c	*Knowledge of investment analysis has a significant positive relationship with SME profitability*
	H5d	*Knowledge of investment analysis has a significant positive relationship with sales growth of SMEs*
	H6a	*Knowledge on risk diversification of SME managers has a significant positive relationship with mangers' digital literacy*

	H6b	*Knowledge on risk diversification of SME managers has a significant positive relationship with SME employment growth*
	H6c	*Knowledge on risk diversification of SME managers has a significant positive relationship SME with profitability*
	H6d:	*Knowledge on risk diversification of SME managers has a significant positive relationship with SME sales growth*
Financial Behaviour	***H7a***	*Budgeting skills has a significant positive relationship with digital literacy of SME managers*
	H7b	*Budgeting skills has a significant positive relationship with employment growth of SMEs*
	H7c	*Budgeting skills has a significant positive relationship with profitability of SMEs*
	H7d	*Budgeting skills has a significant positive relationship with sales growth of SMEs*
	H8a	*Record-keeping behaviour of SME managers has a significant positive relationship with SME managers' digital literacy*
	H8b	*Record-keeping behaviour of SME managers has a significant positive relationship with SME employment growth*
	H8c	*Record-keeping behaviour of SME managers has a significant positive relationship with SME profitability*
	H8d	*Record-keeping behaviour of SME managers has a significant positive relationship with SME sales growth*
	H9a	*Risk management behaviour of SME managers has a significant positive relationship with digital literacy*
	H9b	*Risk management behaviour of SME managers has a significant positive relationship with SME employment growth*
	H9c	*Risk management behaviour of SME managers has a significant positive relationship with SME profitability*
	H9d	*Risk management behaviour of SME managers has a significant positive relationship with sales growth of SMEs*
	H10a	*Savings behaviour of SME managers has a positively significant relationship with digital literacy*
	H10b	*Savings behaviour of SME managers has a significant positive relationship with SME employment growth*
	H10c	*Savings behaviour of SME managers has significant positive relationship with SME profitability*
	H10d	*Savings behaviour of SME managers has a significant positive relationship with SME sales growth*
	H11a	*Digital literacy of SME managers has a significant positive relationship with SME employment growth*
	H11b	*Digital literacy of SME managers has a significant positive relationship with SME profitability*
	H11c	*Digital literacy of SME managers has a significant positive relationship with SME sales growth*
Mediating Role of	***H12a***	*Digital literacy mediates budgeting behaviour of SME managers and employment growth*

Digital Capability	***H12b***	*Digital literacy mediates Knowledge of interest rates of SME managers and employment growth*
	H12c	*Digital literacy mediates Knowledge of interest rates of SME managers and profitability OF SMEs*
	H12d	*Digital literacy mediates risk diversification of SME managers and employment growth of SMEs*
	H12e	*Digital literacy mediates risk diversification of SME managers and profitability of SMEs*
	H12f	*Digital literacy mediates risk management behaviour of SME managers and employment growth*
	H12g	*Digital literacy mediates risk management behaviour of SME managers and profitability of SMEs*
	H12h	*Digital literacy mediates savings behaviour of SME managers and employment growth*
	H12i	*Digital literacy mediates savings behaviour of SME managers and profitability of SMEs*

2.12 Conclusion

In this chapter, the concept of FL was discussed. The chapter analysed the ramifications of SME managers' financial illiteracy on their business performance. As a result, the chapter highlights the significance of human capital development in promoting FL skills as a robust SME strategy for a sustainable SME sector. The chapter also illustrates the core dimension of FL where financial knowledge and behaviour are discussed. The chapter laid a strong argument for how financial knowledge forms a strong base for individuals to understand major financial concepts such as saving, interest rate, inflation, risk diversification, debt, investment, risk management, budgeting which are considered pivotal for individuals and businesses to carry out day to day financial activities.

In addition, the chapter considered how financial knowledge provide SME managers a better understanding of financial concepts to increase financial resilience and prevent them from taking on too many debts (Wise, 2013; Klapper and Lusardi, 2020). This is because uncontrolled debt leads to unexpected shocks preventing individuals and businesses alike to pay their credit cards or business loans timely and in full (Lusardi and Tufano, 2015; Hossain, 2020). The chapter also argues how understanding of financial concepts improve confidence in SME managers to undertake any investment decisions which is normally associated with higher returns (Almenberg and Dreber 2015; Lusardi et al.,2017).

The chapter also presents the conceptual framework or the empirical model that underpins this study. Through the variables definition, the chapter reiterateshow financial knowledge is an integral dimension of, but not equivalent to, financial literacy. As a result, the chapter argues and proposes two main constructs, namely financial knowledge and financial behaviour to measure financial literacy. This is because SME managers cannot practice effective financial practices if they do not have the knowledge to implement or practice effective financial behaviour that leads to prudent financial decision-making.

The chapter also discussed how certain characteristics such as industry category, educational level, gender and age influence SME performance. Based on the discussions, gender plays a significant role in firm performance. This is supported by a previous study which established that women may show a lower risk of hunger compared to their male counterparts (Quiroz-Rojas and Teruel, 2021). The chapter also presents that the educational level of managers plays a significant influence on SME performance (Marconatto et al., 2021). This implies that variables such as age, gender, educational status and industry category which are the control variables for this study should be given considerable attention due to their influence on SME performance. Based on the above discussion, 53 hypotheses are proposed and tested.

The next chapter details FL rates in Ghana and how this impacts the economic development and performance of SMEs. Given the importance of financial literacy skills to SMEs' economic activities, the next chapter also analyses the various FL initiatives in Ghana and their impact on individuals and businesses.

CHAPTER THREE: FINANCIAL LITERACY IN GHANA

3.1 Introduction

Universally access to financial products and services especially by those individuals and businesses in Ghana that are excluded from services such as savings accounts, loans, payment services, insurance, and pensions is critical for the national FL and inclusion agenda (Mohammed et al., 2020). This is because evidence suggests that when SME managers have access to various financial resources and services, they could acquire vital knowledge on how to use these financial products and services which will in turn help promote their financial decision-making skills to improve the performance of their businesses (Adomako and Danso, 2014).

However, across the population, evidence suggests that an estimated 32% of Ghanaian adults are financially literate (Klapper, Lusardi and Van Oudheusden, 2015). It is also estimated that only 30.8 per cent of males and 25 per cent of females owned bank accounts in Ghana (Ghana Statistical Service, 2019). Based on this, access to financial services is also heterogeneous across key demographics such as rural, women and certain regions that are remotely located which results in less FL skills for these groups across the population (World Bank Group, 2019). Given that certain sections of the population are disadvantaged in FL skills, financial services and products must be made accessible, affordable and attractive for everyone in Ghana in an attempt to improve FL skills (Wu et al., 2017). Promoting FL skills has a huge benefit to ordinary Ghanaians because the financial market is crowded with formal and informal financial institutions offering their services with different and complex financial products (Baidoo et al., 2018). If a sizable proportion of the adult population remains financially illiterate and unable to choose the best financial products or investment opportunities, this is likely to exacerbate the problem in the SME sector should these individuals become SME managers.

For example, domestic savings in Ghana remain relatively low at 20 per cent compared to countries such as Singapore is 39.8 per cent, Malaysia which stands at 33 per cent and Indonesia at 27.8 per cent (Mumin et al., 2016). Evidence suggests that the majority of people prefer to save their money with an individual (‘Susu collector) or unlicensed organisation and on some occasions, the savings are undocumented putting the individuals at risk (Baidoo et al., 2018). However, the national savings culture is significantly linked to FL skills which could lead to huge investment opportunities and subsequent economic development, particularly in developing countries such as Ghana (Baidoo et al., 2018; Gatsi and Appiah, 2020). It is, therefore, important to promote financial illiteracy across the Ghanaian population to make informed financial choices regarding saving, investing and responsible borrowing as irresponsible financial behaviour could cause financial uncertainty in households, businesses and the general economy (Abor and Quartey, 2010).

In light of this, the government of Ghana through the Ministry of Finance and in collaboration with financial sector regulators and other key stakeholders seeks to reduce economic vulnerability, particularly for businesses and developed a National Financial Inclusion and Development Strategy (NFIDS) to address the fundamental barriers that prevent businesses and the underserved population from accessing financial products and services (Ofori-Atta, 2018). Also, the government in collaboration with several non-governmental organisations and other agencies launched several initiatives such as the Rural and Agricultural Finance Programme (RAFiP), Financial Literacy Week and SPEED to promote FL skills for individuals and businesses, but gaps still exist.

This chapter presents an extensive overview of financial literacy in Ghana. Section 1 will provide an overview of the literacy rate across the population. Section 2 will consider the financial literacy rate in Ghana. Furthermore, section 3 will review some key challenges that impede SMEs' sustainability and financial performance. Finally, the last section will provide a detailed analysis of some key government and non-governmental initiatives in promoting financial literacy across the Ghanaian population and how these could enhance the sustainability and financial performance of the SME sector.

3.2 Overview of Financial Literacy in Ghana

3.2.1 Literacy Rate in Ghana

Empirically, FL is strongly correlated with literacy level (Sudan, 2019). As a result, the discussion of FL levels across the Ghanaian population cannot be done in isolation without looking at the general literacy rate. More importantly, illiterate individuals might have difficulty understanding the benefits of certain financial products, their terms and conditions and being able to make informed financial decisions. According to the Ghana Statistical Service (GSS), Ghana Health Service (GHS), and ICF International data (2014), an estimated 67% of women and 82% of men are literate. This is an increase from the 2003 survey which showed only 55% of women and 73% of men were able to read. Based on this data, one could confidently argue that men are more likely to be literate than women, indicating a disparity in literacy rates.

Another data from the Ghana Statistical Service and Living Standard Survey (2019) also shows that the proportion of males (15 years and older) who have ever attended school is higher than that of females across the country. The data from the survey also illustrates a significant disparity across regions. For example, Greater Accra has the highest proportion for both males (96.8%) and females (91.4%) of those who ever attended school. Furthermore, the Northern region has the lowest proportion of the population who ever attended school with 56.8% and 35.9% for both males and females respectively. This shows that the proportion of males who have ever attended school is higher than that of females. This data also indicates that men are more likely to be literate than women. Table 3.1 below shows the percentage of persons 15 years and older who have ever attended school by region.

Table 3.1: Percentage of persons 15 years and older who have ever attended school across all regions.

Region	Male	Female
Western	92.1	82.2
Central	93.1	79.9
Greater Accra	96.8	91.4
Volta	88.4	74.1
Eastern	95.1	83.3

Ashanti	94.2	82.6
Brong Ahafo	85.0	74.0
Northern	56.8	35.9
Upper East	69.5	50.1
Upper West	62.3	44.1

Source: (Ghana Statistical Service, 2019)

As general literacy is linked with FL (Sudan, 2019), and based on the above data, men could possess a higher level of FL compared to females and this could imply that SMEs with male managers could perform better in financial management compared to their female counterparts. Empirical studies also identified a persistent gender gap in FL skills. It is postulated that men tend to possess a higher level of financial knowledge and perform better in the application of this knowledge to improve their financial capability than their female counterparts (Preston and Wright, 2019; Rothwell and Wu, 2019). What is even more significant from these studies is that differences persisted even when women were exposed to FL education (Rothwell and Wu, 2019). Based on this, women SME managers could possess less financial skills which could impact the performance of the businesses they manage. However, Robson and Peetz (2020) suggest that gender is not a significant predictor of financial capability but rather, the sociodemographic and psychological traits that explain the majority of the observed gender gap in FL.

In addition, Ghana Health Service (GHS), and ICF International data (2014) also illustrated that women and men in urban areas have higher literacy rates of 78%

and 91% respectively, compared to 54% of women and 72% of men in rural areas. This could create huge disparities in the economic activities that those living in rural areas can render. In the same vein, data from the Ghana Statistical Service (2019) also shows that 93.8% of males and 85.0% of females residing in urban areas attended school. This also indicates that school attendance rates are higher in urban areas compared to rural areas. Disparities are also observed between males and females who ever attended school. Table 2 below illustrates these disparities.

Table.3. 2: Percentage variation of persons 15 years and older who have ever attended school in urban compared to rural areas.

Region	**Urban**		**Rural**	
	Male	Female	Male	Female
Western	96.3	86.0	89.3	78.7
Central	93.6	83.7	92.6	76.2
Greater Accra	97.1	91.9	93.9	85.9
Volta	91.6	84.4	86.7	68.3
Eastern	97.6	90.1	93.4	77.3
Ashanti	95.5	85.8	91.9	77.2
Brong Ahafo	88.8	79.7	82.0	68.7
Northern	74.5	52.2	46.8	27.7
Upper East	81.1	62.6	66.3	46.7
Upper West	87.7	71.8	57.2	38.3

Source: (Ghana Statistical Service, 2019).

3.2.2 Financial Literacy in Ghana

Ghana was the first African country that implement the National Strategy for Financial Literacy Programme, but only 32 per cent of the adult population are financially literate (Klapper et al., 2015). Evidence suggests that FL is correlated with having a bank account (Xu and Zia, 2012). In Ghana, 52 per cent of urban adults have commercial bank accounts, versus just 21 per cent of adults living in rural areas (World Bank, 2019). Individuals with bank accounts are more likely to use other financial services, such as credit and insurance to start and expand their businesses, invest and manage risk effectively to improve their economic status. However, it is estimated that about 73.1 per cent of Ghanaian adults do not receive their income through any bank account (World Bank, 2019). This trend is widely common in rural areas where FL skills are low (Ackah and Asiamah, 2016).

In some parts of Ghana, it emerged that women continue to be excluded from financial products and services compared to men. For example, evidence from the World Bank (2019) shows that only 54% of women had a bank account with a formal financial institution, compared to 62% of men. If such trends continue across the population, it could imply that there would be a widespread loss of opportunities for women in their households and across the general economy. This is because access to financial services promotes FL skills which could be used by women to shape their household spending decisions, explore and make effective investment decisions and manage any related economic risk (World Bank, 2019). Based on this evidence, it is, important to encourage individuals to have access to a financial account which might prevent people from relying on the use of informal savings methods, particularly in rural areas (World Bank, 2019).

Also, there are regional variations of bank accounts held by adults. For example, the proportion of adults with bank accounts in commercial banks in Greater Accra is 70% compared to just 17% in Upper East (Ghana Statistical Service, 2019). This represents a major setback for the government of Ghana in promoting financial inclusion and FL skills across the population. Even though the “Susu scheme” has replaced formal financial services which is predominately used in the Upper East with 26.3% of adults compared to just 7.1% in Ashanti (Ghana Statistical Service, 2019), many people are still excluded from financial services. From the above evidence, access to financial services is heterogeneous across regions and key demographics. For example, some notable regions such as Upper West, Northern, Volta, Upper East, and Brong Ahafo which are usually remote and deprived are the least financially literate (World Bank, 2019). The above statement does imply that SME managers from the above-mentioned regions possess below-standard FL skills to effectively implement proper record keeping, generate a financial statement, undertake proper risk management strategies and make effective investment decisions that lead to the sustainable performance of their businesses. Table 3.1 below illustrates the proportion of accounts held across regions in Ghana.

Table 3.3: Type of financial institution in which accounts are held by the region.

Region	Commercial Banks	Rural Banks	Susu Schemes	Mobile Money
Western	37.1	27.9	9.5	13.7
Central	33.5	13.5	13.7	60.0
Greater Accra	70.0	2.1	9.2	19.7
Volta	34.2	6.9	12.2	55.0
Eastern	29.2	27.2	8.2	33.4
Ashanti	37.3	22.3	7.1	31.7
Brong Ahafo	38.7	21.1	11.1	19.0
Northern	32.5	7.5	30.1	24.1
Upper East	17.4	12.2	18.6	51.2
Upper West	35.9	13.8	26.3	14.9

Source: (Ghana Statistical Service, 2019)

Mobile money usage has also become a dominant part of the Ghanaian economy which saw a significant increase from 345,434 in 2012 to 11.2 million in 2017 (World Bank, 2019). Currently, it is estimated that 30.4% of people in Ghana hold a mobile money account but with expected regional disparities. From Table 3.3 above, the Central Region has the highest number of mobile money account users (60.0%) while the lowest is in the Western region with 13.7% (Ghana Statistical Service, 2019).

Mobile money usage promotes FL and financial inclusion and while there are limited empirical studies on its impact on SMEs' financial performance in Ghana, evidence suggests that mobile money services help SMEs to receive prompt payments for services rendered to customers, pay bills, accumulate assets and obtain credit promptly (Dayour et al., 2020). In a similar vein, Kakwa (2012) postulates that the use of such mobile technology to receive or make payments by SMEs leads to faster response to customer needs, access to markets, increased internal efficiency and minimised operational cost. This is because mobile banking has transformed the way traditional banks transact their businesses and the ability of SMEs to adopt such innovative ways of transacting business could lead to sustaining competitive advantage (Kwateng et al., 2019). But in certain regions of Ghana where the use of financial services is limited, and the use of mobile money is not fully embraced, individuals and business managers could possess below-standard FL skills.

FL is a key determinant of savings in Ghana (Baidoo et al., 2018) and even though domestic saving is a vital component of growth, private sector savings in Ghana remain persistently low at 20 per cent (Mumin et al., 2016). Consumer financial management behaviour such as creating emergency savings is significantly linked to financial access for both individuals and businesses (Grinstein-Weiss et al. 2015; Birkenmaier and Fu, 2019). This is so important because financial access which includes access to safe and affordable bank accounts and consumer credit could promote investment and business development.

There are also regional and demographic disparities in saving rates across the country. At the national level, the average proportion of males that save stands at 30.8% compared to 25% of females. It is observed that the savings schemes are higher in the Greater Accra region at 42.8% and lower in the Northern region at 11.3%. Table 3.2 below shows the regional saving rate between males and females in Ghana.

Table 3.4: Percentage savings rate by regions

Region	Male	Female	Both Sex
Western	28.7	22.6	25.6
Central	33.4	28.1	30.6
Greater Accra	45.6	40.2	42.8
Volta	**23.5**	**19.0**	**21.2**
Eastern	30.1	23.6	26.7
Ashanti	36.2	27.7	31.7
Brong Ahafo	28.0	20.4	24.1
Northern	13.5	9.2	11.3
Upper East	22.9	21.2	22.0
Upper West	14.6	13.0	13.8

Source: (Ghana Statistical Service, 2019).

From Table 3.2 above, regions with lower savings rates could imply low FL rates which could affect the operation and sustainability of SMEs in these regions. FL affects insurance take-up in lower-income countries (Xu and Zia, 2012). However, only 4 per cent of Ghanaians have insurance (World Bank, 2019). Given that SME managers' knowledge of insurance is linked to their FL skills, such low insurance take-up among Ghanaians could translate into low business insurance coverage which negatively impacts their businesses. Table 3.3 below illustrates insurance coverage across regions in Ghana.

Table 3.5. Percentage of households with members holding insurance policy/cover

Region	Male	Female
Western	14.3	20.6
Central	22.9	26.3
Greater Accra	20.8	16.0
Volta	29.5	31.1
Eastern	29.4	44.8
Ashanti	20.5	20.8
Brong Ahafo	23.8	28.2
Northern	10.7	16.9
Upper East	25.6	26.5
Upper West	21.8	29.1

Source: (Ghana Statistical Service, 2019)

From Table 3.3 above, insurance cover or uptake in the Northern region is lower compared to the Eastern region which has the highest insurance take-up. This implies that individuals who become SME managers in the Northern region may not see the importance of insurance take-up for their businesses compared to those in the Eastern region and this could have future financial implications for the SME sector.

3.2.3 The Effect of Financial Literacy on Loan Repayment in Ghana

Loan delinquency continues to be a major challenge that confronts many financial institutions in Ghana causing a significant impact on economic development. This phenomenon is linked to financial illiteracy (Baidoo et al., 2020). The financial sector provides credit to individuals and businesses for investment and business development purposes (Baidoo et al., 2020). Notwithstanding the crucial role that these financial institutions play, they are usually faced with high loan default which inadvertently holds back their performance and sustainable economic growth in Ghana (Asiama and Amoah, 2019). According to the Bank of Ghana's Financial Stability Report (2016), non-performing loans (NPLs) have reached a total of GHS6.1 billion (US$1.45 billion) with an equivalent NPL ratio of 19.1%. In 2018, the report indicated that the NPLs have increased from GHS7.96 billion in 2017 to GHS8.63 billion (US $1.84 billion) with a corresponding NPL ratio of 20.8% (Bank of Ghana, 2018). This persistent rise in default rates could impede SME growth significantly. This is because SMEs in Ghana are branded non-credit worthy and such low confidence from the financial institutions could worsen the existing SMEs' problem of access to finance.

According to Baidoo et al. (2020), adequate FL skills enhance loan repayment significantly which will, in turn, improve the sustainability of the financial institutions and economic development as a whole. This means that with effective financial education or FL initiative programmes, individuals will be equipped with financial knowledge that enhances efficient financial resources management. Also, FL initiatives could help individuals and business managers understand the terms of their loans and make the necessary arrangements to avoid loan defaults (Agbeko et al., 2017). Empirical studies have also emphasised the need for implementing effective entrepreneurial training as a key instrument in preventing loan defaults. Moreover, it has been argued that information asymmetry is one of the challenges why SMEs default on their loans (Behr, et al., 2011). This implies that by improving the relationship between financial institutions and their customers, information asymmetry could be mitigated to improve loan repayment rates (Karlan and Valdivia, 2011). The majority of business managers or individuals do not fully understand their loan terms and obligations, but with tailored financial educational programmes to SME managers, managers could acquire knowledge of financial products, understand financial concepts and improve their loan repayment rates (World Bank, 2019).

3.3 The General Overview of the Ghanaian SME Sector

To understand how important the SME sector is to the Ghanaian economy, it is equally important to analyse the economic growth of Ghana in the past recent years. For example, in 2017 Ghana recorded the second-fastest growing economy in Africa with a growth of 8.1 per cent (World Bank, 2019). The industry sector recorded the largest growth of 15.7 per cent, followed by the agriculture sector at 6.1 per cent and services with an output of 3.3 per cent. Also, according to Ghana Statistical Service (GSS) data (2019), the industry sector recorded the highest GDP growth of 10.5 per cent in 2018. Table 3.4 below shows the quarterly GDP growth by sector in 2018.

Table 3.6: Quarterly GDP Growth in Ghana

2018					
	Q1	**Q2**	**Q3**	**Q4**	**Average**
GDP Growth	5.4	5.4	7.4	6.8	**6.3**
Agriculture	4.7	4.8	5.5	4.4	**4.8**
Industry	10.4	11.1	11.7	8.9	**10.5**

Services	1.4	0.5	3.5	5.4	**2.8**
Non-oil GDP	4.0	5.0	8.5	8.4	**6.5**

Source: Ghana Statistical Service (2019)

The above GDP quarterly growth in 2018 could largely be attributed to the SME sector. This is because, in Ghana, SMEs represent about 92 per cent of all businesses and contribute an estimated 70 per cent of the GDP (Amoah and Mungai, 2020).

It is also important to analyse the economic development of Ghana over the last two decades. Between the years 2005 and 2012, Ghana recorded an impressive 7.7% economic growth each year on average and an annual job creation rate of 4%. Despite the significant growth in the economy, GDP growth was slow with an average of 5.6% particularly between the years 2012 and 2016 before picking up again at 8.5% in 2017. Table 3.5 below details GDP growth and the sectoral drivers between 1991-2016.

Table 3.7: GDP growth and the sectoral drivers between 1991-2016.

Years	Annual GDP growth (%)	Annual GDP per capita growth (%)	Sector Contribution to GDP (%)		
			Agriculture	Industry	Service
1991-1998	4.4	1.7	24.0	-1.0	78.0
1998-2005	4.8	2.1	29.0	20.0	51.0
2005-2012	7.7	5.0	14.0	39.0	47.0
2012-2016	5.6	3.2	22.0	28.5	49.5

Source: (World Bank, 2019)

The above impressive economic growth will inevitably be distracted in the current COVID-19 pandemic as many SMEs are forced to close, causing huge interruptions to their services, notably in the manufacturing sector which renewed the debate about the overall resilience of the SME sector (Li et al., 2021). Although it is difficult to predict the full economic implications of the pandemic, undoubtedly, there will be a significant impact on the national economic growth observed in 2019 (Korankye, 2020). As the SME sector is the catalyst of economic growth in Ghana (Agyapong and Attram, 2019), SMEs must be encouraged to be resilient in dealing with unforeseen situations which could disrupt their survivability (Thukral, 2021). Resilience in this context could be related to the acquisition of FL skills where SME managers can apply those skills to steer their businesses successfully. From a business perspective, resilience is the capability of an SME to survive, adapt, and grow during turbulent times (Kuckertz et al., 2020). SMEs are always under financial constraints and the ability to make an optimal financial decision, particularly in a difficult time could be significant for their survival (Neneh, 2016). Notably, the dominant areas of Ghanaian SMEs are small-scale mining, agriculture, fishing and food processing and these enterprises can be found in either the rural or urban areas (Mensah, 2004; Agyapong, 2010). Also, according to Ghana Statistical Service (2019) analysis, about 46 per cent of Ghanaian households are in some form of non-farm businesses with women operating 72 per cent of these businesses.

3.4 The Challenges of Ghanaian SMEs

Notwithstanding the importance of SMEs to Ghana's economic development, the sector continues to face challenges from poor sales, sluggish growth, and lack of expansion, with many of them folding up within the first two years of operation (Asare 2014). It is estimated that only 40 per cent of Ghanaian SMEs survive beyond five years of operation (Peprah et al., 2016). This section explores some notable constraints such as access to finance or credit, inadequate managerial capabilities, the lack of technological skills and insufficient governmental or political support which are limiting the performance of SMEs in Ghana.

3.4.1 Inadequate Access to Credit Facilities

In Ghana, SMEs largely lack access to financial resources from financial institutions (Quartey et al., 2017). The lack of financial access by Ghanaian SMEs is blamed on information asymmetry, lack of collateral and the lack of education on various sources of funding from governmental institutions, thereby limiting many SMEs operation activities to improve financial performance in Ghana (Quartey et al., 2017; Mohammed and Bunyaminu, 2021). This could mean that any SME that manage to secure loans could end up paying high transaction costs and high interest rate which make them more credit-constrained and thereby, threaten their long-term sustainable growth objectives. However, it could be argued that these SMEs might lack of FL skills and capabilities to identify new and appropriate financial products that meet their financial needs. Evidence suggests that FL has a positive impact on SME managers' ability to access financial opportunities to meet their business growth objectives (Adomako et al., 2016). This has renewed the debate for tailored FL programmes for SME managers to improve their financial management skills. Evidence also suggests when an SME is managed/owned by women, most financial institutions tend to shy away from providing financial support due to the lack of collateral, high operating costs, misuse of disbursed loans, and poor documentation (Boateng and Poku, 2019). However, most SME managers in developing countries lack FL skills to keep up-to-date records of business activities which could provide key evidence about the survival or failure of the businesses (Ye and Kulathunga, 2019). Evidence suggests that record-keeping serves as a good indicator of the creditworthiness of the business when applying for loans, but often, this is not what most SME managers are able to undertake (Wise, 2013). Empirically, access to adequate financial resources enhances managers' ability to invest effectively to meet business growth plans (Owusu et al., 2019). It is, therefore, important that SME managers have the required training to acquire skills such as FL to navigate complex financial institutions' requirements and improve access to financial resources to promote performance.

3.4.2 Weak Human Resource Capability

In Ghana, SMEs lack the managerial capabilities to successfully operate, manage and enhance their business performance (Agyapong et al, 2016). This has opened a fierce debate that SME managers need to build capabilities or skills to formulate effective strategies that drive positive business outcomes. One notable managerial capability that most SME managers lack in Ghana is FL skills which empowers managers to make informed financial decisions (Adomako and

Danso 2014; Agyapong and Attram, 2019). For example, many Ghanaian SME managers lack budgeting skills for the effective allocation of financial resources and generate financial statements to help understand the trend of their business performance. Also, an effective marketing strategy is pivotal to SMEs' ability to penetrate the local market as well as the international market. However, most Ghanaian SMEs lack the marketing capabilities to take the opportunities of both the local and international markets to promote their growth agenda (Possumah and Appiah, 2018). This implies that marketing skills deficiencies coupled with insufficient management skills are detrimental to SMEs’ growth agenda and financial performance. This is because SMEs with enhanced employee capability stand a strong chance to gain and sustain a competitive edge over their competitors. Such managerial capability could be FL skill and given that SME managers are confronted with complex financial decisions that require specific managerial knowledge, these decisions can be taken with confidence using their FL skills to improve performance. For example, evidence suggests that training in business planning, procurement procedure and accounting and bookkeeping improves SMEs growth consistently (Possumah and Appiah, 2018). As suggested by Basile and Faraci (2015), such training could form managerial capability as a core requirement for the effective management of SMEs.

3.4.3 Weak Digital Capability

The lack of digital or technological capabilities is one of the contributing factors to SME failures in Ghana (Donkor et al., 2018). Evidence suggests that SME digital capability and FL are inextricably linked. This is because digital literacy and FL are mutually supportive which is critical for effective risk management practices leading to sustainable performance (Kulathunga et al., 2020). While the technological capability and strategic planning concept are rapidly gathering pace in larger firms in Ghana, its application in SMEs is quite minimal and, on some occasions, non-existent (Quaye and Mensah, 2019). This implies that the absence of technological capability leaves SMEs unable to compete and achieve sustained competitive advantage (Quaye and Acheampong, 2013; Dzisi and Ofosu, 2014). With increasing recognition of the importance of knowledge resources leading to business performance, SMEs in Ghana must be encouraged to be innovative to have any chance to be competitive on the global stage. This is because digital capability leads to discoveries and opportunities to add value to products or services (Semuel et al., 2017). Technological adoption also increases customer satisfaction and loyalty, sales growth, and competitiveness at the global market level (Oduro and Nyarku, 2018). In addition, innovative capability leads to proficiency in altering a firm's understanding of market expectations by adopting new processes and strategies that could improve products (Prasad and Junni, 2017).

Some of the main factors hindering technological development in some SMEs are the lack of knowledge or awareness of its benefits, resource constraints and the capability to absorb such innovation into the business (Oduro, 2020). However, it could be argued that the technological capability and innovation ability of a firm could be influenced by the type of training and technical assistance SME managers receive.

3.5 Financial Literacy Programmes in Ghana

3.5.1 Governmental Financial Literacy Initiatives

Due to the significance of SMEs to Ghana's economic growth, the Microfinance and Small Loans Centre (MASLOC) and the National Board for Small Scale Industries (NBSSI) were setup to support the sector in maximising its contribution to the country's economic and social development (Amoah and Mungai, 2020). For example, NBSSI was set up to initiate entrepreneurial development programmes and provide training for those with the ability to set up their businesses to promote employment growth (Oppong et al., 2014). NBSSI and MASLOC also provide SMEs with extensive and high-quality business development services and facilitate access to credit for their development. But despite the enormous support from these institutions, the performance and sustainability of the SME sector continue to be a major concern for policymakers. Such concern has led many researchers to investigate how FL could improve the financial management practices of SME managers to promote performance (Agyapong and Attram, 2019). This is critical as many people's livelihoods in developing countries like Ghana rely on SMEs (Xu and Zia, 2012). Also, for the government to achieve its policy agenda of economic development, it is important to improve financial literacy skills for entrepreneurs or would-be entrepreneurs given that the financial incapability of these individuals could cause the economy to suffer (Xu and Zia, 2012; Matey et al., 2021). This prompted multiple financial literacy initiatives to promote the financial literacy skills of many in Ghana.

First, Financial Literacy Week was launched to raise the population's awareness of financial products and services in 2008 (Atakora, 2013). This was an initiative by the Ministry of Finance in collaboration with financial sector regulators and the financial industry to help people manage their finances better. The initiative includes the Financial Literacy Road Shows in rural areas to promote the financial literacy skills for both the young and adults to make informed financial decisions (Messy and Monticone, 2012). Roadshows entail a variety of activities such as puppet shows, music, posters, mass media, and interaction that improve people's knowledge on saving, cash management, loans, insurance and investment. Through this initiative, the government believe that financial literacy skills could be improved at a young age leading to a generation of financially capable adults to sprout economic activities and improving the lives of the vulnerable.

In addition, Capital Markets Week was also launched in 2006 and aims to educate the public on wealth creation by participating in the capital market in collaboration with the Securities and Exchange Commission (SEC), the Ghana Securities Industry Association (GSIA) and the Ghana Stock Exchange (GSE). This initiative has become more imperative due to the complexity of the financial markets and households need to assume more responsibility for their financial decisions as an answer to Ghana's economic development.

To further develop the financial literacy of the population, the government of Ghana has also developed and implemented the National Strategy for Financial Literacy and Consumer Education in the Microfinance Sector by the Ministry of Finance and Economic Planning in January 2009 (Messy and Monticone, 2012).

This represents a multi-stakeholder approach that raises the awareness and understanding of microfinance and support the development of good financial practices through an improved financial behaviour. This implies that effective financial literacy programmes promote positive financial behaviour (Guiso and Viviano, 2015).

Furthermore, evidence suggests that introducing a financial literacy programme into the educational curriculum at an earlier age could be effective in shaping long-term behaviours rather than teaching this skill in later life (Berry et al., 2018). Aflatoun's financial education curriculum was then developed and integrated into the schools where students learned about the importance of money management skills, methods for savings, and skills for running a small business to boost financial literacy skills in adulthood (Berry et al., 2018). Empirically, when FL is introduced at a younger age, evidence suggests that it bring significant improvements in individuals' budgeting behaviour (Bruhn et al., 2011). If the current economic development of the nation is to be maintained and improved upon, it is important to promote skills that guarantee economic activities which could lead to the desired national economic development. Supporting SMEs to acquire financial literacy skills could be significant in enhancing Ghana's economic stability.

But evidence suggests that youth or students' financial literacy where participants were offered financial information and a safety box to improve their saving capability has a limited effect on students' saving behaviour (Berry et al., 2018). However, other studies evaluating the impact of youth financial literacy programmes were inconclusive, leaving many researchers to question their cost-effectiveness (Brown et al. 2016; Cole et al., 2016). This implies that more or better initiatives are needed if the financial literacy skills of the youths are to be improved significantly. Although there is mixed evidence on the efficacy of youth financial literacy initiatives, recent evidence established that focusing on youth's financial capability building could be effective for later years or subsequent financial literacy skills (Loke et al., 2015; Modestino et al., 2019).

3.5.2 Non-Governmental Financial Literacy Programmes

Several non-governmental financial literacy initiatives were also launched through international agencies in collaboration with the Ghanaian government to improve the financial literacy skills of the population. First, the Bank of Ghana, the German Agency for International Cooperation (GIZ), and the Danish International Development Agency (Danida) collaborated and launched the Support Programme for Enterprise Empowerment and Development (SPEED) in 2003 to support the sustainability and growth of the private sector organisations using financial literacy initiatives across the country. Given the importance of the private sector to the economic development of Ghana, it is deemed necessary that those who work in the private sector are equipped with financial literacy skills to make informed financial decisions (Cohen and Nelson, 2011). The broader aim of the SPEED Ghana initiative is to help individuals to start businesses, plan for the future, and mitigate financial risks, hence the programme focuses on those with a low level of education, aged 18-30 and most importantly, women. The initiative comprises roadshows, theatre plays puppets and radio programmes with a jingle or signature tune to promote savings, loan acquisition, investment, and better insurance options.

Another notable financial literacy programme initiated by international organisations and agencies is the Rural and Agricultural Finance Programme (RAFiP) sponsored by USAID but implemented by the Ministry of Finance. This initiative aimed at providing financial literacy training mainly for farmer-based organizations, particularly those farmers with very limited education and financial skills to have easy access to finance and agribusiness investment opportunities, as well as money management skills to make an informed financial decision (Ofori-Atta, 2018).

Promoting the financial capability or financial literacy skills of farmers should be an important step to reducing the compounding challenges this sector already faces. For example, some agribusinesses which comprise market traders, agro-dealers, and other agricultural stakeholders such as farmers often lack the required skills to effectively use financial services such as access to credit and savings, manage risks and seek appropriate insurance cover to improve productivity (Akoto et al., 2017; Peprah et al., 2020). Possibly, the geographical location, age and education attainment of these farmers could be determining factors in their financial literacy skills acquisition. Improving the financial literacy of farmers and all those who work in this sector could be an effective economic strategy as the agricultural sector remains the backbone of the Ghanaian economy. For example, in 2012 the sector contributed 23% to the gross domestic product (GDP) and accounts for 56% of the labour force in the Ghanaian economy (Choudhary and D'Alessandro, 2015).

Also, given the known contributions of the agriculture sector to the economic development of Ghana, another financial literacy initiative known as ACDEP Financial Education Project (AFE) coordinated by the Association of Church-based Development NGOs (ACDEP) was initiated to support small-scale farmers to develop financial literacy skills necessary to access financial services and develop business plans for their cash-crop production (Cohen and Nelson, 2011). The programme covers financial goal setting, effective budgeting skills, making savings plans, awareness of over-indebtedness, and how to take up insurance cover for their cash crops. It is argued that such tailored initiatives directed specifically towards farmers could improve the economic development of Ghana significantly.

Furthermore, addressing gender inequalities in credit accessibility has been a major concern for many international organisations in recent years. As a result, Freedom from Hunger (FFH) launched the “Credit with Education Initiative” to build women's financial capability and promote women's empowerment. This is a significant initiative as it can be argued that supporting women to effectively manage working capital loans and develop an effective saving culture as well as better business management skills could empower them and reduce the vulnerability of economic inactivity. Even though the programme was primarily designed to alleviate chronic hunger and poverty, research evidence suggests that educating women on loans and savings could improve business practices significantly (MkNelly and Watson, 2003). In the same vein, Yeboah-Assiamah et al. (2015) also emphasised that teaching women about income-generation activities and best practices in farming could help participants live decent lives.

Finally, Opportunity International launched Financial Inclusion for Enterprise Development to help provide insight and knowledge on savings, access to small business loans, better insurance and business training, particularly for SMEs and vulnerable groups such as women to encourage them to play active economic activity roles in society (Opportunity International, 2023). Even though such an initiative could contribute to the poverty relief agenda and support business skills acquisition, it could equally create a conflict of interest where some organisations would be focusing on promoting the institutions' products and services rather than their core agenda.

Despite the increasing number of governmental and non-governmental financial literacy strategies to improve the population's financial literacy skills, gaps still persist. Several factors such as regulatory constraints, unavailability of competing financial services, and lack of financial consumer protection particularly in developing countries are contributing to the persistent gaps in financial literacy skill acquisition across developing countries such as Ghana (OECD, 2015). An observed view among many scholars is that for financial literacy initiatives to be most effective, they must seek to facilitate access to effective information by creating a national strategy website where simplified financial literacy tools can be located to support anyone who seeks to build their confidence. For example, in Mexico, the government agency responsible for promoting financial literacy launched a website that provides information on different financial literacy components such as savings, credit, insurance policies and saving for retirement products (Cohen and Nelson, 2011). Also, the curriculum of school financial programmes should focus on relevant life planning facets such as saving, debt management, insurance and pension (Berry et al., 2018).

In addition, there should be a multi-delivery channel for raising awareness and communication campaigns that can focus on selected issues and target groups which could be in this case, the SME managers. In some cases, financial literacy messages could be embedded in popular entertainment TV plays on issues such as over-indebtedness (Berg and Zia, 2017).

3.6 Conclusion

The chapter discusses extensively financial literacy rate in Ghana. Despite Ghana being the first few African countries that start the implementation of a National Strategy for Financial Literacy Programme, only 32 per cent of the adult population is financially literate. The chapter also uncovers that SME managers in Ghana still find it challenging to generate a simple financial statement, manage risk, keep a business record and make strategic investment decisions which are critical for business growth due to the lack of financial literacy skills. The chapter discussion establishes that promoting SMEs' financial literacy could lead to a significant in economic development in Ghana. This is because financial literacy skills could help SME managers make a rational and realistic financial decision and helps break some of the major constraints that limit the financial performance of some SMEs in Ghana.

As a result of this, various financial literacy initiatives were launched by the government and non-governmental bodies to help promote financial literacy skills across the population and among businesses. Some of these initiatives were targeted at the youths, women, farmers and businesses, particularly those in rural areas to help them become economically empowered. Some of the government's initiatives are Financial Literacy Week, Capital Markets Week, and Aflatoun's financial education curriculum. The chapter also discusses some of the Non-Governmental Financial Literacy Programmes in Ghana. Some of the notable ones are Enterprise Empowerment and Development (SPEED), Rural and Agricultural Finance Programme (RAFiP), ACDEP Financial Education Project (AFE), Freedom from Hunger (FFH) Initiative and Opportunity International Financial Inclusion for Enterprise Development. Despite these initiatives, the gap in financial literacy still persists in Ghana. A well-coordinated and tailored financial literacy programme is, therefore, needed to help improve SMEs' survivability and promote their financial performance. This is important as the experience from these initiatives could serve as vital steps to formulate a comprehensive national policy to improve financial literacy for all sectors of the economy and help build sustainable economic development. The next chapter presents the theoretical framework that underpins this study where the Knowledge-Based View and Institutional Theory are extensively discussed.

CHAPTER 4: THE THEORIES THAT UNDERPIN THE STUDY

4.1 Introduction

This chapter outlines the theoretical framework that underpins this study. Two main theories are used for this study. These are the Knowledge-Based View (KBV) and the Institutional Theory (IT). It is established that both the institutional setting and the environment within which an SME operates influence entrepreneurial behaviours (Bruton et al., 2009). It is, therefore, necessary to understand those environmental determinants that shape a firm's strategies and actions to improve performance, particularly, those institutional factors that favour the acquisition of financial literacy leading to effective financial management practices and decision-making in SMEs.

Also, it is argued that SMEs that have broad managerial knowledge produce better performance outcomes compared to those without (Subramanian et al., 2016; Mohammadi et al., 2017). SMEs by their nature are resource-constrained, but those with the capacity to invest in firm resources tend to ignore investment in human capability development (Seo and Kim, 2020). Human capability which are often regarded as strategically important for SME innovativeness and strategy development leading to multiple growth outcomes and competitive advantage (Kramer et al., 2011; Anderson and Eshima, 2013). Based on the above discussions, SMEs must, therefore, broaden their knowledge resources and try to break away from the over-reliance on traditional resources such as financial and material capital which no longer fully meet the expectations of today's business environment in the presence of globalisation and rapid technological advancement (Park et al., 2015). This means that conventional strategic decisions and management practices are now inadequate on their own as the new economic demand is driven by knowledge (Kengatharan, 2019).

The previous chapter established that most of Ghanaian SMEs have limited financial literacy skills which is crucial for their sustainability and growth (Agyapong and Attram, 2019; Amoah and Mungai, 2020). It is important that SME managers in Ghana are encouraged to acquire knowledge such as financial literacy skills to develop the required managerial capability that meets the constantly evolving business environment.

This chapter is organised as follows. First, Section 4.2 presents a detailed discussion of the knowledge-based theory and how its application helps improve SME performance in Ghana. Secondly, Section 4.3 considers the various forms of knowledge and how these helps improve SME performance. In addition, Section 4.4 analyses the institutional theory and how its application impact on SME performance. The section also discusses the various institutional domains of the theory by focusing mainly on the cognitive pillar.

4.2. The Knowledge-Based Theory and SME Performance in Ghana

The Knowledge-Based View Theory (KBV) which is an extended part of the Resource-Based View (RBV) has gained prominence in strategic management in recent times (Grant, 1996; Nonaka et al., 2006; Kulathunga et al., 2020). This is because, KBV theorised that there is value which needs to integrate both individual and organisational knowledge base resources into organizational products and services if businesses are to gain a competitive advantage (Hussain et al., 2018). Considering that knowledge resources are usually hard to imitate, and socially complex (Lei et al., 1996), proponents of KBV suggest that setting up heterogeneous knowledge systems in SMEs promotes sustainable competitive advantage. Most SME managers in Ghana have failed to acquire the needed financial literacy skills, which is sometimes blamed on cash flow problems, thereby slowing their growth (Agyapong and Attram, 2019).

The RBV which was originally proposed by Penrose (1959), theorised a firm as an entity endowed with a broad set of resources that lead to a strategic advantage. Penrose's work was later developed by Wernerfelt (1984) who then argued that for an effective strategic decision to be made, a specific set of resources such as physical, financial, human or organizational resources are required for a firm's competitive advantage. Even though Wernerfelt (1984) considered knowledge as a required resource to acquire and transform other firm assets to generate economic rent, Barney (1991) in his later work, considered knowledge as a separate resource on equal footing with other resources (both tangible and intangible). Wernerfelt (1984) later identifies the significance of knowledge as a catalyst for a firm to gain a competitive advantage, but from the KBV perspective, such classification did not go far enough. Proponents of KBV then argued that rather than knowledge having special properties, it was treated as too generic (Kaplan et al., 2001). They also argued that RBV did not give any distinction of what specific or different types of knowledge-based capabilities could improve firms' competitive advantage.

As a direct response to the above argument, KBV gives a firm's knowledge resources adequate recognition and classifies knowledge as the most significant and strategic resource that creates a firm's sustainable growth and competitive advantage (Grant, 1996; Balogun and Jenkins, 2003). As a result, KVB then proposed that organisations should focus more on intangible resources (knowledge resources) rather than their financial or physical assets to promote competitive advantages (Itami, 1987). Explicitly, one could argue that not all knowledge produced in the firm has similar scientific and economic value (Erden et al., 2015). Nevertheless, as knowledge-based assets are often hard to copy, heterogeneous and socially complex, this represents a major drive for sustainable competitive advantage and improve firms' performance (Barney, 1991).

As knowledge resources are considered significant and strategic resources of a firm (Wiklund and Shepherd, 2003), SMEs' financial literacy skills represent such important strategic resources in improving financial performance (Kulathunga et al., 2020). For instance, some SMEs in Ghana are branded as non-credit-worthy and are unable to secure a loan from financial institutions to expand and grow due to managers' limited knowledge of loan requirements (Quartey et al., 2017). This means that most SMEs are unable to put together a strong loan application to secure the needed funds from financial institutions (Mohammed and Bunyaminu, 2021). For SMEs to turn this situation around, managers must acquire financial literacy skills which provides a better understanding of effective planning and resource allocation to improve performance (Eniola and Entebang, 2016). As a result, financial literacy skills are considered a big knowledge gap among most Ghanaian SMEs resulting in the vast majority of them failing, being less competitive and struggling to survive or grow (Agyapong and Attram, 2019).

The KBV presents some very important characteristics. First, the theory argues that the most important resource of the firm should mainly be intangible and dynamic to create a sustainable competitive advantage (Hitt et al., 2001). Empirically, intangible resources play an important part in the organisation due to their positive impact on capability building to spur SMEs’ competitive position (Khan et al., 2019). Similarly, Barney (2001), also argued that firms rich in intangible resources outperform those without intangible resources. Given that financial literacy is knowledge-based, it represents the intangible resource that the SME sector mostly needs to remain competitive.

Secondly, KBV also suggests that investing in firm resources should involve a resource that does not depreciate but can generate increasing economic returns with time. As financial literacy is a knowledge resource, it implies that its application does not devalue SMEs’ financial decision process to improve performance (King and Zeithaml, 2003). For example, evidence suggests that the majority of Ghanaian SME managers do not implement the much-needed standard business practices such as effective record keeping, budgeting, risk management, credit management and making effective investment decisions to improve performance (Amoah and Mungai, 2020). From KBV's perspective, the application of such skills will not depreciate but are needed daily for the effective management of SMEs.

Furthermore, KBV also argues that knowledge is a vital resource as this is hard to imitate, socially complex and heterogeneous (Nonaka et al., 2006; Kulathunga et al., 2020). In a similar vein, Barney (1991) also argued that firm resources contribute to the competitive advantage provided that such resources are valuable (must contribute to improving the firm's performance), rare (only possessed by a few firms), inimitable (costly to copy by others), and non-substitutable. Given that the vast majority of Ghanaian SMEs are struggling to survive or grow and remain competitive, financial literacy could represent such a unique resource that is difficult to copy and socially complex leading to a strong foundation for sustainable SME performance.

Finally, KBV also argues that firms possess enough knowledge resources are able to transfer these resources not only between firms but more importantly, within-firm (Grant 1996). The evidence established that for a firm to achieve sustainable competitive advantage, it must possess a knowledge resource that fills knowledge gaps (Zack, 1999). This implies that SME managers must identify and accumulate knowledge resources that fill the gap which defines a firm's capability to efficiently promote performance (Rumelt, 1984; Wernerfelt, 1984). Since the current global business climate is driven by knowledge, it is important that Ghanaian SMEs identify, develop and adopt strategic capabilities that are based on knowledge to improve performance (Kulathunga et al., 2020). Based on this, SME managers must rely heavily on knowledge resources as a new business culture to effect competitive advantage (Hörisch et al., 2015; Ye and Kulathunga, 2019; Muñoz-Pascual et al., 2021).

4.3 Classification of Knowledge

Given the importance of knowledge in today's competitive world, an understanding of which type enhances organisational performance is critical. Generally, Knowledge is classified into two main types: tacit and explicit (O'Connor and Kelly, 2017).

4.3.1 Tacit Knowledge

Tacit knowledge is the knowledge that is difficult to express, transcribed, codifiable and hard to copy thereby, making it more difficult to transfer to others. An SME manager's ability to acquire and manage tacit knowledge poses a huge challenge, as this represents a higher level of Knowledge management (Leonidou et al., 2016). This is because tacit knowledge is believed to be deeply rooted in personal beliefs, attitudes, and values. This implies that tacit knowledge is of value for SMEs that produce radical innovations and retain this type of knowledge will significantly improve performance (Ardley & Naikar, 2020). Given that tacit knowledge is difficult to articulate, formalise and communicate, SME managers should be encouraged to acquire or learn this type of knowledge through collaborative experience such as entrepreneurial and market orientations as strategies to improve SME performance. This is because tacit knowledge is developed through experience, practice, perception, and learning by doing (Piperopoulos, 2010). Based on this, there is the need to create an internal environment where desired behaviours are encouraged and supported to amplify the effect of knowledge exchange in ways that can lead to competitive advantage (Pérez-Luño et al., 2019). By its nature, tacit knowledge is regarded as a central capital for organisational competitiveness and operational efficiency (López-Cabarcos et al., 2019). This is because when tacit knowledge is developed and maximized effectively, it could bring a real benefit and improve SME performance significantly. For example, the application of tacit knowledge can bring a greater return on investment as this helps firms to analyse better investment opportunities (Muthuveloo et al., 2017). Tacit knowledge is also regarded as a strategic resource in today's competitive business climate as this is the underlying foundation for idea generation and product development, business adaptation, and innovation capabilities for competitive advantage (Goffin and Koners, 2011; Fernandes et al., 2013). Furthermore, empirical evidence suggests that tacit knowledge is significantly associated with firm marketing capabilities as this focuses on meeting customer satisfaction and needs through tailored and innovative products (López-Cabarcos et al., 2019). A significant number of SMEs in Ghana struggle to build a strong customer base which, thereby, affects their survivability and growth (Asare, 2014). A firm's ability to pull information about current and future customers could help build market intelligence which is vitally linked with superior firm performance.

As this type of knowledge is intuitive and unarticulated, one major disadvantage of tacit knowledge is that it could pose a major challenge for firms or managers, as employees may often be reluctant to share their precious knowledge with other people (Chen et al., 2018). This implies that the transfer of tacit knowledge throughout the organisation could be halted due to its intangible and subconscious nature, thereby, limiting SMEs' competitive advantage. This, therefore, calls for greater interaction and socialisation among individuals coupled with better incentives or motivational team-based culture should be encouraged within the firm to enhance the positive impact of tacit knowledge transmission that builds firm capability (Pérez-Luño et al., 2016; López-Cabarcos et al., 2019). Adopting such a strategy could nurture positive relationships that create common experiences based on mutual understanding (Gamble, 2020). However, evidence suggests that the problematic nature of sharing tacit knowledge is not the only limitation, but how this type of knowledge is measured across the organisation (Chuang et al., 2016).

4.3.2 Explicit Knowledge

On the other hand, explicit knowledge is a type that can be documented, codified, stored and easily retrieved within organisations (López-Cabarcos et al., 2019). Based on this definition, this implies that explicit knowledge can easily be transmitted using oral or written communication and, therefore, easily accessible. This is very significant to SMEs that seek to improve their knowledge-based or managerial capabilities. This is beca use, more often, explicit knowledge relates to a series of technological or management procedures that are unique and formalised within an enterprise (Muthuveloo et al., 2017). This implies that SME managers can adopt any of the distinct management procedures from an established organisation and prioritise their performance objectives. This is because Richtner and Ahlstrom (2010) posit that the application of explicit knowledge by top management is highly significant in prioritising actions that bring maximum utility. This makes explicit knowledge objectively based and its systematic language attribute which are embedded makes it easy for managers to take necessary action to improve performance (Anand et al.,2010). This makes explicit knowledge easily transmissible and based on this attribute, explicit knowledge can easily be acquired through direct experiences such as on-the-job training and academic learning (Al Ahbabi et al., 2019). Such modes of acquisition imply that explicit knowledge is formulated into a comprehensive or in-depth understanding rather than a 'general idea' or intuition (Gilson et al., 2013). However, it is argued that implementing explicit knowledge alone is not enough to bring the needed positive organisational performance. This is because explicit knowledge is "universal" by nature and even though its assimilation into organisational knowledge based is much easier, there is a considerable element of risk regarding intellectual property concerns from external sources (Gamble, 2020). Given that SMEs lack the needed human capital to improve performance, managers must be encouraged to acquire explicit knowledge through training or academic learning to help implement the necessary management decisions to improve performance.

4.4 Institutional Theory and Financial Literacy in Ghana

In recent years, institutional theory has gained prominent attention in management research. This is because coherent and efficient organisational strategic decision-making alone is no longer sufficient to drive business success, but how organisations adhere to various institutional norms or rules is crucial to performance (DiMaggio and Powell, 1983). It is suggested that the institutional environment influences the development of formal structures in SMEs by impacting their decision-making processes. For SMEs to gain a competitive advantage in Ghana, they must conform to various institutional norms or rules and establish management systems that promote the acquisition of knowledge-based resources such as financial literacy to influence sustainable SME performance. Some of the notable environmental determinants are the state institutions, educational institutions, trade associations, cultural, and societal norms, professional bodies and markets, which the tendency to shape entrepreneurial behaviour, and thereby affect the performance of SMEs significantly (Scott and Meyer, 1984). This is because, these institutional factors either legitimise or constrain business activities by compelling organisations to adopt certain business strategies such as effective financial decision-making (Welter and Smallbone, 2011).

The proponents of the institutional theory believe that SMEs are embedded in various environmental factors (DiMaggio and Powell, 1983) which set rules (formal and informal) of engagement (Meyer and Rowan, 1991). The institutional theory, therefore, emerged to provide a robust analysis of how both the institutional settings and the environments within which SMEs operate influence organisational behaviours in different markets (Bruton et al., 2009). The institutional Theory's main concern is how various groups and organizations should be better placed to protect their positions and legitimacy by conforming to the rules and norms of the institutional environment (Scott, 1995). By conforming to these norms, SMEs have a greater opportunity to thrive by exploring opportunities in their environment to overcome several challenges that limit business performance. This means that SME decisions must conform to institutional demands strategically (DiMaggio and Powell, 1983; Oliver, 1991).

In Ghana where the majority of SMEs face a myriad of factors that impact their performance, it is, important to understand these environmental factors that shape their strategies and actions to improve performance, particularly, those institutional drivers that favour the acquisition of financial literacy leading to effective financial management practices and decision making. The Institutional theory, therefore, justifies how these institutions attempt to legitimise and create a social structure that enforces norms, rules, routines, and culture among its members which eventually becomes an authoritative guideline in shaping social behaviour (Wright and Zammuto, 2013).

A notable challenge of the institutional theory is the classification of these environmental or institutional factors. Studies tend to classify these factors differently. For example, the study of DiMaggio and Powell (1983) identified these institutions as coercive, normative and mimetic. Also, the study of Scott (2001) classified institutional factors as regulatory, normative and cognitive. Explicitly, there is a lack of a universal classification of the institutions creates disparities in how these institutions should be classified. However, given that the cognitive domain of the institutional theory will be the focus of this study, Scott's (2001) classification is adopted.

4.4.1 Regulatory Institutions and Financial Literacy in Ghana

Regulatory institutions denote all institutions either formal or informal, which offer the regulatory framework that enacts favourable conditions or laws leading to the creation, management and delivery of successful SMEs within a favourable environment that promotes business success. In other words, it is the power of legal systems that coerces SMEs into obedience to gradually adopt a common viewpoint and a set of beliefs to improve performance (Liao, 2018). These regulative institutions represent governmental laws, industrial agreements, and standards (Kondra and Hurst, 2009) which guide organisational behaviours through rule-setting, monitoring, and sanctioning leading to acceptability (Scott, 1995). It is also established that the regulatory institution exerts a commanding influence on business entry rates and location which have a significant influence on SME performance (Kshetri, 2010). However, an inadequate and over-regulatory framework leads to unpredictable or inconsistent government policies that might create operating challenges for many businesses and some cases lead to SME insolvency (Agwu and Emeti, 2014; Puffer et al., 2016). It is, therefore, important that the regulatory institutions enable any formulated laws and policies to encourage behaviour that promotes firm growth (Scott, 1995).

It is important to understand the role of the regulatory institutions in promoting the acquisition of financial literacy skills and to ensure that SME managers adopt and implement favourable policies to mitigate any business entry or management barriers. Few regulatory institutions that exist in Ghana are the National Board for Small Scale Industries (NBSSI), The Registrars General Department, The Ghana Investment Promotion Centre (GIPC), The Social Security and National Insurance Trust (SSNIT) and the Companies Code exert pressure on SMEs. For example , under the VAT law, SMEs are required to keep a record of all supplies made or received to pay the Value Added Tax (VAT) which was enacted by an Act of Parliament in 2007. However, evidence suggests that some SMEs in Ghana have unstructured business units, and this makes it more complicated and burdensome for SMEs to adhere to the imposed requirements by VAT law (Adom et al., 2014). This challenge by SMEs could be due to the lack of financial literacy skills to improve their record-keeping behaviour. Also, the Ghana Audit Service and the Securities and Exchange Commission developed a Corporate Governance Code which represents the best practice that every company code including SMEs in Ghana ought to abide by. Also, The Bank of Ghana (BoG) incorporated some corporate governance rules into the Banking Act, of 2004 to ensure financial sanity (Asunka, 2017). All these regulatory institutions legitimised SMEs or forced them to conform, hence shaping entrepreneurial behaviour.

4.4.2 Normative Institutions and Financial Literacy in Ghana

Normative institutions are the societal structures, practices, values, standards, and norms that impact the nature in which SMEs and other institutions formulate acceptable behaviour and deliver their core business activities and duties to the public (Follesdal, 2009). Based on this, the performance of SMEs is equally affected by the normative institutions which seek to impose societal morals, values and obligations and force SMEs to conform to certain professional standards (Mizruchi & Fein, 1999). This implies that such standards are often regarded as the appropriate ways that SMEs should carry out their business activities to meet specific societal expectations to improve performance. This is because, the normative dimension creates stability that sets out socially acceptable behaviours driven by morals and obligations that SMEs ought to follow (Alexander, 2012).

The competition in the global marketplace has forced many businesses to adopt unique alternative sources of sustainable competitiveness. This means that the ability of SMEs to develop a brand based which focuses on customer confidence is vital for business success (Asamoah, 2014). Evidence suggests that SMEs' ability to pay personal attention to the needs of their clients by developing a unique selling point and competitive pricing is crucial to their financial performance (Kayaman and Arasli, 2007). This means that such steps and strategies help SMEs recognise the various associations customers have with certain brands as well as perceived quality and thereby, help identify loyal customers. However, this could only be achieved effectively if SMEs conform to what society expects from them. This means normative systems outline goals or objectives and design the appropriate ways that SMEs must follow and pursue their expected performance objectives (Scott, 2001). From the above discussion, what is central to the normative perspective is the logic of appropriateness, which proposes that sets of rules and routines that govern certain business actions provide both sanity and predictability in business management (Alexander, 2012). Based on this, if the SME sector in Ghana perceives entrepreneurial training on saving, effective risk management, budgeting, record keeping and investment decision-making, this could promote effective business management and performance significantly.

In Ghana, evidence suggests that certain societal values and norms such as respect, love, and togetherness play a significant role impact on SME growth and development (Forkuoh et al., 2012). This means that elements of socio-culture affect all dimensions of the decision-making process in managing SMEs to improve performance. As a result, SME managers must aim to acquire high personal qualities such as integrating social systems, and decent attitudes that conform with societal norms that could promote financial literacy skills acquisition to promote performance. It also emerged that SME owners' religious belief influences SME owners' financial decision-making and impact firm performance differently (Agyei, 2018). This implies that key culture-led firm decisions could lead to SME managers' quest for capital structure, profit, corporate governance, and innovation to enhance performance. Based on the above, it could be argued that cultural values influence financial knowledge acquisition and as a result, financial literacy training designed for SME managers ought to be tailored to meet their cultural norms, values and religious beliefs.

4.4.3 Cognitive Institutions and Financial Literacy in Ghana

The business environment is dynamic and constantly changing which requires firms to consider which factors in the institutional environment create business opportunities through constant interaction between internal and external factors to understand the impact created by this uncertainty by encouraging firms to imitate the best practice behaviours from others to improve its legality (Liao, 2018). Empirically, all firms are entrenched in one social network. This makes firms imitate the successful behaviours of other members in their network (Liu et al., 2010). Mimicking or copying other organisations helps reduce uncertainty (Levinthal and March, 1981). This is because the lack of clarity leaves organisations confused and with little choice but to imitate other organisational successful behaviours that are deemed acceptable to yield maximum returns (Kondra and Hurst, 2009).

However, the study of Drucker (1998) argued that most knowledge is rooted in the minds of people, therefore, employees should be encouraged to share legitimate knowledge, experience, and any information that could create the desired and core corporate values. However, trust is vital in encouraging employees within or outside the organisation to interact with one another (Nieves and Osorio, 2013).

Cognitive institution refers to the various means by which entrepreneurial knowledge, experience and skills are shared, acquired or imitated either formally or informally to stabilise a firm's behaviour to ensure an effective business operation (DiMaggio & Powell, 1983; Cavusoglu et al., 2015). In other words, cognitive institutions encourage knowledge sharing through education and training programmes to enable individuals and firms to acquire prerequisite knowledge and skills to analyse situations and explore various opportunities to build and manage a successful business (Urban, 2019). In Ghana, the majority of SMEs lack financial literacy skills and as a result unable to make informed financial decisions to improve business performance (Adomako and Danso 2014; Agyapong and Attram, 2019). The ability of the cognitive institutions to enable SMEs within a network to share knowledge and experience on effective risk management, record keeping, effective debt management and making a better investment decision could significantly improve SME performance. This means that when knowledge acquisition becomes a general trend among SMEs, this will improve core management practices across the sector and gradually promote organisational competitiveness.

Evidence suggests that an entrepreneur's knowledge and experience play a significant role in identifying and exploring new business opportunities and promoting growth (Davidsson and Honig, 2003). In the same vein, theorist of human capital argued that one's ability to acquire new knowledge improve productivity and efficiency in a variety of business activities (Becker, 1964) and this, therefore, highlight the importance that cognitive institutions should provide conditions favourable that motivate knowledge acquisition, sharing and to allow other organisations to copy or imitate behaviours that enhance performance and competitive advantage.

Evidence suggests that effective training and developmental programmes could provide opportunities for organisations to maximize the development of desired behaviours regarding conformity to certain organisational cultures (Garavan et al., 2021). This implies that raising the awareness of the importance of financial skills training programmes for SMEs could help managers develop the desired financial management behaviours that the sector needs to promote performance. Also, mentoring and apprenticeships could provide real opportunities for transmitting behavioural norms and expected organisational knowledge to achieve a competitive advantage (Van Maanen and Schein, 1979). This, therefore, implies that cognitive institutions should ensure that norms that nurture a willingness and preparedness to acquire and share knowledge are worth developing. It is, however, important that SMEs who want to adopt, import or imitate any rules or behaviours from other organisations to improve their knowledge resources such as financial literacy skills should be specific and goal-oriented in order to avoid adopting incorrectly any external rules and practices that will not meet their core aims (DiMaggio and Powell, 1983). This implies that copying or imitating other institutions' norms and policies may not always trigger changes in organisational structures and strategies in a positive way due to a wide range of internal variations in organisational behaviours.

Business education could be a reliable channel for promoting high-growth entrepreneurship, particularly in developing countries. But when the educational system continues to be weak, entrepreneurial activities could be hampered (Herrington et al., 2017). This is because a weakened educational system could lead to a lack of skills which would in effect obstruct the entrepreneur's ability to grow their businesses (Urban, 2013). In Ghana where the majority of SME managers lack financial literacy, cognitive institutions such as the National Board for Small Scale Industries (NBSSI), Association of Ghana Industries (AGI), SME groups and Village Banking Groups/Associations, all have prominent roles in creating favourable environment that promotes easy acquisition or entrepreneurial knowledge sharing to facilitate effective entrepreneurial activities. This means that the role of these institutions is critical in knowledge transfer among SMEs in Ghana to ensure managers are equipped with prerequisite skills to make effective management decisions to improve performance.

4.5. Conclusion

This chapter presented the discussion on the KBV and the Institutional theory and its impact on financial literacy for SME managers and the performance of their enterprises. The chapter highlights how the complexity of the current business environment has made KBV an essential and prominent organisational theory to improve firms' knowledge resources and achieve competitive advantage. The chapter also argues how financial literacy should be considered a strategic intangible resource that could enhance SME performance given that knowledge resources that are generally rare, difficult to copy and socially complex contribute significantly to firms' performance. Based on this, proponents of the knowledge-based view believed that because knowledge resource does not depreciate it can generate an increasing firms' economic return with time.

The chapter further discusses how the institutional environment which consists of social ideas, rules, norms or culture influences the reasonability, acceptability and support received by SMEs which leads to survivability and sustainable performance. This means that SMEs must conform to the rules of their environment for survival and competitive advantage. The chapter also highlights how elements of socio-culture affect all dimensions of the decision-making process in acquiring financial literacy skills to improve SME performance. This explains how culture leads to key SME managers' decision-making leading to their quest for capital structure, profit, corporate governance, and innovation to enhance performance. The chapter also explains how the three main dimensions of the institutional theory such as the regulatory, normative and cognitive institutions continue to constrain SME activities and behaviours.

The next chapter considers the adopted research design and the methodology to answer the research questions and establish the level of impact financial knowledge and behaviour have on SME performance in Ghana.

CHAPTER 5: ADOPTED RESEARCH DESIGN AND METHODOLOGY

5.1 Introduction

The previous chapter analysed the empirical model or conceptual framework that underpins this research which is extensively drawn from the literature. From the extant literature, it emerged that the financial literacy skills of SME managers have a significant impact on SME survivability and performance.

This chapter seeks to outline the methodological choices adopted for this study by comprehensively specifying the research design, philosophical stance and research approach and justifying how they effectively contribute to answering the main research question. In addition, the chapter discusses the research strategy, sampling design and techniques and the main research instrument for data collection. Furthermore, the chapter explains the scientific justification for adopting the data analysis techniques. Every piece of quantitative research must outline a clear methodological process that is followed during an enquiry to ensure transparency and replicability of the study (Aguinis et al., 2017; Bergh et al., 2017; Aguinis and Solarino, 2019). Failure to replicate published research in the social sciences undermines the trustworthiness of both the results and established research practices (Hensel, 2021).

Based on the main research question, the pragmatic philosophical stand is adopted for this research. Thus, both positivist and interpretivist research paradigms are discussed to test the conceptual framework proposed in the previous chapter (Creswell, 2014). Based on this, both the inductive and deductive approaches are adopted and justified to answer the research questions. The chapter continues to justify a questionnaire and interview adoption as a mixed-method strategy in collecting both quantitative and qualitative data respectively. Adopting a mixed-method strategy is significant because the lack of financial literacy skills could be multi-dimensional and as such, needs exploring through both quantitative and qualitative approaches for the robustness of the study (Fielding, 2012).

This chapter is divided into eighteen sections. While section 6.1 provides the introduction to the chapter, section 6.2 outlines the research design. Section 6.3 presents the research approach where the deductive, inductive and abductive approaches are discussed. Furthermore, section 6.4 examines the research strategy and methodology with extensive discussions and justification for adopting the proposed strategy. In addition, section 6.5 presents the research setting where the research population, the unit of analysis, the sampling criteria and technique and the sampling size determination are discussed. Also, sections 6.6 and 6.7 discussed the measurement of financial knowledge and financial behaviour constructs respectively. Also, while section 6.8 discusses how the digital capability of SMEs is measured, section 6.9 considers the control variables and how these are measured in this study. Furthermore, section 6.10 discusses SME performance measurement and how these are measured in this study. Section 6.11 discusses the research instruments where the survey and the interview questionnaires are justified. Also, while section 6.12 presents and discusses the data collection procedure, section 6.13 analyses the adopted quantitative and qualitative data analysis techniques.

Furthermore, section 6.14 presents and discusses the pilot study results while explaining the necessary modifications made before the main data collection. Furthermore, section 6.15 presents the validity and reliability test results on the main data collected. Also, while section 6.16 considers the exploratory factor analysis for both financial knowledge and financial behaviour constructs, section 6.17 analyses the measurement model for the study. Finally, section 6.18 reports on the ethical considerations and section 6.19 highlights the conclusion of the chapter.

5.2 Research Design

Every piece of research must have a rigid structure that a researcher must follow to undertake the research to effectively answer the research questions. This means that planning research should not be an arbitrary matter but rather a reflexive exercise (Cohen et al., 2018). A research design is, therefore, defines as a systematic plan that every researcher adopts to answer a research question (Polit and Beck, 2012). This systematic plan encompasses the philosophies, the approaches, strategies as well and methods that all researchers adopt during the research process (Creswell, 2009). Based on this, every researcher must adopt a reliable research design that effectively investigates and answers the research question under consideration for the robustness and replicability of the research findings. Research design, therefore, provides a rigid framework to establish the relationship among the variables and the method applied (Bryman and Bell, 2007).

5.2.1 Research Philosophy

Based on the outlined research aim and objectives, the pragmatic philosophical stand has been adopted for this study. The pragmatic research paradigm has been adopted to investigate financial literacy skills among some SME managers by developing new knowledge to improve financial performance. This is because pragmatism is often related to action, intervention and constructive knowledge (Goldkuhl, 2012). This implies that both positivism and interpretivism are adopted in an explanatory sequential triangulation method to undertake this study.

In every piece of research, the researcher must ensure that there is consistency between the research aim, research questions, adopted methodology and the philosophical stand adopted. With this in mind, McLachlan and Garcia (2015) posit that researchers should adopt a philosophical viewpoint not only based on the perception of the social world but also the methodological aspect of any piece of research. This means that philosophical perspectives must be reflexively linked to methodological practice. Based on this, the researcher ensures that the pragmatic philosophical stand adopted determines the research approach, strategy and method to be used to carry out this research. Understanding the impact of financial literacy on SME performance could be multi-dimensional and as such needs to be explored extensively by adopting both quantitative and qualitative means. This is because many institutional and environmental factors play a major role in this relationship (Bruton et al., 2010).

According to Saunders et al. (2016), a research philosophy refers to a researcher's set of beliefs and assumptions about how research should be conducted per its guidelines, principles, and research strategy. Based on this, the adopted philosophical perspective for this study helped the researcher gather a specific type of evidence and how this evidence is interpreted to answer the research questions. This means that the pragmatic philosophical stand adopted helps the researcher evaluate different methodological perspectives, any limitations associated with a particular approach and how these limitations are identified earlier, thereby helping the researcher to be innovative in selecting a specific methodology (Saunders et al., 2012).

In social sciences, research philosophy often comprises of four main components namely; epistemology, axiology, ontology, and the nature of human behaviour (Bryman and Bell, 2011; Saunders et al., 2019). However, these philosophy classifications and some of their conflicting viewpoints on the 'quantitative-qualitative' debates, have created a major dilemma for researchers in establishing their relevance to subject areas or specific disciplines (Mkansi and Acheampong, 2012). This is because other studies have used different descriptions, categorisations or classifications of research paradigms and philosophies which are viewed and interpreted as paradigm "wars". For example, Ritchie and Lewis (2003) adopt different ontological classifications and descriptions which include realism; materialism, critical realism, idealism and relativism; and adopt positivism and interpretivism as epistemological a viewpoint. These classifications are different from the study of Saunders et al. (2016) which classified a research philosophy as ontological, epistemological and axiological stance. These various philosophical perspectives have created an overlapping classification but, are not entirely different because they all share common assumptions (Mkansi and Acheampong, 2012). Even though the various philosophical classifications do share common assumptions, nevertheless, these classifications no doubt could generate philosophical debates and create challenges for researchers.

5.2.1.1 Positivism

The positivist philosophical stand believes that a great deal of knowledge could be acquired using existing theories to develop and test any acceptable hypothesis generated (Bryman 2016). Based on this, positivists argue that it is important for researchers to gather data and test hypotheses that are generally generated from a known theory. This is so as positivists reject subjective understandings and hold that knowledge of social phenomena is based on what can be observed and recorded (Matthews and Ross, 2010). Most significantly, positivists argue that unnecessary human engagement in any piece of research could impact the quality of the research findings and as such, the researcher should be independent and his or her engagement should be limited to data collection and its objective interpretation (Bryman and Bell, 2011). The above argument established the fundamental reasoning of positivism which assumes that an objective reality exists, independent of human behaviour and senses should be used to collect data that are objective, discernible and measurable (Ali and Chowdhury, 2015). This enables the researcher to predict and explain any changes in knowledge of inquiry (Kaushik and Walsh, 2019). This means that the positivist approach to social research is usually quantitative which usually involves a large data set and is often analysed statistically (Matthews and Ross, 2010).

Adopting a positivist viewpoint does not come without any criticism. The view that social life can be investigated using similar principles and ideas as natural science has led to the criticism of the positivist approach (Meier, 2005). Employing a positivist approach to studying human behaviour could not provide the means to thoroughly examine human beings and their behaviours. This is because human beings are not objects and many things influence their behaviour, feelings, perceptions and attitudes which positivists reject (Schiller 2016). This implies that the positivist approach could sometimes provide a shallow view of some phenomena under investigation such as certain human behaviour which is beyond the scope of positivism.

Other critics view positivists as individualists and argue that a researcher cannot be passive and distance themselves from the phenomenon under study (O'Reilly, 2009). According to Bryman and Bell (2011), a researcher must be actively engaged in the tasks of criticism, the building of theory and critically explaining the reality behind the observed phenomenon. This implies that social sciences research should be understood in accordance to human behaviour, attitudes and socio-cultural issues that influence the research participants in any piece of research. Based on this, relying solitary on the positivist approach is no longer entirely defensible.

5.2.1.2 Interpretivism

Interpretivists believe that individuals are the source of opportunities (Saunders et al., 2012). This means that in social research, individuals must form a key part in the understanding and explanation of any social phenomenon under investigation which is sometimes difficult to observe by the senses (Matthews and Ross, 2010). Interpretivism views individuals as actors in the social world and, therefore, believes that social researchers must enter the social world to understand the socially constructed meaning in order to talk abstractly about relations between phenomena (O'Reilly, 2009). This implies that interpretivists strongly believe that humans learn and understand reality through their interaction with it (Packard, 2017). Based on this, interpretivists argue that social situations are sometimes complex and for researchers to understand the phenomenon, they must engage in the investigation and draw meaning through the eyes of the people being researched (Matthews and Ross, 2010; Bryman and Bell, 2011).

Based on the above, interpretivist researcher believes that different factors such as behavioural aspects based on participants' experiences would help to describe the reality of the phenomenon. This means that the interpretivism approach to social research is qualitative in nature which provides empathetic understanding by stepping into other people's shoes to uncover subjective meanings of the phenomenon under investigation (Matthews and Ross, 2010). Adopting this approach enables the researcher to present and analyse the data collected to generate a theory.

The interpretivist approach does come with some weaknesses. Critics believe that interpretivists philosophical stance alone will unlikely lead to the generalisation of research findings, particularly to a larger population given that certain contextual meanings and implications are difficult to circumvent (Bryman and Bell, 2011). Also, there is a tendency that researchers to become sometimes engrossed in the whole research process, thereby, interfering with the findings which might not reflect the view of the research participants (Zikmund et al., 2012). This, therefore, implies that the research findings could become researcher-centred instead of participants-centred, leading to the inability to replicate the research or verify the findings.

The above discussion of both the positivist and interpretivist perspectives does encourage in-depth thinking on how this research is planned and establishes the earlier discussions on why exploring various philosophical stances could be significant, particularly, when choosing and evaluating the methodological stance of the study. This research aims to investigate the impact of financial literacy skills on SME financial performance. Adopting the pragmatic philosophical viewpoint helps the researcher decide the overall research strategy to answer the research questions.

5.2.1.3 Realism

Critical realism is a moderate step away from strictly positivist empiricism which suggests that an objective world exists separate from researchers' perceptions, experience, language, or imagination (O'Mahoney and Vincent, 2014). Based on this, the realists believe that the researcher should make every effort to find, examine and understand objective reality without interfering with his own experience (Bryman and Bell, 2011). This makes the realism position similar to positivism, with both employing the same research approach, data collection, analysis methods, and interpretation (Bryman and Bell, 2011). However, realism goes a bit further and suggests that social reality is underpinned by invisible and powerful mechanisms (Matthews and Ross, 2010).

5.2.2 Justification for Adopting Pragmatism

To answer the research questions, the researcher adopts both objective and subjective means to understand the understudied phenomenon (Saunders et al., 2009). This means that every piece of research must be analysed and interpreted both objectively and subjectively by the researcher to ensure robust research findings. It is argued that social science research shouldn't be analysed narrowly or only objectively as it is important for the researcher must equally understand the social world and the people that are involved with it (Shusterman, 2016). Rather than asking which philosophical stance is better than the other, adopting a pragmatism lens for this study is seen as a progressive way of settling the paradigm war and a much more robust way of reaching the research findings. This means that using quantitative alone is enough to measure and understand every single factor that helps or prevents SME managers to acquire financial knowledge and subsequently improve their financial behaviour. This implies that the subjective interpretation from the SME managers' point of view is equally imperative to provide a rich discussion of this study. Previous studies on financial literacy in Ghana (Agyapong and Atram, 2019; Tuffour et al., 2020) adopted only a quantitative stance to objectively analyse the various factors contributing to the lack of financial literacy skills among Ghanaian SME managers. Critics argue that for quantitative research to be well understood, it should involve more in-depth explorations into why individuals react or behave in certain ways (Packard, 2017).

Adopting a pragmatic philosophical choice enriches the study on many fronts. First, SMEs in Ghana lack the managerial capability to implement effective financial management practices to improve performance (Agyapong and Attram, 2019). However, the ability to implement any gold-standard financial management practices depends on SME managers' financial knowledge and their prudent financial behaviour (Drexler et al., 2014). It is, therefore, important the researcher analyse both objectively and subjectively the various contextual issues and factors that affect SMEs' inability to acquire the prerequisite financial knowledge that helps improve their financial behaviour. Also, in developing countries such as Ghana, the institutional machinery that supports SME growth or supports markets to encourage entrepreneurial activities is absent, weak, or sometimes, fails to accomplish its expected roles (Mair and Marti, 2009; Stephan et al., 2015; Canare, 2018). It is important to better establish an understanding of these factors that contribute to the lack of such support from the governmental institutions qualitatively from SME managers' perspective to enrich the outcome of this study (Sen, 2019). In addition, certain factors such as educational level, gender, age, and industry also influence SME managers' financial literacy skills acquisition (Karadag, 2017; Rai et al., 2019). Adopting a pragmatic approach provides an in-depth understanding of these factors and how SME managers can be supported to improve their financial performance. This implies that while the positivist paradigm demonstrates clear statistical tendencies of the phenomenon under investigation, the interpretivist paradigm explores the views of respondents from this study comprehensively. Based on this, a pragmatic approach is adopted for this study where both the quantitative and qualitative dimensions is considered in exploring all the contextual factors for the richness of the findings. This is because pragmatism focuses on dealing with practical issues or action-centred research approaches rather than relying on assumptions about natural knowledge (Cameron, 2011; Creswell, 2014; Shannon-Baker, 2016).

5.3 The Research Approach

The philosophical stand adopted for this study calls for both the inductive and deductive approaches to underpin the study. It is believed that social contexts are unstable over time leading to unpredictability in research. Even though existing research theories provide sufficient and interesting empirical findings, these theories might not apply to all concepts in providing an in-depth understanding of all incidents or phenomena under investigation (Andersen and Kragh, 2010). A research approach is often regarded as the process by which social science theories are generated, evaluated, and tested (Saunders et al., 2009). Generally, social science research considers three main research approaches when deciding on any piece of research. These are the inductive, deductive and abductive approaches (Bryman and Bell, 2011).

5.3.1 The Deductive Approach

A deductive is an approach that is not grounded in empirical observation but involves the use of a theory, deriving hypotheses and testing those hypotheses to establish causal relationships among factors (Locke, 2007; Saunders et al., 2012). This implies that the deductive approach starts from a theoretical base from which a series of hypotheses is deducted, and data is collected and analysed to test an existing theory (Bryman, 2012). Based on the outcomes of the test, the hypotheses developed are either accepted or rejected (Saunders et al., 2009). From the above, the deductive approach is, therefore, quantitative in nature (Saunders et al., 2012). This approach does help researchers ascertain whether the conclusion reached is valid or flawed.

Given that deductive approach starting points are not grounded in empirical observation but rather on a proposed theory that is often not fully tested or validated (Locke, 2007), the approach is often criticised for the lack of an in-depth understanding of human behaviour as an actor in research (Bryman and Bell, 2011). Also, despite the dominance of this approach, the deductive approach does not sufficiently capture how people truly think, and as a result, the approach cannot effectively explain how people respond to their environments (Woiceshyn and Daellenbach, 2018).

5.3.2 Inductive Approach

On the other hand, the inductive approach is exploratory in nature through observations, descriptions and analysis of data to observe any emergent patterns that may explain a phenomenon under study (Burns and Burns, 2008; Bryman and Bell, 2011). The inductive method has been recommended as a vital way of knowledge and theory building and development which requires careful empirical observation over time (Locke, 2007). This study investigates the impact of financial literacy on SME performance. It is important to explore the views of SME managers on how certain environmental and institutional factors impact SME performance. Given that the inductive approach documents, analyses, and understands how human beings construct and attach meanings to their experiences (Patton, 2015), it is, important to highlight the contextual understanding in terms of behaviours, values and beliefs of the phenomenon under investigation (Bryman and Bell, 2011). Evidence suggests that in management studies where organisational behaviour, theory and strategy are investigated, inductive research should be applied to provide the researcher with an opportunity to explore and uncover the underlying assumptions (Eriksson and Kovalainen, 2016). Against this backdrop, the inductive approach is qualitative in nature.

5.3.3 The Abductive Approach

It is sometimes difficult to carry out research using a single approach and as a result, the researcher adopts the abductive approach where both the inductive and deductive approaches are used in a single piece of study whenever it is practical (Saunders et al.,2012). Adopting abductive approach involves both theory testing by either rejecting or confirming a hypothesis using quantitative techniques as well as building theory through the identification of specific patterns by observing and exploring a phenomenon (Saunders et al., 2016). This implies that adopting the abductive approach provides robustness to the study as both the deductive and inductive approaches complement and compensate for the weaknesses of each other (Bryman and Bell, 2011).

5.3.4 The Justification for Adopting the Abductive Research Approach

This study deploys an abductive approach given the philosophical stance that underpinned the study. Empirically, adopting the abductive approach strengthens the whole process of conducting research as this allows both theory generation and theory testing approaches to be deployed in a single study, thereby, creating a robust study outcome (Saunders et al., 2016). More importantly, both inductive and deductive approaches are known to have their strengths and weaknesses, therefore, using both in this study complement and compensate for the weaknesses of each other and, thereby, improve the reliability of the research findings (Bryman and Bell, 2011).

As stated earlier, SME managers inability to implement effective financial management practices could be as a result of multidimensional factors which is better explored using both inductive and deductive approaches. This implies that by deploying both inductive and deductive approaches to explore SME managers financial literacy knowledge and financial behaviour helps understand various factors that could be explored to improve their financial literacy skills and SME performance. Through the abductive approach, the researcher explores all the contextual issues that affect SMEs financial knowledge and and financial behaviour acquisition and more importantly, to improve the reliability of the result.

5.4 Research Strategy and Methodology

Based on the philosophical stance and the research approach that underpins this study, a mixed strategy is adopted to undertake the study. This implies both qualitative and quantitative strategies are explored. According to Bryman and Bell (2011), a research strategy is defined as a general orientation where a study adopts either a quantitative or qualitative, and sometimes a mixed strategy to carry out research. This means that selecting the right strategy does not only provide a clear direction for the research but also helps choose the appropriate methodology for data collection and analysis.

5.4.1 Qualitative Strategy

Qualitative research is about immersing oneself in the research process by building rapport sensitively to gather vital clues that help make sense of the phenomenon under investigation (Tracy, 2013). Given that the study adopts a mixed-method, qualitative strategy forms an important element of the whole process by using a single data collection technique such as semi-structured interviews with its corresponding analytical process (Saunders et al., 2019). This facilitates an in-depth understanding of how people place meanings on the phenomenon, process and setting which allows the researcher to capture rich and holistic data beyond surveys. Such rich data is gathered through people's opinions, introspection, observations, and interviews which help explain, illuminate or reinterpret quantitative data to have a clear understanding of a subject under investigation (Saunders et al., 2012; Tracy, 2013).

Qualitative researchers often consider the world as complex, dynamic, interdependent, and unpredictable which could be better understood through stories and people's experiences (Denzin and Lincoln, 2013; Patton, 2015). As a result, qualitative research is outlined broadly within the socially constructed where multiple truth is discovered (Parylo, 2012). Based on this context, adopting a qualitative approach has many advantages. First, the qualitative method can uncover very important and holistic experiences in a very preserved chronological flow, thus, documenting what events lead to what consequences (Tracy, 2013). This study investigates the impact of financial literacy skills on SME financial performance. A holistic and in-depth understanding of SME managers' experiences or views on why they find it challenging to acquire this requisite skill set is significant to the research findings. The uniqueness and richness of qualitative data make it sensitive to detailed research settings (Bryman and Bell, 2015) which is a result of the central position occupied by the voice of the phenomenon under investigation.

One major weakness of qualitative research is the time involved in collecting data and analysis which is often branded as complex and laborious with limited theoretical consideration (De Casterle et al., 2012). This implies that the qualitative research process can be very frustrating, particularly to young researchers in the absence of clear-cut guidelines regarding the complexity of the data analysis process.

5.4.2 Quantitative Strategy

Quantitative research design often relies heavily on the use of surveys and experiments in collecting numerical data and analysis to test or verify the hypothesis using statistical procedures (Saunders et al., 2019). In other words, quantitative research explores the relationship between variables that are measured numerically while using various statistical techniques with graphical representations of data (Saunders et al., 2009). Based on this, quantitative research design relies on objectivism and positivism, particularly when predetermined and highly structured data collection methods are used (Creswell, 2014; Saunders et al., 2019). This implies that quantitative study adopts a deductive approach to collect and analyse data to test a theory. Also, unlike the qualitative where the emergence process is the focus of attention, in the quantitative, the emerged construct is rather the centre of attention (Kozlowski et al., 2013).

One main advantage of the quantitative strategy is its ability to produce precise results with a relatively quicker data collection and analysis process. Nonetheless, some crucial variables might be disregarded during the process of theory and hypothesis testing in quantitative strategy and some findings might not reflect the local social understanding (Maarouf, 2019).

5.4.3 A Mixed Strategy

Mixed-method research is where both the qualitative and quantitative methods are adopted in a single study to answer the research objectives. In other to answer the research questions, a mixed method which involves quantification, measurement and analysis of quantitative data and exploring the narrative accounts and experiences of SME managers through the qualitative strategy is adopted for this study (Flick et al., 2004). By adopting a mixed method strategy, the researcher believes that this has the potential to enrich the quality of the study's findings (Fielding, 2012).

Traditionally, quantitative methods have dominated the research world, but this traditional survey and experimental strategy began to feel obsolete and methodologically inadequate (Gobo, 2016). Based on this, deploying a mixed method for this study recognises the limitations of quantitative approaches and, therefore, finding a way of merging both qualitative and quantitative methods provide a way forward where the differences and diversities of both methods are levelled. Thus, both strategies have their strengths and weaknesses and combining both creatively serves complementary roles which provide more robust research outcomes (Denscombe, 2007; Denzin and Lincoln, 2011; Creswell and Creswell, 2017). Evidence suggests that quantitative studies can sometimes uncover unexpected results, and, in such instances, qualitative data provides an in-depth explanation of the quantitative findings to improve the research outcome (Creswell, 2009). As suggested by Saunders et al. (2019), business and management research should ideally combine both quantitative and qualitative in their study design as it is important that respondents answer open questions in their own words after a questionnaire has been used. Furthermore, it has been indicated earlier in this chapter that the study adopts a pragmatic philosophical stance. Pragmatists have long been linked to mixed methods who argue and encourage researchers to use both quantitative and qualitative approaches in single research given the robustness of the research outcome (Cameron, 2009).

According to Buchanan and Bryman (2007), there are many contextual issues that surround the field of organisational research. This means that a more practical and outcome-driven approach or research strategy that is based on action iteratively is required to help the researcher answer the research questions better. This study investigates the impact of financial literacy skills on SME performance with so many contextual issues such as the perceptions of SME managers on human capital development, and the experience and views of SME managers of what impedes the growth and survivability of their businesses. It is important that all these are explored to provide rich data.

There are different types of mixed-method strategies. These are sequential explanatory strategy, sequential exploratory, sequential transformative, concurrent triangulation, concurrent nested and concurrent transformative (Parylo, 2012; Creswell and Creswell, 2017). Table 1 below illustrates the differences between the various mixed methods designs or strategies.

Table 5.1: Designs for mixed-method strategy

Design	Description
Sequential explanatory	This strategy starts with dominant quantitative data collection and analysis followed by qualitative data and analysis and then the interpretation of the entire analysis is conducted. Integration occurs at the interpretation phase
Sequential exploratory	Starts with dominant qualitative data and analysis, followed by the quantitative data and analysis, and ends with the research interpretation of all data collected. Integration occurs at the interpretation phase
Sequential transformative	Data could be collected in any order, and either qualitative or quantitative methods are chosen as dominant. Integration occurs at the interpretation phase
Concurrent triangulation	Qualitative and quantitative data are collected at the same time followed by the data interpretation stage where the data from both methods were compared. Integration occurs at the interpretation phase of the analysis phase
Concurrent nested	Simultaneous collection of qualitative and quantitative data, but one method is dominant. Integration occurs at the analysis phase
Concurrent transformative	Simultaneously collected data may be either equal in priority, or one of the methods is given priority while the other is less dominant. Integration occurs at the analysis phase (but can occur at the interpretation phase also)

Source: Creswell et al. (2003).

After carefully consideration all the above mixed-method strategies, this study adopts the sequential explanatory design strategy which is a mixed method with strong quantitative leanings. This implies that quantitative data is collected and analysed in the first phase, followed by the collection and analysis of qualitative data during the second phase (Creswell and Creswell, 2017). Even though both quantitative and qualitative strategies are used in two-way processes of data collection, however, both are linked with the qualitative data providing a supporting role for this study.

5.4.4 The Justification for Adopting the Explanatory Sequential Triangulation

Given that the study adopts a pragmatic philosophical stance, a mixed method is deployed in an explanatory sequential triangulation method to investigate the impact of financial literacy skills on SME financial performance. Based on the conceptual model developed, all the hypotheses formulated are tested after the first stage of the data collection process using a survey questionnaire. This is because the sequential explanatory study design gives priority to the quantitative approach during the methodological process (Ivankova et al., 2006). As a result, 499 quantitative data were collected from SME managers to establish the link between SME financial literacy skills and SME performance.

In order to accommodate the subjectivist and interpretivist viewpoint, the researcher conducts 10 interviews as part of the qualitative data. Through these interviews, the views and experiences of SME managers are explored to establish an in-depth understanding of the impact of financial literacy on business performance. More importantly, the researcher deemed it imperative to explore all the factors preventing SME managers from acquiring financial literacy skills to improve. This is very significant given that the qualitative approach helps address the “how” of the research question and provides rich data in a holistic means which helps provide a detailed explanation of the quantitative results. The researcher also anticipates that new questions might emerge from quantitative findings which are then explored through qualitative means to establish robust research findings (Saunders et al., 2019). By combining both data in a triangulation form adds depth, breadth and richness to this study's findings (Denzin and Lincoln, 2018). More importantly, triangulation establishes the traditional view that quantitative and qualitative research are often mutually supported (Bryman, 2008).

5.5 The Research Setting

According to the World Bank (2019), people living in remote or rural areas possess less financial literacy skills. Volta Region is one of the poorest and most remote regions of Ghana (Dzanku, 2015) and this implies that most people in the region possess less financial literacy skills to make informed financial decisions. Financial literacy is a key determinant of savings for both individuals and businesses (Baidoo et al., 2018; Birkenmaier and Fu, 2019). However, according to the Ghana Statistical Service (2019), 21.2% of people living in the Volta Region have some form of savings scheme compared to regions such as Greater Accra and Central at 42.8% and 30.6% respectively. Promoting and encouraging individuals and SME managers to acquire financial literacy skills could improve personal and business savings and improve their financial performance significantly across this region. Previous empirical studies postulate that the majority of SMEs in the Ho Municipality do not keep proper accounting records of their businesses (Dodor et al., 2017; Zotorvie, 2017).

Also, having a bank account improves economic activities. However, according to the Ghana Statistical Service (2019), only 34.2% of people in the Volta Region have an account in a commercial bank compared to 70% and 37 % in Greater Accra and Western Region respectively. The inability to use a bank account could hamper SME managers' ability to apply for working capital to meet their growth objectives and improve performance. Entrepreneurship has become the driving force in recent years for many developing countries like Ghana and will probably remain for the foreseeable future (Li et al., 2017). This implies that for any individual and business in Ho in the Volta Region of Ghana to explore and take the opportunity to set up a new business and manage it effectively, individuals and businesses alike must have a critical understanding of entrepreneurship and possess skills such as financial literacy to manage, grow and sustain the business.

However, in the Ho Municipality, SME managers find it challenging to implement the required accounting management practices that help manage businesses in a cost-effective way to improve performance (Dodor et al., 2017). In a similar vein, most SMEs in the Volta Region of Ghana are unable to keep proper accounting records of their date-to-date business activities (Zotorvie, 2017). Inevitably, managers are unable to determine or monitor the success of their businesses without any effective record of business activities. The region is, however, strategically located with many SME sectors such as trading, hospitality services, transport and distribution services, with many operating in the regional capital. It is, therefore, important to investigate the performance of these businesses by exploring all the contextual issues preventing SME managers from acquiring the required skills to manage their businesses effectively. The discussion above provides a strong justification for the choice of this region to investigate the impact of financial literacy on SMEs in other to improve the economic activities in the Volta Region of Ghana.

5.5.1 The Research Population

According to Fowler (2014), a research population is the whole of subjects, thus, individuals as well as organization from which research data is drawn. This means that all subjects in the population must have similar characteristics that conform to or meet the specified selection criteria of the study (Denzin & Lincoln, 2013; Saunders et al., 2019). Based on the above definition, this study population is SME managers and senior employees acting as managers who make critical decisions in line with the research objectives and who are based in the Volta Region of Ghana. This population holds key information about the SMEs of interest, with similar characteristics and relevant to answer the research questions (Creswell, 2012). As postulates by Burns and Grove (2001), a research population must meet all the eligibility criteria specified in accordance with a research objective. Based on the research objectives for this study, the population of the study is drawn from the 841 estimated number of registered SMEs in the Ho Municipality of the Volta Region of Ghana.

5.5.2 Unit of Analysis

The unit of analysis for this study is SME managers who make both financial and operational decisions for the business. A unit of analysis is the central element or object such as an individual, a group or an organisation from which data is attained in a study (Grünbaum, 2007). In other words, a unit of analysis is the entity from which a researcher is interested in drawing a conclusion at the end of a study (Sheppard, 2020). The unit of analysis can also be referred to as the main group of elements that are selected from the sample (Blumberg et al., 2011). Based on this, SME managers are considered as cases where data is drawn to answer the research questions. This means that SME managers' financial literacy skills are measured and analysed against SME performance in the area of employment, sales and profitability.

5.5.3 The Sampling Criteria

The sampling criteria is the strategy set out by the researcher to ensure the sample selected for the study represents the population from which they are drawn. This means that elements in the population to be included in the study must possess specific characteristics that meet the research aims and objectives (Denzin & Lincoln, 2013). Based on the above, to answer the research questions, all SMEs must meet the following three criteria as part of the study sample.

1. The SMEs must be in business for not less than two years.
2. The SMEs must be domiciled in Ho.
3. The SMEs need to be registered with the Registrar General's Department or the District/Municipal Assembly.

The above inclusion criteria set the stage for potential participant recruitment, and this plays a significant role in the feasibility of this research. Therefore, the researcher adheres to these criteria while recruiting participants to prevent skewness of the results and avoid inaccurate data to the study results which could lead to false conclusions.

The researcher is also aware that too narrow of a criterion could lead to a sample size that yields insignificant amounts of data. Equally, the over-expanding of criteria can lead to data that is clouded by external factors. Therefore, the criteria set out above find the perfect balance to investigate the impact of financial literacy skills on the financial performance of SMEs operating in this region. Selecting only SMEs operating in the Volta Region enables the researcher to understand all the contextual issues impacting the lack of human capital development regarding financial literacy skills acquisition and how this could be improved and promote economic activities in the region. This is important given that the main contributions to the knowledge of this study are to promote human capability development, management practices within SMEs, and the development and implementation of public policies regarding financial literacy to help support SME growth and sustainability across the board.

Critically, evidence suggests that most businesses fold up within the first 2 years of their establishment (Wise, 2013; Eniola and Entebang, 2015). Engaging with businesses that have been in operation for more than two years provides the confidence that these businesses are stable, therefore, managers of these businesses could provide vital data regarding their challenges and successes which need exploring for the richness of the research findings. It is also important to engage with businesses that have operated for more than two years as this helps gain a fair reflection of SME managers' experiences.

Lastly, this study also engages with businesses that are registered with either the District Assembly or the Registrar General Department. This is important as the National Board for Small Scale Industries (NBSSI) is the main government body that provides support for SMEs such as organising training programmes for businesses, advisory roles on business operations and some occasions, providing financial assistance in the form of loan schemes which SMEs can only benefit from if they are registered. It is, therefore, crucial to understand from the SME owner's perspective through the qualitative method the experience of some of these training and how these could be improved to meet SME growth potential. It is also important to ascertain whether this institution is doing enough to promote financial literacy skills among SMEs to improve their financial performance. This is because there is compelling evidence that this institution might not obtain the funding needed to deliver its supporting roles effectively due to some level of political interference (Ntiamoah et al., 2016).

Ho has been the capital region, most SMEs would have more opportunities for training, and benefit from government machinery for support.

5.5.4 The Sampling Technique

A stratified sampling technique is adopted for this study to select the sample. By adopting a stratified sampling method, the target population is divided into strata where sample is selected randomly from each subgroup to represent the entire population (Pradhan, 2013). This means that the target population (SME managers in Ho of the Volta Region) is divided into strata such as manufacturing, general services, trading, transport and distribution, education, agriculture and hotels and restaurants where stratified random sampling technique is deployed to select SME managers from each stratum to represent the entire population (Ye et al., 2013). Using a stratified sampling technique, each element or case in the population has an equal and independent chance of being involved in the study and allows the researcher to minimise sampling error due to its probability nature (Jing et al., 2015). Unlike non-probability sampling techniques, the target population does have equal chances of being selected to take part in the study (Saunders et al., 2019).

Even though sampling error cannot be avoided completely, adopting a stratified random sampling technique offers precision, and convenience and more importantly, provides better coverage of the research population (Lapko and Lapko, 2014). Also, choosing sample techniques largely depends on the study types, sample availability, time and resources available to undertake research (Hair et al., 2006). Given that the study is for academic purposes only with limited time and resources, adopting a stratified random sampling technique is justified. Even though this study adopts a stratified sampling technique, there are other forms of probability sampling that some researchers may consider based on the nature of the study design. These are simple random sampling, systematic sampling and cluster sampling (Saunders et al., 2019).

5.5.5 Sample Size Determination

The ability of every researcher to determine the appropriate sample size is crucial in every research process. This is because an inadequate sample size or too large a sample size could impact the quality of the research findings significantly. Some scholars argue that the larger the sample size, the less likely it is to generate errors in generalising research findings to the population (Saunders et al., 2019). This is because a larger sample size often results in normal distribution during the data analysis stage (Saunders et al., 2012). This implies that the sample size has statistical power when it is large to represent the research population. Therefore, to determine the best sample size, it is important that the researcher ensure that efficiency, representativeness, reliability and flexibility are given optimum priority (Kothari, 2011). According to Desu (2012), a sample size is a number obtained which is a representative of the population from which the research data is gathered. When determining the study sample size, It is important that the researcher select a sample size that is adequate in determining a statistical result which is correct within a predetermined error range and has enough power to identify a given significant effect. For the quantitative data collected, this study adopts Yamane (1967) sample size determination formula as indicated below:

$$S = \frac{N}{[1 + N(e^2)]}$$

From the formula above, S = sample size, N= target population and e = marginal error (degree of freedom = 0.05 (5%). The sample size for each of the strata was established from table 6.2 below:

Table 5.2: The Quantitative Study Sample Size Determination

Manufacturing (2%)	General services (13%)	Trading (61%)	Transport and distribution (11%)	Education (3%)	Agriculture (2%)	Hotels and Restaurants (8%)
S= 17 [1 +16.82 (0.05^2)] =10 1+(17X0.0025) =17 1+ 0.0425 = 17 1.0425 = 16	S=109 [1+109(0.05^2)] = 109 1+(109×0.0025) = 109 1+0.2725 = 109 1.2725 =86	S=513 [1+513(0.05^2)] = 513 1+(513×0.0025) =513 1+1.2825 = 513 2.2825 =225	S= 93 [1 + 93 (0.05^2)] = 93 1+(93x0.0025) =93 1+0.23 =93 1.23 =75	S= 25 [1+25(0.05^2)] =25 1+(25x0.0025) =25 1+0.062 = 25 1.062 =24	S=17 [1+17(0.05^2)] =17 1+(17x0.0025 =17 1+0.042 = 17 1.042 =16	S=67 [1 + 67 (0.05^2)] = 67 1+(67x0.0025) = 67 1+0.167 =67 1.167 =57

From the above table, a total of 499 SME managers were selected from the strata and represents the sample size for the quantitative data collected. A stratified random sampling technique was also deployed to select 10 SME managers for the qualitative data. Table 6.3 below presents the sample size determination for the qualitative data.

Table 5.3: Sample size Determination for the Quantitative Study

Strata	Quantitative Sample Size	Qualitative Sample Size	Total
Manufacturing (2%)	16	(16/499) × 10	1
General services (13%)	86	(86/499) × 10	1
Trading (61%)	225	(225/499) × 10	4

Transport and distribution (11%)	75	(75/499) × 10	1
Education (3%)	24	(24/499) × 10	1
Agriculture (2%)	16	(16/499) × 10	1
Hotels and Restaurants (8%)	57	(57/499) × 10	1
Total	499		10

5.5.6 The Sampling Procedure

The contact details of SMEs operating in Ho of the Volta Region of Ghana are obtained from the Ho Municipal Assembly list of registered SMEs. This database helps identify SME managers who met the selection criteria and then put them into strata. SME managers are then selected from each stratum to take part in both the survey and interview as a representation of the target population. Given that the study adopts stratified random sampling, which is probability sampling, each SME that meets the selection criterion is given an equal chance of being selected (Lewis and Saunders, 2012).

5.5.7 Sources and Types of Data

This study used primary data to answer the research questions. Thus, the quantitative data is collected first using a survey questionnaire followed by the qualitative data using an interview facilitated with a semi-structured questionnaire. For quantitative data, 636 questionnaires were distributed to SME managers operating in Ho municipality of the Volta Region of Ghana. Out of 636 questionnaires that were distributed, 499 were retrieved. In addition, 10 interviews were conducted using a semi-structured questionnaire for the qualitative data.

5.6. Measurement of Financial Knowledge Construct

The instruments used to measure financial knowledge are drawn from key fundamental areas in financial decision-making such as knowledge of interest rates, inflation, insurance, risk diversification, debt management and investment which are adopted from Atkinson and Messy (2012) and Hasler and Lusardi (2017) and OECD (2019) which is survey instrument for measuring the FL of SMEs.

5.6.1 Knowledge of Interest Rates

It is important that SME managers have knowledge about their borrowings. Knowledge of compound interest was measured using four (4) items specifying the difference between compound and simple interest and how this will inform investments, borrowing and financial planning decision-making. The items were adopted from Atkinson and Messy (2012) and Hasler and Lusardi (2017) but modified to answer the research questions. The items were measured using a Likert scale of strongly disagree (1) and strongly agree (5) to establish SME managers' level agreement.

5.6.2 Knowledge on Inflation

It is important to test SME managers' level of the economic situation. This is because economic behaviour could be affected by perception rather than the actual knowledge possessed by the individual (Lusardi and Mitchell, 2007). As a result, knowledge on inflation was measured using three (3) items of self-assessed measures of economic knowledge using a five (5) point Likert scale of strongly disagree (1) and strongly agree (5) which are adopted from Atkinson and Messy (2012) and García-P´erez-de-Lema et al. (2021).

5.6.3 Knowledge on Risk Diversification

Risk diversification was measured to have a good overview of SME managers' basic knowledge of reducing the risk of investments. Three (3) items were used to measure Knowledge of risk diversification which were adopted from van Rooij et al. (2011) and Atkinson and Messy (2012) and modified to answer the research questions. These items were measured on a Likert scale of strongly disagree (1) to strongly agree (5).

5.6.4 Debt Literacy

Debt literacy is measured by asking participants if they usually pay their loans on time to avoid fines for non-payment or late loan payments. The ability to manage debt and prevent over-indebtedness denotes the application of financial knowledge. This particular measure is adopted from the OECD (2011) which is an internationally comparable survey questionnaire for measuring FL and Lusardi and Tufano (2015) but modified to meet the research objectives. Participants are also asked whether they consider several loan products from different financial institutions before deciding on a loan application. Measurement also involved understanding financial knowledge and its application to control debt by asking participants whether uncontrolled borrowing is risky and can increase business debt. A total of six (6) questions are developed to measure SME managers' debt management skills using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

5.6.5 Investment Literacy

An SME's ability to understand and explore investment options and monitor returns promptly is crucial to their growth objectives (van Rooij et al., 2011; Von Gaudecker, 2015). Items of investment literacy measures are adapted from existing literature (van Rooij et al., 2011; Sivaramakrishnan et al., 2017). Participants are asked whether “an investment with a high return is likely to be a high risk for my business” and whether “it is safer to have multiple business investments compared to just one”. The items are modified partially to make the scale more suitable for the current study in the Ghanaian context. The questionnaire contains 5 items on the Likert scale ranging from 1 to 5 where 1= strongly disagrees and 5= strongly agree.

5.6.6 Insurance Literacy

Insurance literacy measures are adopted from the OECD (2013). SME managers' insurance literacy skill was measured by a total of five (5) items such as, “I understand the importance of business insurance”, “I understand that the terms of my business insurance premium could affect my business operation”, “I do have information about insurance products that are appropriate for my business” A total of five questions are developed using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

5.7 Measurement of the Financial Behaviour Construct

5.7.1 Budgeting Behaviour

Budgeting behaviour is measured by asking participants if they set specific or general financial goals and also whether they set a monthly budget for their business finances. These particular items are adopted from Shefrin and Nicols (2014) and the World Bank (2018), a study conducted specifically to measure the financial capabilities of SMEs. Some of the samples of the item used are “I have a written business budget, which tells me how much is spent on operation cost to help reduce business debt”, and “I set a specific financial goal for capital injection into my business”. A total of five questions are developed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to measure SME managers’ budgeting skills.

5.7.2 Record-Keeping Behaviour

Record keeping is measured using cash-flow management records, accounting records and business plan writing skills which are adopted and adapted from the World Bank (2018), a study conducted specifically to measure the financial capabilities of SMEs and McKenzie and Woodruff (2017), a study to investigate business practices in small firms in developing countries. Examples of the items used to measure record-keeping skills are mainly around whether participants have a cash book in which they record all business revenues and expenditures and whether they separate business finances from personal finances to understand the trend of the business’s success and failure. A five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to measure each of the items on record-keeping skills.

5.7.3 Risk Management Behaviour

Different studies used various proxies to measure risk management practices across businesses. The key dimensions used to measure risk are risk identification, risk assessment and risk monitoring which are adopted from Dahmen and Rodr’guez (2014), Sax and Torp (2015), Rehman and Anwar (2019) and Al-Nimer et al. (2021). The scale consisted of five items, with sample items such as “I have standard procedures in place for identifying major risks and opportunities”, “I always analyse identified risks when deciding on product/service selection” and “I regularly prepare risk reports to monitor any potential risk”, “I carry out a monthly financial analysis of monthly financial statements to identify any risk”. The items included in the questionnaire were put on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

5.7.4 Savings Behaviour

Effective savings behaviour has long been established to be a vital component for both personal and business wealth accumulation and more importantly, as a buffer to withstand any unforeseen economic situation. It is, therefore, important that SME managers acquire an acceptable level of FL skills to prevent potential long-term financial insecurity which hampers SME performance objectives. Key items used to measure SME managers' savings are adopted from the World Bank (2018), a study conducted specifically to measure the financial capabilities of SMEs and the OECD/INFE (2020) survey instrument used to measure the FL of

SMEs. The items are adapted to meet this research objective. Participants are asked whether they know the importance of savings for their business growth, if they set a specific financial goal to meet business savings objectives and whether they keep cash reserves beyond what is needed for their regular business operations. The items on the questionnaire consist of a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) is used to measure savings skills.

5.8 Digital Capability

A digitalised SME sector improves management strategy among SMEs, particularly in developing countries like Ghana where digital technology adoption is very patchy (Mabula and Ping, 2018). The digital literacy measure was adapted from existing literature (Kulathunga et al., 2020; García-P´erez-de-Lema et al. (2021). Participants are asked whether they use computerised accounting software to prepare financial reports", "use the online banking system to do banking activities" and whether they use a computer system to keep an electronic record, which could help SME manager manage their accounting systems and all other records which simplifies their performance management. A total of five questions were used on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

5.9 Control Variables

It is observed that certain factors such as firm age, industry type, age of manager, educational attainment and gender play a major role in SME performance (Anderson and Eshima, 2013). This research adopts these factors into the research model as control variables to explain any potential variance in the outcome variable.

5.9.1 Firm Age

Organisational policies and strategies developed over the years could prove an important factor that drives SMEs to access certain specific training such as FL. Through access to FL training, SME managers could develop top management skills to make effective and prudent financial decisions to improve performance. Such training could provide innovativeness, and this could also depend on how long the firm has been in operation. This means that age is a significant factor in firm growth. This study measures a firm's age on a scale of 4 representing the number of years the business has been in operation {(2-5(2), 6-10(3), 11-15(4), and more than 15 years (5)}.

Evidence suggests that the older you are, the lesser financial literacy skills an individual possesses (Klapper and Lusardi, 2020). This implies that the age of an SME manager could determine the level of FL he or she possesses. Based on this, managers' age is measured using age groups using the following categories. Under 25 (1), 26-35 (2), 36-45 (3), 46-55 (4) and 55+(5). This measure has been persistently used in other studies (Beckmann, 2013; Bucher-Koenen and Lusardi, 2011; Gamble et al., 2014).

5.9.2 Industry Categorisation

The industry category where SMEs operate could prove important to their survivability and financial performance. To understand how the industry category could impact on SME performance, managers were asked to identify their businesses under the following categories: agriculture sector (1), manufacturing (2) construction (3), general services (4) general trading (5), hotels and restaurants (6), education (7) transport and distribution (8). These measures were adopted from previous studies which similarly measured industry type based on the above-mentioned categories (Agnew and Harrison, 2015; Bucher-Koenen et al., 2017).

5.9.3. SME Manager’s Educational Attainment

Empirically, FL and educational attainment are significantly linked (Morgan and Trinh, 2019). This implies that the higher an SME manager's educational attainment, the higher the level of FL skills he or she has to make strategic financial decisions to improve performance. According to Newman et al. (2014), managers with higher educational background do possess special knowledge and skills in accounting management practices, numeracy and marketing skills which are crucial for effective date-to-date management decision-making. Based on this, educational level was measured using six educational categories such as; no formal education (1), primary school (2), secondary education (3), an undergraduate degree (4) and postgraduate degree (5) which is persistently used in previous studies (Christelis et al., 2010; Lusardi and Mitchell, 2011).

5.9.4 Gender

Consistently, empirical studies established that women are financially less capable compared to men (Lusardi and Mitchell, 2014; Hasler and Lusardi, 2017; Preston and Wright, 2019). Given that FL skills are fundamental to SME financial decision-making and subsequent financial performance, based on the above evidence it could imply that women managers will be less capable of managing SMEs adequately compared to men. To understand how gender impacts on managers' FL skills acquisition, gender is measured using 0 to represent male and 1 to represent female which was used in previous studies (Agnew and Harrison, 2015; Bucher-Koenen et al., 2017).

5.10. Performance Measurement

Performance measurement is a multidisciplinary topic that is highly studied but remains challenging to measure due to the lack of standardised definitions and measurement tools. This implies that deciding on SME performance indicators continues to pose a major challenge for many researchers (Fatoki, 2011). Traditionally, performance measures were initially limited to financial indicators. However, measuring performance under the objective parameter where indicators such as profitability, competitiveness, efficiency, and productivity are used have lived its usefulness (Raymond et al. 2011). With the rapidly changing technology and societal views and behaviour, performance measurement requires a multi-dimensional model (Van Looy and Shafagatova, 2016). This implies that it is important that subjective performance indicators such as the stakeholder's satisfaction and quality of human resources indicators are included as performance measure to improve performance (Storey, 1994). This means that it is prudent for SME managers to combine both financial and non-financial performance indicators to measure their business performance. Performance indicators ought to be multifaceted, thus, combining non-financial metrics like manager satisfaction overall, employment growth, customer satisfaction, employee satisfaction, customer loyalty, and brand awareness with financial metrics like profitability, sales growth, market share, and returns on equity to accurately assess a company's performance (Storey, 1994; Blackburn et al., 2013).

However, the literature argues that performance indicators should be organisational based as performance is derived from a firm's growth objectives, strategy, mission and vision (Van Looy and Shafagatova, 2016). Based on this, many authors proposed various performance indicators. For example, Raymond et al. (2011) proposed that SME performance is measured using indicators such as competitiveness, profitability, efficiency, and productivity. In the same vein, Fatoki (2011), also indicates that performance is measured using indicators such as profitability, sales growth, market share, and return on equity. But non-financial performance indicators have become increasingly popular in the literature. For example, managers' overall satisfaction, employee satisfaction, employment growth, customer satisfaction, customer loyalty, and brand awareness have all become prominent in the literature as performance indicators According to (Blackburn et al., 2013). Considering the various dimensions of performance indicators, this study aims at measuring performance objectively rather than the subjective approach (Storey, 1994; Magableh et al., 2011). Based on the conceptual model in Chapter 5 and the extensive literature review, the following performance measures are adopted:

- Profitability
- Sales growth

- Employment growth.

5.10.1 Profitability

Profitability has emerged as one of the dimensions to measure SME performance (Raymond et al., 2011). Empirically, a firm's turnover and return on assets is a very important growth indicator for SMEs, particularly where access to resources is limited (Roper, 1999). This implies that SME managers must make strategic decisions to effectively use resources to improve sales growth and market share in their quest to increase profitability. Based on this, profitability has become a prominent measure for SME performance. This study, therefore, measures profitability by considering the profitability data from 2017 to 2021 for each SME.

5.10.2 SME Sales Growth

SMEs must develop strategies to improve sales of their goods and services as this symbolises performance and growth (Fatoki, 2011). This implies that sales growth increases cash flow for SMEs to meet their financial needs. This makes sales growth an important performance metric for SMEs (Paglia and Harjoto, 2014). Based on this, SMES must be supported to develop capabilities that enable them to have access to credit and develop innovative products, customer management skills and marketing skills to increase sales. While it has been argued empirically that sales figures could not be relied on as a true measure of performance, nevertheless measuring SME performance using sales growth is an important step in identifying performance trends (Davidsson et al., 2010). As a result, the researcher adopts sales growth as a performance indicator using real sales data from each SME for a period of five years (2017-2021).

5.10.3 Employment Growth

SMEs' employment growth has been widely used as a key indicator of firm performance (Storey, 1994). The researcher, therefore, adopts employment growth as a performance measure. As a result, employment data on both skilled and unskilled labour of SMEs from the period 2017 to 2021 is used to generate business growth.

5.11 Research Instruments

5.11.1 Survey Questionnaire

The researcher adopts a survey questionnaire for the quantitative data collection. The researcher made consensus efforts to minimise and prevent low coverage, sampling error, non-response, and measurement errors before the questionnaire was deployed (Ponto, 2015). As expressed by Saunders et al. (2012), it is important that researchers ensure that a survey questionnaire is specifically designed to maximise the response rate and ensure the legitimacy and quality of the research data is maintained. With this in mind, the researcher ensures that the questionnaire items are carefully written and reviewed to ensure easy understanding by participants so that the questionnaire measures precisely what is meant to measure and ensures that it answers the research questions (Wrenn et al., 2002).

To improve the objectivity of statistical analysis, the questionnaire is developed and administered by the researcher to all respondents to ensure that accurate data is captured (Polit and Beck, 2012). Given that this study aims to collect a larger data set from SME managers in different locations in the Ho Municipality, the use of a questionnaire is suitable and appropriate for this course (Yin, 2009). As explained eloquently by Saunders et al. (2019), the questionnaire is the most widely prominent data collection instrument within a survey strategy. By doing so, each SME manager was asked to respond to a similar set of questions in a predetermined manner which is an effective way to collect a large data set before the quantitative analysis. Given that a good questionnaire design could sometimes pose challenges for many researchers (Bell and Waters, 2014), the researcher designs the questionnaire to allow individuals to remain anonymous while responding to the survey. To maximise the response rate, the researcher ensures that there is a short introduction on the first page of the questionnaire different from the initial cover letter to respondents stating that participating is voluntary (Dillman et al., 2014). The researcher also ensures that the questionnaire is clear and unbiased to promote maximum response.

The survey questionnaire comprises four sections. Section A covers the demographic data such as gender, age, marital status, education and experience of the SME manager. While section B comprises the business profile such as business name, registration type, age of the business and the industry category, section C comprises FL questions that test SME managers' financial knowledge and financial behaviour of SME managers. Section D, which is the final section, presents the SMEs' financial performance in the areas of employment, sales, and profitability. A Likert scale between 1 (strongly disagree), and 5 (strongly agree) is used to test the impact of FL skills on financial performance measures. A sample of the survey questionnaire is attached in the Appendix.

5.11.2 The Interview Questionnaire

The researcher deployed interviews for the qualitative data collection. This is because interviews are flexible techniques for exploring deeper and richer insight into a subject or phenomenon either face-to-face or by telephone (Polit and Beck, 2012). To ensure that the interview questionnaire yields a higher response rate, the content, and structure of questions are organised and consistent for easy understanding by SME managers to promote the reliability of the study (Creswell, 2009; Creswell and Clark, 2017). As suggested by Bryman and Bell (2015), the interview questions are designed to ensure that the interviewer asks further questions to explore further any response provided. Despite some known weaknesses of interviews such as their biased nature due to the presence of the researcher and their laborious nature due to time (Creswell, 2009; Brink et al., 2012), deploying interviews in the qualitative data collecting process provides detailed and a more holistic view on the contextual issues preventing some SMEs in acquiring the needed human capital such as the FL to improve performance.

The interview questionnaire comprises 4 sections. Section A covers the business profile. While Section B presents the financial knowledge questions, Section C deals with how SME managers apply financial knowledge in day-to-day business management. Finally, Section D covers performance questions in the area of employment, sales growth and profitability.

5.12 Research Data Collection

Based on this study objectives, two main stages of the data collection process are deployed. In the first stage, quantitative data is collected using a survey questionnaire. The second stage comprises qualitative data collection where a semi-structured questionnaire was deployed to get a better insight into contextual issues affecting SME FL skills acquisition to help address performance-related concerns.

5.12.1 Quantitative Data Collection

This study deployed an explanatory sequential strategy and as a result, quantitative data was collected first. Before the start of quantitative data collection, an introduction letter from Demonfort University, Leicester, was sent to all SME managers that met the selection criteria detailing clearly the research aims to improve positive engagement (Traugott et al., 1987; Lavrakas, 1993). After the letters were disseminated to those managers that were sampled, the researcher contacted each of them and arranged a suitable place and convenient time to administer the questionnaire. In most cases, most of the respondents completed the questionnaires during the first visit, but on a few occasions when the respondents were busy or had to attend to some urgent issues, a week was agreed in consultation with the respondents to respond to the questionnaire which was later collected.

The data was collected largely in English. On some occasions when some respondents found it challenging to understand some aspects of the questionnaire, as a native speaker of the local dialect (Ewe), I used the local language to facilitate the understanding of the questionnaires to those individuals affected. As suggested by Saunders et al. (2012), all participants must understand the survey questionnaire to ensure that they are answered honestly, and accurately and to increase response rates.

5.12.2 Qualitative Data Collection

Qualitative data collection is the second stage of the data collection process for this study, and this began after four weeks of the quantitative data collection. To ensure better engagement and help establish rapport with SME managers, a meeting was first arranged via the telephone to agree with each owner or manager on the venue and time for the interview. This is very important to ensure that the consent of the interviewees as well as the consent to record them during the interviews is obtained prior to the whole interview process. A semi-structured questionnaire is deployed to explore systematically each predetermined list of themes with each participant. This enables the researcher to compare participants' responses specifically to each theme which helps identify any underpinning reality of what is been investigated (Saunders et al., 2019). Using semi-structured interviews also helped the researcher explore respondents' experiences, behaviour and understandings of the research topic. Throughout the whole data collection exercise, effective communication skills such as nodding the head, keeping eye contact and speaking in an acceptable tone to ensure comfortable interaction with the respondents. The researcher also constantly reassured respondents that their personal information and identity would be kept confidential and none of their personal information would be disclosed without their consent. To ensure that respondents are not easily identified, the researcher used numbers 1 to 10 to capture their responses. Also, in instances where participants found it challenges to understand the interview questionnaire, as a native speaker, the researcher facilitates the understanding in local language (Ewe) for easy understanding for those with limited literacy to enhance participation rate.

5.13 Data Analysis Technique

5.13.1 Quantitative Data Analysis

The quantitative data was analysed using both Statistical Package for Social Science (SPSS) version 28 and SmartPLS version 4. First, SPSS is deployed as it is easy to perform both parametric and non-parametric comparison analyses (Ong and Puteh, 2017). SPSS is also used as it is capable of validating variable items, and test assumptions and is mostly suitable to perform frequency analysis with ease (Pallant, 2015). The Exploratory Factor Analysis (EFA) was conducted using SPSS to validate the variable items given its optimal statistical package that provides comprehensive output from a principal components analysis (i.e., using eigenvalues) compared to other statistical software (Ong and Puteh, 2017).

However, the researcher used SmartPLS as the main data analysis tool as it has the ability to test all variables simultaneously more robustly than traditional SPSS (Ong and Puteh, 2017). The model that underpinned this study looks complex due to the number of paths identified and its associated hypotheses. Given that PLS-SEM is better suitable for complex research models, the researcher deployed the SmartPLS due to its special feature that tests measurement and substantive models to examine the relationships among constructs more effectively and efficiently. SmartPLS also offers flexibility in data analysis due to its special power to process different types of nominal, ordinal, interval and ratio data (Hair et al., 2011) which justified its use to analyse this study's data. Finally, the researcher used SmartPLS as it does not require normality assumptions to be fulfilled which makes it more flexible to use to analyse data.

5.13.2 Qualitative Data Analysis

Thematic analysis was used to identify various sub-themes from the interview which answered the research questions and objectives. The researcher also found it helpful to transcribe the interview to ensure that all valuable information is captured. Through transcribing, the researcher ensures that qualitative data is carefully analysed and explored to ensure that any questions that were not answered through quantitative mean is picked up by the qualitative analysis. This is done to ensure that both qualitative and quantitative data analysis complement each other to enable the researcher to present a validated research model.

As eloquently explained by Bazeley (2013), any data analysis from an interview should start by listening to interviewees' verbatim responses before transcribing, reading and re-reading to ensure an in-depth qualitative research process, thereby, improving the rigour of qualitative research findings. Based on this, the qualitative data analysis from this study is analysed meticulously through five main processes. Below are the five main processes that the researcher followed:

Oral data processing: this is an important stage where the researcher listens to the recorded audio to have a holistic understanding of the respondents' experience.

Data transcription: The researcher reproduces verbatim all responses of the interviewees to form a brief abstract of the key storyline from the interview questions that were asked and generate meaning.

Reading and note-taking: At this stage, the researcher reads every single transcribed data and makes note of key issues emerging from the data which are related to the topic.

Clustering: The researcher tests the appropriateness of the data and thereby puts similar topics and issues together in a table form covering the main subject under study.

Thematic analysis: This is the stage where the researcher begins to put into themes all responses from the respondents and systematically analyse them to generate meaningful outcomes.

5.14 Pilot Study

The researcher conducted a pilot study before the start of main quantitative study. This is to ensure that all necessary modifications are done to avoid validity issues and the likely inconsistency of the data collected during the main study (Saunders et al., 2009). According to Brinke et al. (2012), a pilot study is a scaled-down version of the primary research. The pilot study's goals are to pre-test the questionnaire instrument to make sure the necessary adjustments are made to increase the study's feasibility and to assess the instrument's internal consistency.

During the pilot study, the researcher selected 50 SME managers who did not part of the main respondents selected. It was observed that some respondents feel reluctant to provide information about their profitability and sales for fear that this information could be used by the internal revenue to increase their taxes. As a result of this, modifications were made to make it easier for the respondents to understand the wording and to reassure them. The modification was done to capture these data using a range of sales and profits profit before the start of the main quantitative study. Using SPSS, the internal consistency of the items was tested using Cronbach's alpha. The analysis revealed that all the constructs were above 0.7 thresholds. Table 6.4 and 6.5 below provides a detailed illustration of the reliability test of the constructs during the pilot study.

Table 5.4: Reliability test of financial knowledge construct for the pilot study

Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Item	Number of Items
Interest Rates	0.911	0.915	4
Inflation	0.874	0.883	3
Risk Diversification	0.894	0.894	3
Insurance Literacy	0.775	0.807	5
Investment Literacy	0.811	0.797	5
Digital Literacy	0.805	0.832	6
Debt Literacy	0.815	0.829	6

Table 5.5: Reliability test of financial behaviour construct for the pilot study

Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Item	Number of Items
Budgeting	0.838	0.841	5
Savings	0.717	0.768	5

Record Keeping	0.899	0.904	7
Risk Management	0.982	0.982	6

5.15 Validity and Reliability Tests

5.15.1 Constructs Validity

To ensure that construct validity is established, the study is designed and conceptualised to ensure that it measures what it intended to investigate (Taherdoost, 2016). Validity is an important factor when selecting and applying a research instrument (Almanasreh et al., 2019) and as a result, the researcher ensures that the study instrument is validated as a good research practice for the robustness of the results. In other words, the researcher ensures that the data collection instrument covers the actual area of what the study aims to investigate as this is important in establishing the credibility of research findings (Bryman and Bell, 2011). Validity simply means the ability of the study to measure what is intended to be measured (Creswell, 2014; Taherdoost, 2016). Against this background, validity is, therefore, the most credible and representative of a research process and results (Polit and Beck, 2012).

Construct validity has two components: namely convergent and discriminant validity. Discriminant validity which is sometimes called divergent validity is the degree to which the measures of different constructs have no relationship or are minimally correlated with one another (Rönkkö and Cho, 2022). On the other hand, convergent validity refers to the extent to which different measures of the same construct converge or strongly correlate with one another. Factor analysis is often deployed using principal component analysis (PCA) with the varimax rotation method to ascertain construct validity (Koh and Nam, 2005). In addition to construct validity, other forms of validity exist across the literature namely, content validity, face validity and criterion validity (Taherdoost, 2016).

Content validity is often a qualitative means of ensuring that items on an instrument adequately reflect broadly the content and operational definition of the construct through an exhaustive literature review (Taherdoost, 2016; Almanasreh et al., 2019). This implies that the content of a test, survey questionnaire, or measurement items must cover all relevant parts of the subject it aims to measure.

Another form of validity is criterion validity. Criterion validity refers to the degree to which test scores can predict specific criterion variables and predict a concrete outcome. criterion validity is often established by a high correlation which gives a good indication that your test is measuring what it intends to measure (Taherdoost, 2016). Two types of criterion validity exist namely, concurrent validity, predictive and postdictive validity.

Finally, face Validity refers to the extent to which measurement instrument content appears linguistically and analytically relevant to the person taking the test. This implies that the researcher must subjectively ensure that the items in the instrument are relevant, reasonable, unambiguous and clear to measure what it is intended to measure (Oluwatayo, 2012).

As suggested by Taherdoost (2016), validity cannot be achieved without reliability. As reliability is a prerequisite for validity, the researcher ensures that reliability is first achieved. This study's validity is, however, achieved through content and construct validity. To ensure content validity is obtained, the researcher designed the data collection instruments that represent all variables through an extensive literature review with good logic, intuitive skills and perseverance with careful consideration of the study objectives. Furthermore, to ensure that the suitability of the questionnaire is assessed, the questionnaire is sent to 100 SME managers for a pretest to ensure that the questionnaire items match what it intends to measure.

5.15.2 Constructs Reliability

The possibility of research replicability is very important in quantitative research. This implies that similar results should be obtained when the research adopts a similar methodological approach using the same sample within a certain limit of experimental error or random error (Cohen et al., 2008). This means that reliability depends heavily on consistency, reproducibility or replicability over time using similar instruments and respondents within the same context. Based on the above account, reliability in research refers to the consistency of a study results should the study be repeated over a period in a similar context (Bazeley, 2013). To achieve this, it is important that the scale have high internal consistency reliability and ensure that the items of a scale “hang together” and be able to measure the same construct. Most often, the Cronbach Alpha coefficient is commonly used as internal consistency measure when using Likert scales (Whitley et al., 2012). Based on this, the reliability of this study is established using Cronbach’s α test of the variables using SPSS. From the results, both financial Knowledge and financial behaviour constructs had Cronbach’s alpha greater than 0.70, symbolising higher and satisfactory reliability (Hair et al., 2019). Tables 6.6 and 6.7 below show the summary of the reliability test for both Financial Knowledge and financial behaviour Constructs respectively.

Table 5.6 Summary of Reliability Test for Financial Knowledge Construct

Factors	Cronbach's Alpha	Cronbach's Alpha is based on standardised Items	Number of Items	Cronbach's Alpha if the item is deleted
Compound Interest	**0.754**		4	
Items	I know the difference between simple and compound interest rates			0.636
	Investing at compound interest yields much returns than a simple interest investment			0.681
	I understand the total amount I would need to repay on any business loan secured.			0.631
	I prefer to follow my instinct rather than make detailed financial plans for my business.			0.876
inflation	**0.856**		3	
Items	High inflation means that the cost of goods and living is increasing rapidly			0.808
	If the prices of goods you buy double in the next 10 years and your income also doubles, you are likely to buy the same you can buy today			0.728
	If your savings account earns 1% interest per year, but inflation rises to 2% per year you will be able to buy less of your goods for sales			0.877
Risk diversification	**0.824**		3	
Items	It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares			0.637
	It is riskier to put money in one product line than to put in multiple products at the same time			0.574
	I diversify my services and change them depending on the returns/yields			0.962
Insurance literacy	**0.828**		4	
	I understand the importance of business insurance			0.797

Items	I understand that the terms of my business insurance premium could affect my business operation.			0.718
	I understand the cost of business insurance regarding the type of business I do.			0.740
	I have a current insurance cover for my business.			0.908
Investment literacy	**0.811**		5	
Items	An investment with a high return is likely to be a high risk for my business			0.730
	I regularly monitor returns on my business operations			0.724
	I have the skills required to make sound financial investments			0.758
	It is safer to have multiple business investments compared to just one			0.863
	I invest in products that sell quickly with maximum returns			0.801
Debt literacy	**0.815**		6	
Items	Uncontrolled borrowing is risky and can increase my business debt			0.786
	If you take a GH2000 business loan charged at 12% per year compounded annually but only pay a minimum of GH20, you will be in debt for a long time			0.761
	I considered several loan products from different financial institutions before making my decision on borrowing			0.761
	I usually apply for a loan to pay for other business debts when I am struggling financially			0.850
	I consider a business loan that is one-year duration rather than a long-term loan with a higher interest rate			0.747
	I pay attention to the terms and conditions of all business loans applied rather than ignoring them			0.807
Digital literacy	**0.891**		6	
Items	I use mobile money transfer for payment of purchases (products/services)			0.878
	I accept mobile money transfer payments from customers for goods and services bought			0.869
	I use a computer system to keep financial records electronically so that I can alter them easily whenever necessary			0.876
	I use an online banking system to do some banking transactions			**0.877**
	I use a computerised system to manage stock /service delivery			**0.861**

	I use an E-commerce platform for selling goods/service.	**0.873**

Table 5.7 Summary of Reliability Test for Financial Behaviour Construct

Record keeping skill	**0.939**		6	
Items	I have a cash book which I use to record all business revenues and expenditure			0.929
	I separate my business finances from personal finances to understand the trend of business success and failure			0.937
	I use records regularly to know whether sales of a particular product are increasing or decreasing from one month to another			0.926
	I record every purchase and sale made by the business			0.925
	I take stock regularly to ensure the business does not run out of stock			0.926
	I use my business record to identify high-selling items			0.921
Risk management skill	**0.966**		7	
Items	I have standard procedures in place for identifying major risks and opportunities.			0.958
	I always analyse identified risks when making a decision on product/service selection			0.957
	I regularly prepare risk reports to monitor any potential risk			0.986
	I understand the business risk policy for handling major risks that could affect the firm's ability to meet its strategic objectives			0.956
	My business has a policy for handling major risks that could affect the firm's ability to reach its strategic objectives			0.958
	I integrate risk management strategy into daily business operations			0.956
	I carry out a monthly financial analysis of monthly financial statements to identify any risk			0.956
Saving literacy	**0.711**		5	

Items	I know the importance of savings for my business growth			0.610
	I keep cash reserves beyond what is needed for my regular business operations			0.592
	I find it satisfying spending my than to save.			0.794
	I set specific financial goals to meet business savings objectives			0.626
	I consider business savings as a means to deal with unexpected business circumstances			0.677
Budgeting Skills	**0.810**		5	
Items	I have a written business budget, which tells me how much is spent on operation costs to help reduce business debt			0.785
	I set specific financial goals for capital injection into my business			0.773
	I make an annual financial plan for my business and monitor it regularly			0.805
	I have a written business plan that I follow to guide my decision making			0.738
	I adjust all business planning activities according to the changes in an economic situation			0.758

5.16 The Exploratory Factor Analysis (EFA)

After assessing the internal consistency of the questionnaire using Cronbach's Alpha Test, exploratory factor analysis (EFA) is deployed for factor selection to help detect hidden data structures (Treiblmaier and Filzmoser, 2010). This means that using exploratory factor analysis provides a detailed explanation of most of the variances observed and helps understand the structure of the data collected. However, before executing EFA, the researcher ensures that certain statistical and methodological requirements are met. The researcher ensures that the data inspection techniques, the factor analytic method, the factor retention method, the factor rotation method, and the factor loading cut-off are all considered before performing the EFA (Howard, 2016). Given that there are different factor analytic methods such as Principal Components Analysis (PCA), Principal Axis Factoring (PAF) and Maximum Likelihood (ML), it t is also important that researchers consider their preferred factor analytic method. For this study, PCA is considered the preferred “EFA” method as it is the default factor extraction method in SPSS (Costello and Osborne, 2005).

5.16.1 The Exploratory Factor Analysis for Financial Knowledge Construct

Before conducting the EFA, Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were first deployed to examine the suitability of the data. While the Kaiser-Meyer-Olkin (KMO) test measures the adequacy of each variable in the model, Bartlett's Test of Sphericity tests the null hypothesis to ascertain whether the variables are unrelated and not ideal for factor analysis (Field, 2013; Lloret et al., 2017). From the result, the value for KMO is 0.888 which is greater than the recommended value of 0.5. This result indicates a strong partial correlation, hence EFA could be conducted. It is often recommended that a KMO value between 0.8 and 1 indicates that the sampling is adequate (Field, 2013). The result of Bartlett’s Test of Sphericity also revealed a chi-square value of 17670.166 with a corresponding significant p-value of 0.000. This result also indicates that it is appropriate to proceed with the factor analysis. Table 6.8 below shows the KMO and Bartlett’s test results for the financial knowledge construct.

Table 5.8: KMO and Bartlett's Test for financial Knowledge Construct

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.888
Bartlett's Test of Sphericity	Approx. Chi-Square	17670.166
	df	496
	Sig.	.000

Given that the sampling adequacy is met through the KMO test and the suitability of the data through Bartlett's Test of Sphericity, principal component analysis was conducted on all thirty-two (32) items measuring financial knowledge construct. The results from Table 6.9 below revealed a seven-factor solution accounting for 78.7% of the total variance which represents compound interest, inflation, risk diversification, debt literacy, investment literacy, insurance literacy and digital literacy. The results also indicated that factor 1 had an eigenvalue of 14.078 which accounted for 43.9% of the total variation. Also, factor 2 had an eigenvalue of 3.389 representing 10.5% of the total variation. In addition, the result from Table 6.7 indicated that factor 3 had an eigenvalue of 2.343 representing 7.32% of the total variation. Furthermore, factor 4 had an eigenvalue of 1.730 which accounts for 5.4% of the total variation. Finally, factors 5, 6 and 7 have eigenvalues of 1.412, 1.146 and 1.096 representing 4.4 %, 3.5%, and 3.4% of the total variation respectively. Figure 6.1 which represents the scree plot also supports the number of components extracted revealing all seven components are greater than 1. Table 6.9 and Figure 6.1 below explain the above analysis.

Table 5.9: Total Variance Explained for financial Knowledge Construct

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.078	43.992	43.992	14.078	43.992	43.992	6.131	19.161	19.161
2	3.389	10.592	54.584	3.389	10.592	54.584	4.088	12.774	31.935
3	2.343	7.323	61.907	2.343	7.323	61.907	4.087	12.773	44.708
4	1.730	5.408	67.315	1.730	5.408	67.315	3.336	10.425	55.132
5	1.412	4.411	71.726	1.412	4.411	71.726	3.269	10.215	65.347
6	1.146	3.580	75.306	1.146	3.580	75.306	2.848	8.900	74.247
7	1.096	3.425	78.731	1.096	3.425	78.731	1.435	4.484	78.731
8	.954	2.982	81.712						
9	.814	2.544	84.257						
10	.616	1.925	86.181						
11	.522	1.632	87.813						
12	.482	1.505	89.318						
13	.451	1.409	90.727						
14	.443	1.383	92.110						
15	.316	.989	93.099						
16	.314	.981	94.080						
17	.284	.888	94.968						
18	.256	.799	95.766						
19	.212	.662	96.429						
20	.180	.564	96.993						
21	.159	.498	97.491						
22	.135	.423	97.913						
23	.118	.369	98.283						
24	.109	.342	98.624						
25	.098	.306	98.931						
26	.091	.284	99.215						
27	.069	.215	99.430						
28	.060	.189	99.619						
29	.045	.139	99.759						
30	.036	.111	99.870						
31	.025	.079	99.949						
32	.016	.051	100.000						

Extraction Method: Principal Component Analysis.

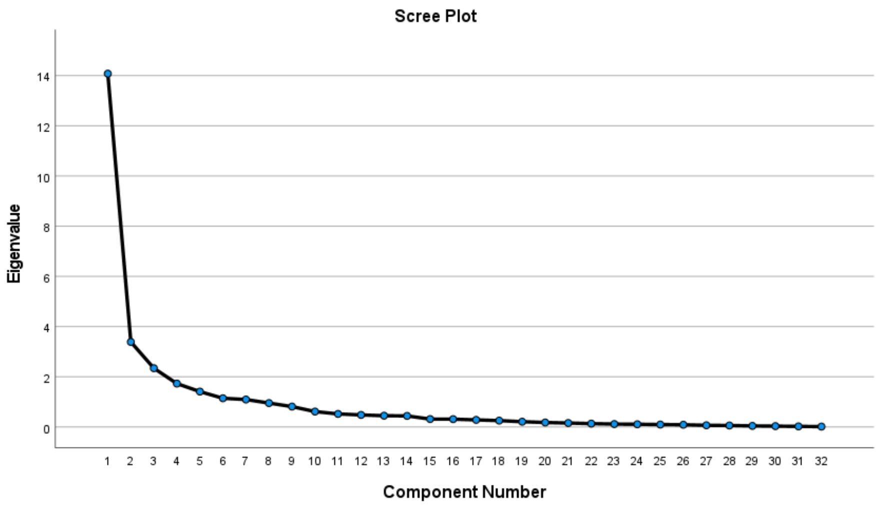

Figure 5.1: Scree plot for financial knowledge construct

6.16.2 The Exploratory Factor Analysis for financial Behaviour Construct

Kaiser-Meyer-Olkin (KMO) and Bartlett's tests for financial behaviour construct indicated that the KMO measure of sampling adequacy is 0.909 which exceeded 0.5 of the recommended value. Bartlett's Test of Sphericity revealed a chi-square value of 14142.572 with a significant p-value of 0.000 indicating sufficient correlations among all the variables measuring the financial behaviour construct. Table 6.10 below shows KMO and Bartlett's test results of the financial behaviour construct.

Table 5.10: KMO and Bartlett's Test for financial behaviour construct

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.909

Bartlett's Test of Sphericity	Approx. Chi-Square	14142.572
	df	276
	Sig.	.000

A principal component analysis was performed on twenty-four (24) items to examine the structure of the financial behaviour construct. The result from Table 6.11 below revealed a six-factor solution representing a total of 83.771% of the total variance explained. The result indicated that factor 1 had an eigenvalue of 13.171 which accounts for 54.8% of the total variation. The result from the analysis also revealed that factors 2, 3, 4, 5, and 6 have eigenvalues of 1.846, 1.589, 1.255, 1.223 and 1.021 respectively. The percentage representation of the total variation of factors 2, 3, 4, 5, and 6 are 7.7%, 6.6%, 5.2%, 5.1% and 4.2% respectively. Figure 6.2 below represents the scree plot that supports the number of components extracted and reveals that all six components are greater than 1.

Table 5.11: Total Variance Explained for financial behaviour construct.

Total Variance Explained									
	Initial Eigenvalues			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings**		
Component	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	13.171	54.880	54.880	13.171	54.880	54.880	5.941	24.753	24.753
2	1.846	7.694	62.573	1.846	7.694	62.573	5.246	21.858	46.611
3	1.589	6.619	69.193	1.589	6.619	69.193	2.405	10.020	56.631
4	1.255	5.229	74.422	1.255	5.229	74.422	2.311	9.628	66.259
5	1.223	5.096	79.518	1.223	5.096	79.518	2.121	8.838	75.096
6	1.021	4.254	83.771	1.021	4.254	83.771	2.082	8.675	83.771

7	.639	2.662	86.433						
8	.529	2.203	88.636						
9	.436	1.818	90.454						
10	.419	1.745	92.199						
11	.316	1.316	93.514						
12	.259	1.079	94.593						
13	.239	.996	95.589						
14	.200	.834	96.423						
15	.177	.738	97.161						
16	.139	.580	97.741						
17	.115	.481	98.222						
18	.101	.421	98.643						
19	.093	.387	99.030						
20	.071	.297	99.327						
21	.056	.235	99.562						
22	.042	.177	99.738						
23	.038	.159	99.897						
24	.025	.103	100.000						

Extraction Method: Principal Component Analysis.

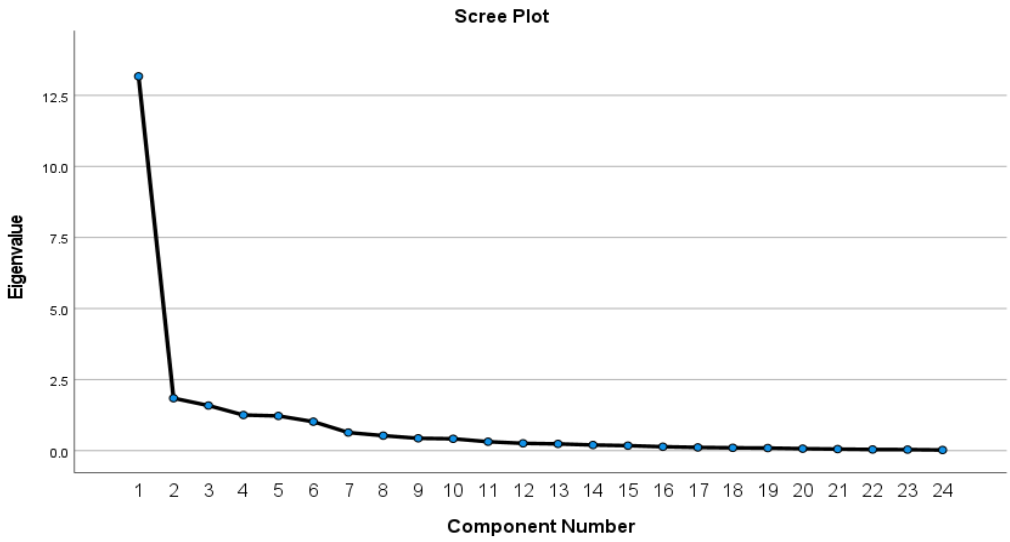

Figure 5.2: Scree plot for financial behaviour construct

5.17 The Measurement Model Assessment

This section reports on the measurement model while considering the reliability and validity of the latent variables which are generated from the measurement model assessment. As suggested by Hair et al. (2019), this study's measurement model was determined by using confirmatory factor analysis to validate the relationships between measurement variables and the latent variables. The SmartPLS 4.0 was deployed to generate the reliability, convergent and discriminant validity.

First, Cronbach's α test is conducted to establish the reliability of the relationship among the variables measured. Secondly, the researcher proceeds to deploy the Heterotrait-Monotrait (HTMT) ratio and Fornell and Larcker methods to evaluate discriminant validity. As stated by Henseler et al. (2015), the HTMT ratio of correlations is a relevant alternative metric to evaluate discriminant validity. Finally, the average variance extracted (AVE) is also analysed to establish convergent validity. The results are illustrated in the subsections below.

5.17.1 Reliability and Convergent Validity Tests

Individual item reliability was measured by assessing their corresponding individual item loadings. According to Hair et al. (2019), variables with outer loading above 0.708 are considered satisfactory. This implies that items with loadings less than 0.708 must be omitted to improve the reliability and validity of the measures. As shown in Table 6.11 below, no indicator loading in the reflective measurement models is below 0.708 (final iteration), except for the eight (8) indicators (as in the first iteration) and this implies that indicator reliability is at a good level (Saari et al., 2021; Sarstedt et al., 2019).

Also, to ascertain construct reliability, Cronbach's alpha, rho_A and composite reliability are applied while convergent validity is assessed using average variance extracted (AVE) (Usakli and Kucukergin, 2018; Hair et al., 2019). From Table 6.12 below, it is established that the Cronbach Alpha values of all the indicators range from 0.799 to 0.976 which are above the threshold of 0.70. This implies that reliability is established at an acceptable level (Sarstedt et al., 2019; Saari et al., 2021). In addition, the results from Table 6.12 below also reveal that every construct has an AVE greater than the critical level of 0.50 which is considered an acceptable threshold. This suggests that the measures have adequate reliability and convergent validity (Shmueli et al., 2019). Finally, the result from Table 6.12 below shows that all the indicators have significant loadings (Hair et al., 2019). These results are depicted in Table 6.12 below:

Table 5.12 Reliability and convergent validity results

Indicator	First Iteration Loadings	Final Iteration Loadings	Final Indicator Reliability	CA	rho_A	CR	AVE
Application of Budgeting Skills (Budg)				*0.812*	*0.828*	*0.889*	*0.728*
Budg1	0.817	0.835	0.696				
Budg2	0.888	0.912	0.831				
Budg3	0.786	0.809	0.656				
Budg4	0.632	Omitted					
Budg5	0.568	Omitted					
Knowledge of Interest Rates				*0.881*	*0.943*	*0.924*	*0.803*
Int rates1	0.887	0.939	0.883				
Int rates 2	0.772	0.829	0.688				
Int rates3	0.898	0.915	0.838				
Int rates 4	0.660	Omitted					
Application of Debt Literacy (DebtLit)				*0.870*	*0.888*	*0.912*	*0.721*
DebtLit1	0.768	0.818	0.669				
DebtLit2	0.877	0.908	0.824				
DebtLit3	0.767	0.757	0.574				
DebtLit4	0.559	Omitted					
DebtLit5	0.888	0.905	0.820				
DebtLit6	0.641	Omitted					
Application of Digital Literacy (DigLit)				*0.905*	*0.909*	*0.927*	*0.679*
DigLit1	0.824	0.826	0.680				
DigLit2	0.866	0.867	0.749				
DigLit3	0.775	0.773	0.605				
DigLit4	0.809	0.809	0.651				
DigLit5	0.882	0.883	0.774				
DigLit6	0.782	0.780	0.615				
Employment (Emp)				*0.975*	*0.977*	*0.981*	*0.911*
Emp1	0.931	0.931	0.865				
Emp2	0.959	0.959	0.917				
Emp3	0.974	0.974	0.948				
Emp4	0.969	0.969	0.941				
Emp5	0.938	0.938	0.883				
Knowledge on Inflation (Infl)				*0.879*	*0.885*	*0.926*	*0.806*
Infl1	0.885	0.885	0.782				
Infl2	0.932	0.932	0.868				
Infl3	0.875	0.875	0.767				
Application of Insurance Literacy (InsLit)				*0.881*	*0.895*	*0.919*	*0.740*
InsLit1	0.801	0.814	0.662				
InsLit2	0.924	0.936	0.875				
InsLit3	0.909	0.912	0.832				
InsLit4	0.772	0.767	0.589				
InsLit5	0.179	Omitted					
Application of Investment Literacy (InvLit)				*0.867*	*0.873*	*0.911*	*0.719*
InvLit1	0.896	0.897	0.805				

Indicator	First Iteration Loadings	Final Iteration Loadings	Final Indicator Reliability	CA	rho_A	CR	AVE
InvLit2	0.927	0.928	0.861				
InvLit3	0.816	0.813	0.661				
InvLit4	0.454	Omitted					
InvLit5	0.738	0.742	0.551				
Profit				*0.914*	*0.931*	*0.936*	*0.745*
Profit1	0.768	0.769	0.555				
Profit2	0.853	0.854	0.710				
Profit3	0.927	0.927	0.867				
Profit4	0.916	0.916	0.853				
Profit5	0.840	0.839	0.722				
Application of Record Keeping Skill (RecK)				*0.944*	*0.950*	*0.955*	*0.750*
RecK1	0.866	0.866	0.750				
RecK2	0.786	0.786	0.618				
RecK3	0.842	0.842	0.708				
RecK4	0.897	0.897	0.804				
RecK5	0.878	0.878	0.771				
RecK6	0.876	0.876	0.768				
RecK7	0.912	0.912	0.832				
Knowledge on Risks Diversification (RiskD)				*0.817*	*0.892*	*0.881*	*0.711*
RiskD1	0.828	0.828	0.687				
RiskD2	0.867	0.867	0.752				
RiskD3	0.834	0.834	0.695				
Application of Risk Management Skill (RiskMgt)				*0.976*	*0.976*	*0.980*	*0.876*
RiskMgt1	0.945	0.945	0.894				
RiskMgt2	0.961	0.961	0.924				
RiskMgt3	0.776	0.776	0.603				
RiskMgt4	0.972	0.972	0.944				
RiskMgt5	0.945	0.945	0.893				
RiskMgt6	0.973	0.973	0.948				
RiskMgt7	0.964	0.964	0.930				
Sales				*0.953*	*0.955*	*0.964*	*0.842*
Sales1	0.912	0.912	0.817				
Sales2	0.934	0.934	0.859				
Sales3	0.954	0.954	0.905				
Sales4	0.945	0.945	0.895				
Sales5	0.839	0.840	0.727				
Application of Saving Literacy (SavLit)				*0.799*	*0.809*	*0.868*	*0.622*
Sav1	0.790	0.808	0.650				
Sav2	0.813	0.826	0.681				
Sav3	0.352	Omitted					
Sav4	0.815	0.799	0.640				
Sav5	0.708	0.716	0.515				

5.17.2 *Discriminant Validity Test*

After establishing construct reliability and convergent validity, there is no guarantee that the latent constructs are truly distinct from each other to prevent multicollinearity issues. To investigate multicollinearity issues, Fornell and

Larcker, the Heterotrait-Monotrait (HTMT) ratio methods and the cross-loadings are deployed to evaluate discriminant validity (Fornell and Larcker, 1981; Henseler et al., 2015). These are necessary steps in establishing discriminant validity while providing a better understanding of the quality of the measures used (Hair et al., 2010). Table 6.13 below depicts Heterotrait-Monotrait (HTMT) results. The results explicitly reveal that all HTMT values are below the proposed upper limit of 0.90 which suggests that discriminant validity is established (Gold et al., 2001; Hair et al., 2019; Saari et al., 2021).

Table 5.13: Discriminant validity by Heterotrait-Monotrait Ratio (HTMT) criterion

Latent Variables	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Budg														
CompInt	**0.792**													
DebtLit	0.851	**0.727**												
DigCa	0.802	0.722	**0.727**											
Emp	0.582	0.458	0.575	**0.685**										
Infl	0.719	0.582	0.643	0.630	**0.518**									
InsLit	0.730	0.575	0.655	0.623	0.499	**0.698**								
InvLit	0.818	0.691	0.749	0.625	0.466	0.585	**0.690**							
Profit	0.591	0.388	0.507	0.562	0.482	0.640	0.655	**0.491**						
10. RecK	0.704	0.510	0.619	0.568	0.423	0.662	0.871	0.664	**0.652**					
11. RiskD	0.697	0.689	0.650	0.677	0.308	0.526	0.496	0.570	0.359	**0.477**				
12. RiskMgt	0.724	0.605	0.697	0.670	0.617	0.707	0.850	0.712	0.628	0.806	**0.478**			
13. Sales	0.564	0.479	0.531	0.550	0.673	0.680	0.520	0.476	0.749	0.473	0.284	**0.624**		
14.Sav	0.819	0.615	0.801	0.768	0.645	0.742	0.759	0.710	0.676	0.717	0.636	0.774	**0.642**	

Note: Int Rates= Interest Rate; Budg= Budgeting Behaviour; DebtLit= Debt Literacy; Emp=Employment Rates; Infl= Inflation Literacy; InsLit= Insurance Literacy; InvLit= Investment Literacy; RecK= Record Keeping; RiskD= Risk Diversification; RiskMg= Risk Management; Sav= Savings Behaviour; DigCa= Digital Capability.

Furthermore, the Fornell-Larcker criterion was also deployed to evaluate discriminant validity. The Fornell-Larcker criterion compares the square root of each AVE in the diagonal with the correlation of latent constructs. The result from Table 6.14 below indicates that the square root of AVE for all latent variables exceeds the inter-construct correlations (Fornell and Larcker, 1981). This result shows that discriminant validity is established for the study measurement model.

Table 5.14: Discriminant validity by Fornell-Larcker criterion

Latent Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Budg	***0.853***													
Int Rates	0.694	***0.896***												
DebtLit	0.721	0.661	***0.849***											
DigCa	0.692	0.663	0.648	***0.824***										
Emp	0.522	0.452	0.541	0.645	***0.954***									
Infl	0.614	0.535	0.569	0.570	0.484	***0.898***								
InsLit	0.626	0.534	0.585	0.567	0.484	0.619	***0.860***							
InvLit	0.685	0.614	0.648	0.552	0.430	0.513	0.609	***0.848***						
Profit	0.536	0.390	0.483	0.533	0.466	0.589	0.603	0.460	***0.863***					
10 RecK	0.624	0.488	0.570	0.534	0.418	0.606	0.797	0.605	0.623	***0.866***				
11 RiskD	0.618	0.559	0.585	0.618	0.336	0.472	0.467	0.518	0.357	0.463	***0.843***			
12.RiskMgt	0.647	0.582	0.648	0.629	0.603	0.656	0.794	0.657	0.613	0.778	0.469	***0.936***		
13.Sales	0.505	0.467	0.496	0.520	0.650	0.626	0.491	0.440	0.707	0.457	0.283	0.608	***0.918***	
14.Sav	0.690	0.569	0.696	0.677	0.589	0.638	0.649	0.606	0.602	0.630	0.591	0.691	0.574	***0.788***

Note: Int Rates= Interest Rate; Budg= Budgeting Behaviour; DebtLit= Debt Literacy; Emp= Employment Rates; Infl= Inflation Literacy; InsLit= Insurance Literacy; InvLit= Investment Literacy; RecK= Record Keeping; RiskD= Risk Diversification; RiskMg= Risk Management; Sav= Savings Behaviour; DigCa= Digital Capability.

5.17.3 Criteria for Assessing Measurement Model

The measurement model for this study was determined by the confirmatory factor analysis conducted and discussed in sections 6.17.1 and 6.17.2 above where the relationships between measurement variables and the latent variables are validated (Hair et al., 2019). From Table 6.12 above, explicitly, every factor has a value greater than 0.70 of Cronbach's threshold. A Cronbach's α test threshold of 0.70 illustrates that the reliability of the relationship among the variables measured is established.

Given that reliability has been established, the researcher proceeds and deploys Fornell and Larcker and the Heterotrait-Monotrait (HTMT) ratio methods to evaluate discriminant validity. From Table 6.13 above, HTMT values are below the recommended 0.9 upper limits which thereby confirms that discriminant validity is established (Saari et al., 2021). Evidence suggests that the HTMT ratio of correlations is a relevant alternative metric to evaluate discriminant validity (Henseler et al., 2015).

The measurement model is also evaluated by analysing the average variance extracted (AVE) to determine convergent validity. As depicted in Table 6.12 above, the AVE values vary from 0.622 to 0.911, all of which exceed the minimum threshold of 0.5. Based on the above analysis, Figure 6.3 below represents the measurement model for this study:

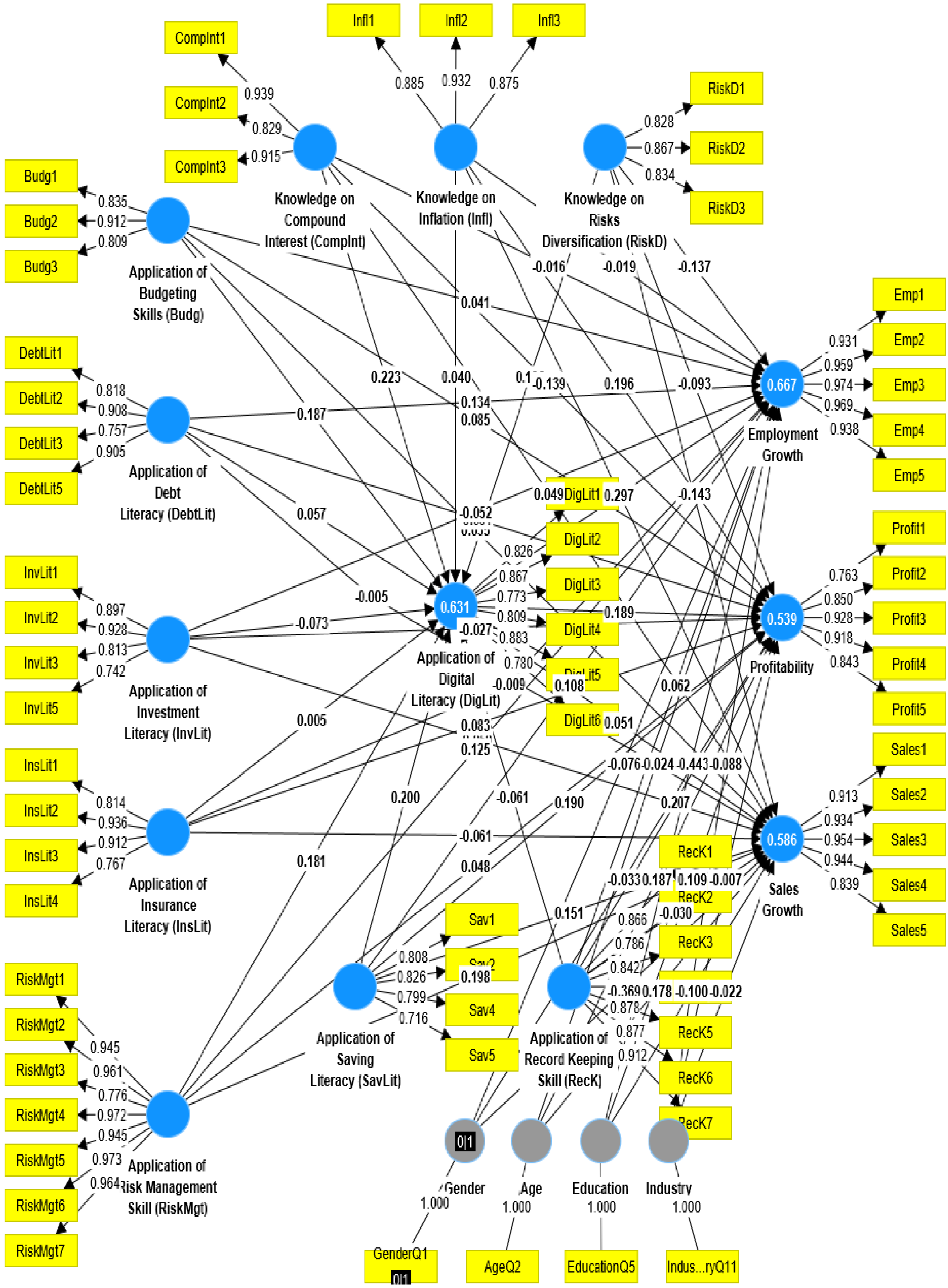

Figure 5.3 Measurement model

5.18 Ethical Considerations

Every researcher ought to follow strict guidelines to ensure confidence in the research findings. This implies that researchers must seek consent from research participants when collecting sensitive information, maintain confidentiality, minimise bias and avoid incorrect reporting (Denscombe, 2007). More importantly, ethical issues must be strictly observed when human participants are used to ensure participants' rights and dignity are observed (Gregory, 2003). Over the years, certain pressing issues have emerged such as non-discrimination, objectivity, competency, respect for intellectual property and respect for human and animal rights and these need to be addressed in social science research and prevent any conflict of interest (Navalta et al., 2019). Based on the above argument, this study aims to follow the highest ethical standards to ensure that participants are free from harm and feel confident to participate and maintain academic credibility. To ensure ethical issues are addressed, the following factors are considered:

Free from harm: this study ensures that no physical or psychological is caused to any participant. All participants are visited at their places of convenience so they can confidently express themselves freely without feeling coerced. the researcher also ensures that all questions are free from any jargon but in simple words for easy understanding.

Free to participate: throughout the data collection process, participants were made aware that participation is voluntary. Participants were given the opportunity to redraw from the study at any point in time. This is an acceptable practice to ensure that participants' rights and dignity are protected. Participants' consent was sought, particularly when certain information such as participants' age, and marital status are being collected and in cases where they feel uncomfortable, the researcher reassured them that they are free to be excluded from the study at any time.

Confidentiality: confidentiality was maintained throughout the data collection and analysis stage to assure participants that all information provided was not disclosed or lost. Participants were also reassured that the information is purely for academic purposes and no personal information will appear in any publication. Participants are also made aware that their personal data or information is kept securely, and any device used is password-protected to ensure that no one can have access to their personal information.

Academic credibility: academic credibility was maintained throughout and in situations where ideas and knowledge of other scholars are used, these were acknowledged through proper referencing.

To ensure that all the above procedures were followed, an ethical application was submitted to the DMU Business School ethics committee prior to the fieldwork in Ghana. In cases where participants felt uncomfortable about the purpose of the study, an ethics approval letter from the DMU ethics committee was shown to individuals to reassure them that the study is purely for academic purposes only.

5.19 Conclusion

The chapter presents the research design, approach and strategy that underpinned the study. The study adopts a pragmatic philosophical stand where both the inductive and the deductive approaches are discussed. The chapter further considers the target population and the sampling techniques adopted by the study. The target population of this study is managers of SMEs operating and registered in Ho in the Volta Region of Ghana. Primary data was collected to answer the research questions whereas the quantitative data was collected first using a survey questionnaire followed by the qualitative data using an interview facilitated with a semi-structured questionnaire.

The quantitative data is then analysed using both Statistical Package for Social Science (SPSS) version 28 and Structural Equation Modelling (PLS-SEM) version 4. Both software are used given that each has its strengths in providing the robustness of the study findings. The qualitative data, on the other hand, is analysed meticulously through five main processes such as oral data processing, data transcription, reading and notes making, clustering and thematic analysis. For the robustness of the results, various validity and reliability tests are conducted. For content validity, the researcher ensures that items on the data collection instrument reflect broadly the content and operational definition of the construct through an exhaustive literature review. Construct validity is explored through the convergent and discriminant validity tests using PLS-SEM. The reliability is achieved using Cronbach's α test of the variables using SPSS. In addition, the chapter also considered exploratory factor analysis to discover the patterns of multidimensional constructs which helps provide a detailed explanation of most of the variances observed to understand the structure of the data collected. The presentation and discussion of the quantitative research findings in a systematic manner is presented in the next chapter.

CHAPTER 6: PRESENTATION AND DISCUSSION OF THE QUANTITAVE FINDINGS

6.1 Introduction

This chapter discusses the relationship between FL skills and their effect on SME performance in Ghana. Performance indicators are drawn from sales growth, profitability and employment growth from each SME that responds to the questionnaire. The discussions are based on the results of the statistical analyses. A total of 53 hypotheses are formulated and tested and the results are discussed below.

The outline of this chapter is as follows: while Section 7.2 provides the demographic information of the respondents, Section 7.3 discusses the business profiles of the sampled SMEs. In addition, Section 7.4 presents a discussion on constructs descriptive statistics and the normality of the data. Furthermore, Section 7.5 provides a statistical justification for deploying Structural Equation Modelling (PLS-SEM) for this study. Also, Section 7.6 and Section 7.7 consider the criteria for the structural model. In addition, Sections 7.8 and 7.9 present the results and the discussions on the impact of SME managers' financial knowledge and financial behaviour on SME performance respectively. In Section 7.10, the chapter discusses the impact of managers' digital capability on SME performance. Also, while Section 7.11 discusses the effects of digital literacy skills on SME managers' financial knowledge and financial behaviour, Section 7.12 considers the mediating effect of digital capability on SME performance. Finally, Section 7.13 evaluates the impact of control variables.

6.2 Demographic Analysis

The section accounts for demographic information such as gender, age, marital status and the educational level of SME managers who are the main respondents of the research questionnaire. Given that some demographic questions are sometimes considered too sensitive by some participants, the researcher adopts a strategy by grouping the age category to reduce such sensitivity around participants' age to improve maximum response. Evidence suggests that if confidentiality concerns are not addressed during the questionnaire designing stage, this could threaten participants' maximum participation and sometimes fail to answer some questions which could lead to missing data (Lor et al. 2017; Ziegenfuss et al., 2021).

6.2.1 Gender Analysis of Participants

Table 6.1 below represents the gender distribution of SME managers that responded to the survey.

Table 6.1: Gender distribution

Gender distribution		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	296	59.3	60.7	60.7
	Female	192	38.5	39.3	100.0
	Total	488	97.8	100.0	
	Missing System	11	2.2		
Total		499	100.0		

From the table above, out of the total number of 499 respondents, 296 are male and 192 are female, representing 60.7% and 39.3% of SME managers respectively. This illustrates that the management of SMEs in Ho is heavily dominated by males despite the increasing number of women engaging in entrepreneurial activity in recent years across many countries (Piva, and Rovelli, 2022). This disparity could be attributed to how entrepreneurship is perceived in certain parts of the developing world as a man's job (Meyer et al., 2017). The finding implies that entrepreneurship could also be perceived in the Volta Region of Ghana as a man's job, hence the dominance of males in this sector. However, women are considered to be more risk-averse compared to men and given that risk aversion limits the propensity toward entrepreneurial entry (Gimenez-Jimenez et al., 2022). There is also a consistent trend that women have less FL skills compared to men (Lusardi and Mitchell, 2014; Hasler and Lusardi, 2017; Preston and Wright, 2019). The above evidence could explain the components of this data. From Table 6.1 above, it is observed that there are 11 missing data representing 2.2% of the total respondents.

6.2.2 Age of Participants

From Table 6.2 below, out of the total number of 499 respondents, most SME managers (170) are within the 45 to 55 age group representing 35.2%. This is followed by those above 55 years (107) and they represent 22.2% of the total number of respondents. The result also established that those in the 35 to 45 age group (102) represent 21.1%. Finally, the data also revealed that the 25 to 35 age group (78) formed 16.1% and under-25 (26) represents the least number of respondents with only 5.4%. From Table 6.2 below, the 45 to 55 age group formed the dominant age category, and given that managers' FL skills diminish with age, the majority of SMEs could possess less financial knowledge to make informed financial decisions to improve performance. From the data, it is observed that 16 questionnaires are rejected due to missing data, representing 3.2% of the total sample.

Table 6.2: Age of participants

Age of respondent		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 25	26	5.2	5.4	5.4
	25 – 35	78	15.6	16.1	21.5
	35 – 45	102	20.4	21.1	42.7
	45 – 55	170	34.1	35.2	77.8
	55+	107	21.4	22.2	100.0
	Total	483	96.8	100.0	
	Missing System	16	3.2		
Total		499	100.0		

6.2.3 Educational Level of Participants

From Table 6.3 below, 100 respondents have undergraduate degrees, representing 20% of the total respondents. Also, 14 SME managers have postgraduate education and 100 have secondary education, representing 2.8% and 17% respectively. However, the majority of the SME managers, 55.8% (276) had no formal education. This is quite significant given that highly educated SME managers are known to possess a high level of FL skills required to make better investment strategic decisions and be able to allocate resources strategically to improve financial performance (Wagner, 2019). As most SME managers have no formal education, management of most of these SMEs could prove difficult due to the lack of FL skills. This means that most of these SMEs would lack business acuity and entrepreneurial skills which is pivotal in developing effective strategies that will prevent these businesses from failing (Sar, 2017; Morgan and Trinh, 2019). This result indicates that the majority of the SME managers are necessity or survival entrepreneurs and thereby, formed the business out of economic needs (Xu & Zia, 2012). This result reignites the debate on how effective policies are required to help SMEs develop effective human capital such as FL skills to promote economic value. From Table 6.3 below, 4 questionnaires are rejected due to missing data.

Table 6.3: Educational level of participants

Educational level		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No formal education	276	55.3	55.8	55.8
	Primary school	18	3.6	3.6	59.4
	Secondary school	85	17.0	17.2	76.6
	Undergraduate degree	100	20.0	20.2	96.8
	Postgraduate degree	14	2.8	2.8	99.6
	Other	2	.4	.4	100.0
	Total	495	99.2	100.0	
	Missing System	4	.8		
Total		499	100.0		

6.2.4 Respondent's Role in Business

It is very important to analyse the role of the respondents in the business. From Table 6.4 below, 397 of the respondents are owner-managers, representing 81% of the total respondents. Also, the results indicate that 52 respondents are owners while 36 are managers, representing 10.6% and 7.3% of the total number of respondents respectively. Finally, the data also reveals that 5 respondents might not be managers but might be senior members of the team. Based on this analysis, most of the respondents manage their businesses. This is in line with the study of Hansen and Hamilton (2011) who argued that owner-managers are the most critical resource of a firm as their ability and commitment to growth are often at the optimal level in shaping business performance. This finding is also consistent with Fatoki (2011) who suggests that African businesses by their nature are managed by owners. This finding implies that most SME owners in the Volta Region of Ghana prefer to manage their businesses to ensure maximum utility. Also, from Table 6.4 below, a total of 9 missing data are reported representing 1.8%.

Table 6.4: Respondents' role in business

Role of respondents in business		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Owner-manager	397	79.6	81.0	81.0
	Owner	52	10.4	10.6	91.6
	Manager	36	7.2	7.3	99.0
	Other	5	1.0	1.0	100.0

	Total	490	98.2	100.0	
	Missing System	9	1.8		
Total		499	100.0		

6.3 Business Profile

6.3.1 Business Categorisation

Based on the data collected, it is observed that SMEs' operations in the Volta Region of Ghana fall under various categories. From Table 6.5 below, the majority of the firms are in trading (225) representing 61% of total respondents. This is followed by general services, (86) representing 13% of the respondents. The rest of the SMEs are in agriculture (2.0%), transport and distribution (11%), hotels and restaurants (8%), manufacturing (2%) and lastly, (3%) are from the education sector. Explicitly, these results indicate that most SMEs in Ghana, specifically those in the Volta Region are in trading. From the data, SMEs in the manufacturing sector is one of the least-grown categories. SMEs in the Manufacturing sector in Africa generally face a series of challenges such as export constraints, technology and most crucially, the institutional barriers to engaging fully in the global economy and Ghana is not an exception (Mutalemwa, 2015). This implies that SMEs in the manufacturing sector in Ho could be facing some level of constraints and challenges which require targeted FL programme to expand their entrepreneurial activities in the region.

Tabble 6.5: Business/Industry Categories

Business/Industry Categories	Frequency	Percent

Valid	Agriculture	16	2%
	Manufacturing	16	2%
	General services	86	13%
	Trading	225	61%
	Hotels & Restaurants	57	8%
	Education	24	3%
	Transport and Distribution	75	11%
	Total	499	100%

6.3.2 Sources of Capital

In terms of sources of working capital, Table 6.6 below shows that most SMEs, thus, 328 sourced their working capital from savings (66.9%). Given that most SMEs find it challenging to secure working capital from financial institutions (Naegels et al., 2017), individuals need to develop FL skills to improve their savings behaviour. While 84 participants relied on family and friends for their investment capital (17.1%), 71 got their working capital from microcredit (14.5%). It emerged that there are only a few SME managers, thus, 6 got their working capital from the government assistance scheme (1.2%). From this analysis, clearly, there is little governmental support relating to working capital for SMEs to start businesses and expand. If SMEs are to remain the cornerstones of the local economy, much is needed to be done to support individuals with the needed capital to start up a business. This is a vital way to reduce unemployment, grow the economy and reduce poverty.

It is also observed that 71 respondents obtained their working capital through microcredit. However, evidence suggests that SMEs lack FL skills and as a result, these SME managers could find it challenging to explore better credit opportunities and understand the terms of those loans and be able to repay these promptly. As previously discussed in Chapter Two, non-performing loans are rising in Ghana which questioned the sustainability and profitability of these microcredit institutions (Amuakwa-Mensah et al., 2017; Asiama and Amoah, 2019). Based on this evidence, SMES must acquire FL skills to understand the impact of high-interest rates on their ability to repay their loans. Table 6.6 below shows the main source of capital.

Table 6.6: Main sources of capital

Main sources of capital		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Savings	328	65.7	66.9	66.9
	Microcredit	71	14.2	14.5	81.4
	Family and Friends	84	16.8	17.1	98.6
	Government assistance	6	1.2	1.2	99.8
	Other	1	.2	.2	100.0
	Total	490	98.2	100.0	
	Missing System	9	1.8		
Total		499	100.0		

6.3.2 Total Capital Invested

Table 6.7 below indicates the total capital invested in the start-up of the business by the respondents. The results indicate that the majority of respondents (69.9%) invested more than GH¢20,000 into the business as start-up capital. Given that the majority of the respondents invest a substantial amount into the business as start-up capital, it is important that SME managers have adequate managerial capabilities and FL skills to prevent the current rates of business failures in developing countries such as Ghana (Muriithi, 2017). The result also shows that 12.3% of the respondents invested GH¢500 to GH¢2,000, 8% invested GH¢10,001 to GH¢20,000, 6.1% and 3.7% injected GH¢5,001 to GH¢10,000 and GH¢2,001 to GH¢5,000, respectively.

Table 6.7: Total Capital Invested

Capital Invested		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	GH¢500 - GH¢2000	60	12.0	12.3	12.3
	GH¢2001 - GH¢5000	18	3.6	3.7	16.0
	GH¢5001 - GH¢10,000	30	6.0	6.1	22.1
	GH¢10,001 - GH¢20,000	39	7.8	8.0	30.1
	Above ¢20,000	341	68.3	69.9	100.0
	Total	488	97.8	100.0	
	Missing System	11	2.2		
Total		499	100.0		

6.3.3 Business Registration

The results presented in Table 6.8 below indicate that 214 (43%) of the SMEs registered their businesses with the Registrar's General Department while most SMEs, 299 (59.9%) registered their businesses with Ho District Municipal Assembly. Explicitly, the majority of SMEs are registered with Ho District Municipal Assembly. Probably, bureaucratic challenges that many SMEs often experience with the national registration body could be the determining factor why many have chosen their registration through the District Assembly rather than through the Registrar General Department or National Board of Small-Scale Industry (NBSSI) (Abor and Quartey, 2010). Also, business managers often perceive that the national registration body could share their details with relevant authorities to pursue them for tax purposes, therefore, unwilling to register their businesses through that channel (Demenet et al., 2016).

However, the National Board for Small Scale Industries (NBSSI) and Microfinance and Small Loans Centre (MASLOC) are both national institutions in Ghana that provide support to SMEs to generate economic value (Amoah and Mungai, 2020). The NBSSI in particular is set up to initiate entrepreneurial development programmes to promote employment growth (Oppong et al., 2014). This implies that any new business that is registered through these institutions could take opportunities such as national skills development programmes to improve their capabilities to improve entrepreneurial activities.

Table 6.8: Business Registration

	Business Registration	YES	%	NO	%
	Business registration with Registrar General's Department	214	43.0	284	57.0
	Business registration with District/Municipal Assembly	299	59.9	200	40.1

6.3.4 Business Ownership Registration of SMEs

Table 6.9 below examines the legal registration status of all SMEs in the Volta Region of Ghana. The analysis shows that 439 SMEs (89.8%) registered the business as a sole proprietorship. Also, it emerged that 33 (6.7%) of SMEs registered their businesses as limited liability companies while 17 (3.5%) are in partnership. These results imply that most SMEs are in sole proprietorships. This is in line with Baik et al. (2015) who suggest that most SMEs in developing and emerging economies prefer sole proprietorship as it allows quick decision-making and provides a low cost to the business. According to Khurana et al. (2020), economic freedom has emerged as a determining factor in the choice of business legal structure. This implies that such freedom would allow managers to make any investment decisions of their choice that bring maximum benefits. However, if SMEs want economic freedom, managers must acquire critical skills to improve performance. One of such skills could be FL skills that could help SMEs make challenging financial decisions (Agyapong and Attram, 2019).

Table 6.9 Ownership Structure

Legal Ownership Registration Structure		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sole proprietorship	439	88.0	89.8	89.8
	Partnership	17	3.4	3.5	93.3
	Limited liability company	33	6.6	6.7	100.0
	Total	489	98.0	100.0	
	Missing System	10	2.0		
Total		499	100.0		

6.3.5 Business Age

Table 6.10 below shows the number of years SMEs have been in business. The result indicates that the majority of SMEs (151), thus, 30.4% have been in business for more than 15 years. Also, 118 SMEs representing 23.8% of the respondents are operating between 11 to 15 years, while 18.5%, 92 respondents are in business for 6 to 10 years. Lastly, 88 SMEs, (17.7%) and 47 representing 9.5% are in operating for 2-5 years and less than 2 years respectively. Evidence suggests a firm's age helps businesses gain critical human capital, thus, skills, knowledge and experience which are suitable to formulate strategies to foster economic growth (Behrens et al., 2012; Halil and Hasan, 2012). This could imply that the longer an SME is in operation, the easier it is for it to acquire FL skills that could foster a firm's economic growth.

Table 6.10: Business Age

	Business Age	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 2	47	9.4	9.5	9.5
	2 - 5	88	17.6	17.7	27.2
	6 - 10	92	18.4	18.5	45.8
	11 - 15	118	23.6	23.8	69.6
	16+	151	30.3	30.4	100.0
	Total	496	99.4	100.0	
	Missing System	3	.6		

6.4 Construct Descriptive Statistics

This section presents the constructs' descriptive statistics. The section covers the descriptive analysis of the measuring scales of the main FL variables, DC which is a mediating variable and SME performance indicators.

All items of financial knowledge and financial behaviour variables are measured on a five-point scale where 1 signifies strongly disagree and 5 denotes strongly agree. The results from Table 6.11 below indicate that all financial knowledge and financial behaviour variables as well as that of DC have mean values above 3.2. According to Castro and Martins (2010), a mean value above 3.2 is a reasonable threshold to suggest a positive perception while scores below 3.2 indicate a negative perception of that dimension. Given that the descriptive statistic results have a mean value of 3.2, this denotes a generally positive perception of the statements or the items.

More broadly, Table 6.11. below indicates that the composite mean values for FL, thus financial knowledge and financial behaviour variables range from 3.89 to 4.31. Specifically, descriptive statistical analysis on each of the ten FL factors shows that knowledge on inflation (M = 4.31; SD = 0.679) is rated higher followed by knowledge on compound interest (M = 4.26; SD = 0.764), application of saving literacy (M = 4.22; SD = 0.895), application of record-keeping skill (M = 4.18; SD = 0.861), and application of investment literacy (M = 4.17; SD = 0.921). These are followed by the application of budgeting skills (M = 4.16; SD = 0.906), application of debt literacy (M = 4.13; SD = 0.881), knowledge on risks diversification (M = 4.11; SD = 1.059), application of insurance literacy (M = 4.02; SD = 0.910), while the application of risk management skill (M = 3.89; SD = 0.928) the least of all. Explicitly, this signifies a positive perception of the FL factors. The application of DC also yielded an overall mean of 4.33 (SD = 0.775), implying that most of the respondents also had positive perceptions about the application of digital capability.

Table 6.11 Construct descriptive statistics for Financial Literacy variables and Digital Capability

Descriptive Statistics												
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
Variables	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Interest Rate	496	3.00	2.00	5.00	2113.75	4.2616	.60281	.363	-.365	.110	-.311	.219
Inflation	496	2.33	2.67	5.00	2137.67	4.3098	.60905	.371	-.260	.110	-.877	.219
Risk Diversification	496	4.00	1.00	5.00	2042.00	4.1169	.90750	.824	-1.130	.110	.994	.219
Budgeting Behaviour	495	3.00	2.00	5.00	2064.00	4.1697	.69186	.479	-.548	.110	-.081	.219
Savings Behaviour	491	2.20	2.80	5.00	2072.60	4.2212	.62103	.386	-.273	.110	-1.002	.220
Debt Management	494	3.00	2.00	5.00	2039.67	4.1289	.65000	.423	-.533	.110	.272	.219
Investment	489	3.00	2.00	5.00	2043.60	4.1791	.70720	.500	-.648	.110	.327	.220
Insurance	490	2.80	2.20	5.00	1968.80	4.0180	.63388	.402	-.193	.110	-.304	.220
Record Keeping	492	3.00	2.00	5.00	2056.86	4.1806	.74907	.561	-.676	.110	-.023	.220
Risk Management	491	3.00	2.00	5.00	1915.29	3.9008	.85588	.733	-.313	.110	-.582	.220
Digital Capability	494	3.00	2.00	5.00	2039.67	4.1289	.65000	.423	-.533	.110	.272	.219

Also, Table 6.12 below depicts the firms' performance in the area of employment growth, profitability and sales growth which are assessed over a five year period (2017 to 2021). As revealed in Table 6.12 below, the mean scores for employment growth ranged from 3.02 in 2017 to 2.71 in 2021 and this explicitly illustrates a constant decrease in employee numbers over the five years. Nevertheless, the mean values for sales growth suggest an increase from 2017 (M = 4.47) to 2018 (4.57) but diminished in 2019 (M = 4.49) and then became stable in 2020 (M = 4.49) and decreased again in 2021 (M = 4.44). Similarly, the mean values for profitability suggest an increase from 2017 (M = 4.54) to 2019 (4.85) but declined in 2020 (M = 4.80) as well as 2021 (M = 4.70). The above analysis from Table 6.12 below explicitly concludes a weak performance across firms. Such weak performance could be attributed to the lack of FL skills.

Table 6.12: Construct descriptive statistics of Outcome Variables

Variables	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Employment Growth						
Emp 2017	1	4	3.02	1.224	-0.616	-1.346
Emp 2018	1	4	2.97	1.231	-0.554	-1.413
Emp 2019	1	4	2.88	1.248	-0.406	-1.549
Emp 2020	1	4	2.83	1.254	-0.331	-1.599
Emp 2021	1	4	2.71	1.272	-0.179	-1.677
Sales Growth						
Sales 2017	1	6	4.47	1.423	-0.907	-0.077
Sales 2018	1	6	4.57	1.231	-0.817	0.335
Sales 2019	1	6	4.49	1.273	-0.818	0.324
Sales 2020	1	6	4.49	1.304	-0.725	-0.014
Sales 2021	1	6	4.44	1.464	-0.764	-0.284
Profitability						
Profit 2017	1	6	4.54	1.052	-1.664	2.445
Profit 2018	1	6	4.73	0.838	-2.145	5.022
Profit 2019	1	6	4.85	1.050	-1.398	1.945
Profit 2020	1	6	4.80	1.127	-1.394	1.761
Profit 2021	1	6	4.70	1.373	-1.169	0.501

6.5 Justification for Using Structural Equation Modelling Technique (PLS-SEM)

This study applied Partial Least Squares Structural Equation Modelling (PLS-SEM) as a measurement tool. In recent years, PLS-SEM has emerged as a novel and standard tool for analysing a model's out-of-sample prediction due to its robustness in analysing multifaceted interrelationships between observed and latent variables (Sarstedt et al., 2020). Many scholars in social science disciplines such as Entrepreneurship (Manley et al., 2021), Human Resource Management (Ringle et al., 2020), Accounting (Nitzl, 2016) and Family Business (Sarstedt et al., 2014) all adopted PLS-SEM to estimate complex models with many constructs, indicator variables and structural paths. Evidence suggests that the use of PLS-SEM does not impose distributional assumptions on data (Hair et al., 2019). However, it is often suggested that researchers should first and foremost, critically consider research objectives before deciding on the statistical tool for data analysis (Ong and Puteh, 2017). This study aims to investigate the impact of FL on SME performance and based on this main objective, both causal and effect relationships between key independent (financial knowledge and financial behaviour) and dependent (sales growth, employment growth and profitability) variables are examined using PLS-SEM analysis as a robust statistical tool to increase methodological rigour (Hair et al., 2019). Despite the use of SPSS to analyse the descriptive statistics and to perform the exploratory factor analysis (EFA), the above arguments justified the use of PLS-SEM as the main and most suitable measurement method for this study. For example, PLS-SEM is composed of two sub-models which are the measurement (outer) model and a structural (inner) model, and, thereby, gives PLS-SEM a unique statistical tool that tests the causal relationships between constructs with multiple measurement items (Hair et al., 2019). Also, in recent years, PLS-SEM has developed a cutting-edge analysis technique which allows researchers freedom in their modelling leading to a more refined assessment of results (Hair et al., 2018). This implies that PLS-SEM is a very flexible tool to use due to its modelling properties. In terms of data normality, PLS-SEM's statistical properties enable robust model estimations with a normal data distribution or skewness in the data (Ringle et al., 2020). This means that in the case where it is practically impossible to meet the stricter requirements of more traditional multivariate techniques to ensure the normality of data, PLS-SEM is a nonparametric method and therefore, makes no distributional assumptions. This modality justifies the reason PLS-SEM is deployed for data analysis for this study.

Furthermore, PLS-SEM also works effectively with small data sets or sample sizes and complex models (Hair et al., 2019). Even though this study involves a large sample size (499) which increases the precision or consistency of PLS-SEM estimations, using it for this study is justified. Four key factors are critically considered for the use of PLS-SEM as the main data analysis tool for this research. These are data characteristics, model characteristics, model estimation, and model evaluation (Hair et al., 2022). It is observed from the data captured that there are some missing values. According to Hair et al. (2021), PLS-SEM characteristics are robustly designed to deal with such missing values as long as these are below a reasonable level, thus less than 5%. Given that these missing data are below 5%, it is wise to use PLS-SEM to ensure the quality of the results. Finally, PLS-SEM enables researchers to identify any blind spots, and this has led methodologists to introduce advanced modelling, assessment and analysis procedures which substantially extend the original PLS-SEM method. This methodological adjustment has made PLS-SEM a competitive data analysis tool for this study (Hair et al., 2011).

6.6 Model Predictive Power, Predictive Relevance and Fit

From Table 6.13 below, the Model's explanatory power indicates that the structural model has good explanatory power (Usakli and Kucukergin, 2018; Hair et al., 2019). Specifically, the R^2 values show that the model explains 63.1%, 66.7%, 63.9% and 58.6% of the variation in the application of digital literacy, employment growth, profitability and sales growth, respectively. This suggests the structural model significantly contributes to the variability in the application of digital literacy, employment growth, profitability and sales growth. Table 6.13 below depicts the R^2 values of the endogenous variables.

Table 6.13: Model's explanatory power

Construct	R^2	Adjusted R^2
DigLit	0.631	0.624
Emp	0.667	0.656
Profit	0.539	0.524
Sales	0.586	0.573

Also, from Table 6.14 below, the result indicates that the structural model has an acceptable level of predictive relevance as all the Q^2 values are greater than 0.0

(Usakli and Kucukergin, 2018; Hair et al., 2019). Precisely**, Q^2** values of the model range from 0.372 to 0.598 which are > 0.0. This denotes that the PLS structural model has medium predictive relevance (Geisser, 1974; Stone, 1974; Hair et al., 2019). Table 6.14 below represents the model's predictive relevance.

Table 6.14: Model's predictive relevance

Constructs	SSO	SSE	Q^2 (=1-SSE/SSO)
DigLit	2994.000	1732.861	0.421
Emp	2495.000	1003.463	0.598
Profit	2495.000	1565.806	0.372
Sales	2495.000	1303.508	0.478

6.7 Structural Model Assessment

Given that both financial knowledge and financial behaviour constructs met the acceptable requirement for the measurement model after the reliability and validity test in the previous chapter, the bootstrapping procedure is deployed to evaluate the structural model to estimate the effects of the predictors on the outcome variables (Hair et al., 2019; Ringle et al., 2020). The main aim of assessing the structural model is to define the impact of the causal paths linked with the hypotheses (Henseler et al, 2009). As a result, several methodical steps are evaluated to ascertain the structural model for the study.

First, the structural model was assessed using the coefficient of determination (***R2***) which has been adopted by previous studies to support structural model quality (Shmueli et al., 2019; Sarstedt et al., 2022). The result from Table 6.13 above depicts that the endogenous variables have ***R2*** values of 0.631, 0.667, 0.539 and 0.586 which are considered acceptable explanatory power for this study given the complexity of the model (Hair et al., 2017; Usakli and Kucukergin, 2018; Hair et al., 2019).

Secondly, the blindfolding procedure is also deployed to assess the structural model (Hair et al., 2019) where the predictive relevance **(Q2)** of the model is analysed. The results from Table 6.14 above also indicate that the structural model has an acceptable level of predictive relevance as all the **Q2** values are greater than 0.0 (Usakli and Kucukergin, 2018; Hair et al., 2019). Precisely**,** **Q2** values of the model range from 0.372 to 0.598 which are > 0.0. and this denotes that the PLS structural model has medium predictive relevance (Geisser, 1974; Stone, 1974; Hair et al., 2019).

Finally, the study structural model is also assessed by examining the Variance Inflation Factor (VIF) values as proposed by Hair et al. (2017). This is specifically deployed to ascertain any collinearity issues with the data. As shown in Table6.15 below, all the VIF values are below 5, ranging from 1.880 to 4.703. The results indicate that there are no collinearity concerns among the predictor constructs (Rosen and Hochwarter, 2014; Hair et al, 2019). Based on the above analysis, Figure 6.1 below shows the structural model for this study.

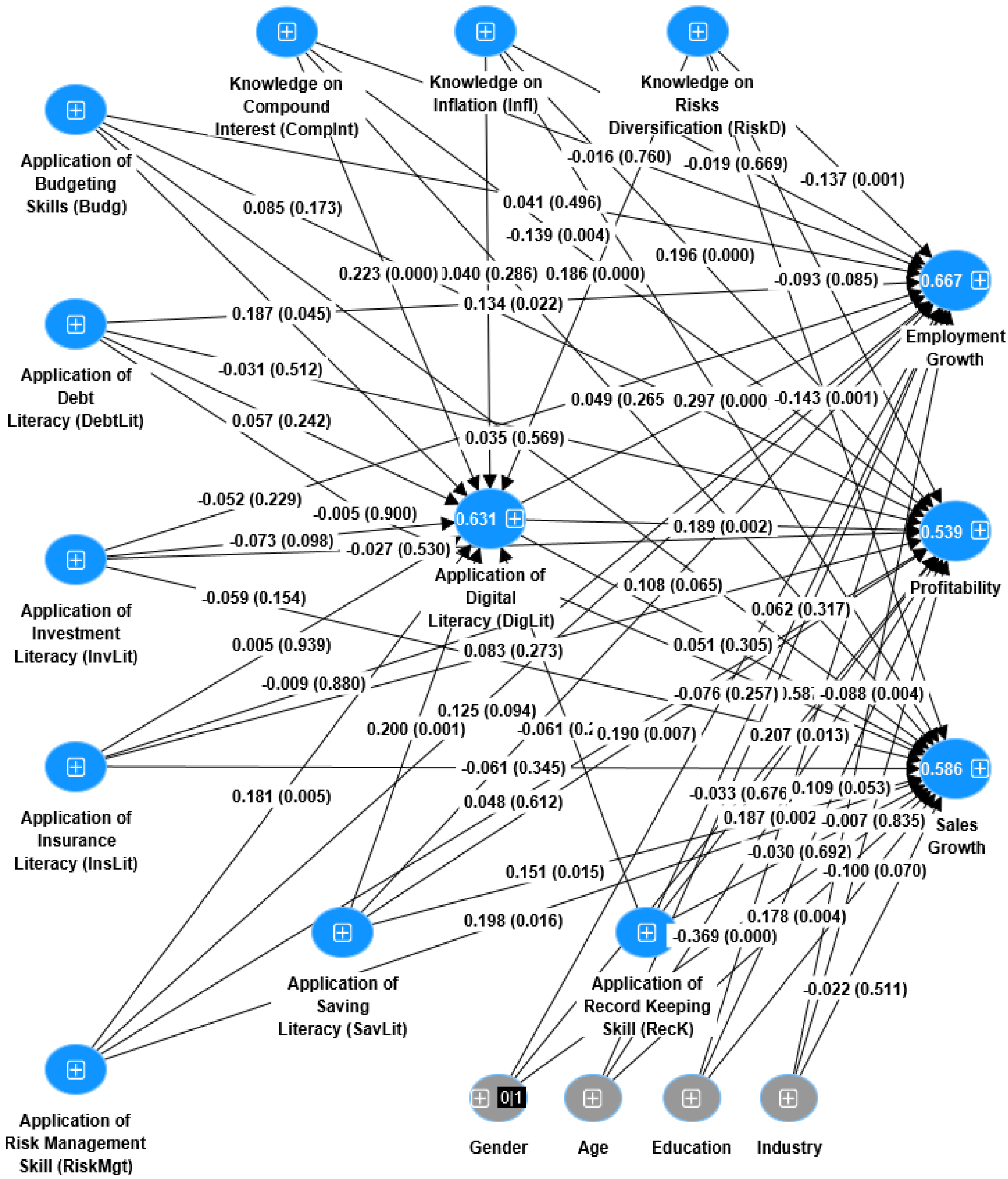

Figure 6.1: Structural model estimates

Based on the conceptual model developed in chapter 5, Table 6.15 below reports the direct path effects of the predictors on SME performance.

Table 6.15: Direct path results

	Direct Paths		VIF	β	SE	t-statistics	p-values	f2	Confidence Interval	
									LL (2.5%)	UL (97.5%)
	Financial Knowledge Construct									
1	H1a	Int rates -> DigLit	2.348	0.223	0.057	3.938	0.000	0.058	0.108	0.330
2	H1b	Int rates-> Emp	2.556	-0.016	0.053	0.306	0.760	0.000	-0.113	0.094
3	H1c	Int rates-> Profit	2.556	-0.139	0.048	2.869	0.004	0.016	-0.232	-0.042
4	H1d	Int rates-> Sales	2.556	0.049	0.044	1.115	0.265	0.002	-0.035	0.140
5	H2a	Infl -> DigLit	2.146	0.040	0.038	1.067	0.286	0.002	-0.030	0.119
6	H2b	Infl -> Emp	2.206	-0.019	0.045	0.427	0.669	0.001	-0.106	0.071
7	H2c	Infl -> Profit	2.206	0.196	0.050	3.932	0.000	0.038	0.102	0.297
8	H2d	Infl -> Sales	2.206	0.331	0.051	6.443	0.000	0.120	0.227	0.426
9	H3a	DebtLit -> DigLit	2.845	0.057	0.049	1.170	0.242	0.003	-0.038	0.157
10	H3b	DebtLit -> Emp	2.910	0.134	0.058	2.291	0.022	0.018	0.024	0.253
11	H3c	DebtLit -> Profit	2.910	-0.031	0.047	0.656	0.512	0.001	-0.126	0.060
12	H3d	DebtLit -> Sales	2.910	-0.005	0.040	0.125	0.900	0.000	-0.079	0.078
13	H4a	InsLit -> DigLit	3.627	0.005	0.066	0.077	0.939	0.000	-0.122	0.140
14	H4b	InsLit -> Emp	3.670	-0.009	0.061	0.151	0.880	0.000	-0.130	0.111
15	H4c	InsLit -> Profit	3.670	0.083	0.076	1.096	0.273	0.004	-0.067	0.228
16	H4d	InsLit -> Sales	3.670	-0.061	0.064	0.945	0.345	0.002	-0.187	0.067
17	H5a	InvLit -> DigLit	2.406	-0.073	0.044	1.654	0.098	0.006	-0.160	0.014
18	H5b	InvLit -> Emp	2.524	-0.052	0.043	1.203	0.229	0.003	-0.142	0.030
19	H5c	InvLit -> Profit	2.524	-0.027	0.044	0.628	0.530	0.001	-0.117	0.052
20	H5d	InvLit -> Sales	2.524	-0.059	0.041	1.427	0.154	0.003	-0.142	0.017
21	H6a	RiskD -> DigLit	1.880	0.186	0.045	4.161	0.000	0.050	0.098	0.273
22	65b	RiskD -> Emp	2.088	-0.137	0.041	3.369	0.001	0.027	-0.212	-0.053
23	H6c	RiskD -> Profit	2.088	-0.093	0.054	1.725	0.085	0.009	-0.188	0.024
24	H6d	RiskD -> Sales	2.088	0.143	0.043	3.318	0.001	0.024	-0.224	-0.057
	Financial Behaviour Construct									
25	H7a	Budg -> DigLit	3.303	0.187	0.093	2.001	0.045	0.029	0.027	0.392
26	H7b	Budg -> Emp	3.407	0.041	0.061	0.680	0.496	0.002	-0.072	0.173
27	H7c	Budg -> Profit	3.407	0.085	0.063	1.362	0.173	0.005	-0.036	0.207

	Direct Paths		VIF	β	SE	t-statistics	p-values	f2	Confidence Interval	
									LL (2.5%)	UL (97.5%)
28	H7d	Budg -> Sales	3.407	0.035	0.061	0.570	0.569	0.001	-0.079	0.162
29	H8a	RecK -> DigLit	3.427	-0.061	0.058	1.055	0.291	0.003	-0.165	0.062
30	H8b	RecK -> Emp	4.042	0.062	0.062	1.000	0.317	0.003	-0.061	0.184
31	H8c	RecK -> Profit	4.042	0.207	0.084	2.476	0.013	0.023	0.044	0.367
32	H8d	RecK -> Sales	4.042	-0.030	0.077	0.396	0.692	0.001	-0.179	0.124
33	H9a	RiskMgt -> DigLit	4.002	0.181	0.064	2.807	0.005	0.022	0.057	0.312
34	H9b	RiskMgt -> Emp	4.703	0.125	0.074	1.676	0.094	0.010	-0.021	0.273
35	H9c	RiskMgt -> Profit	4.703	0.048	0.094	0.507	0.612	0.001	-0.141	0.227
36	H9d	RiskMgt -> Sales	4.703	0.198	0.082	2.401	0.016	0.020	0.035	0.359
37	H10a	SavLit -> DigLit	2.865	0.200	0.062	3.244	0.001	0.038	0.074	0.317
38	H10b	SavLit -> Emp	3.099	0.108	0.058	1.844	0.065	0.011	-0.008	0.219
39	H10c	SavLit -> Profit	3.099	0.190	0.071	2.675	0.007	0.025	0.057	0.335
40	H10d	SavLit -> Sales	3.099	0.151	0.062	2.428	0.015	0.018	0.023	0.269
41	H11a	DigLit -> Emp	2.875	0.297	0.070	4.252	0.000	0.092	0.181	0.450
42	H11b	DigLit -> Profit	2.875	0.189	0.060	3.147	0.002	0.027	0.062	0.298
43	H11c	DigLit -> Sales	2.875	0.051	0.050	1.025	0.305	0.002	-0.040	0.155
		Control Variables								
		Age -> Emp	2.082	-0.024	0.044	0.543	0.587	0.001	-0.113	0.058
		Age -> Profit	2.082	0.187	0.059	3.147	0.002	0.037	0.070	0.304
		Age -> Sales	2.082	0.178	0.062	2.876	0.004	0.037	0.055	0.297
		Gender -> Emp	1.225	-0.076	0.067	1.135	0.257	0.003	-0.210	0.050
		Gender -> Profit	1.225	-0.033	0.079	0.418	0.676	0.000	-0.189	0.119
		Gender -> Sales	1.225	-0.369	0.072	5.100	0.000	0.063	-0.510	-0.226
		Educ -> Emp	1.961	-0.443	0.042	10.501	0.000	0.300	-0.525	-0.359
		Educ-> Profit	1.961	0.109	0.056	1.937	0.053	0.013	-0.004	0.215
		Educ -> Sales	1.961	-0.100	0.055	1.811	0.070	0.012	-0.208	0.011
		Industry -> Emp	1.067	-0.088	0.030	2.893	0.004	0.022	-0.147	-0.031
		Industry -> Profit	1.067	-0.007	0.036	0.208	0.835	0.000	-0.077	0.060
		Industry -> Sales	1.067	-0.022	0.033	0.657	0.511	0.001	-0.087	0.043

Note: Int Rates= Interest Rate; Budg= Budgeting Behaviour; DebtLit= Debt Literacy; Emp=Employment Rates; Infl= Inflation Literacy; InsLit= Insurance Literacy; InvLit= Investment Literacy; RecK= Record Keeping; RiskD= Risk Diversification; RiskMg= Risk Management; Sav= Savings Behaviour; DigCa= Digital Capability

6.8 The Impact of Financial Knowledge on SME Performance

6.8.1 Knowledge on Interest Rates and SME Performance

The direct path assessment based on Table 6.15 and Figure 6.1 above indicates that knowledge of interest rates exerts insignificant negative effects in explaining employment growth (β = -0.016) (p = 0.760). Based on this result, *H1b* is therefore rejected. This implies that the relationship between managers' knowledge of interest rates and SME employment growth in Ghana is statistically insignificant. Even though some previous studies support this result (Vatavu, 2014; Odusanya et al., 2018), the study by Lusardi and de Bassa Scheresberg (2013) argues that SME manager's ability to understand the rates at which a loan is acquired prevents SMEs from falling into unnecessary debt which can lead to insolvency. This means that lower interest rates will provide financial flexibility for SMEs in the Volta Region of Ghana to invest in other business opportunities and hire more staff to improve performance.

Also, the direct path assessment from Table 6.15 and Figure 6.1 above indicates that knowledge of interest rates has a significant negative effect on profitability (β = -0.139; p = 0.004) at a 5 % level. The result indicates that a unit increase in the knowledge of interest rates leads to a decrease in SME profitability by 14%. The result implies that knowledge of interest rates has a negative effect on SME profitability, hence *H1c* is rejected. However, knowledge of interest rates helps SME managers understand the impact higher interest rates could have on their businesses. This is because higher interest rates affect SMEs' capital structure leading to downward financial performance (Restrepo et al., 2019). This implies that the lack of interest rates knowledge leads to the high cost of borrowing as this prevents SME managers in Ghana from coordinating sound financial behaviour in making effective financial decisions in improving SME profitability (Atkinson and Messy 2012; Lusardi and de Bassa Scheresberg, 2013; Tang et al, 2015).

This study hypothesised that SME managers' knowledge of interest rates would have a significant positive on profitability. But the significant negative effect finding could imply that SME managers with a better insight into interest rates might make investment decisions based on the expected rise in future interest rates. Empirically, businesses increase their investments when interest rates are low (Hanson and Stein 2015; Di Maggio and Kacperczyk 2017). However, among small businesses, this knowledge leads to excessive borrowing and investments. Many SMEs therefore depend heavily on borrowed funds which eventually leads to low profitability in their businesses (Lian et al., 2019). In addition, if SMEs rely on excessive borrowing to finance their operational activities, they could be in higher debt due to the usual high interest rates in Ghana.

Finally, as shown in Table 6.15 and Figure 6.1, the results indicate that knowledge of interest rates exerts insignificant effects on sales growth (β =0.049) (p = 0.265). Thus, knowledge of interest rates is statistically insignificant in explaining the sales of SMEs in the Volta Region of Ghana, hence, *H1d* is rejected. This finding could imply that most SME managers in Ho, the Volta Region of Ghana might not have a clear insight into how interest rates interact with consumer financial decision, market trends, and their own business operations. As a result, managers might find it challenging to translate their knowledge into actionable insights that promote SME sales growth.

Also, the lack of effective marketing and promotional strategies to boost sales could possibly contribute to this insignificant finding. Strategies such as targeted marketing campaigns, attractive discounts, and innovative product offerings can attract new customers and stimulate demand (Teece, 2010), potentially offsetting any negative impact of rising interest rates. Even though this finding is supported by Nanda and Panda (2018), however, it is important that SME managers use their knowledge of interest rates to obtain loans at lower rates which could provide financial flexibility for SMEs to diversify their product lines to increase sales.

6.7.2 The Impact Knowledge of Inflation on SME Performance

First, the direct path result based on Table 6.15 and Figure 6.1 above shows knowledge of inflation has a statistically insignificant negative effect on employment growth (β =-0.019) ($p = 0.669$). The result implies that knowledge of inflation failed to explain SME employment growth in Ghana and as a result, *H2b* is rejected. Previous studies, however, contradict this finding and argue that there is a positive relationship between inflation and SME employment growth (Mateev and Anastasov, 2011; Ipinnaiye et al., 2017). Given that persistent inflation is one of the major challenges affecting entrepreneurial activities, leading to low growth among SMEs (Thompson Agyapong, 2018), managers can use their knowledge of inflation and develop strategies that mitigate any risks that threaten their growth. This implies that knowledge of inflation could have a significant effect on employment growth in the SME sector in Ghana as inflation causes SME sales to decrease leading to staff layoffs. This finding could, however, mean that most SMEs in the Volta Region of Ghana lack knowledge on inflation to understand its impact on future market conditions and make strategic investment decisions on staff recruitment to improve performance.

Secondly, the path analysis result from Table 6.15 and Figure 6.1 above shows that Knowledge of inflation exerts a significant positive effect on profitability (β = 0.196; p = 0.002 at 5% level. This means that *H2c* is accepted. This result implies that a unit increase in the knowledge of inflation increases SME profitability by 20%. This finding is in line with previous empirical studies (Mateev and Anastasov, 2011; Vatavu, 2014; Gado, 2015). Based on this result, SME managers in the Volta Region of Ghana are able to use their inflation knowledge and decide what products to sell to boost their profitability. As inflation dips consumer confidence causing most people to spend less on goods and services (Rashid and Saeed, 2017), the ability of SME managers to invest in affordable or cheaper and alternative products could boost their sales and improve profitability.

Some previous studies, however, contradict this finding and established an insignificant statistical effect between inflation and SME profitability (Kiganda, 2014; Osamwonyi and Michael, 2014; Bolarinwa et al., 2021). It is argued that high inflation increases the costs of production for most SMEs and also reduces currency values which inversely affect the exchange rate and thereby, affect SME profitability (Odusanya et al., 2018). Even though these different stances create a division in the literature, however, it is important that SME managers in the Volta Region of Ghana are encouraged and supported to boost their knowledge on inflation to enable them to understand how inflation uncertainty affects price changes and investment decision-making to improve performance (Wang et al., 2016).

Finally, the analysis from Table 6.15 and Figure 6.1 above also shows that knowledge of inflation exerts a statistically significant effect on sales growth (β = 0.331; *SE* = 0.051; *p* = 0.000 at 5% level. The result indicates that knowledge of inflation is statistically significant in explaining SME sales growth in the Volta Region of Ghana hence, *H2d* is accepted. This means that a unit improvement in knowledge of inflation leads to a 33% increase in SME sales in the Volta Region of Ghana. This finding implies that most SME managers in the Volta Region of Ghana, particularly those in trading could use their knowledge of inflation and take advantage of the lack of well-functioning market structures and economic systems in Ghana to hoard goods and later hike prices in an inflationary economy to maximise sales (Jackson and Jabbie, 2020). For example, from Table 6.6 above, the majority of SMEs in Ghana (58.3%) are into trading and could hoard goods and products which creates a dysfunctional price system leading to an increase in sales during a high inflation.

Previous studies, however, contradict this finding and argue that inflation drives prices of goods and services and thereby, reduces sales (Cant and Wiid, 2013; Doan et al., 2020; Khan, 2022). This could imply macroeconomic conditions such as high inflation are out control of SME managers and this could affect SME performance (Ipinnaiye et al., 2017).

7.7.3 The Impact of Debt Management Literacy on SME Performance

From Table 6.15 and Figure 6.1 above, the application of debt literacy exerts a significant positive effect on employment growth (β = 0.134; p = 0.022) at a 5% level. This finding means that a unit increase in debt management knowledge leads to an increase in employment growth by 13%. Based on this, *H3b* is accepted. This result is in line with previous studies which argued that debt is the likely cause of unemployment in most SMEs (Hanka, 1998; Duygan-Bump et al., 2015). This means that SMEs may consider reducing their workforce when there is an increase in debt level (Chodorow-Reich, 2014). This result implies that most SMEs in Ghana understand the impact of debt on their businesses. Despite the significant result, SME managers in Ghana must continually be encouraged and supported to acquire debt management skills that satisfactorily their debt level to improve employment growth and SME performance.

The direct path result based on Table 6.15 and Figure 6.1 also shows that debt management literacy failed to have a significant effect on SME profitability (β = -0.031) (p = 0.512). This result implies that a unit increase in debt management knowledge decreases SME profitability by 3% hence, *H3c* is rejected. The result shows that knowledge of debt management failed to explain SME profitability in Ghana. The finding is, however, supported by previous studies (Zeitun and Tian, 2007; Nunes et al., 2009; Rafiq, 2011; Yazdanfar and Öhman, 2015; Milos and Milos, 2015). But conventionally, managers' ability to control debt leads to a broad set of economic behaviour that improves SME performance (Gathergood et al., 2019). Based on this, the study of Abor (2005) suggested that short-term and total debt positively and significantly influenced profitability which contradicts this finding. This implies that managers' debt management knowledge could encourage SMEs' positive financial decision-making to improve performance.

Several factors could explain this current finding. First, the type of SME financing could infer the influence of debt on SME profitability. For example, when SME managers choose internal financing over external, SMEs become more profitable (Milošev, 2021). Profitable SMEs tend to reduce their agency costs of debt by reducing their debt ratios. Based on the agency cost viewpoint, the relationship between debt and SME *profitability is* likely to be negative which justified this finding (Öhman and Yazdanfar, 2017). Based on this evidence, the finding implies that most of the SMEs in Ghana could be financing their businesses internally as excessive debt leads to higher agency costs resulting in a negative association between debt ratio and SME profitability. Secondly, the principles of tax deductibility of interest on debt, income tax and non-debt tax shield could create contradictory effects of debt on SME profitability (Milošev, 2021). As taxation influences SME profitability, SME managers in the Volta Region of Ghana might not be encouraged to declare their actual profits which could explain this finding.

Also, the direct path result based on Table 6.15 and Figure 6.1 shows that debt management literacy exerts a negative insignificant result on sales growth (β = -0.005) (p = 0.900). This means that a unit improvement of debt management literacy decreases SME sales in the Volta Region of Ghana by 1%. Based on this result*, H3d* is rejected. The finding is line with previous studies results (Rafiq, 2011; Yazdanfar and Öhman, 2015). This finding could imply that SMEs find debt management strategies challenging to implement due to their complexity and time-consuming nature. Given that most SMEs in developing countries like Ghana have limited financial resources and capabilities, this can lead to substandard debt management practices that may not translate into significant sales growth. In addition, the impact of debt management literacy on sales growth may vary depending on the industry in which the SME operates. This is because SMEs in industries with stiff competition are more likely to experience negative effects from higher debt levels.

6.7.4 The Impact of Insurance Literacy on SME Performance

The direct path result based on Table 6.15 and Figure 6.1 above shows that insurance literacy exerts statistically insignificant negative effects on employment growth ($\beta = -0.009$) ($p = 0.880$) hence, *H4b* is rejected. This finding implies that insurance knowledge failed to explain SME employment in the Volta Region of Ghana. Several reasons could explain this finding. First, the overall economic situation could influence the effect of insurance literacy on SME employment growth. This is because different dimensions of the business environment have a significant impact on employment growth particularly, in developing countries like Ghana where markets and institutional infrastructure are weak (Aterido et al., 2011). Secondly, insurance literacy could play a more critical role in business continuity and employment stability in industries such as construction, transportation and manufacturing that are more susceptible to risks. Based on the 6.5 above, only a few SME managers are from these risk industries. As a result, most SMEs in Ghana might not deem it necessary to have insurance coverage to safeguard against the potential loss of jobs.

The direct path result also shows that insurance literacy exerts statistically insignificant positive effects on profitability (β= 0.083) (p = 0.273) hence, *H4c* is rejected. This result contradicts the conventional view in the literature. This is because insurance offers an important financial resource for SMEs in the event of uncertainties (Garba et al., 2022), therefore, the lack of insurance knowledge will only compound SMEs' problem to take up appropriate insurance cover to improve performance. Several reasons could account for this finding. SME operators in developing countries like Ghana are often associated with high risks and as a result, most insurance companies prefer to deal with larger organisations (Terungwa, 2012). While the knowledge of insurance plays a significant role in determining the purchase of an insurance policy by SMEs to improve performance, the lack of insurance that meets SMEs' needs could discourage them from taking up insurance coverage. Also, insurance uptake in developing countries such as Ghana is predominantly based on consumer purchasing power and a business strategic framework that supports insurance (Schuster and Holtbrugge, 2012). Given that SMEs particularly, those operating in developing countries like Ghana have limited resources and lack the managerial capability to implement a business strategic framework that supports insurance uptake, taking up insurance cover might not be SMEs' priority despite their knowledge.

The finding, however, contradicts previous empirical results studies which argue that insurance capability has a statistically significant effect on SME performance (Oscar and Abor, 2013; Amoah and Mungai, 2020). This suggests that one of the most crucial ways for SMEs to shift business risks is through insurance.

From Table 6.15 and Figure 6.1 above, the result of insurance literacy on sales growth shows statistically insignificant negative effects (β= -0.061) (p = 0.345). Thus, a unit increase in insurance literacy decreases SME sales by 6%. This implies that *H4d* is also rejected. But evidence suggests that a lack of insurance knowledge or uptake compounds SMEs' problems to mitigate certain risk factors and improve performance (Garba et al., 2022). This means that insurance purchases increase firms' values as this provides an important financial cushion for most SMEs to improve performance particularly, in the event of unforeseen circumstances (Asai, 2019). Given that most SMEs in Ghana have limited financial resources, they might not have the financial flexibility to take up insurance to safeguard their businesses. This could explain the insignificant effects. Empirically, most SMEs that obtain their working capital from banks as loans require insurance coverage as a protection of the loan (Asai, 2019). From Table 6.7 above, it is observed that most SMEs in the Volta Region of Ghana, thus, 66.9% obtained their working capital from savings. Given that the majority of SMEs obtain their working capital through savings, insurance cover will not be the priority for SMEs in the Volta Region which could explain the insignificant result.

7.7.5 The Impact of Investment Literacy on SME Performance

The result from Table 6.15 above indicates that the application of investment literacy had insignificant positive effects on employment growth (β= 0.052) (p=0.229). This means that investment literacy failed to explain SME employment growth in the Volta Region of Ghana, hence *H5b* is rejected. But empirically, SME managers' investment knowledge plays a crucial role in an organisational investment strategy to improve performance (van Rooiji et al., 2011; van Rooiji et al., 2012; Bellofatto et al., 2018). This means that knowledge possessed by SMEs in the Volta Region of Ghana determines what they can do to improve SME employment growth. Based on this, the finding from the study is inconsistent with the general view in the literature.

This insignificant relationship between investment literacy and employment growth could be related to certain factors related to the overall business environment, certain characteristics of the SME manager such as risk aversion, or external economic conditions (Herrera and Kouamé, 2017; Igwe et al., 2019). For example, SMEs with large investment capital, large fixed assets, more business stability, structured business ownership, large customer size, and operating in urban locations are able to reinvest their annual profits to improve performance (Appiah et al., 2019). This implies that despite SME investment knowledge, these factors could discourage most SMEs in the Volta Region of Ghana from making investment decisions to improve employment growth.

The direct path assessment based on Table 6.15 and Figure 6.1 above also shows that the application of investment literacy exerts an insignificant negative effect on profitability ($\beta = -0.027$) ($p = 0.530$). This result means that an improvement in investment literacy decreases profitability by 3%. Investment literacy, therefore, fails to explain SME profitability in the Volta Region of Ghana, hence *H5c* is rejected. Despite the insignificant finding, investment decisions could be inclined toward SME sectors, labour composition and the multivariate nature of firm performance (Cristadoro and D'Aurizio, 2014). This implies that the motivation to invest might be different across the various SME sectors in the Volta Region of Ghana rather than their investment literacy, hence the insignificant result.

Finally, the direct path assessment from Table 6.15 and Figure 6.1 above shows that investment literacy had an insignificant negative effect on sales growth (β= -0.059) (p = 0.154). The result shows that a unit increase in investment literacy decreases SME sales growth by 6%. Based on this *H5d* is also rejected. But managers' investment knowledge in Ghana could help them to explore and understand what specific products or products to invest into that are fast selling to improve performance. Given that FL skills which are a catalyst in boosting SMEs' investment decision-making strategies are inadequate among most SMEs (van Rooiji et al., 2011), SME managers in the Volta Region of Ghana must be encouraged to develop their investment capabilities to improve performance.

6.7.6 The Impact of Risk Diversification Knowledge on SME Performance

Based on Table 6.15 and Figure 6.1 above, the direct path result shows that risk diversification had a significant negative effect on employment growth (β = -0.137; p = 0.001) at a 1% level. This result means that a unit increase in risk diversification knowledge decreases employment growth by 14%, the *H6b* is, therefore, rejected. This finding implies that the majority of SMEs in Ghana find it challenging to follow diversification theory due to inadequate managerial capabilities that stimulate knowledge of risk diversification to improve performance (McKenzie and Woodruff, 2017). This result means that SME managers in Ghana are over-diversifying into products and services that are not directly impacting employment growth. Also, SMEs that diversify into dissimilar industries are more likely to experience job losses compared to those that remain in specialised areas of operation within their core industry (Audretsch et al., 2021). It is, therefore, important that SME managers in the Volta Region of Ghana have more insight into how to diversify their overall investment portfolio through FL skills to improve performance (Cressy et al., 2014; Eshetu and Mekonnen, 2016). This means that a well-managed and diversified SME in the Volta Region of Ghana is able to employ the required staff level to improve performance (Coad and Guenther, 2014).

The direct path result from Table 6.15 also shows that knowledge of risk diversification exerts an insignificant negative effect on profitability (β = -0.093) (p = 0.085). The finding implies that knowledge of risk diversification failed to explain SME profitability in Ghana. Based on this result, a unit improvement in risk diversification decreases profitability by 9%, hence *H6c* is rejected. The finding is in line with a previous study which also failed to establish any association between product or business diversification with higher SME performance (Muñoz-Bullón and Sanchez-Bueno, 2011). But the lack of in-depth knowledge of the risk-return trade-offs that is linked with various investment strategies can lead to low-standard diversification decisions that negatively affect profitability (Baker and Ricciardi, 2014). It is, therefore, important that SMEs in Ghana are supported to acquire FL skills to diversify their business to improve profitability.

Finally, the direct path result from Table 6.15 above shows that knowledge of risk diversification exerts a statistically significant effect on sales growth (β = 0.143; p = 0.001) at a 1% level. The result implies that a unit increase in risk diversification leads to an increase in sales growth by 14%. From the result, *H6d* is accepted. This finding is in line with the study by Cumming and Walz (2010) which argue that knowledge of risk diversification leads to an increase in sales. This means that the ability of SME managers in Ghana to spread or diversify risks improves the effectiveness of their sales (Cieślik et al., 2012). Other studies, however, contradict this finding by establishing statistically insignificant results (Campa and Kedia, 2002; Martin and Sayrak, 2003). But with the stiff competition in the current business environment, adopting risk diversification strategies is unlikely to endanger the survivability and growth prospects of SMEs operating in Ghana due to their improved sales (Ljubownikow and Ang, 2020).

6.*8* The Impact of Financial Behaviour on SME Performance

6.8.1 The Effect of Budgeting Behaviour on SME Performance

The direct path shown in Table 6.15 and Figure 6.1 above reveals that the application of budgeting exerts an insignificant direct effect on employment growth (β = 0.041) (p = 0.496) at a 5% level. This result implies that budgeting behaviour failed to explain SME employment growth in Ghana and as a result, *H7b* is rejected. The finding, however, contradicts previous empirical studies which establish a linear relationship between budgeting and SME employment growth (Schubert and Kirsten, 2021). But the current budgetary system is becoming more sophisticated consisting of costly financial modelling and software which is often associated with expensive training (Mulani et al., 2015). Given that SMEs are resource-constrained, this means that SMEs in the Volta Region of Ghana lack of resources to install such an expensive and sophisticated budgetary system and employ staff to manage budgets (Fortuna, 2021), hence the insignificant result. Despite this finding, SMEs in Ghana must be encouraged to develop their human capital and implement a budgetary control system given its effect on legitimising SME managers' strategic and operational planning to improve performance (Fayard et al., 2012).

Also, the direct path assessment based on Table 6.15 and Figure 6.1 above reveals an insignificant result between budgeting and profitability (β =0.085) (p = 0.173). This finding implies that *H7c* is rejected. This result is consistent with the finding of Fortuna (2021). But given that budgeting is costly, time-consuming and knowledge-intensive and as most SMEs in developing countries like Ghana lack resources, most SMEs in Ghana might not be motivated to adopt one (Ahmad, 2017). Based on SMEs' resource constraints, they will be compelled to adopt a weaker budgeting system which is more likely to experience budget overruns and cost overruns, thereby impacting profitability negatively. Managers' level of education as well as the degree of openness to experience also play an important role in understanding budgeting practices among SMEs in emerging and developing economies (Zor et al., 2019). Based on Table 6.4 above, the majority (55.3%) of SME managers in the Volta Region of Ghana who responded to the questionnaire have no formal education. This implies that most of the SMEs in the Volta Region might not have the knowledge to understand how a budgetary system could improve profitability and implement one, hence the insignificant result.

Finally, the direct path analysis of budgeting behaviour on sales growth also revealed an insignificant statistical effect (β = 0.035) (p = 0.569). This means that budgetary behaviour failed to explain SME sales growth in the Volta Region of Ghana and as a result, *H7d* is rejected. But scholars have long argued that effective budgeting practices improve SME performance (King et al., 2010; Laitinen et al., 2016; Matsoso et al., 2021). This finding thereby contradicts the general view in the literature which established a linear relationship between budgeting behaviour and sales growth (Dunk, 2011; Laitinen et al., 2016; Ahmad, 2017). The result could be attributed to the lack of financial management practices among most SMEs in developing countries such as Ghana and the resource challenges that these SMEs face to implement effective budgeting systems and boost performance (Drexler et al., 2014; McKenzie and Woodruff, 2017). It is, therefore, important for SME managers in the Ghana to develop their human capital to acquire FL skills to understand how budgetary practices could benefit SME sales growth.

6.8.2. The Impact of Record-Keeping Behaviour on SME Performance

The direct path analysis based on Table 6.15 and Figure 6.1 above shows that the application of record-keeping behaviour exerts an insignificant effect on employment growth (β =0.062) (p = 0.317). Record-keeping behaviour, therefore, failed to explain SME employment growth in Ghana, hence *H8b* is rejected. A previous study, however, contradicts this finding and argues that SMEs can establish high productivity and strong business performance by employing adequate staff with the right skillset (Abdul-Rahamon and Adejare, 2014). This means that when SME managers in the Volta Region of Ghana make record-keeping their priority, they will be able to recruit and train staff to the standard skills that improve performance. But the resource challenges could make it challenging for these SMEs in the Volta Region to attract the right staff that possess adequate skills such as effective record-keeping skills to improve performance. This could explain the insignificant result as managers in the Volta Region might not prioritise or practice effective record-keeping.

The direct path result based on Table 6.15 also shows that the application of record-keeping behaviour exerts a significant positive influence on profitability (β = 0.207; p = 0.013) at a 5% level. This means that a unit increase in record-keeping behaviour increases profitability by 21%. This result means that *H8c* is accepted. This finding is broadly consistent with previous empirical studies on Ghana (Amoako et al., 2014; Musah, 2017). This result is also in line with a previous study conducted across seven developing countries which include Bangladesh, Chile, Ghana, Kenya, Mexico, Nigeria, and Sri Lanka (McKenzie and Woodruff, 2017). This underscores the importance of record-keeping as an effective financial management practice for SMEs in the Volta Region of Ghana to improve their financial performance (Maseko and Rnyani, 2011; Tzempelikos and Gounaris, 2015). However, the study by Higuchi et al. (2019) contradicts this finding. Despite this, SMEs in Ghana must be encouraged to acquire FL skills which enhance record-keeping strategy to monitor their performance trends.

Furthermore, the PLS-SEM direct path testing from Table 6.15 and Figure 6.1 reveals record-keeping to exert an insignificant negative effect on SME sales growth (β = -0.030) (p = 0.692). The result implies that a unit increase in record-keeping decreases sales growth by 3%. This means that record-keeping failed to explain SME sales in the Volta Region of Ghana, hence *H8d* is rejected. Even though this result is consistent with a previous study (Higuchi et al., 2019), however, the study by McKenzie and Woodruff (2017) contradicts this finding and establishes a statistically significant result. This, thereby, creates a mixed view in the literature. Despite this mixed view, there is compelling evidence that managers' record-keeping skills improve SME performance significantly (Drexler et al., 2014; Berge et al., 2015; Higuchi et al., 2015; Mwebesa et al., 2018). This finding implies that SME managers in Ghana do not understand how valuable record-keeping can impact on sales growth. Even though many economic factors such as inflation and interest rates could contribute to lower sales growth rather than managers record-keeping behaviour (Mian and Sufi, 2010; Minetti and Zhu, 2011; Hunjra et al., 2014), SME managers must be encouraged to take up FL training that improves their record-keeping behaviour and explores fast selling products to boost sales growth.

6.8.3 The Impact of Risk Management Behaviour on SME Performance

First, the path analysis based on Table 6.15 and Figure 6.1 shows that risk management has an insignificant impact on employment growth (β =0.125) (p = 0.094). The result means that risk management is statistically insignificant in explaining SME employment growth in Ghana. Based on this result, *H9b* is rejected. This result could imply that most of these SMEs overemphasised risk mitigation over long-term investments in innovation, expansion, or market development which could lead to missed growth opportunities and potentially impacting on employment growth. But, when risks are not well mitigated, this could equally result in job losses or impact on future staff recruitment plans. As a result, previous studies disagreed with this finding and argued that there is a linear relationship between SME risk management and performance (Ping and Muthuveloo, 2015; Teoh et al., 2017; Grondys et al., 2021). This is because the effective implementation of a risk management strategy improves SME performance significantly (Malik et al., 2020).

Furthermore, the direct path analysis based on Table 7.15 and Figure 7.1 shows a statistically insignificant relationship between risk management and profitability (β =0.048; p = 0.612), hence *H9c* is rejected. Risk management increases costs (Grace et al., 2015). The finding could, therefore, imply that most SME managers in the Volta Region of Ghana only consider adopting risk management strategies if the benefits exceed the costs (Pagach and Warr, 2011). As a result, adopting a risk management strategy might not be managers' priority and this could explain the insignificant effect.

However, previous studies contradict this finding (Eckles et al. 2014; Ahmed, 2016; Yakob et al., 2019). This is because risk management practices are internal capabilities or resources which reduce various costs associated with business operations to ensure that SMEs remain profitable (Florio and Leoni, 2017; Yang et al., 2018). Based on this, It is important that SMEs in the Volta Region invest in human capability development to acquire the requisite skills and knowledge to initiate risk management strategies to boost performance (Berge et al., 2015; Higuchi et al., 2015; Sifumba et al., 2017).

From the direct path analysis, which is based on Table 6.15, risk management behaviour emerged to have a statistically significant positive effect on sales growth (β = 0.198; p = 0.016) at a 2% level. The finding is consistent with the study of Saeidi et al. (2021). This result means that a unit increase in SME risk management behaviour increases SME sales growth by 20%. This implies that risk management successfully explains the direct positive effects on sales growth of SMEs in the Volta Region of Ghana hence, *H9d* is accepted. This finding means that SME managers acknowledged how risk management practices are becoming an effective strategy for identifying, assessing, measuring and mitigating potential risks which can lead to better resource allocation, improved innovation, and reduced costs, eventually contributing to SME sales growth. (Daidj et al.,2017; Yakob et al., 2019). The literature generally argues that standardised risk management practices provide firms with greater access to financial resources, which can be used for the implementation of SME growth strategies to expand sales and improve performance (Callahan and Soileau 2017; Florio and Leoni 2017; Yang et al., 2018; Malik et al., 2020). Despite the significant benefits of risk management outlined above, a study by Quon et al. (2012) contradicts this finding by failing to record any noticeable significant effect of SME risk management behaviour on sales growth.

6.8.4 The Impact of Savings Behaviour on SME Performance

The direct path result which is based on Table 6.15 above shows that the application of savings behaviour exerts a statistically insignificant effect on employment growth (β =0.108; p = 0.065). The result implies that savings behaviour failed in explaining the employment growth of SMEs in the Volta Region of Ghana, hence *H10b* is rejected. This finding could be explained by macroeconomic conditions. This is because in a strong and stable economy, increased savings by SMEs could translate into increased investment which leads to job creation (Denis and Sibilkov, 2010; Duval et al., 2020). However, as the study was conducted in the Volta Region of Ghana, most of these SMEs face resource challenges (Quartey et al., 2017) and are unable to make significant investments in their staffing level to improve performance.

This finding is, however, in line with the study by Bacchetta et al. (2019) but contradicts the study by Kisaka and Mwewa (2014) which established a statistically significant effect of SME savings on employment growth. It is plausible the finding could imply that most of these SMEs lack FL skills to understand how their savings behaviour could lead to investment and improve performance.

The direct path analysis based on Table 6.15 also shows that the application of savings behaviour exerts a statistically significant positive effect on SME profitability (β = 0.190; p = 0.007) at a 1% level. This implies that a unit increase in savings behaviour increases SME profitability by 19%. As a result, *H10c* is accepted. The finding coincides with a previous empirical result (Dimitropoulos et al., 2020). The finding implies that savings help SMEs in the Volta Region of

Ghana finance profitable and strategic investment projects to improve performance (Mohd-Ashhari and Faizal, 2018; Martínez-Sola et al., 2018). The result also highlights that SMEs in Ghana understand effective savings culture and how this improves performance and reduces the risk of insolvency. Evidence suggests that individuals or businesses that incorporate savings activities into daily routines could lead to personal saving orientation and help achieve long-term business objectives (Dholakia et al., 2016). From Table 6.7 above, most of the SME managers (65.7%) financed their businesses through personal savings which could be a result of their personal saving orientation specifically to set up a business. This means that the majority of SME managers in the Volta Region of Ghana understand the importance of savings to business growth, hence the significant finding.

Finally, the direct path results based on Table 6.15 also show that the application of savings behaviour exerts a significant positive effect on sales growth (β = 0.151; p = 0.015) at a 2% level. This implies that a unit increase in savings increases SME sales growth by 15%. Based on this, *H10d* is accepted. This finding implies that most SMEs are less reliant on debt financing for business needs. Less reliance on debt financing by SMEs reduces the cost of capital for business operations and allows them to invest more in growth initiatives that lead to increasing sales. This result is confirmed by previous studies (Rocca and Cambrea, 2019; Doan, 2020) which established a significant positive relationship between savings behaviour and sales growth. Despite this significant result, SMEs in the Volta Region of Ghana must be encouraged to develop FL skills that translate into savings behaviour to boost their financial performance.

6.9 The Impact of Managerial Digital Capability on SME Performance

First, based on the path analysis testing from Table 6.15 and Figure 6.1, managers' digital capability emerged to have a statistically significant effect on employment growth (β =0.297) *(p=0.000)* at a 1% level. This finding means that a unit improvement in digital capability increases SME employment growth by 30%. Based on this*, H11a* is, therefore, accepted. The finding is in line with the study by Fareri et al. (2020) which argues that digital capability has become one of the soft skills and central across many employments in the current digital era. The finding implies that most SMEs from Ghana understand the impact of the current technological development on staff productivity. This means most of these SMEs acknowledged that digital capability is one of the human resources for strategic decision-making to improve SME performance, hence the significant result. Given that the majority of SMEs in developing countries such as Ghana still face major challenges to fully adopt digital technology in their strategic decision-making to improve performance (Irfan and Sabir, 2022), SMEs in the Volta Region of Ghana must be supported to develop their digital capability and be able to take advantage of the huge benefits that digital technology brings to businesses in the area of savings, credit, insurance uptake and transfer of money in the payment of goods and services.

Secondly, the direct coefficient analysis based on Table 6.15 also reveals that digital capability exerts a statistically significant effect on profitability *(β* = 0.189) *(p= 0.002*) at a 5% level. The result means digital capability successfully explains the significant effect of SME profitability in Ghana. This implies that a unit increase in digital capability increases SME profitability by 19%. Based on this *H11b* is accepted. This finding is in line with a previous study's result which argued that managers' digital capability helps SMEs to easily diversify business activities both online and offline to maximise profits (Neumeyer et al., 2020). This result implies that Ghanaian SME managers understand how digital capability serves as a catalyst to easily adapt innovative ways of diversifying business operations and activities to improve profitability. This means that SME managers in the Volta Region of Ghana who are not digitally savvy could find it challenging to build market strategies that attract new customers to improve performance (Eze et al., 2021). The statistically significant effect of digital capability on SME profitability from this current study renews the debate on human capital development which serves as micro-foundations for SME growth objectives.

Lastly, the direct path analysis based on Table 7.15 further shows that managers' digital capability exerts a statistically insignificant effect on sales growth (β = 0.051) ($p=0.305$). This means that digital capability failed to explain SME sales growth in the Volta Region of Ghana, hence *H11c* is rejected. However, this finding contradicts the general view in the literature which highlights that SMEs with digital capability are able to strategize better to increase their customer base and boost sales (Irfan and Sabir, 2022; Acosta-Prado and Tafur-Mendoza, 2023). Based on this, SMEs in the Volta Region of Ghana must understand the shift in digital consumer behaviour which requires SMEs to adopt innovative business models that meet consumer expectations and habits to improve sales (Verhoef et al., 2021). It is, therefore, important that SMEs in the Volta Region of Ghana are encouraged to make substantial investments in developing their digital capabilities if performance is to be improved in this sector. This is because digital capability enables business activities to be conducted a lot quicker, more efficiently and in cost-beneficial ways (Tarigan et al., 2020).

6.10 The Effect of SME Financial Knowledge and Behaviour on Digital Capability

6.10.1 The Effect of Financial Knowledge on Digital Capability Development of SMEs

First, the assessment of the direct path results based on Table 6.15 and Figure 6.1 above reveals that knowledge of interest rates has a significant positive effect on SME digital capability (β = 0.223; p = 0.000) at a 1% level. This result indicates that a unit increase in interest rates increases digital capability by 22%. This means that *H1a* is accepted. This result implies that most SME managers in the Volta Region of Ghana do realise the importance and the flexibility that digital capability brings to help address some key challenges in conducting business activities to bring maximum utility (Skare et al., 2023). With digital financial products on the rise, this finding implies that most SMEs in Ghana are deploying digital literacy skills as a new form of financial management and mode of payment to improve performance (Shofawati, 2019). This means that managers' digital capability is now central for SMEs to access the best financial product and this explains this significant finding.

Secondly, the direct path/effect analysis which is based on Table 6.15 above also shows that knowledge of inflation had an insignificant effect on SMEs' digital capability *(β=0.040; p = 0.286)* hence, *H2a* is rejected. However, SME managers' digital capability enables them to access economic information with ease to enhance their knowledge resources and improve performance (Kulathunga et al., 2020). This means that SME managers in the Volta Region of Ghana can access information on inflation using their digital capability and develop an effective strategy that improves their business performance. This is because SME managers' digital capability serves as a catalyst in fast-tracking the needed transformation that a business requires to attain a sustained competitive advantage (Cenamor et al., 2019). Given that inflation had an insignificant effect on SMEs' digital capability, the finding calls for better FL initiatives that stimulate managers' financial knowledge and digital capability that drive innovation to improve performance (Solberg et al., 2020).

Thirdly, the direct path/effect results from Table 6.15 above reveal that the use of debt management literacy had no significant influence on digital capability *(β =0.057; p = 0.242).* This result means that *H3a* is rejected. This finding contradicts a prior study which suggests that Internet banking, which mainly relies on managers' digital capability, reduces SME indebtedness (Fasano and Cappa, 2022). Given that most financial services and products are now accessible online, SME managers in the Volta Region of Ghana must develop their digital capability to explore financial services and products that are suitable to their needs to improve performance. This means that digital technology has altered traditional business models, and the way value is created in SMEs (Matarazzo et al., 2021; Müller et al., 2021). As credit contracts are based on information, the ability of SMEs in Ghana to use online services and apply for credit could reduce the bank-firm information gaps and improve prudent financial decision-making (Puschmann, 2017).

In addition, the direct path/effect assessment results from Table 6.15 also show that the application of SME managers' knowledge on insurance exerts an insignificant positive effect on manager's digital capability *(β= 0.005; p = 0.939)* hence, *H4a* is rejected. Digital capability and the financial world have become deeply integrated requiring managers to develop their capability to meet business demand (Yu et al., 2023). This implies that for SME managers in Ghana to access most financial services and products such as insurance with ease, they require optimum digital capability.

Furthermore, the path analysis result from Table 6.15 also shows that managers' investment literacy exerts an insignificant negative effect on SMEs' digital capability *(β= -0.073; p = 0.098)*. This finding implies that *H5a* is rejected. This result failed to follow the conventional view in the literature on how managers' digital capability improves SMEs' investment opportunities. This finding implies that most Ghanaian SMEs will find it challenging to reshape their business models and activities and tap into the investment markets to improve performance (Skare et al., 2023). Based on this finding, digital capability development must be SMEs' top priority to improve performance.

Finally, based on Table 6.15, knowledge of risk diversification had a significant positive effect on managers' digital capability (β = 0.186; p = 0.000) at a 1% level. The result implies that a unit improvement in knowledge of risk diversification increases a manager's digital capability by 19% and hence, *H6a* is accepted. This finding is consistent with a previous study which argues that managers' digital capability helps businesses diversify their activities and remain resilient (Morris et al., 2022). This implies that through digital technology, SME managers in Ghana could have the greatest opportunity to spread their business risks across several markets to improve performance (Bowen and Morris, 2019).

6.10.2 The Effect of Financial Behaviour on Digital Capability of SMEs

Regarding SME financial behaviour, the direct path/effect results shown in Table 6.15 and Figure 6.1 above, the findings are also mixed. First, the application of budgeting behaviour had a significant positive influence on digital capability (β = 0.187; p = 0.045) at a 5% level. This implies that a unit increase in managers' budgeting behaviour increases digital capability by 19%. Based on this result, *H7a* is accepted. This result highlighted that most SME managers in Ghana now understand that budgeting behaviour and digital literacy skills are complementary. As a result, all SME managers in Ghana must rethink and develop their digital capabilities to innovate their business models and remain competitive (Bouwman et al., 2019). This finding explicitly illustrates that most of SMEs in Ghana are now replacing their traditional business management practices (manual accounting system) with digitalised systems to improve performance.

Secondly, the direct path result based on Table 6.15 shows record-keeping behaviour to have a statistically insignificant negative effect on digital *literacy* (β = -0.061) (p= 0.291). The result indicates that *H8a* is rejected. This finding, however, contradicts previous empirical study which shows a statistically significant impact of SME digital capability and record-keeping practice (Mabula and Han, 2018). Despite the insignificant effect of this result, digital technology remains an important determinant for SME financial management practices (Oyeku et al., 2014), however, its adoption among SMEs in some developing countries such as Ghana is generally low (Datta, 2011). Based on this evidence, the findings from this study could imply that most SMEs in Ghana lack the digital capability to implement financial management practices such as budgeting to improve performance. SMEs must, therefore, be encouraged to develop their digital capability to implement computerised accounting management systems to improve performance.

Thirdly, from the direct path result based on Table 6.15, SME risk management behaviour shows a statistically significant effect on SME digital capability *(β =0.181) (p=0.005)* at a 5% level*.* This finding implies that most SMEs in Ghana have acknowledged that innovative culture is the future for shaping their business strategies and models to improve performance (Hahn, 2020; Wang et al., 2020). The result implies that a unit increase in risk management behaviour increases SME digital capability by 18%. This finding indicates that *H9a* is accepted. The finding is in line with other previous empirical studies (Chang et al., 2020; Zinn and Goldsby, 2020). Despite the significant result, the financial and human resource constraints are preventing most SMEs in Ghana from fully adopting digital technology to improve their digital capability (Baryannis et al., 2019). SMEs must, therefore, be encouraged to allocate resources and invest in technological adoption to mitigate potential risks in their businesses.

Finally, from Table 6.15, the direct path shows that savings behaviour had a significant positive effect on the application of digital literacy *(β = 0.200; p=0.001)* at a 5% level. This result means that a unit increase in savings behaviour increases managers' digital capability by 20%. Thus, overall, savings behaviour correlates positively with Digital capability, hence *H10a* is accepted. The finding is in line with a previous study which highlights that digital capability influences savings behaviour (Benami and Carter, 2021). This result means that most SME managers in Ghana have the ability to adopt a digital culture that helps formulate better financial behaviour and strategies to improve performance (Proksch et al., 2021). A previous study, however, contradicts this finding and reveals that digital capability reduces SME savings ability significantly by removing the precautionary motive (Sun et al., 2022). Despite this mixed view, digital capability is crucial in delivering innovative SME financial practices to improve performance.

6.11 The Mediating Effect of Managers' Digital Capability on SME Performance

This section highlights the significance of digital capability in building effective financial skills and behaviours among SME managers. Table 6.16 below reports the indirect effects of the predictors on SME performance indicators through managers' digital capability (i.e., the mediating role of digital capability). According to Nitzl et al. (2016), a mediating effect exists when the indirect effect is significant. As revealed in Table 6.16 below, out of the thirty (30) indirect paths, nine (9) are significant.

Table 6.16: Indirect path (Mediating effects) results

Paths	*β*	*SE*	*t*-statistics	*p*-values	Confidence Interval	
					LL (2.5%)	UL (97.5%)
Budg -> DigLit -> Emp	0.055	0.028	1.974	0.048	0.011	0.126
Budg -> DigLit -> Profit	0.035	0.024	1.455	0.146	0.004	0.102
Budg -> DigLit -> Sales	0.010	0.012	0.790	0.429	-0.005	0.049
Int Rates -> DigLit -> Emp	0.066	0.029	2.254	0.024	0.024	0.139
Int Rates -> DigLit -> Profit	0.042	0.016	2.709	0.007	0.017	0.078
Int Rates-> DigLit -> Sales	0.011	0.012	0.987	0.324	-0.008	0.038
DebtLit -> DigLit -> Emp	0.017	0.017	1.003	0.316	-0.010	0.057
DebtLit -> DigLit -> Profit	0.011	0.010	1.051	0.293	-0.005	0.036
DebtLit -> DigLit -> Sales	0.003	0.005	0.636	0.525	-0.002	0.018
Infl -> DigLit -> Emp	0.012	0.012	1.003	0.316	-0.009	0.039
Infl -> DigLit -> Profit	0.008	0.008	0.933	0.351	-0.004	0.029
Infl -> DigLit -> Sales	0.002	0.003	0.662	0.508	-0.001	0.014
InsLit -> DigLit -> Emp	0.001	0.020	0.074	0.941	-0.035	0.048
InsLit -> DigLit -> Profit	0.001	0.014	0.070	0.944	-0.023	0.035
InsLit -> DigLit -> Sales	0.000	0.005	0.051	0.959	-0.007	0.015
InvLit -> DigLit -> Emp	-0.022	0.015	1.479	0.139	-0.056	0.004
InvLit -> DigLit -> Profit	-0.014	0.010	1.445	0.148	-0.040	0.000
InvLit -> DigLit -> Sales	-0.004	0.005	0.810	0.418	-0.019	0.002
RecK -> DigLit -> Emp	-0.018	0.020	0.891	0.373	-0.063	0.016
RecK -> DigLit -> Profit	-0.011	0.013	0.904	0.366	-0.041	0.009
RecK -> DigLit -> Sales	-0.003	0.005	0.585	0.558	-0.021	0.003
RiskD -> DigLit -> Emp	0.055	0.018	3.075	0.002	0.028	0.100
RiskD -> DigLit -> Profit	0.035	0.014	2.550	0.011	0.012	0.067
RiskD -> DigLit -> Sales	0.010	0.010	0.956	0.339	-0.006	0.034
RiskMgt -> DigLit -> Emp	0.054	0.022	2.498	0.013	0.018	0.103
RiskMgt -> DigLit -> Profit	0.034	0.015	2.239	0.025	0.011	0.073
RiskMgt -> DigLit -> Sales	0.009	0.009	1.054	0.292	-0.006	0.030
SavLit -> DigLit -> Emp	0.059	0.030	2.013	0.044	0.018	0.131
SavLit -> DigLit -> Profit	0.038	0.016	2.295	0.022	0.012	0.077
SavLit -> DigLit -> Sales	0.010	0.011	0.918	0.359	-0.007	0.038

Note: Int Rates= Interest Rate; Budg= Budgeting Behaviour; DebtLit= Debt Literacy; Emp=Employment Rates; Infl= Inflation Literacy; InsLit= Insurance Literacy; InvLit= Investment Literacy; RecK= Record Keeping; RiskD= Risk Diversification; RiskMg= Risk Management; Sav= Savings Behaviour; DigLit= Digital Capability

6.11.1 Budgeting, Employment Growth and the Mediating Effect of Digital Capability of SMEs

Based on the indirect path assessment from Table 6.16 above, the application of budgeting skills had a significant indirect effect on employment growth through digital capability (β = 0.055; p = 0.048) at a 5% level. The result implies that a unit increase in budgeting behaviour increases SME employment growth by 6% through managers' digital capability. This means that *H12a* is accepted. The finding suggests that the application of digital capability mediates the influence of the application of budgeting on employment growth. The result implies that most SMEs from Ghana have realised that the traditional way of managing the organisational accounting system is very time-consuming and laborious with too much paperwork (Kumar, 2020). As innovation has become the main driver of productivity and job creation in recent years, this finding posits that adopting digital technology in SMEs as a business management strategy provides the opportunity to employ skilled workers to improve performance (Acemoglu and Restrepo, 2018; Balsmeier and Woerter, 2019). This is because digitally savvy managers will be capable to generate digitalised records such as budgeting statement that is more reliable and efficient for business management (Arcega et al., 2015; Tychalas and Karatza, 2020).

6.11.2 Interest Rates, Employment Growth and the Mediating Effect of Digital Capability

The indirect path assessment from Table 6.16 above also shows that knowledge of interest rates had a significant indirect effect on employment growth (β =

0.066; p = 0.024) through SMEs' digital capability at a 5% level. The result implies that a unit increase in interest rates increases SME employment growth by 7% through managers' digital capability. This result means that *H12b* is accepted. This finding implies that the influence of knowledge of interest rates on employment growth is mediated by digital capability. This means that managers' digital capability enables them to access financial services to improve performance. With this in mind, this finding from this study means that most SME managers from Ghana find it difficult to detach digital technologies from their everyday financial activities such as access to funding to improve performance. SME manager's inability to develop digital capability could impact future employment growth, particularly in the constantly evolving digitalised business environment (Qian Qiu and Mok, 2021). Given that most lenders have resolved to the use of digital technology in lending and financial advising due to changes in customer behaviour (Vives, 2017), it is, important that managers develop their digital capability to have quick access to funding and improve performance.

76.11.3 Interest Rates, Profitability and the Mediating Effect of Digital Capability of SMEs

Also, based on the indirect path assessment from Table 6.16 above, knowledge of interest rates had significant indirect effects on profitability (β = 0.042; p = 0.007) through managers' digital capability at a 5% level. The result implies that a unit increase in interest rates increases SME profitability by 4% through managers' digital capability. Based on this, *H12c* is accepted. The result indicates that the application of digital capability mediates the effects of knowledge of interest rates on SME profitability. This finding is consistent with an earlier study by Restrepo et al. (2019) which argues that SME managers' inability to understand the impact of higher interest rates affects their capital structure which thereby weakens SME profitability. Based on this finding, SME managers' knowledge of interest rates can help coordinate sound financial behaviour to make informed financial decisions and improve performance (OECD, 2012; Tang et al., 2015). This is because SME cycles and their financial performance in developing countries such as Ghana are highly correlated with borrowing costs (Aysen Doyran, 2013). This result, therefore, implies that managers' digital capability enables them to explore lower borrowing costs of their working capital and remain profitable. This is because, in the current digital age, digital technology is a fundamental requirement for online banking and mobile money (Kass-Hanna et al., 2022).

6.11.4 Risk Diversification, Employment Growth and the Mediating Effect of Digital Capability of SMEs

The indirect path assessment from Table 6.16 above indicates that knowledge of risk diversification had a significant indirect effect on employment growth (β = 0.055; p = 0.002) through digital capability at a 5% level. The result implies that a unit increase in risk diversification increases employment growth by 6% through managers' digital capability and as a result, *H12d* is accepted. This finding implies that SME managers in Ghana are able to diversify their businesses through their digital capability to improve performance. This means SMEs are able to diversify and supply all their selling outlets and market them through digital capabilities which leads to employment growth (Wang, 2020). Despite the significant result, some SME managers still find it challenging to diversify their businesses to reap their maximum benefits, particularly in developing countries like Ghana.

6.11.5 Risk Diversification, Profitability and the Mediating Effect of Digital Capability

Based on Table 6.16 above, the indirect path assessment on knowledge of risk diversification had a significant indirect effect on profitability (β = 0.035; p = 0.011) through managers' digital capability at a 5% level. The result implies that a unit increase in risk diversification increases profitability by 4% through managers' digital capability. This means that *H12e* is accepted. This finding denotes that the influence of the application of risk diversification skills on profitability is mediated by the application of digital capability. Based on this finding, SME managers in Ghana with limited digital capability will lack marketing knowledge to diversify risk or adopt a new business model to substitute the existing one to improve profitability (Lichtenthaler and Muethel, 2012). This result implies that an unsatisfactory level of digital literacy hampers SMEs in Ghana to diversify business activities to improve firm profitability (Morris et al., 2022).

6.11.6 Risk Management, Employment Growth and the Mediating Effect of Digital Capability

From Table 6.16, the indirect path result also shows that the application of risk management behaviour exerts a significant indirect effect on employment growth (β = 0.054; p = 0.013) through the application of digital capability at a 5% level.

This denotes that the influence of the application of risk management behaviour on employment growth is mediated by SME managers' digital capability. *H12f* is, therefore, accepted. From this result, one can say that a unit increase in risk management increases employment growth by 5% through managers' digital capability. This finding is in line with a previous study by Sariwulan et al. (2020) which argued that SME digital capability is a significant drive for SME performance. This result provides a strong indication of how some SME managers in Ghana are adopting innovative ways of risk management through their digital capability in influencing strategic decision-making to reduce cost and improve employment growth (Sax and Torp, 2015). Based on this, all SME managers must be impelled to develop their digital capability to enable them to implement effective risk management practices to enhance the performance of their businesses (Agrawal, 2016; Kim et al., 2016).

6.11.7 Risk Management, Profitability and the Mediating Effect of Digital Capability

The application of risk management behaviour based on Table 6.16 above had a significant indirect effect on profitability ($\beta = 0.034$; $p = 0.025$) through SME digital capability at a 5% level. This finding indicates that the use of digital skills mediates the impact of risk management behaviour on profitability. *H12g* is, therefore, accepted. From this result, a unit increase in risk management increases profitability by 3% with the help of SME digital capability. The finding provides strong evidence of how effective implementation of risk management requires capability development such as digital capability to shape the day-to-day business activities to improve SME’s profitability (Stulz, 2015; Kulathunga et al., 2020). These values on profitability denote moderate performance. However, this finding implies that it is practically impossible to undertake effective risk management without managers’ digital capability. As a result, SME managers in Ghana must invest in developing their digital capability to build innovative knowledge to be able to access, monitor and manage risks associated with market changes to improve performance (Matarazzo et al., 2021; Scuotto et al., 2021; Saeidi et al., 2019).

6.11.8 Savings, Employment Growth and the Mediating Effect of Digital Capability of SMEs

From Table 6.16 above, the result shows that the application of saving behaviour had a significant indirect effect on employment growth (β = 0.059; p = 0.044) at a 5% level through digital capability. The inference of this result is that the effects of the application of savings behaviour on employment growth is mediated by the application of digital skills. Based on this result, a unit improvement in savings improves employment growth by 6%. *H12h* is, therefore, accepted. As digital financial services are on the rise, this finding implies that most SME managers in Ghana have realised that the most effective way to access financial services currently is by developing their digital capability (Lyons et al., 2020). For example, mobile money usage has significantly improved the savings behaviour of many SME managers in Ghana which reduces their predisposition of using informal savings channels. This infers that the use of online banking services by most SME managers fosters their saving decisions to improve performance (Ouma et al., 2017; Apiors and Suzuki 2018). From these backdrops, when SME managers are able to save enough, they can explore other business opportunities that improve employment growth (Denis and Sibilkov, 2010; Duval et al., 2020).

6.11.9 Savings, Profitability and the Mediating Effect of Digital Capability of SMEs

Finally, from Table 6.16 above, the application of savings exerts a significant indirect effect on profitability (β = 0.038; p = 0.022) at 5% level through SMEs digital capability. This finding infers that the effects of the application of savings behaviour on profitability is mediated through digital capability. Based on this finding, a unit increase in savings increases SME profitability by 4%. *H12i* is, therefore, accepted. With the growing trend of digital financial products, this result implies that most SME managers in Ghana have resolved to use digital technology to save and remain profitable. For SMEs to remain profitable, they must be able to save to finance profitable and strategic investment decisions to improve performance (Dimitropoulos et al., 2020). The mediating effects of digital capability through savings behaviour and SME profitability imply that managers must make digital capability development a priority in this digital age to improve profitability.

6.12 The Effect of Control Variables on SME Performance

6.12.1 The Effect of Age, Gender, Education and Industry Category on SME Profitability

First, the direct path analysis from Table 6.15 and Figure 6.1 shows that age exerts a significant effect on profitability (β = 0.187; p = 0.002) at a 1% level in explaining variations in SME profitability. This infers that one standardised unit increase in managers age increases SME profitability by 19 %. The result is consistent with a previous empirical finding (Nguyen et al., 2018). Evidence suggests that as a manager's age increases, this lowers their investment ambition thereby, impacting SME profitability (Belenzon et al., 2019). This is because managers become more conservative and risk averse as they grow older (Serfling, 2014). The inference is that age affects strategic decision-making and thereby, affects firms' organic growth. From Table 6.2 above, the majority of SME managers, thus, 35.2% are within the 45 to 55 age group. This means that most of the managers from this study are middle-aged with divergent interests in making innovative investment decisions which might involve risks but boost profitability (Li et al., 2017).

Secondly, the direct path analysis based on Table 6.15 shows that gender had an insignificant negative effect on profitability (β = -0.033; p = 0.418). This result is consistent with previous studies (Biga-Diambeidou et al., 2021; Shen et al., 2022). However, the study by Đặng et al. (2020) contradicts this result and establishes a statistically significant effect between gender and firm profitability. This suggests that the general view in the literature is mixed. For example, evidence suggests that female SME managers tend to underperform or are disadvantaged in many aspects compared to their male counterparts (Robb and Watson, 2012; Bigelow et al., 2014; Aristei and Gallo, 2016; Johnson et al., 2018). Evidence also suggests that investors don't trust female-led firms, hence they suffer disproportionally when it comes to funding (Johnson et al., 2018). Also, women tend to be risk-averse compared to their male counterparts (Quiroz-Rojas and Teruel, 2021) and thereby, hold back growth opportunities. Based on the above evidence, gender has a significant influence on SME performance.

Furthermore, the assessment of the direct path based on Table 6.15 shows that education exerts a statistically significant effect on profitability (β=0.109) ($p=0.053$). The inference is that a unit increase in managers' level of education increases profitability by 11%. This finding is consistent with earlier studies which argue that managers' industry-specific education or knowledge is significantly linked to a firm's profitability (Soriano and Castrogiovanni, 2012; Aissa and Goaied, 2016). This implies that human capital development is a major drive to maximise SME performance (Bartz-Zuccala et al., 2018). Such human capital development could be specific financial management practices that help in the implementation of standardised financial management practices to improve performance (Karadag, 2017). Finally, the direct path analysis also shows that the industry category exerts an insignificant effect on profitability (p=0.835).

6.12.2 The Effect of Age, Gender, Education and Industry Category on SME Sales Growth

First, the path analysis based on Table 6.15 shows that age has a significant effect on sales growth (β = 0.178; p=0.004) at a 1% level in explaining variations in sales growth. The positive correlation from this finding implies that a standardised unit increase in age increases sales growth by 18%. This finding is consistent with a previous study which established that SMEs managed by younger managers grow faster in terms of sales and assets compared to older managers (Barba Navaretti et al., 2022). The finding infers that managers' young profile provides them with the motivation to derive innovative ideas to boost sales and improve performance (Isaga, 2015). This means that age is arguably a determinant factor to be more risk and policy orientation to improve SME growth (Serra et al., 2012).

Secondly, the path analysis which is based on Table 6.15 above also shows that gender exerts a statistically significant effect on sales growth (β = -0.369; p = 0.000).at 1% level in explaining variations in SME sales growth. This result is also in line with previous studies which established the annual sales growth in female-owned SMEs to be significantly high compared to male-owned (Ali and Shabir, 2017; Quiroz-Rojas and Teruel, 2021). However, the data from this current study indicates a male-dominated SME sector. Thus, males represent 60.7% of SME managers compared to 39.3% of women. Given that males represent the highest number of managers, this finding infers that gender influences sales growth in this study. However, this result must be interpreted with caution because a previous study contradicts this finding and argues that male entrepreneurs outperformed females in terms of sales growth. (Mersha and Sriram, 2019).

Finally, the path analysis shows that (education: p=0.070) and (industry category: p=0.511) both exert an insignificant effect and sales growth.

6.12.3 The Effect of Age, Gender, Education and Industry Category on SME Employment Growth

First, the direct path result from Table 6.15 above shows that both age and gender exert an insignificant negative effect on employment growth (β =-0.024; p=0.587) and (β =-0.076; p=0.257) respectively. However, education appeared to have a statistically significant negative effect on employment growth (β =-0.443; p=0.000). This finding is in collaboration with a previous study (Marconatto et al., 2021) which renewed the debate about the effect of training or industry-specific education on SME growth in developing countries like Ghana (Ng and Feldman, 2010; Unger et al., 2011; Martin et al., 2013). This result is important to dissuade young entrepreneurs in Ghana who are tempted to believe that can set up a business with no skills and manage with success by dropping out of school. Equally, the finding also reiterates the importance of human capital development for those older managers who never upskill and overly rely on their experience to improve performance. Even though experience plays a pivotal role in business management, investing in human capital development should be managers' priority to improve performance. Based on Table 6.15, the analysis further revealed that both gender (p=0.257) and age (p= 0.587) exert an insignificant statistical effect on employment growth. But industry category appears to have a significant negative effect on employment growth (β = -0.088; p = 0.004).

6.13 Conclusion

The chapter presents the quantitative findings focusing on the impact of financial knowledge and financial behaviour on SME performance using employment, sales and profitability growth as performance indicators. The chapter starts by analysing the business characteristics and demographic makeup of SME managers. These analyses help provide a stronger understanding of the industry sectors of SMEs that are active in Ghana. The analyses further reveal an insightful understanding of how the demographic makeup and firm characteristics impact SMEs' performance. Based on the chapter discussion, it is observed that gender, educational level of managers, industry category and business age all exert a significant influence on SME performance. The chapter further discusses the impact of both financial knowledge (FK)and financial behaviour (FB) on SME performance. The discussion provides an in-depth understanding of how the lack of FL skills contributes to SME failures, particularly those operating in developing countries such as Ghana. Evidence from this discussion has renewed the debate on the need for SME managers to invest in human capital development to improve performance. From the extant literature and the empirical model formulated in chapter 5, the following hypotheses are formulated and tested: *H1a, H1b, H1c, H1d; H2a, H2b, H2c, H2d; H3a, H3b, H3c, H3d; H4a, H4b, H4c, H4d; H5a, H5b, H5c, H5d; H6a, H6b, H6c, H6d; H7a, H7b, H7c, H7d; H8a, H8b, H8c, H8d; H9a, H9b, H9c, H9d; H10a, H10b, H10c, H0d, H11a, H11b, H11c, H12a, H12b, H12c, H12d, H12e, H12f, H12g, H12h, H12i, H12j.*

Based on the results*, H1a, H2c, H2d, H3b, H6a, H6b, H6d, H7a, H8c, H9a, H9d, H10a, H10c, H10d, H11a and H11b are accepted while H1b, H1c, H1d, H2a,* *H2b, H3a, H3c, H3d, H4a, H4b, H4c, H4d, H5a, H5b, H5c, H5d, , H6c, H7b, H7c, H7d, H8a, H8b, H8d, H9b, H9c, H10b, H11c are all rejected*.

The chapter also discussed the mediating effect of digital capability on financial knowledge and financial behaviour on SME performance. Based on the conceptual model in Chapter 5, the following hypotheses *H12a, H12b, H12c, H12d, H12e, H12f, H12g, H12h, and H12i* were formulated and tested. Based on the results, all the hypotheses are accepted underscoring the importance of digital capability in today's business world.

Without the qualitative results, the chapter is inconclusive. This is because it is vital to explore the views of SME managers on various factors that affect their FL skills acquisition and how this can help enhance their business performance. The next chapter presents and discusses the qualitative results of this study.

CHAPTER 7: DICUSSION OF QUALITATIVE RESULTS

7.1 Introduction

In the previous chapter, quantitative results were presented and discussed. In chapter five, this study proposed an explanatory sequential design, using a core quantitative method with qualitative follow-up contribution (QUANT- qual). The purpose of deploying this study design is to blend the two methods of inquiry for convergent validation or richness of this study's findings (Fielding, 2012; Creswell, 2014). The direct path analysis from Chapter 6 established a mixed finding. Even though some financial knowledge and financial behaviour variables exert a statistically significant effect on employment growth, sales growth and profitability, it is critical to further explore the model from a qualitative perspective to validate the quantitative findings. This chapter, therefore, presents and discusses the qualitative findings.

The chapter focuses on analysing the 10 qualitative data obtained from SME managers to establish the impact of financial knowledge, financial behaviour and the digital capability of managers to improve SME performance. Thematic Content Analysis (TCA) was deployed through data transcription to ensure the researcher identifies common themes that run through SME managers' perspective on the impact of their financial knowledge and financial behaviour on the performance of their businesses (Vaismoradi et al., 2013).

7.2 Financial Knowledge and SME Performance

Given the impact high-interest rates can have on the financial performance of SMEs, most managers realised that it is prudent to check and compare rates before deciding on their loan applications. Some interviewees point out that:

> *"I do go online and research the various financial institutions, and their terms and conditions before proceeding with my application. If I realise the rate is very high, I don't proceed with any loan application" (Business Owner 1 A.I.C).*

Another manager also said:

> *"If I want to go for a loan, I consult various financial institutions before settling with the one with the least interest rates. I also make sure I read their terms and conditions to understand the implications or penalties for defaulting on the loan. So, I read word-for-word, particularly the rates they are offering" (Business Owner 8 M.M.M).*

Consistent with these views, Mnang'at et al. (2016) posit that lending terms must be understood by SME managers to avoid falling behind in their repayment which could have a detrimental effect on the business finances.

Access to finance to implement strategic growth objectives is a major challenge for most SMEs in developing countries such as Ghana (Quartey et al., 2017). It is important that SMEs, particularly those in developing countries possess FL skills to improve their chances of financial access and analyse lending rates to improve performance. Banks often base their lending decisions on evaluating information from business financial statements and asset-based lending (Howorth and Moro, 2012). This implies that SME managers must possess an optimal level of FL skills to access finance. It is also crucial that SME managers understand the impact the interest rates can have on loan repayment to avoid falling into unnecessary debt which could lead to insolvency (Lusardi and de Bassa Scheresberg, 2013). Based on the above view from the SME managers, most managers tend to consider lower interest rates when applying for a loan. Traditionally, businesses tend to borrow more when the rates are low as this offers SMEs the opportunity to invest less money on the cost of the loan (Restrepo et al., 2019). This is because lower rates lead to a more robust output (Bruyland et al., 2019). On this point, another interviewee respondent emphasised that:

> "*First of all, I consider if I am qualified to take a loan from the financial institution and if the proposed interest rate is affordable to avoid running into spiral debt which can cause my business to collapse. A lot of institutions take advantage of us" (Business Owner 4 H.F.S).*

This implies that managers must assess their financial position to ensure they can repay any loan apply for and improve their creditworthiness. In developing countries like Ghana, most SMEs obtain their working capital from microfinance institutions (MFIs) with high-interest rates and unethical collection methods which have a significant impact on the overall financial sustainability level of SMEs (Dehejia et al, 2012; Kar and Swain, 2014). In light of this, another prominent interviewee opined that:

> *"There are lots of places you can go or loans, and when you investigate it, you realise that some charge high rates. I understand that high rates could affect the business, but I always take loans from microfinance*

institutions which come with high rates. I have no choice but to go for it. I know it can affect my profits (Business Owner 5 J.B.B).

Even though the respondent has no other options other than acquiring a loan from a microfinance institution which attracts high rates, he understands that loans with high interest rates can adversely affect the financial sustainability and profitability of his business.

Based on the above SME managers' viewpoints, the results suggest that managers' knowledge of interest rates has a significant effect on performance of their businesses. The results however, failed to support quantitative findings. Despite the contradictory nature of both the qualitative and quantitative results, previous studies, however, argue that SME managers' knowledge and ability to understand the rates at which loans are obtained have significant impact on profitability, sales, and employment growth (Lusardi and de Bassa Scheresberg, 2013; Tang et al, 2015).

On managers' knowledge of inflation, it emerged from the qualitative data that the majority of business managers understand that inflation have significant impact on business operations and financial performance. For example, one of the interviewees said:

"*To me, inflation means a reduction on my returns or profits margin. I purchase less because of the high cost of production and operation which will reduce profitability" (Business Owner 1 A.I.C).*

This view is in line with the study of Vatavu (2014) and Gado (2015) which established a linear relation between inflation and SME profitability. Evidence suggests that macroeconomic factors such as inflation are significant determinants of firm growth (Ipinnaiye et al., 2017). This is because, in a high inflationary business environment, consumer confidence is low resulting in people spending less on goods and services which, thereby, leads to a decline in SME profitability (Rashid and Saeed, 2017). In Ghana, inflation has been a major concern causing depreciation in the currency and making exports more expensive for businesses which in turn leads to a high cost of goods and services (Agalega and Antwi, 2013).

Other empirical studies also suggest that inflation drives prices of goods and services and thereby, reduces sales which is totally beyond the control of SME managers (Cant and Wiid, 2013; Doan et al., 2020). Based on this, one prominent manager acknowledged that:

> *“Inflation would affect my business because if the prices are very high in the market, it affects my pricing too and this drives the customers away which I have no control of. This impacts my business significantly.” (Business Owner 4 H.F.S).*

This view implies that the impact of inflation could be significant to the ordinary consumer leading to less customer consumption and demand, particularly in developing countries like Ghana (Odusanya et al., 2018). In line with this, another interviewee also said:

“Rise in prices of goods and commodities which is due to inflation means I’m now going to buy items at a very high rate, and this will be transferred to my customers. This means that the consumers are the ones who suffer the most

leading to a reduction in the consumption of their daily products need. This reduces sales and affects profit" (Business Owner 3 H.A.E).

Another manager also added his voice and said:

> *"In general, an increase in price of goods and services makes it difficult for consumers to adjust to the new prices. This leads to a drop in sales" (Business Owner 6 J.C.P).*

The above views underscored the need for managers to understand how inflation uncertainty affects price changes and help formulate effective investment decisions making (Wang et al., 2016). This result implies that both the quantitative and the qualitative analysis produced a mixed findings on managers' knowledge on inflation. While the qualitative analysis showed a positive impact between managers' knowledge on inflation and SME performance, quantitative results show a mixed result. This means that the results of the qualitative analysis failed to support fully the quantitative findings. From the quantitative analysis, managers' knowledge on inflation failed to explain SME employment growth while exerting a significant positive effect on profitability and sales respectively.

It is also important that SME managers understand the need for insurance coverage of their businesses to improve performance. When the insurance knowledge was explored, one of the managers interviewed, noted that:

> *"I couldn't insure my business due to the high cost of insurance premium. I struggle to acquire my working capital and I can't just stand up and insure my business without money" (Business Owner 5 J.B.B; Business Owner 8 M.M.M).*

Empirically, the lack of insurance policies compounds SMEs' financial position (Garba et al., 2022). The view from the above SME manager could imply that managers lack the FL skills to explore the best insurance coverage or understand why it is important to have one.

But failure to take insurance cover for the business could open the business up to risks, particularly in the event of unforeseen circumstances such as fire and flooding. However, the non-insurance cover stands by managers could lead to business failure during unpredictable events (Harrison et al., 2022). The above views of managers clearly indicate that most SMEs in developing countries found it challenging to afford a business insurance policy because it is too expensive and probably, information asymmetry on its importance to the businesses. These views are in line with the study of Driver et al. (2018) which posits that insurance literacy is traditionally low, compounded by the lack of product knowledge, particularly in developing countries. Another interviewee opined:

> "*It's difficult to make a claim for your insurance and it is better to put that money in savings so that when something happens you can use it to sustain the business" (Business Owner 10 N.H.C).*

From the above viewpoints, the qualitative results are in line with the quantitative findings. This implies that the qualitative results support the quantitative findings which highlight the importance of SMEs FL training across the developing countries to enable them to make complex and strategic financial decisions to improve business survival rates (Drexler et al., 2014). This is because insurance knowledge improves the insurance uptake among SMEs and help them mitigate certain risk factors to improve performance (Garba et al., 2022).

In Ghana, the majority of SMEs struggle to diversify their businesses due to limited resources. For example, digital connectivity is a critical resource in facilitating SME diversification to improve financial performance (Bowen and Morris, 2019). Based on this evidence, one of the managers said:

> *"It is important to invest in multiple business opportunities as this helps to reduce risks drastically. But the challenge here in Ghana is the lack of technological resources and skills and these pose a major constraint on me to diversify and manage effectively and improve profitability. Sometimes, it is better to focus on one business" (Business Owner 1 M.J.K).*

The view of this participant is in line with recent empirical evidence that suggests that SMEs are often less likely to attract skilled staff and obtain advanced technologies to enhance diversification due to their business models and limited resources (Chen et al., 2020). But SMEs' ability to diversify their overall investment portfolio leads to an increase in investment opportunities and also an opportunity to spread risks across several markets (Spowart and Wickramasekera, 2012; Cressy et al., 2014).

Given the significant resource challenges that most SMEs face in developing countries like Ghana, most SMEs adopt a strategy to provide multiple services or sell multiple products on the same premises which is often referred to as the concentration effect to boost sales (Morris and Bowen, 2020). The evidence is in line with the view of most SME managers in this study who confirm that within-firm diversification increases their sales significantly due to the broader product lines they have on sales. For example, one SME owner states that:

"Due to logistical and other technical issues, I prefer to keep my business in one place for easy management. But I diversify into a variety of products that easily sell to boost sales and make more profit **"**(*Business* Owner 3 H.A.E).

This finding is in line with a previous study which argues that sales revenue increases when a firm adds a new product to their existing product line as a business model (Kim and Min, 2015). But most SME managers emphasised that geographical proximity is the main driver for choosing such a business model as this creates more opportunities for SMEs in Ghana to create robust interaction strategies which are required when a firm diversifies its product lines (Oh et al., 2015). This view is also consistent with another previous study which argues that a firm ability to diversify into products is based on demand-side synergies which lead to increases in sales, particularly when consumers are willing to pay (Ye et al., 2012).

Based on this, one SME owner emphasized that:

"*It's not advisable to invest in just one product. Some products sell very fast as they are in high demand. To boost sales and improve your financial performance, it is critical as a business owner to do a market survey to determine which product sells faster to maximize profit "(Business Owner 2 A.M.P).*

The manager's view above really opens the debate on whether diversification strategies really fit into SMEs' business model in developing countries context like Ghana. But evidence suggests that product diversification within a firm does not require substantial coordination and control costs (Oh et al., 2015). Perhaps, this explains why most SMEs in Ghana are focusing on product diversification while relying on knowledge and capabilities within the business to formulate strategies and exploit market inefficiency and consumer trends to improve performance. In line with this, one interviewee says:

> *"To quickly learn about new consumer needs and shopping behaviours, I have not thought of diversifying my business in another geographical area. I have been doing this business for several years now and have focused on different product lines and this has helped my profits significantly (Business Owner 4 H.F.S).*

These findings infer managers' risks diversification knowledge is crucial for SME performance. From the results, most managers either adopt products diversification or business geographical diversification as strategies to maximise performance. While the qualitative findings show positive impact between knowledge of risks diversification and SME performance, quantitative analysis shows a mixed findings on performance variables. The quantitative results from chapter 6 show risk diversification knowledge exerts an insignificant negative effect on profitability but statistically significant effect on sales and employment growth. This implies that the qualitative findings partially support the quantitative results.

In addition, effective investment strategies are also required to make prudent investment decisions to improve SME performance (van Rooiji et al., 2011). But based on the qualitative data collected, one manager said:

"*I don't consider any other investment option apart from concentrating on my own business to ensure it brings me the maximum returns." (Business Owner 5 J.B.B).*

The above managers' views could imply that effective investment decisions depend on various factors within the firms such as the skills, knowledge and ambitions of the SME manager to invest and improve financial performance (Bellofatto et al., 2018). The manager's view could mean that manager lacked the prerequisite knowledge and skills to explore the best investment opportunities to improve SME financial performance. For example, when one manager was asked about his knowledge and skills when considering investment decisions, some interviewee stated that:

"Many investment opportunities came to the region and left many SMEs with bitter experience. Many who took those investment options saw their businesses collapse early. Investments that have high returns carry more risks" (Business Owner 2 A.M.P; Business Owner 7 L.T.C).

From these views point, most SMEs in Ghana lack financial literacy skills and knowledge to explore investment risks and make effective investment decisions to enhance their financial performance (Drexler et al., 2014; Agyapong and Attram, 2019). The qualitative results are, however, in line with the quantitative results. This implies that qualitative results fully support the quantitative findings. However, the findings from this current study contradicts previous studies' results which established a linear relationship between investment knowledge, decisions, and firm performance (Nthenge and Ringera, 2017; Shahwan, 2018).

SMEs by their nature, are characterised by centralised leadership where most of the critical decisions of the business lie solely with the manager. Given that knowledge of investment improves performance, it is important that SME managers are encouraged to take up training and support opportunities as a human capability-building strategy to boost their willingness to invest (Appiah et al., 2018).

Furthermore, evidence suggests that majorities of SMEs in developing countries struggle to survive and as a result, hamper their growthy agenda (Campello and Larrain, 2016). This calls for SMEs to formulate effective debt management strategies to improve performance. But when managers were asked about their debt literacy, one interviewee noted that:

> *"I don't think about debt when I am seeking financial capital to grow my business. You need the required financial fund that meets your growth ambition, and this means more debt" (Business Owner 7 L.T.C).*

From the data, the majority of managers argued that short-term debt or long-term debt has no significant effect on their firms' performance. For example, most of the respondents (7 out of 10) said:

> *they use profits to reduce their debt level and since more capital is always needed to grow the business, this will always increase the firm's debt position.*

The finding implies that from the managers' perspective, there is no linear relationship between debt literacy and performance. The finding is consistent with previous studies that established insignificant results between debt literacy and SME performance (Drobertz et al., 2013; Yazdanfar and Öhman, 2015).

For example, one prominent interviewee opines that:

> *"I don't consider the debt level. Sometimes, I don't even check the interest rate when securing a loan and provided the money can be used to add another product or service to boost sales," (Business Owner 6 J.C.P).*

This view is in line with a previous study which argues that SMEs with growth ambitions explore opportunities to raise more funding compared to those without growth possibilities (Degryse et al., 2012). Based on this, it could be argued that more profitable firms have larger debt which is in line with the trade-off theory. The results, therefore, mean that managers do not consider debt management knowledge to have any impact on the performance of their businesses. Based on this finding, the qualitative results partially support quantitative findings given that debt management literacy failed to have a significant effect on SME profitability and sales growth based on the quantitative analysis while showing a positive impact on SME employment growth.

7 .3 The Impact of Financial Behaviour on SME Performance

Budgeting has emerged as one of the most important management control systems, but its implementation by SME managers in developing countries is limited and non-existent in some cases (Zor et al., 2019). Based on this evidence, SME managers were interviewed to assess their skills and budgeting behaviour improve business performance. From the data, it is evidence that most respondents do not adopt budgeting in planning, forecasting and allocation of resources to improve performance. For example, some managers exemplified that:

"*Sometimes economic situations make it impossible to budget for the number of staff to employ or specific products and services to provide and improve profitability. In my business, I act based on customer needs and what is happening in the economy. When prices of certain items are increasing astronomically, I take action to buy and hoard them which have never been budgeted for" (Business manager 4 H.F.S).*

The findings imply that SME managers in the developing world take actions based on market demand rather than systematic planning, and forecasting.

When managers were asked how they monitor to ensure their business spending is within budget, most interviewees said:

"*You look at the cost of production and all the other costs that relate to the end product you are selling and put money where it is necessary to maximize profits. Sometimes annual budgeting does not work when implementing the nature of business strategies in this type of our businesses" (Business Owner 1 A.I.C; Business Owner 5 J.B.B; Business Manager 9 M.A.R).*

The results show that managers do not consider budgeting to have any impact on their business. The findings, therefore, support the quantitative results which also show budgeting to exert insignificant direct effect on employment growth, sales growth, and SME profitability.

Despite these findings, budgeting remains a critical driver that ensures prudent organisational planning and operational activities are put in place to promote SME performance (Drury, 2018). These managers' perception of budgeting could be related to their level of education to understand the value of adopting robust budgeting systems to improve performance (Matsoso et al., 2021). From Table 7.4 above, most respondents had no formal education (276) representing 55.8% of SME managers. This implies that despite the benefits of budgeting control, most SME managers do not understand its effectiveness in SME performance in Ghana. As explained eloquently by Laitinen et al. (2016), SMEs suffer from resource underutilisation in the absence of robust budgeting control. Based on this, it is important that managers improve their managerial capabilities to improve performance (Nwanyanwu and Ogbonnaya, 2018). One such skill is financial literacy skill which improves budgeting practices in SMEs and enhances firms' profitability (Tuan and Rajagopal, 2022).

Also, maintaining effective records of business activities emerged to help SMEs track business progress and help managers make better judgments on how to expand and meet their growth objectives (Mintah et al., 2022). But when managers were asked about their record-keeping behaviour, the result is mixed. For example, one SME owner exemplified,

> *"I do not keep records on sales because this does not make any difference to our sales figures. We can be busy on some days and besides, our limited staff do not have the requisite skills to do this effectively. As a result, there is no motivation to use any record-keeping system" (Business Owner 4 H.F.S).*

This finding is consistent with the study of Higuchi et al. (2019). But empirically, SMEs with effective record-keeping practices are able to increase sales and staff levels to improve financial performance (McKenzie and Woodruff, 2017). This implies that an effective business record reflects the authenticity of daily business activities that provide value and improve SME performance. But one interviewee noted,

> *"There are books that we use to record daily sales and any purchase, but the truth is, on many occasions, staff failed to follow this through. This is because I understand manual recording can be very challenging" (Business Owner 9 M.A.R).*

These findings are in line with previous studies which revealed that most managers do not keep up-to-date records of their business activities and as a result unable to track performance trends (Owusu et al., 2015; Yussif et al., 2019). Evidence suggests that the lack of adequate knowledge and skills is the major challenge in adopting effective record-keeping behaviour among SME managers in developing countries (Musah, 2017).

Also, it is observed that most managers do not separate their business accounts from their personal ones. When managers were asked whether they separate business accounts from personal ones, six out of ten managers interviewed stated:

> *"I do not separate business account from personal one. I do everything from one account which is easy for me. Besides, I don't believe this affects my business performance" (Business Owner 1 A.I.C; Business Owner 3 H.A.E; Business Owner 4 H.F.S; Business Owner 10 N.H.C; Business Owner 6 J.C.P; Business Owner 8 M.M.M).*

This finding is in line with a previous study which illustrates most SME managers in developing countries do not separate business accounts from their personal ones (McKenzie and Woodruff, 2014). Based on the above findings, business management practices among the SMEs are rudimentary which can impede their financial performance. This means that SME record-keeping behaviour does not seems to have any impact on their business performance. These findings also support the quantitative results where record-keeping behaviour is observed to have an insignificant effect on employment and sales growth.

The finding could be attributed to the lack of FL skills which are woefully inadequate among SME managers (Ye and Kulathunga, 2019). This is because Hussain et al. (2018) posits that an SME manager's financial FL skills are a prerequisite skillset that help in understanding and applying effective financial management practices to promote high growth across the firm.

Furthermore, empirically, managers' effective risk management strategies help SMEs demonstrate a proactive approach to risk management and help reduce operational risks and costs to improve firm value and performance (Soltanizadeh et al., 2016; Şenol and Karaca, 2017). This implies that for SMEs to meet their growth objectives in the current business environments, risk management must be their top priority (Glowka et al., 2021). But when SME managers were asked about the importance of having risk procedures in place to improve performance, the findings were also mixed. For example, some of them stated:

> *"As a business, I don't have any risk procedure in place. But I know what to buy and do to increase sales. Some products can be a risk when you buy them. I analyse and take decisions that improve the business but*

nothing on risk management to be honest.” (*Business Owner 1 A.I.C; Business Owner 4 H.F.S; Business Owner 8 M.M.M).*

But contrary to the above managers’ viewpoints, two business managers emphasised the importance of risk management and stated:

> *“My philosophy is to adopt the best practices to improve my business. Since I deployed effective risk management strategies into the business, my sales have improved. It has helped identify what customers want and help reduce unnecessary waste (Business Owner 5 J.B.B; Business Owner 9 M.A.R).*

This result supports the quantitative finding which shows risk management behaviour to have a statistically significant positive effect on sales growth. This finding is also in line with a previous study which revealed that effective risk management practices improve sales growth (Saeidi et al., 2021).

Also, when managers were asked why it is so important to maintain regular business savings, one manager stated that:

> “*I save weekly because, in terms of paying rent and other stuff, you need to save to pay for all these in the future. Failure to save will make it difficult to raise the financial capital quickly to inject into the business and meet its need” (Business manager 4 H.F.S).*

Based on the above finding, SMEs' ability to save or hold significant cash in their savings account helps support their growth and business development ambitions and improve performance (Harris and Raviv 2017). The result supports the quantitative finding which shows savings behaviour exerting a statistically significant positive effect on SME profitability. Previous empirical evidence also argued that savings behaviour contributes positively to firm profitability (Dimitropoulos et al., 2020).

Given that SMEs suffer from information opacity in searching for financial support and with most managers lacking the requisite skills to apply for the needed funding, it is, therefore, pivotal for managers to adopt effective savings behaviour. In line with this, some managers re-emphasised,

> "*In case of any capital injection into the business, we can do that faster and quicker without too much hustle, like you trying to source funds elsewhere. We find it more profitable reinvesting the profit into the business because it's also a way of saving." (Business Manager 8 M.M.M; Business manager 9 M.A.R).*

These findings suggest that SMEs are able to use their savings as a buffer against any possible adverse financial situations and remain resilient. As stated by Banos-Caballero et al. (2016), savings provide SMEs with financial flexibility which is directly linked to performance. The above evidence suggests that managers embrace savings as a very valuable financial behaviour to adopt and improve performance (La Rocca et al., 2019).

According to Doan (2020), there is a direct link between managers' saving culture and sales growth. Based on this evidence, some of the interviewees stated that:

> " *Sometimes savings provide the confidence to invest into a new product that is fast selling. To keep your customer base, you need to make sure you sell products that customers require daily. I have used my savings*

to explore this opportunity constantly to boost sales" (Business Owner 1 A.I.C; Business Manager 10 N.H.C).

This finding is supported by Rocca and Cambrea, (2019) who pointed out that savings boost SMEs' sales and business activities. The result also supports the quantitative finding which shows savings behaviour exerting a significant positive effect on sales growth.

7.4 Digital Capability and SME Performance

Most SMEs, particularly, those in developing countries still find it challenging to adopt digitalised systems into their management practices due to resource constraints, lack of knowledge and skills and on some occasions, poor power supply to improve performance (Capușneanu et al., 2020). Based on this evidence, when managers were asked about the challenges of adopting digital technology in their businesses, one stated:

"The intermittent power supply is a major problem here and this does not encourage me to adopt any digitalized system. You might not use it when installed, so what is the point "(Business Manager 9 M.A.R).

An empirical study has highlighted the critical role of adopting digitalised management practices in SMEs (Idota et al., 2020). According to Ibrahim et al. (2020), digitalised SMEs are able to record accounting transactions, monitor and analyse financial statements and implement effective risk management practices with ease to improve performance. This implies that adopting a computerised accounting and management system promotes efficiency (Xu, 2020). But it is observed that digital literacy skills are critically lacking among most of the managers interviewed and this has renewed the debate on digital capability development for SME managers that meet the current business climate.

Contactless and cashless digital transactions are on the rise which requires businesses to shift their operations model to meet business and customers' demand (Lyons et al., 2022). To explore managers' level of digital literacy skills and how this is incorporated into their daily business activities, participants were first asked whether they use online services to select the best rate for their loan application. Most of them stated:

> *"With the help of technological development, I can do everything on my smartphone and tablet. It's convenient and you can explore the various rates online before deciding on your loan application. Even though there is no guarantee your loan application will be accepted, at least, there is an option to explore it online" (Business manager 3 H.A.E; Business manager 6 J.C.P; Business manager 7 L.T.C)*.

Based on this evidence, the digital revolution is transforming digital financial services via mobile phones and other devices where individuals can access financial services (Durai and Stella, 2019). The finding implies that manager uses their devices to access financial services to improve performance and this support the quantitative result which also revealed digital to exert a statistically significant effect on SME performance.

Also, when managers were asked if they accept digital payment systems such as mobile money transfers to pay for products and services in their businesses, one stated:

"It helps me keep track of every transaction and makes me conscious of my spending. It is also easier and safer and very convenient to use. More importantly, it is critical to pay suppliers on time" (Business Manager 8 M.M.M).

This finding is in line with a previous study which posits that digital payments adoption by SMEs leads to effective financial management to improve performance (Dumitriu et al., 2019). Empirical evidence posits that digital transactions have paved the way for new business models (Angeles, 2020). The finding implies that managers have resolved to adopt a digitalised system to meet changes in consumer behaviour and improve SME financial performance (Peter et al., 2020).

This study further explores how digital literacy enhances SME managers' effective record-keeping behaviour to improve performance. Based on this, managers were asked whether digital literacy has improved their record-keeping culture.

Most managers exemplified that:

"Currently we use notebooks to record daily transactions due to financial constraints and the lack of knowledge and skills to use any advanced system to keep records is always a challenge (Business manager 1 A.I.C; Business manager 6 J.C.P; Business manager 4 H.F.S; Business manager 9 M.A.R).

The findings support the quantitative result which shows record-keeping to exert a statistically insignificant negative effect on digital literacy. The result could imply that the financial constraint poses a major challenge for most

SME managers to adopt a digitalised system to manage their daily business activities. However, these findings contradict the general views in the literature. Empirically, digital record-keeping provides accurate and smart reports of financial statements, and cash flow statements and helps generate financial forecasts to improve performance (Arcega et al., 2015). Evidence from the extant literature suggests that organisational capital structure is greatly linked to knowledge acquisition ambition (Mahmood and Mubarak, 2020). Given that most SMEs in developing countries struggle financially, their ability to develop digital capability is highly limited.

When managers were also asked whether they adopt any digital system to manage debt some of them stated:

> ” *I do not use any specific programme in debt management. I know how much I owe, and I always write this down in a notebook but besides, my Bank sends a monthly notification to my phone to alert me on the loan balance” (Business manager 10 N.H.C; Business manager 7 L.T.C).*

The finding suggests that some managers do not use and have no knowledge of the existence of software to manage and keep records of debts to avoid indebtedness. This finding also supports the quantitative result which shows debt management literacy to have no significant influence on SME managers’ digital capability. But this result could imply that managers lack FL skills to understand the impact of business debt on firm performance and how digital capability can help manage debt accurately.

The finding, however, contradicts the general view in the literature which argue that adopting a digitalised accounting management system control debt by reducing operation cost and help generate accurate report while tracking the accounts and analysing data to improve performance (Ahmed et al., 2020; Birt et al., 2020). Based on this, SME managers must develop financial and digital literacy skills to ensure that effective and innovative debt management strategies are in place to improve SME performance.

Digital financial services are accelerating and have transformed the business landscape (Lu et al., 2022). Based on this, managers were then asked whether they use any form of digital financial services to improve their savings behaviour. Some SME managers posit that:

> *"I transfer money from my mobile money account daily to my savings without going to the bank to make deposits. When I need money quickly to pay for products and services, I don't need to go to the bank to withdraw. I use my online savings account to transfer the needed money onto my mobile money account with ease and vice versa" (Business manager 5 J.B.B; Business manager 7 L.T.C).*

The findings suggest that most managers have embraced digitalised financial services through their digital capabilities. This means that managers have realised that the use of digital technology is driving the interactions between financial institutions and their customers (Pazarbasioglu et al., 2020). The finding supports the quantitative result which show savings behaviour to have a significant positive effect on the application of digital literacy. This means that managers have realised that digital financial services are on the rise and have benefited entrepreneurial activities, including business entry and innovation (Yin et al., 2019).

This finding, however, contradicts the study by Lyons et al. (2022), who asserted that while digital literacy may enhance the use of digital financial services, it does not necessarily lead to an increase in savings. Based on this evidence, it could be argued that most SME managers use digital literacy mainly for basic services and while digital financial services provide an alternative for convenient business transactions and cost-effective, the use of digital literacy might not promote savings (Angeles, 2020). Also, given that financial behaviour is based on SME managers' inner motivation rather than the influence of digital literacy skills, there is no guarantee that managers would be able to save despite the digital literacy skills (Kijkasiwat, 2021). But based on the significant benefits that most managers are deriving through their digital capability, it is vital that SME managers build their digital capability and be able to access digital financial services such as savings to improve performance.

Technology has revolutionised the world of business models and practices forcing business managers to acquire digital literacy skills to improve SME performance (Tortora et al., 2021; Usai et al., 2021). Based on this viewpoint, managers were asked about how digitalised systems support their risk management strategies. The results were mixed.

For example, one of the interviewees expressed their concern about the use of such software which requires practical knowledge and said:

> "*To be honest, this would improve my business if installed because it will cut waste and warn me of any risk to the business. But sadly, I don't have the proficiency to manage this" (Business Manager 10 N.H.C)*.

This finding supports the quantitative result which shows SME risk management behaviour to be a statistically significant effect on SME digital capability. These views imply that managers acknowledged the benefits a digitalised risk management system can bring, however, its implementation is limited in SMEs.

Given the crucial role digital literacy skill plays in helping managers transform their businesses and achieve top performance levels (Garzoni et al., 2020), some of the interviewees, however, stated:

> *"Adopting digitalized risk management has improved my sales and profits. This is because if we have trouble with payments from customers, we find out very early. It is a useful management system" (Business Manager 3 H.A.E; Business Manager 5 J.B.B).*

This finding implies that managers' inability to manage risks using online systems can have a devastating on the business. This finding supports the quantitative result and this is also consistent with a previous study which argues that SMEs' innovative risk management systems boost firm performance (Kulathunga et al., 2020). Based on the above views, improved digital knowledge enhances SME managers' ability to implement effective risk management strategies to improve performance. Given that most managers acknowledge that digitalised risk management improves performance, managers must be encouraged to develop their digital capability to improve performance.

Effective budget management has emerged as a crucial tool that ensures all operating costs are properly monitored and resources are well allocated properly to maintain desired business financial performance (Sandalgaard and Nielsen, 2018; Pratama and Samopa, 2019). With this in mind, managers were asked about their knowledge of electronic budgeting systems using digital literacy. One of the interviewees exemplified that:

> *“Currently I use a special notebook to generate my budget. I lack the knowledge to use advanced software to generate effective budgeting” (Business Manager 10 N.H.C)*.

Another manager also pointed out that:

> *“It’s convenient, but this is not for me because I am not tech savvy enough to generate a budget using the software” (Business Manager 7 L.T.*).

This finding is in line with the study of Oduro (2020), who established that a lack of knowledge, skills and practical experience is preventing SME managers from enjoying the potential benefits of what digital revolutions bring to boost SME growth and financial performance. But few other managers, however, have a different perspective. For example, some stated:

> “*Adopting a digitalised budgeting system has made it possible for us not to overspend on labour, on material and overall made us cost-conscious. It has made our workload easy and reduced the difficulty of preparing financial statements, budgets, and cash flow statements using a notebook (Business Manager 1 A.I.C; Business Manager 2 A*).

The finding is supported by the quantitative result which highlighted that most SME managers in Ghana now understand that their budgeting behaviour and their digital capability are complementary. This finding is in line with Pratama and Samopa (2019) who opined that a digitalised budgeting system controls costs and allocated resources, particularly when a firm has a limited resources to improve performance.

7.5 Conclusion

The chapter explored the impact of SME managers' financial knowledge and financial behaviour on SME performance through the qualitative data analysis from the 10 interviews conducted. The chapter also examined the impact of digital literacy on SME performance. The qualitative data analysis produced a mixed finding. Despite the mixed results, the chapter discussions revealed that SME managers' knowledge of FL and their prudent financial behaviour improve business performance. Based on the data analysis and discussion, risk management, record-keeping and budgeting behaviour failed to contribute positively to SME performance. However, from the extant literature, evidence suggests that managers' record-keeping, risk management and budgeting behaviour contribute significantly to the performance of SMEs (Florio and Leoni 2017; McKenzie and Woodruff, 2017; Malik et al., 2020). Mangers' savings behaviour is, however, found to contribute to the performance of SMEs.

On managers' financial knowledge, the data analysis also revealed mixed findings. The data analysis established that Knowledge of interest rates, inflation and risk diversification were all found to contribute significantly to SME performance. Managers' knowledge of debt, insurance and investment literacy, however, failed to make any significant contribution to business performance.

Finally, on managers' digital capability, most of them acknowledge the importance of a digitalised accounting management system. However, the data also revealed mixed results due to resource constraints and lack of prerequisite skills by managers to adopt a digitalised technology into their businesses.

As a result, the use of digital Literacy to manage SME debt and to keep effective records failed to contribute to SME performance. However, managers' digital Literacy and their Knowledge of Interest Rates, digital literacy and SME savings, risk management and budgeting behaviour all proved to make significant contributions to the performance of SMEs.

CHAPTER EIGHT: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

SMEs continue to be the catalyst for employment and economic development in Ghana. As a result, this research sought to empirically test the impact of SME managers' financial knowledge and financial behaviour on SME performance covering employment, sales, and profitability growth in Ghana. This study, therefore, investigates the impact of managers' knowledge of interest rates, risk diversification, debt management, insurance and investment as financial knowledge variables on the performance of SMEs. As financial knowledge informs effective financial behaviour, the impact of SME managers' financial behaviour which covers budgeting, savings, risk management and record-keeping on SME performance is also investigated. These are crucial for SME survival and growth in the current competitive environment as most SMEs find it challenging to recognise new opportunities to meet their growth objectives. The study also investigates simultaneously the mediating role of digital capability on both financial knowledge and financial behaviour variables and its impact on SME performance.

The Knowledge-Based View (KBV) and the Institutional Theory (IT) formed the theoretical pillars of this study. The research adopts the explanatory sequential triangulation method with a pragmatic philosophical stance. This implies that both the inductive and the deductive approaches are adopted with detailed justification to answer the research questions. The study collected quantitative data from 499

SME managers in Ghana to measure SME managers' FL knowledge and behaviour. For the qualitative data, 10 SME managers were sampled and interviewed. SPSS version 28 was used to validate the variables and to perform the frequency analysis. In addition, the Smart PLS 4 was used to estimate the proposed model and test the hypotheses.

From the result, the model's explanatory power indicates that the structural model has good explanatory power. Specifically, the values show that the model explains 63.1% (Digital Capability), 66.7% (Employment Growth), 63.9% (Profitability Growth) and 58.6% (Sales Growth) in the outcomes. This suggests the structural model significantly contributes to the variability in the application of digital literacy, employment growth, profitability and sales growth. The result also indicates that the structural model has an acceptable level of predictive relevance as all the **Q2** values are greater than 0.0 (Usakli and Kucukergin, 2018; Hair et al., 2019). Precisely**, Q2** values of the model range from 0.372 to 0.598 which are > 0.0.

This chapter is structured as follows. First, section 8.2 presents the summary of the findings for the quantitative and qualitative data analyses by illustrating which hypotheses were supported or rejected.

Secondly, section 8.3 considers the contributions of the study. Thirdly, section 8.4 explains the implications of the study for policy and practice. Finally, while section 8.5 considers the limitations of the study, section 8.6 outlines the direction and recommendations for future research.

8.2 Summary of Results

This section presents the findings of both the quantitative and qualitative data analysis. In Chapter 7, the quantitative data was analysed based on the 53 hypotheses formulated in relationship with the impact of financial knowledge, financial behaviour and digital literacy of SME managers on performance in Ghana. This research is designed to explore the following interrelated objectives:

1. To assess the impact of SME managers' knowledge of interest rates on firm performance
2. To examine the impact of SME managers' investment knowledge on firm performance
3. To investigate the impact of SME managers' insurance knowledge on firm performance
4. To assess the impact of SME managers' knowledge of risk diversification on firm performance
5. To assess the impact of SME managers' debt management literacy on firm performance
6. To assess the impact of SME managers' record-keeping behaviour on firm performance
7. To establish the impact of SME managers' saving behaviour on firm performance
8. To establish the impact of SME managers' budgeting behaviour on firm performance
9. To examine the impact of SME managers' risk management behaviour on firm performance

10 To assess the impact of SME managers’ digital capability on firm performance

Based on the above objectives, this study aims to answer the following research questions:

1. What is the impact of SME managers’ investment knowledge on firm performance?
2. What is the impact of SME managers’ knowledge of interest rates on firm performance?
3. What is the impact of SME managers’ insurance knowledge on firm performance?
4. What is the impact of SME managers’ knowledge of risk diversification on firm performance?
5. What is the impact of SME managers’ debt management literacy on firm performance?
6. What is the impact of SME managers’ record-keeping behaviour on firm performance?
7. What is the impact of SME managers’ saving behaviour on firm performance?
8. What is the impact of SME managers’ budgeting behaviour on firm performance?
9. What is the impact of SME managers’ risk management behaviour on firm performance?

10. What is the impact of SME managers' digital capability on firm performance?

8.2.1 Financial Knowledge and SME Performance

The first objective for this study is to assess the impact of SME managers' knowledge of interest rates on SME performance. Based on the quantitative result, knowledge of interest rates exerts a significant negative direct effect on profitability (β = -0.139; p = 0.004), while insignificant negative and positive effects on employment growth (p = 0.760) and sales growth (p = 0.265) respectively.

The qualitative findings however, established that managers explore various rates options before seeking to apply for loan. This implies managers' knowledge of interest rates play a significant in their loan application. Based on this, the qualitative findings failed to support the above quantitative results. The general view in the literature is that managers must understand the detrimental effect of the high cost of borrowing on their businesses to improve performance. This is because knowledge of interest rates helps managers decide whether it is prudent to borrow at a cost that will not affect SMEs capital structure and their financial performance (Lusardi and de Bassa Scheresberg, 2013; Restrepo et al., 2019).

The study further explores the impact of managers' Knowledge of inflation on SME performance. The results indicate that knowledge of inflation exerts a significant positive effect on profitability (β = 0.196; p = 0.002), and sales growth (β = 0.331; p = 0.000) but insignificant effects on employment growth (p = 0.669).

The finding from the qualitative analysis also show that managers understand the significant impact inflation plays on their business performance. This means that the qualitative finding failed to support fully the quantitative results.

While this study welcomes the significant positive effect of inflation on sales and profitability, managers face significant challenges during high inflation. This is because, in a high inflationary business environment, consumer confidence falls causing most people to spend less on goods and services which affects SME's profitability (Rashid and Saeed, 2017; Doan et al., 2020). However, the insignificant effect of inflation on employment implies that increased inflation figures significantly lead to a decrease in employment growth (Ipinnaiye et al., 2017).

The study also assesses the impact of managers' investment knowledge on SME performance. The result reveals that the application of investment literacy exerts an insignificant positive effect on the application of employment growth (p = 0.229), profitability (p = 0.530), and sales growth (p = 0.154).

The result from the qualitative analysis revealed that most SME managers do not consider any other investment option apart from concentrating on my own business. This implies that investment knowledge failed to promote SME managers investment decision making to improve performance. The qualitative result, therefore, support the quantitative findings. But evidence suggests that investment knowledge plays a crucial role in an organisational investment strategy to improve financial performance (van Rooiji et al., 2012; Bellofatto et al., 2018). This implies that the finding does not reflect the general view in the literature.

In addition, the study assesses the impact of managers' insurance knowledge on the performance of their businesses. The result shows that knowledge of insurance had insignificant positive effects on employment growth (p = 0.880), profitability (p = 0.273), and sales growth (p = 0.345).

The qualitative analysis also revealed that most managers do not insure their businesses due to the high cost of insurance premium. Most managers also stated that they struggled to acquire my working capital, therefore, it is important to put money into the business instead of taking up insurance. Insurance knowledge, therefore, failed to show any positive impact on insurance uptake. These findings fully support the quantitative results.

But insurance purchases increase firms' values (Asai, 2019), therefore, managers must understand the terms of any insurance policy that meets their business needs. This is because the lack of knowledge of insurance policies compounds SMEs' problems in taking up insurance coverage to mitigate certain risk factors and improve performance (Garba et al., 2022).

Knowledge of risk diversification is also investigated, and the result shows a significant effect on employment growth (β = 0.137; p = 0.001), and sales growth (β = 0.143; p = 0.001), whiles having an insignificant effect on profitability (p = 0.085). While the positive effect on sales and employment growth is welcome, equally managers' ability to diversify their business portfolio could lead to extra income as a different line of business.

The qualitative analysis also show that managers understand the impact of diversification to improve performance. Most managers said it is important to invest in multiple business opportunities as to reduce business risks drastically and improve performance. Even though the quantitative analysis shows risk diversification to exert an insignificant effect on profitability, but the view from managers shows that the qualitative findings partially support quantitative results. Based on this, it is important that managers understand how to diversify their overall investment portfolio to improve the firm's performance (Cressy et al., 2014).

On debt literacy, the analysis, however, failed to have significant effects on profitability ($p = 0.512$), and sales growth ($p = 0.900$), but exerts a significant positive effect on employment growth ($\beta = 0.134$; $p = 0.022$). Previous studies have, however, established an insignificant positive effect of debt literacy on profitability and sales growth (Drobertz et al., 2013; Yazdanfar and Öhman, 2015).

Data from the qualitative analysis also shows no linear relationship between debt literacy and SME performance. This finding is consistent with the quantitative results in the exception of significant positive effect that debt literacy shows on employment growth. However, managing debt effectively sets a broad set of prudent economic behaviours (Gathergood et al., 2019). This implies that SME managers' ability to control debt has a positive effect on their financial performance. Based on this, SME managers must be encouraged to acquire FL skills to prevent SME indebtedness.

8.2.2 Financial Behaviour and SME Performance

On financial behaviour, first, the study assesses the impact of managers' budgeting behaviour on SME performance. Based on the analysis, budgeting behaviour exerts insignificant direct effects on employment growth (p = 0.496), profitability (p = 0.173), and sales growth (p = 0.569).

The qualitative data also show that managers do not implement budgetary in their business to improve performance. Most managers stated that annual budgeting does not work when implementing business strategies in their businesses. The findings are consistence with the quantitative results, and this implies that qualitative results fully support the qualitative oner.

These findings, however, are inconsistent with the view in the literature. This is because budgeting has been considered an important strategic tool to enhance business performance (Fayard et al., 2012; Schubert and Kirsten, 2021). The results, therefore, undermine the significance of budgeting as an internal cost management strategy to drive performance (Libby and Lindsay 2010).

Secondly, the study assesses the impact of managers' record-keeping behaviour on SME performance. The application of record-keeping behaviour, however, exerts a significant positive influence on profitability (β = 0.207; p = 0.013) but an insignificant effect on employment growth (p = 0.317), and sales growth (p = 0.692).

But the findings from the qualitative analysis show that the majority of managers do not keep records on sales as they believed it does not make any difference to their sales figures. Most of them also believed that this does not affects their business performance. The findings partially support the quantitative results.

But a comprehensive study conducted across seven developing countries found a significant positive effect between record-keeping and profitability (McKenzie and Woodruff, 2017). Even though record-keeping behaviour exerts an insignificant effect on sales and employment growth, it is important that SMEs in Ghana have the ambition to train staff or recruit anyone with a unique skill set that makes record-keeping a standard business management practice. Also, when managers make record-keeping their standard business management practice, they are able to identify fast-selling products and prioritise investing in products that are fast-selling. Based on this, SME managers in Ghana must invest in improving FL skills as human capital development to improve performance.

Thirdly, the study assesses the impact of managers' risk management behaviour on SME performance. The PLS-SEM path analysis reveals that risk management behaviour exerts a significant positive effect on sales growth (β = 0.198; p = 0.016) but insignificant effects on employment growth (p = 0.094) and profitability (p = 0.612). While risk management only exerts a statistically significant effect on sales, managers' risk management behaviour helps them to identify, measure, and mitigate potential risks to improve performance (Daidj et al.,2017).

The data from the qualitative analysis, however, revealed that most managers deployed effective risk management strategies to improve sales. While this supports the quantitative result, the qualitative findings failed to fully support the quantitative results given the mixed findings.

Finally, the study assesses the impact of managers' savings behaviour on SME performance. The application of savings behaviour is found to exert a statistically significant effect on profitability (β = 0.190; p = 0.007), and sales growth (β = 0.151: p = 0.015), while exerting an insignificant effect on employment growth (p = 0.065).

From the qualitative results, it is established that managers inability to save make it too difficult to raise the financial capital needed to make the business profitable. Some managers also said savings enable them to explore other opportunities that help boost sales. These findings are in line with the quantitative results.

These findings are also supported by previous empirical studies which argued that savings boost SMEs' sales and help firms finance profitable strategic investment projects (Rocca and Cambrea, 2019) to improve performance. Savings have become an important business practice that helps improve organisational capital structure to improve performance (Mohd-Ashhari and Faizal, 2018).

8.2.3 The Impact of Managers' Digital Capability on SME Performance

The study further assesses the impact of managers' digital capability on SME performance. The path analysis testing of managers' digital skills emerged to have a statistically significant effect on employment growth *(p=0.000)* and profitability *(p= 0.002*) while exerting a statistically insignificant effect on sales growth (*p=0.305*). The significant positive effect of digital literacy on employment indicates how digital literacy skill is becoming pivotal in many workplaces including developing countries.

The qualitative findings also show that managers acknowledged the importance of digitalised business management practices to improve performance. Some managers believed that when businesses installed account management system, it will cut waste and help them mitigate any risk to the business. This means that the qualitative data partially support the quantitative findings.

Despite the statistically insignificant effect of digital literacy on sales growth, SME managers' digital capability can enhance their ability to strategize better to increase their customer base and increase sales (Irfan and Sabir, 2022). This means that managers' digital capability has increasingly become a crucial skill to help SMEs transform their business models and achieve optimum performance levels (Garzoni et al., 2020). SME digital capability can help managers to easily diversify their business activities online and offline to maximise profits (Neumeyer et al., 2020).

8.2.4 The Effect of Control Variables on SME Performance

The result shows that age had a significant effect on profitability ($\beta = 0.187$; $t = 3.147$; $p = 0.002$). Evidence suggests that young and middle-aged managers have a divergence of interests in taking innovative activities and investment decisions which might involve risks to boost firm growth (Li et al., 2017). Also, even though older managers tend to have a lot of experience, they are often risk averse (Serfling, 2014). Based on these findings, age affects strategic decision-making and thereby, affects firms' organic growth. This implies that age is one of the major factors in SME performance.

Based on the results, gender exerts an insignificant effect on profitability ($\beta = -0.033$; $p = 0.418$). However, empirical evidence suggests that women tend to be risk-averse compared to their male counterparts (Quiroz-Rojas and Teruel, 2021). This implies that female managers hold back growth opportunities which affects SME profitability. The insignificant impact of gender on profitability contradicts the above finding.

In addition, the assessment of the direct path also shows a statistically significant effect between education and profitability ($p=0.053$). The finding highlighted how industry-specific education or knowledge possessed by a business owner/manager improves SME profitability (Soriano and Castrogiovanni, 2012; Aissa and Goaied, 2016). This implies that managers' educational level is an important factor in enhancing the effective implementation of standard financial management practices in SMEs to improve performance.

Furthermore, the path analysis reveals that age has a significant effect on sales growth ($p=0.004$). This finding is in line with a previous study which established that firms managed by younger managers tend to grow faster in terms of sales and assets than those managed by older managers. (Barba Navaretti et al., 2022). The result, therefore, implies that age is a determining factor to be more risk-oriented and effective policy implementation to improve SME growth (Serra et al., 2012).

Also, the result shows that gender exerts statistically significant negative results on sales growth ($\beta = -0.369$; $p = 0.000$). This finding needs to be interpreted with caution. This is because several studies produced mixed results on gender and sales growth. For example, previous empirical evidence suggests that annual sales growth in female-owned firms is significantly higher compared to male-owned (Ali and Shabir, 2017; Quiroz-Rojas and Teruel, 2021). Another previous study also argues that male entrepreneurs outperformed females in terms of sales growth (Mersha and Sriram, 2019).

Finally, managers' level of education and industry category showed an insignificant effect and sales growth (p=0.070), and (p=0.511) respectively. Age and gender exert an insignificant positive effect on employment growth (p=0.587), (p=0.257) respectively. However, education and industry categories appeared to be statistically significant on employment growth (p=0.000), (p = 0.004) respectively.

Table 9.1 below presents both financial knowledge and financial behaviour variables and their corresponding hypotheses. Out of 43 hypotheses, 25 are accepted whiles 27 are rejected. Table 9.1 below shows all hypotheses and their associated results.

Table 8.1 Summary of Hypotheses Testing Results

Construct		Label	Research Objective	Hypothesis	Levels of Sig.	Result
Financial Knowledge	*1*	*H1a*	1.To assess the impact of managers' knowledge of interest rates on SME performance in the Volta Region of Ghana.	*Knowledge of interest rates has a positively significant relationship with SME managers digital capability*	1%	Accepted
	2	*H1b*		*Knowledge of interest rates has a positively significant relationship with employment growth of SMEs*	10%	Rejected
	3	*H1c*		*Knowledge of interest rates has a positively significant relationship with SMEs profitability*	5%	Rejected
	4	*H1d*		*Knowledge of interest rates has a positively significant relationship with SMEs sales growth*	10%	Rejected
	5	*H2a*	2.To assess the impact of' managers' inflation knowledge on SME performance in the Volta Region of Ghana.	*Knowledge on inflation has a positively significant relationship with SME managers' digital capability*		Rejected
	6	*H2b*		*Knowledge on inflation has a positively significant relationship with employment growth of SMEs.*	7%	Rejected

	7	*H2c*		*Knowledge on inflation has a positively significant relationship with profitability of SMEs*	5%	Accepted
	8	*H2d*		*Knowledge on inflation has a positively significant relationship with sales growth of SMEs*	5%	Accepted
	9	*H3a*	3.To assess the impact of managers' debt management literacy on SME performance in the Volta Region of Ghana	*Knowledge of debt literacy has a positively significant relationship with SME managers' digital capability*		Rejected
	10	*H3b*		*knowledge of debt literacy has a positively significant relationship with employment growth of SMEs.*	5%	Accepted
	11	*H3c*		*Knowledge of debt literacy has a positively significant relationship with profitability of SMEs*	10%	Rejected
	12	*H3d*		*Knowledge of debt literacy has a positively significant relationship with sales growth of SMEs*	10%	Rejected
	13	*H4a*	4.To assess the impact of managers' insurance knowledge on SME performance in the Volta Region of Ghana	*Knowledge on business insurance has a positively significant relationship with SME managers' digital capability*	10%	Rejected
	14	*H4b*		*Knowledge on business insurance has a positively significant relationship with employment growth of SMEs*	10%	Rejected
	15	*H4c*		*Knowledge on business insurance has a positively significant relationship with profitability of SMEs*	8%	Rejected
	16	*H4d*		*Knowledge on business insurance has a positively significant relationship with sales growth of SMEs.*	6%	Rejected
	17	*H5a*	5.To assess the impact of managers' knowledge of investment analysis on SME performance in the Volta Region of Ghana	*Knowledge of investment analysis has a positively significant relationship with SME managers' digital capability*	10%	Rejected
	18	*H5b*		*Knowledge of investment analysis has a positively significant relationship with employment growth of SMEs*	10%	Rejected
	19	*H5c*		*Knowledge of investment analysis has a positively significant relationship with profitability of SMEs*	10%	Rejected
	20	*H5d*		*Knowledge of investment analysis has a positively significant relationship with sales growth of SMEs*	6%	Rejected

	21	*H6a*	6.To assess the impact of managers' knowledge of risks diversification on SME performance in the Volta Region of Ghana.	*Knowledge on risk diversification of SME managers has a positively significant relationship with managers' digital capability*	1%	Accepted
	22	*H6b*		*Knowledge on risk diversification of SME managers has a positively significant relationship with employment growth of SMEs*	1%	Accepted
	23	*H6c*		*Knowledge on risk diversification of SME managers has a positively significant relationship with profitability of SMEs*	10%	Rejected
	24	*H6d*		*Knowledge on risk diversification of SME managers has a positively significant relationship with sales growth of SMEs*	1%	Accepted
Financial Behaviour	*25*	*H7a*	7.To assess the impact of managers' budgeting behaviour on SME performance in the Volta Region of Ghana.	*Budgeting skills has a positively significant relationship with digital literacy of SME managers*	5%	Accepted
	26	*H7b*		*Budgeting skills has a positively significant relationship with employment growth of SMEs*	6%	Rejected
	27	*H7c*		*Budgeting skills has a positively significant relationship with profitability of SMEs*	10%	Rejected
	28	*H7d*		*Budgeting skills has a positively significant relationship with sales growth of SMEs*	6%	Rejected
	29	*H8a*	8.To assess the impact of managers' record-keeping behaviour on SME performance in the Volta Region of Ghana	*Record-keeping behaviour of SME managers has a positively significant relationship with digital literacy*		Rejected
	30	*H8b*		*Record-keeping behaviour of SME managers has a positively significant relationship with employment growth of SMEs*	6%	Rejected
	31	*H8c*		*Record-keeping behaviour of SME managers has a positively significant relationship with profitability of SMEs*	5%	Accepted
	32	*H8d*		*Record-keeping behaviour of SME managers has a positively significant relationship with sales growth of SMEs*	7%	Rejected
	33	*H9a*	9.To assess the impact of managers' risk management behaviour on SME performance in the Volta Region of Ghana	*Risk management behaviour of SME managers has a positively significant relationship with digital literacy*	5%	Accepted
	34	*H9b*		*Risk management behaviour of SME manager has a positively significant relationship with employment growth*	9%	Rejected

	35	*H9c*		*Risk management behaviour of SME managers has a positively significant relationship with profitability of SMEs*	6%	Rejected
	36	*H9d*		*Risk management behaviour of SME managers has a positively significant relationship with sales growth of SMEs*	2%	Accepted
	37	*H10a*	10.To assess the impact of managers' saving behaviour on SME performance in the Volta Region of Ghana.	*Savings behaviour of SMEs managers has a positively significant relationship with digital literacy*	1%	Accepted
	38	*H10b*		*Savings behaviour of SMEs managers has a positively significant relationship with employment growth of SMEs*	7%	Rejected
	39	*H10c*		*Savings behaviour of SMEs managers has a positively significant relationship with profitability of SMEs*	1%	Accepted
	40	*H10d*		*Savings behaviour of SMEs managers has a positively significant relationship with sales growth of SMEs*	2%	Accepted
Digital Capability	*41*	*H11a*	11.To assess the impact of managers' digital literacy skills on SME performance	*Digital literacy of SME managers has a positively significant relationship with employment growth of SMEs*	1%	Accepted
	42	*H11b*		*Digital literacy of SME managers has a positively significant relationship with profitability of SMEs*	5%	Accepted
	43	*H11c*		*Digital literacy of SME managers has a positively significant relationship with sales growth of SMEs*	10%	Rejected
	44	*H12a*	12.To assess the mediating role of managers' digital capability on SME performance	*Digital literacy mediates budgeting behaviour of SMEs managers and employment growth*	5%	Accepted
	45	*H12b*		*Digital literacy mediates Knowledge on interest rates of SMEs managers and employment growth*	5%	Accepted
	46	*H12c*		*Digital literacy mediates Knowledge on interest rates of SMEs managers and profitability OF SMEs*	5%	Accepted
	47	*H12d*		*Digital literacy mediates risk diversification of SME managers and employment growth of SMEs*	2%	Accepted
	48	*H12e*		*Digital literacy mediates risk diversification of SME managers and profitability of SMEs*	5%	Accepted

	49	*H12f*		*Digital literacy mediates risk management behaviour of SME managers and employment growth*	5%	Accepted
	50	*H12g*		*Digital literacy mediates risk management behaviour of SME managers and profitability of SMEs*	3%	Accepted
	51	*H12h*		*Digital literacy mediates savings behaviour of SME managers and employment growth*	5%	Accepted
	52	*H12i*		*Digital literacy mediates savings behaviour of SME managers and profitability of SMEs*	5%	Accepted
	53	*H12j*		*Digital literacy mediates budgeting behaviour of SMEs managers and employment growth*	1%	Accepted

8.3 The Validated Model

The conceptual model below seeks to respond to the research gap and thereby, represents the validated model of how SME managers' financial knowledge (FK) and financial behaviour (FB) improve SME performance in Ghana. This study argues that a manager's financial knowledge leads to effective financial behaviour to improve SME performance. This implies that effective financial behaviour is the catalyst for SME managers to implement better financial management practices to improve performance. This research addresses the research gap by making a significant contribution to the entrepreneurship literature through the theoretical model developed that ascertains how SMEs' financial knowledge and financial behaviour impact their performance in the areas of employment, sales, and profitability growth. It is also expected that SME managers' digital capability helps improve SME performance. Analysing both the quantitative and qualitative findings provides an insightful understanding of those indicators which affect SME performance in Ghana. This proposed and validated model could, therefore, be adopted by selected government agencies such as the National Board for Small Scale Industries (NBSSI) and Microfinance and Small Loans Centre (MASLOC) to help the SME sector improve performance. This means that SMEs should be provided with opportunities to develop their human capabilities such as financial and digital capability to improve performance. Figure 8.1 presents the validated model of the impact of Financial Knowledge, Financial behaviour and Digital Capability on SME performance.

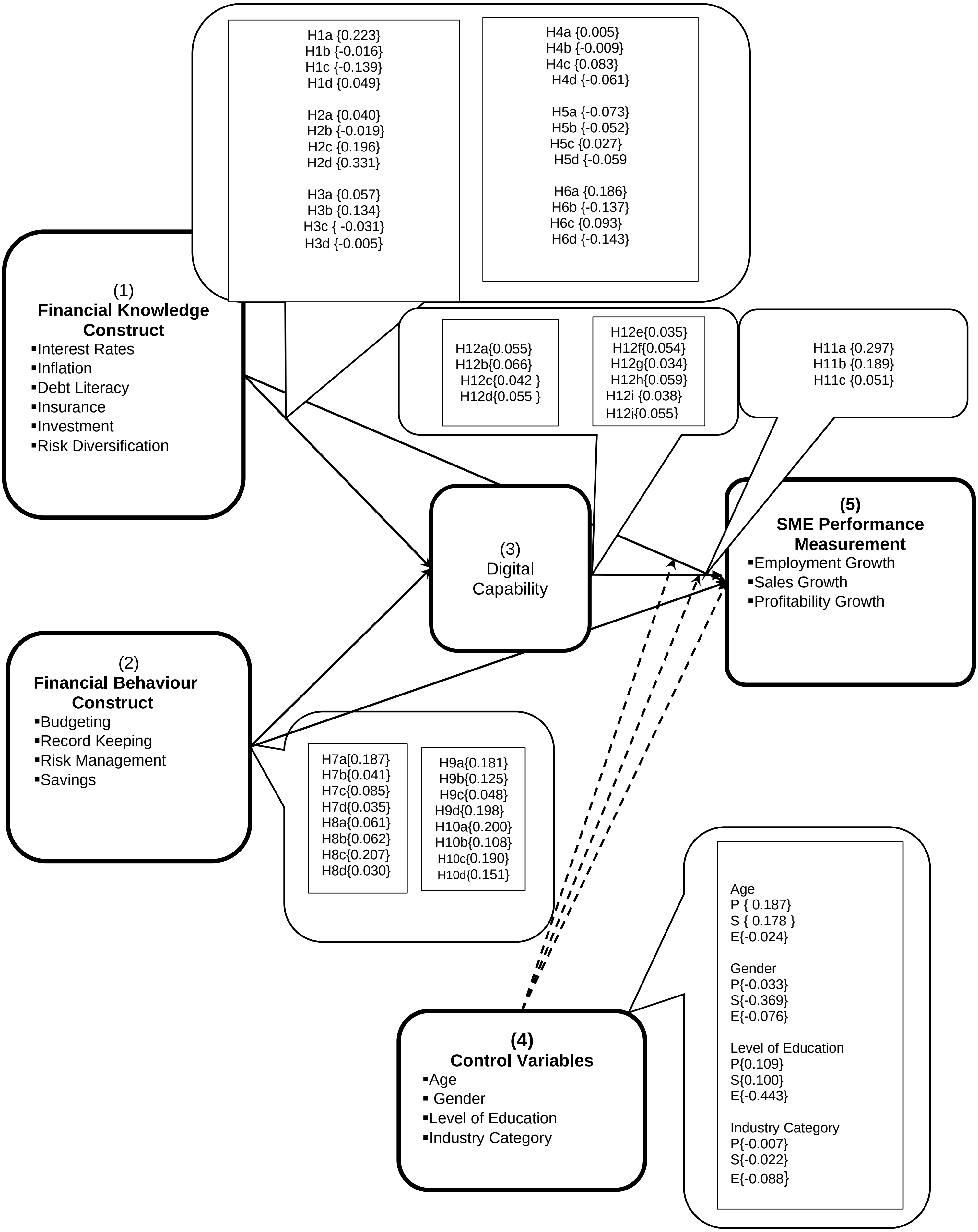
H1a {0.223}
H1b {-0.016}
H1c {-0.139}
H1d {0.049}
H2a {0.040}
H2b {-0.019}
H2c {0.196}
H2d {0.331}
H3a {0.057}
H3b {0.134}
H3c { -0.031}
H3d {-0.005}
H4a {0.005}
H4b {-0.009}
H4c {0.083}
H4d {-0.061}
H5a {-0.073}
H5b {-0.052}
H5c {0.027}
H5d {-0.059
H6a {0.186}
H6b {-0.137}
H6c {0.093}
H6d {-0.143}
(1)
Financial Knowledge Construct
▪Interest Rates
▪Inflation
▪Debt Literacy
▪Insurance
▪Investment
▪Risk Diversification
H12a{0.055}
H12b{0.066}
H12c{0.042 }
H12d{0.055 }
H12e{0.035}
H12f{0.054}
H12g{0.034}
H12h{0.059}
H12i {0.038}
H12j{0.055}
H11a {0.297}
H11b {0.189}
H11c {0.051}
(3)
Digital Capability
(5)
SME Performance Measurement
▪Employment Growth
▪Sales Growth
▪Profitability Growth
(2)
Financial Behaviour Construct
▪Budgeting
▪Record Keeping
▪Risk Management
▪Savings
H7a[0.187}
H7b{0.041}
H7c{0.085}
H7d{0.035}
H8a{0.061}
H8b{0.062}
H8c{0.207}
H8d{0.030}
H9a{0.181}
H9b{0.125}
H9c{0.048}
H9d{0.198}
H10a{0.200}
H10b{0.108}
H10c{0.190}
H10d{0.151}
Age
P { 0.187}
S { 0.178 }
E{-0.024}
Gender
P{-0.033}
S{-0.369}
E{-0.076}
Level of Education
P{0.109}
S{0.100}
E{-0.443}
Industry Category
P{-0.007}
S{-0.022}
E{-0.088}
(4)
Control Variables
▪Age
▪ Gender
▪Level of Education
▪Industry Category

Figure 8.1: The validated model of the impact of Financial Knowledge, Financial Behaviour and Digital Capability on SME performance

8.4 Contribution to Knowledge

This study has made three important contributions. First, this study proposes a conceptual framework that anticipates SME managers’ knowledge of interest rates, inflation, debt management, investment and insurance to effectively support their financial decision-making process to improve SME performance. As a result, the study contributes to entrepreneurship and financial management literature by exploring how SME financial knowledge contributes to managers' sound financial management behaviour to improve SME performance. The study also contributes to the digital transformation literature by exploring how the use of digital literacy can enhance SME performance and streamline their operations.

Second, from a theoretical perspective, the Knowledge-Based View contributes to how the optimum financial literacy level of the SME manager strengthens the explicit and tacit knowledge leading to a high SME financial performance. Also, according to the Institutional Theory, SMEs encounter a host of institutions including regulatory, normative and cognitive ones which seek to transform managers’ financial behaviour and general business outlook.

Lastly, the study also made a significant methodological contribution where an explanatory sequential triangulation strategy is adopted to ensure that both quantitative and qualitative strategies are deployed where the qualitative study validates the quantitative study to add depth, breadth and richness to the study outcomes.

8.5 Implications for Policy and Practice

The findings from this study provide a clear directive for policymakers and practitioners alike on how SMEs in Ghana should be supported to acquire FL skills and manage their financial resources to produce the maximum utility.

8.5.1 Implications for Policy

Successive governments of Ghana have taken some initiatives to improve the SME sector given their significant contributions to the national economic development. For example, the government of Ghana initiated easy access to loans, and skill training through Microfinance and Small Loans Centre (MASLOC) and the National Board for Small-Scale Industries to improve performance. But most of the SMEs in Ghana are still failing and most that are still in operation, the majority are not sustainable.

The findings from this study, imply that the government of Ghana and institutions such as Microfinance and Small Loans Centre (MASLOC) and the National Board for Small Scale Industries (NBSSI) responsible for the development of SMEs continue to implement dedicated FL training initiatives as an economic development policy to enhance sustainability and growth of the SME sector. This is crucial given that the SME sector is one of Ghana’s economic strengths. In terms of policy, all institutions that are responsible for supporting the SME sector must focus on human capital development training programmes to ensure that the SME sector remains resilient. Also, the regulatory bodies and all relevant government institutions must work with the financial institutions to develop tailored FL for SME managers to build their managerial capabilities. Developing such capabilities will support SME managers in implementing standard account management practices such as effective record-keeping, risk management strategies, budgeting and regular saving policies which are pivotal in the day-to-day management of a business. Is only through these standard practices that managers can make effective decisions on resource management identify opportunities in an inflationary environment and make informed investment decisions to improve performance. As such, training workshops and seminars on FL should be organised and included in the annual training and development programmes for SMEs to improve performance. These programmes should cover record-keeping, financial statement analysis, cash flow analysis, business environment analysis, risk analysis and investment management which are critical for managers to make prudent financial decisions.

8.5.2 Implications for Practice

Based on the above policy implications, it is also vital that SME managers in the Volta Region of Ghana understand the importance of acquiring FL skills which can provide an important impetus to implement up-to-date business management practices and improve their firms' performance. This means that managers must undertake regular training programmes on FL skills to enhance their ability to implement sound risk management practices, keep up-to-date records of business activities, develop effective budgeting systems and be able to develop appropriate savings behaviour. It is only through such proactive steps by managers that the gap between SME financial literacy and organisational capabilities will be bridged.

As most SMEs face financial constraints, the findings from this study also imply that when SME managers are encouraged to improve their FL skills, it might enhance their access to financing and other vital resources such as digitalised and innovative systems that meet today's business challenges. Also, it is only when SME managers invest in knowledge acquisition and other needed skills that meet business needs, is then that they can improve performance and remain competitive.

8.5.3 Implications for Researchers

It is also important that the researcher reflect on some of the challenges and successes of the whole research process to provide some insights for other researchers to consider. This provides a critical evaluation of the whole research process that any future researcher needs to be familiar with before embarking on any research, particularly when the researcher is not familiar with the research setting. With this in mind, the data collection process for this study was extremely challenging where most SMEs in developing countries like Ghana lack resources to invest and implement effective financial management practices to improve performance. Based on this, it is, therefore, important that any future researcher works with the government institutions such as Microfinance and Small Loans Centre (MASLOC) and the National Board for Small Scale Industries (NBSSI) in the Region and seek approval from the District Municipal Assemble to maximise the response rate. More importantly, researchers must be able to identify certain decorum during an interview process and be able to know whether the interview has been conducted at the appropriate time. This is because some SME managers will exhibit certain behaviours particularly when they are busy which might affect the quality or richness of the data. Once these are identified, researchers must respect the views of interviewees and perhaps suggest rescheduling the data collection for a different day when it might be convenient. As a result, future researchers must consider the self-administration of questionnaires as this has proven useful in getting the right information and a high response rate.

8.6 Limitations of the Study

This study few limitations. Firstly, the study's sample was collected only from the Volta Region of Ghana. This implies that drawing a policy guide from this study should be done cautiously. A cross-regional study would have provided a better insight into the effect of SME financial and digital capabilities development on the performance of SMEs and how these could be used to provide the needed support for SMEs. A more representative picture of the findings is vital for policymakers. Even though the research instrument shows scientific reliability and validity through the various tests deployed, more studies are required for the general applicability of policy.

Secondly, the study collected 499 quantitative data compared to only 10 interviews conducted for the qualitative data. This creates an imbalance in the data and as a result, provides some drawbacks. Future research should endeavour to increase the qualitative sample which would thereby, improve the insight gained from this study.

8.7 Future Research Direction

Based on the research limitations, the findings provide some insightful advice for any future researcher to consider. First, for the general applicability of policy, future research should consider testing the proposed model of this study across several regions of Ghana. This is because each region might have their peculiar challenges which limit SMEs' ability to develop their financial and digital literacy skills to improve performance. For example, some regions in the Northern of Ghana have low FL skills across the population. The ramifications of the lack of FL skills among SME managers in these regions could have been far worse compared to the Volta Region. For example, low literacy rates, lack of resources and inadequate governmental support could be some of the challenges limiting SMEs' ability in these Regions to adopt and implement effective financial management practices to improve performance. This implies that understanding the consequences of the lack of financial and digital literacy skills among SMEs in these Regions could provide an appropriate financial behavioural approach for SME managers and appropriate policies from the government institutions to support the SME sector to flourish.

Secondly, even though the focus of this study is on SME managers, future research should also consider measuring FL on every employee of SME as this will provide a more holistic understanding of how FL helps every employee to improve performance.

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APPENDICES

Appendix 1: Ethical Approval for the Research Project

21 March 2022

Senyo Agbanyo

Dear Senyo Agbanyo

I am writing regarding your application for ethical approval for the research study summarised below which has now been reviewed in accordance with De Montfort University's Research Ethics Code of Practice. I am pleased to inform you that the study has been approved.

It is your responsibility to ensure your research adheres to the standard conditions of approval below. You should ensure that the ethics of your study is kept under review as the research progresses, and in response to any external changes that might affect the approval. As noted below, changes in your research may require you to apply for an amendment to your application. As always, you should feel free to ask your Faculty Research Ethics Committee or ethics@dmu.ac.uk for advice and support.

Study Title:	The impact of financial literacy on the performance of small and medium enterprises: Empirical Evidence from Ghana.Ref:450487
WorkTribe Ref:	450487
Committee:	Faculty of Business and Law
Approval Date:	21 Mar 2022
End Date:	20 Mar 2025 (3 years approval)
Risk category:	Low
Status:	**Approved**

Appendix 2: Turnitin Score

Appendix 3: Quantitative Questionnaire for SMEs in Ghana

DE MONTFORT UNIVERSITY LEICESTER
FACULTY OF BUSINESS AND LAW
QUANTITATIVE QUESTIONNAIRE F(SMEs IN GHANA

DE MONTFORT UNIVERSITY LEICESTER

Dear Sir/Madam

My name is Senyo Agbanyo, a research student at De Montfort University Faculty of Business and Law , Leicester, United Kingdom.
I am collecting data for my PhD thesis titled: The impact of financial literacy on the performance of SMEs: Empirical Evidence from Ghana.
This questionnaire collects data on your financial literacy skills and its impact on the performance of your business.
Dr. Victor Atiase, Dr.Samuel Salia and Dr Oscar Mgbame of De Montfort University Castle Business School are supervising this study.
I would be very grateful if you could spare 15 minutes of your time to respond to the following questions. Please you are advised not to write your name on questionnaire as it is completely anonymous,used purposely for academic endeavour and shall be treated strictly confidential as much as possible.

If you would like to receive an executive summary of the research report, please tick the appropri	Yes	☐	No	☐
If you would like to participate further in this research, please tick the appropriate box.	Yes	☐	No	☐

Thank you very much for your time and contributions.

FOR INTERNAL USE ONLY

Questionnaire Code:...

Date Administered:..

Date of Retrieval:...

Contact of Respondent..

INSTRUCTION

You are kindly requested to tick the box that best represents your biographic nature or perspective. Please specify where appropriate.

SECTION A: PERSONAL PROFILE

1. Gender:	[1] Male	[2] Female			
2. Age	[1] Under 25	[2] 26 – 35	[3] 36 – 45	[4] 46-55	[5] 55+
3. Marital Status	[1] Married	[2] Single	[3] Divorced	[4] Widowed	
4.What role do you play in this business?	[1] Owner Manager	[2] Owner	[3] Manager	[4] Others (Please specify)	
5. Highest level of education?	[1] No formal education	[2] Primary school	[3] Secondary school	[4] Undergraduate degree	
	[5] Postgraduate degree		[6] Other (specify)		

SECTION B: BUSINESS PROFILE

6. What is the nature of your business registration?					
a.Registras' General Department	[1] Yes	[2] No			
b.District/Municipal Assebmly	[1] Yes	[2] No			
7.Please categorise the legal form of your business by ticking the appropriate box	[1] Sole proprietorship		[2] Partnership	[3] Limited liability company	
8. What is the total capital invested into your business?	[1] Ghc 500-Ghc 2000	[2] Ghc 2001-Ghc 5000	[3] Ghc 5001-Ghc 10,000	[4] Ghc10,001-Ghc 20,000	[5] Above Ghc 20,000
9.What are the main sources of your invested capital?	[1] Savings	[2] Microcredit	[3] Family and Friends	[4] Government assistance	[5] Others (specify)
10. What is the age of your business?	[1] Less than 2 years	[2] 2 – 5 years	[3] 6 – 10 years	[4] 11 – 15 years	[5] More than 15 years
11.Which of the following industry is your business classified?	[1] Agriculture	[2] Manufacturing	[3] Construction	[4] General services	[5] Trading
	[6] Hotels and restaurants	[7] Education	[8] Transport and distribution	[9] Others(Please specify)	

SECTION C: FINANCIAL LITERACY QUESTIONS

12.Could you tell me how you would rate your overall fiancial knowledge by rating on a scale between 1 and 5,where 1=Strongly disagree,3=Neutral, and 5=Strongly agree?

Financial knowledge

Knowledge on compound interest	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
12.a. I know the difference between simple and compound interest rates	[1]	[2]	[3]	[4]	[5]
12.b. Investing at compound interest yield much returns than a simple interest investment.	[1]	[2]	[3]	[4]	[5]
12.c. I understand the total amount I would need to repay on any business loan sercured.	[1]	[2]	[3]	[4]	[5]
12.d.I prefer to follow my instinct rather than to make detailed financial plans for my business	[1]	[2]	[3]	[4]	[5]

13. How would you agree to the following regarding your knowledge on inflation by rating on a scale between 1 and 5, where 1 = Strongly disagree, 3 = Neutral, and 5 = Strongly Agree ?

Knowledge on inflation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
13.a. High inflation means that the cost of goods and living is increasing rapidly.	[1]	[2]	[3]	[4]	[5]
13.b. If the prices of goods you buy doubles in next 10 years and your income also doubles, you are likely to buy the same you can buy today.	[1]	[2]	[3]	[4]	[5]
13.c.If your savings account earns 1% interest per year, but inflation rises to 2% per year you will be able to buy less of your goods for sales.	[1]	[2]	[3]	[4]	[5]

14.How would you agree to the following regarding your understanding around risk diversification by rating on a scale between 1 and 5, where 1 = Strongly disagree, 3 = Neutral, and 5 = Strongly Agree ?

Knowledge on risks diversification	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
14.a.It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares	[1]	[2]	[3]	[4]	[5]
14.b. It is riskier to put money in one product line than to put in multiple products at the same time.	[1]	[2]	[3]	[4]	[5]
14.c.I diversify my services and change them depending on the returns/yields	[1]	[2]	[3]	[4]	[5]

15.How would you agree to the following regarding your budgetting skill by rating on a scale between 1 and 5, where 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree ?

Application of budgeting skill	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15.a. I have a written business budget, which tells me how much is spent on operation cost to help reduce business debt.	[1]	[2]	[3]	[4]	[5]
15.b.I set specific financial goal for capital injection into my business.	[1]	[2]	[3]	[4]	[5]
15.c. I make an annual financial plan for my business and monitor it regularly	[1]	[2]	[3]	[4]	[5]
15.d. I have a written business plan that I follow to guide my decision making	[1]	[2]	[3]	[4]	[5]
15.e. I adjust all business planning activities according to the changes in economic situation	[1]	[2]	[3]	[4]	[5]

16.How would you agree to the following regarding the impact of effective application of saving skills on the business by rating on a scale between 1 and 5, where 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree ?

Application of saving literacy	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
16.a.I know the importance of savings for my business growth	[1]	[2]	[3]	[4]	[5]
16.b. I keep cash reserves beyond what is needed for my regular business operations.	[1]	[2]	[3]	[4]	[5]
16.c. I find it satisfying spending money than to save.	[1]	[2]	[3]	[4]	[5]
16.d. I set specific fiancial goal to meet business savings objectives.	[1]	[2]	[3]	[4]	[5]
16.e. I consider business savings as a means to deal with unexpected business circumstances.	[1]	[2]	[3]	[4]	[5]

17. How would you agree to the following regarding the impact of effective application of debt literacy skill on the business by rating on a scale between 1 and 5, where 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree ?

Application of debt literacy	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
17. a.Uncontrolled borrowing is risky and can increase my business debt	[1]	[2]	[3]	[4]	[5]

17.b. If you take GH2000 business loan charged at 12% per year compounded annually but only pay minimum of GH20, you will be in debt for a long time.	[1]	[2]	[3]	[4]	[5]
17.c. I considered several loan products from different financial institutions before making my decision on borrowing	[1]	[2]	[3]	[4]	[5]
17.d. I usualy apply for loan to pay for other business debts when I am struggling fiancially.	[1]	[2]	[3]	[4]	[5]
17.e. I consider business loan that is one year duration rather than long term loan with higher interest rate	[1]	[2]	[3]	[4]	[5]
17.f. I pay attention to the terms and conditions of all business loan applied rather than ignoring them	[1]	[2]	[3]	[4]	[5]

18. How would you agree to the following regarding the impact of effective application of investment literacy on the business by rating on a scale between 1 and 5, where 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree?

Application of investment literacy	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
18.a. An investment with a high return is likely to be a high risk for my business	[1]	[2]	[3]	[4]	[5]
18.b. I regularly monitor returns on my business operations	[1]	[2]	[3]	[4]	[5]
18.c. I have the skills required to make sound financial investments	[1]	[2]	[3]	[4]	[5]
18.d. It is safer to have multiple business investments compared to just one	[1]	[2]	[3]	[4]	[5]
18.e. I invest in products that sell quickly with maximum returns	[1]	[2]	[3]	[4]	[5]

19.How would you agree to the following regarding the impact of effective application of insurance literacy on the business by rating on a scale between 1 and 5, where 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree?

Application of insurance literacy	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
19.a. I understand the importance of business insurance	[1]	[2]	[3]	[4]	[5]
19.b. I understand that the terms of my business insurance premium could affect my business operation.	[1]	[2]	[3]	[4]	[5]
19.c. I understand the cost of business insurance regarding the type of business I do.	[1]	[2]	[3]	[4]	[5]
19.d. I have a current insurance cover for my business	[1]	[2]	[3]	[4]	[5]
19.e. Insurance is too costly and do not know how to look for a cheap one for the business	[1]	[2]	[3]	[4]	[5]

20. How would you agree to the following regarding the effective application record keeping on the business by rating on a scale between 1 and 5, where 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree?					
Application of record keeping skill	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
20.a. I have a cash book which I use to record all business revenues and expenditure	[1]	[2]	[3]	[4]	[5]
20.b. I separate my business finances from personal finances to understand the trend of the business success and failure	[1]	[2]	[3]	[4]	[5]
20.c. I prepare monthly financial statements for my business (Income statement)	[1]	[2]	[3]	[4]	[5]
20.d. I use records regularly to know whether sales of a particular product are increasing or decreasing from one month to another	[1]	[2]	[3]	[4]	[5]
20.e I records every purchase and sale made by the business	[1]	[2]	[3]	[4]	[5]
20.f. I take stock regularly to ensure business does not run out of stock	[1]	[2]	[3]	[4]	[5]
20.g. I use my business record to identify high selling items	[1]	[2]	[3]	[4]	[5]
21. How would you agree to the following regarding the effective application risk management skill on the business by rating on a scale between 1 and 5, where 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree?					
Application of risk management skill	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
21.a. I have standard procedures in place for identifying major risks and opportunities.	[1]	[2]	[3]	[4]	[5]
21.b. I always analyse identified risks when making decision on product/service selection	[1]	[2]	[3]	[4]	[5]
21.c. I regularly prepare risk reports to monitor any potential risk	[1]	[2]	[3]	[4]	[5]
21.d. I understand the business risk policy for handling major risks that could affect the firm's ability to meet its strategic objectives	[1]	[2]	[3]	[4]	[5]
21.e. My business has a policy for handling major risks that could affect the firm's ability to reach its strategic objectives	[1]	[2]	[3]	[4]	[5]
21.f. I integrate risk management strategy into daily business operations	[1]	[2]	[3]	[4]	[5]
21. g. I carry out a monthly financial analysis of monthly financial statements to identify any risk	[1]	[2]	[3]	[4]	[5]

22. How would you agree to the following regarding the impact of digital literacy on the business by rating on a scale between 1 and 5, where 1 = Strongly Disagree, 3 = Neutral, and 5 = Strongly Agree ?					
Application of digital literacy	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
22.a. I use mobile money transfer for payment of purchase (products/services)	[1]	[2]	[3]	[4]	[5]
22.b. I accept mobile money transfer payment from customers for goods and services bought	[1]	[2]	[3]	[4]	[5]
22.c. I use a computer system to keep financial record electronically so that I can alter easily whenever necessary	[1]	[2]	[3]	[4]	[5]
22.d. I use online banking system to do some banking transactions	[1]	[2]	[3]	[4]	[5]
22.e. I use computerised system to manage stock /service delivery	[1]	[2]	[3]	[4]	[5]
22.f. I use an Ecommerce platform for selling goods/service	[1]	[2]	[3]	[4]	[5]

23. Number of Full- time employees	**2017**	**2018**	**2019**	**2020**	**2021**
23 a. Skilled employees	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29
23. b. Unskilled employees	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29	[1] 1 [2] 2-5 [3] 6-19 [4] 20-29 [5] Over 29

24. Indicate in the table below the sales revenue and profit between 2017 and 2021	2017	2018	2019	2020	2021
	GH¢	GH¢	GH¢	GH¢	GH¢
24.a Sales	[1] Below 5000	[1] Below 5000	[1] Below 5000	[1] Below 5000	[1] Below 5000
	[2] 5000-9,999	[2] 5000-9,999	[2] 5000-9,999	[2] 5000-9,999	[2] 5000-9,999
	[3] 10,000-24,999	[3] 10,000-24,999	[3] 10,000-24,999	[3] 10,000-24,999	[3] 10,000-24,999
	[4] 25,000-49,999	[4] 25,000-49,999	[4] 25,000-49,999	[4] 25,000-49,999	[4] 25,000-49,999
	[5] 50,000-74,999	[5] 50,000-74,999	[5] 50,000-74,999	[5] 50,000-74,999	[5] 50,000-74,999
	[6] 75,000 & over	[6] 75,000 & over	[6] 75,000 & over	[6] 75,000 & over	[6] 75,000 & over
24.b Profit	[1] Loss or 0%	[1] Loss or 0%	[1] Loss or 0%	[1] Loss or 0%	[1] Loss or 0%
	[2] 1-9%	[2] 1-9%	[2] 1-9%	[2] 1-9%	[2] 1-9%
	[3] 10-19%	[3] 10-19%	[3] 10-19%	[3] 10-19%	[3] 10-19%
	[4] 20-29%	[4] 20-29%	[4] 20-29%	[4] 20-29%	[4] 20-29%
	[5] 30-49%	[5] 30-49%	[5] 30-49%	[5] 30-49%	[5] 30-49%
	[6] 50% & over	[6] 50% & over	[6] 50% & over	[6] 50% & over	[6] 50% & over

Appendix 4: Qualitative Questionnaire for SMEs

DE MONTFORT UNIVERSITY LEICESTER

DE MONTFORD UNIVERSITY LEICESTER

FACULTY OF BUSINESS AND LAW

<u>INTERVIEW QUESTIONS</u>

<u>FOR INTERNAL USE ONLY</u>

Name of SME...

Questionnaire Code..

Date Administered...

Date of Retrieval..

Contact of Respondent...

Business Location: ....

<u>SECTION A: PERSONAL AND SME BACKGROUND</u>

1. What role in the business?

……………………………………………………………………………………………………

2. **What is your highest level of education?**

……………………………………………………………………………………………………

3. **What is the legal form of your business?**

……………………………………………………………………………………………………

4. **What is the nature of your business registration?**

……………………………………………………………………………………………………

5. **How much capital did you invest in this business?**

……………………………………………………………………………………………………

6. **What are the main sources of capital invested in this business?**

……………………………………………………………………………………………………

7. **Under which industry does your business belong?**

……………………………………………………………………………………………………

8. How many employees do you currently have?

………………………………………………………………………………………………………..

SECTION B: FINANCIAL KNOWLEDGE QUESTIONS

9. What is the difference between simple and compound interest?

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10. How can you reduce the risk of your investment when buying shares?

………..

11. what does high inflation mean to you and your business?

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……

12. How can you increase the return on your investment?

……
……

13. What does a savings account that earns 1% interest per year but with a 2% rise in inflation per year means to the buying and selling of your goods?

……
……

SECTION C: APPLICATION OF FINANCIAL KNOWLEDGE QUESTIONS

Application of budgeting skill

14. How do you know what is spent on operation costs to help reduce business debt?

....
....

15. How do you tell how much capital needs injected to sustain operation?

16. How do you monitor your business spending to ensure you are within your budget?

....
....

17. How would you ensure sustainability in your business in the event of changing economic situation?

....
....

<u>Application of saving literacy</u>

18. Why is it so important to maintain regular business savings?

19. Why is it important to keep cash reserves beyond what the business needs?

………
………..

20. How do you ensure that you save regularly?

………
………

Application of debt literacy

21. Why is it important to control business borrowing?

………
………

22. Why is it important to pay off business debt early?

………
………

23. How do you decide on the best loan product for the business?

………
………

Application of investment literacy

24. Why is it important to be cautious of an investment that has a higher return?

………
………

25. Why is it important to have multiple business investments compared to just one?

………
………

26. Why is it important to invest in products that sell quickly?

………
………

Application of insurance literacy

27. Why is it important to have business insurance?

………

28. Why is it necessary to understand the terms of business insurance Premium?

……
……

29. why is it vital to have appropriate business insurance cover for my business?

……
……

<u>Application of record-keeping skill</u>

30. How do you record all your business activities?

……
……

31. Why is it important to separate business account from your personal one?

……
……

32. How do you ensure that your business does not run out of stock?

33. How do you know whether your business is striving or failing?

……
……

Application of effective risk management skill

34. Why is it important to have a standard risk procedure in place for your business?

……
……

35. why is it crucial to regularly prepare risk reports for the business?

……
……

Application of digital literacy

36. Why do you use mobile money transfer for payment of products and services in your business?

……

……

37. Why do you think using the computer system to keep records electronically could be very important for your business?

……
……

38. How do you manage your financial business activities?

……

SECTION D: SME PERFORMANCE

39. Can you describe how your business has improved its financial performance over the years in terms of employment, sales and profit?

Employment:

……
……
……

Sales:

……
……

Profititability:

……
……
……