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**The influence of financial literacy on formal credit accessibility in the informal
Sector - The taxi Industry**

Student No.: 24072398

A research project submitted to the Gordon Institute of Business Science,
University of Pretoria, in partial fulfilment of the requirements for the
degree of Master of Business Administration.

03 November 2025

ABSTRACT

The aim of this study is to investigate how financial literacy affects the ability of taxi operators in South Africa's informal sector to gain access to formal credit. Although the taxi industry is of considerable economic importance to South Africa, many operators experience obstacles when trying to obtain formal funding. Qualitative research was used, which involved conducting in-depth interviews with 15 taxi operators to examine their experiences, beliefs and practices concerning finance. A thematic analysis of the data collected from the interviews demonstrated that although most participants reported having some basic knowledge of financial management, there existed large knowledge gaps regarding formal financing options. Taxi operators experienced structural barriers to formal financing, these included extensive documentation required, demands for collateral, limited or no credit history and so forth. These structural barriers were exacerbated by taxi operator negative views of formal financing institutions (e.g. mistrust, discriminatory treatment and complexity of processes). As a result, taxi operators relied extensively upon informal financial arrangements (e.g., stokvels and private lending networks) to manage their finances and obtain capital. Furthermore, the results of the study indicated that those with higher levels of financial literacy had better business plans, had greater access to formal financing and were able to withstand financial difficulties better than other taxi operators. The results of the study emphasize the necessity of developing tailored financial literacy programs, adapting formal financing arrangements to accommodate informal businesses and implementing initiatives to build trust between formal financing institutions and informal businesses to increase access to formal financing opportunities. Therefore, recommendations based on the findings of the study include the establishment of financially accessible educational programs for informal businesses, the modification of formal lending criteria to be compatible with the needs of informal businesses and the creation of an environment that is conducive to financial inclusion for informal businesses. The study contributes to the body of literature that examines financial inclusion in the informal economy and emphasizes the significance of implementing context-specific measures to facilitate the long-term growth and sustainability of taxi operators. Ultimately, the study concludes that increasing the level of financial literacy of informal business owners, through the implementation of inclusive financial systems, will be necessary to empower informal business owners and contribute to overall economic development in South Africa.

KEY WORDS

Financial literacy, credit access, informal sector, human capital theory, financial inclusion.

PLAGIARISM DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

24072398

3 November 2025

Table of Contents

ABSTRACT	2
CHAPTER ONE: INTRODUCTION	8
1.1 Introduction	8
1.2 Background to the Research Problem	8
1.3 Research Problem	10
1.4 Aim of the Study.....	11
1.5 Research Objectives.....	11
1.6 Research Questions	12
1.7 Justification or Rationale of the Study.....	12
1.8 Conclusion	16
CHAPTER TWO: LITERATURE REVIEW	17
2.1 Introduction	17
2.2 Defining Financial Literacy and Credit Access.....	17
2.2.2 Credit Access: Formal and Informal Dimensions	19
2.2.4 Contextualizing Financial Literacy and Credit Access in the Informal Sector	21
2.3 Theoretical Perspectives on Financial Literacy and Credit Access.....	23
2.3.1 Resource-Based View (RBV): Financial Literacy as an Intangible Asset.....	23
2.3.2 Human Capital Theory: Education, Skills and Economic Returns	25
2.3.3 Dynamic Capabilities Framework: Adapting to Financial Environments.....	26
2.3.4 Integrating Theoretical Perspectives: A Holistic View.....	27
2.4 Financial Literacy in the Informal Sector	28
2.4.1 Characteristics and Challenges of the Informal Sector	28
2.4.2 Prevalence and Consequences of Low Financial Literacy	29
2.4.3 Empirical Evidence: The Impact of Financial Literacy Interventions	29

2.4.4 Barriers to Financial Literacy in the Informal Sector	30
2.4.5 Strategies for Enhancing Financial Literacy and Inclusion	31
2.5 Barriers to Credit Access in Informal Economies	32
2.5.1 Lack of Collateral and Formal Documentation	32
2.5.2 Information Asymmetry and Credit Rationing	33
2.5.3 High Transaction Costs and Regulatory Barriers	33
2.5.4 Socio-economic Discrimination and Exclusion	34
2.5.5 Limited Trust in Formal Institutions	34
2.5.6 The Role of Financial Literacy in Overcoming Barriers	35
2.6 The Role of Financial Institutions and Policy Interventions	36
2.6.1 Traditional Barriers and Institutional Reluctance	36
2.6.2 Fintech Innovations and Alternative Credit Assessment	36
2.6.3 Policy Interventions for Financial Inclusion	37
2.6.4 Tailoring Interventions to Informal Sector Needs	38
2.7 Empirical Evidence on Financial Literacy and Credit Access	39
2.7.1 Evidence from sub-Saharan Africa	39
2.7.2 The South African Context: The Taxi Industry	40
2.7.3 International Evidence: Emerging Markets and Beyond	41
2.7.4 Mechanisms Linking Financial Literacy and Credit Access	41
2.7.5 Limitations and Contextual Factors	42
2.8 Debates and Gaps in the Literature	42
2.9 Synthesis and Conceptual Model	43
2.10 Conclusion	43
CHAPTER 3: RESEARCH QUESTION	44
CHAPTER 4: RESEARCH METHODOLOGY	46
4.1 Research Design	46

4.1.1 Philosophy	48
4.1.2 Approach.....	49
4.1.4 Strategy	51
4.1.5 Time Horizon.....	52
4.2 Research Methodology	53
4.2.1 Population.....	53
4.2.2 Unit of Analysis	54
4.2.3 Sampling	55
4.2.4 Measurement Instrument.....	56
4.2.5 Data Gathering Process	57
4.2.6 Data Analysis Process	59
4.3 Quality Assurance.....	61
4.4 Ethical Considerations	62
4.5 Limitations of the Study	63
Chapter 5: Presentation of Results	65
5.1 Introduction	65
5.2 Demographic Profile of Participants	65
5.3 Thematic Analysis and Presentation of Findings	67
5.3.1 Financial Literacy Levels among Taxi Operators.....	68
5.3.2 Barriers to Formal Credit Access.....	68
5.3.3 Informal Financial Practices	70
5.3.4 Perceptions of Formal Financial Institutions	72
5.3.5 Impact of Financial Literacy on Business Outcomes	73
5.4 Chapter Summary	75
Chapter 6: Discussion	76
6.1 Introduction	76

6.2 Financial Literacy Levels among Taxi Operators	77
6.3 Barriers to Formal Credit Access	79
6.4 Informal Financial Practices.....	81
6.5 Perceptions of Formal Financial Institutions	84
6.6 Impact of Financial Literacy on Business Outcomes.....	86
6.7 Implications for Policy and Practice.....	88
6.8 Chapter Summary	90
Chapter 7: Conclusion and Recommendations	90
7.1 Introduction	90
7.2 Summary of Key Findings	91
7.3 Contributions to Knowledge	93
7.4 Recommendations	94
7.5 Study Limitations	95
7.6 Recommendations for Future Research	95
7.7 Chapter Summary	95
Bibliography.....	95

CHAPTER ONE: INTRODUCTION

1.1 Introduction

The financial literacy of individuals has become an important factor in driving inclusive economic growth and improving the resilience of small businesses, particularly in developing economies and markets that are characterized by informal sectors (Lusardi, 2019). Understanding and applying financial ideas such as budgeting, saving and understanding credit does not only support an individual's financial well-being, but also the sustainability and growth of micro and small enterprises. The taxi industry in South Africa is one of the strongest examples of informal businesses' role in national economies, representing the backbone of public transport and employing a considerable number of individuals in the country (Madichie et al., 2021). Informality in the sector involves cash, limited participation in formal financial systems and continued barriers to accessing formal credit (Aterido et al., 2013).

Research concerning financial literacy and access to credit has increased, showing that operators with higher financial literacy are more likely to complete the demands of loan applications, keep accurate financial records and engage productively with lenders (Klapper et al., 2022). Because taxi operators operate without these skills, they cannot pursue funding for expanding their businesses or ensuring their vehicles are in a good state of repair. Moreso, taxi operators are kept in a cycle of informality and exclusion from financing (Motingwe & Brijlal, 2020). This chapter sets the stage for an exploratory study in specifically understanding how financial literacy relates to access to credit in the South African taxi industry by presenting the concerns surrounding the research problem, the relevant contextual background and research objectives that will be addressed in this research paper.

1.2 Background to the Research Problem

The South African taxi industry is an important element of the country's public transport system, an economic activity generator and an employer. The conceptualisation of the taxi industry as part of the public transport system gets too restrictive; the taxi industry operates at least 15 million commuter trips every day, in both urban and rural locations and provides an essential service for mobility (SANTACO, 2021; NTA, 2021). The importance of taxis also extends beyond the provision of mobility or transport for commuters; the taxi industry employs hundreds of thousands of people directly and indirectly, including taxi drivers, queue marshals, mechanics and other vendors who operate in taxi ranks. Despite the socio-

economic relevance of the taxi industry as a business sector, it remains informal, with most taxi operators not registered as businesses, only transacting in cash and ignoring regulatory regimes, tax obligations, required encrypted payments and other regulations that would otherwise apply to formal businesses (Ndlovu & Mohale, 2023).

The consequences of informality for the financial sustainability and health of taxi operators are extensive. Limited access to formal credit could be considered one of the most significant challenges taxi operators faces. According to FinMark Trust (2025), less than 30% of small and informal businesses, such as taxi operators, access formal credit. This lack of access to credit is not only due to these operators being economically marginalised, but it is closely related to the limited financial literacy among taxi operators. Many taxi operators do not have the skills to develop business plans, maintain financial records, or they do not adequately understand what is required by formal financiers (Ndlovu & Mohale, 2023 Fatoki, 2021)It is thus no surprise taxi operators fail to deliver the necessary documentation and adequate collateral to banks and other financial institutions.

More specifically, financial literacy, according to Lusardi Olivia Mitchell et al., (2013) comprises the understanding of budgeting, saving, investing and understanding credit among other financial products. In the case of the taxi industry, financial illiteracy presents itself in developing little recordkeeping, little business planning and enormous dependence on informal lenders. The National Credit Regulator (NCR, 2021) has argued many taxi operators must access loan sharks or informal lenders when they occasionally require credit, which means taxi operators often pay unreasonable interest rates and these informal lenders provide little protection or solution, when matters of addiction, crime, or other disputes arise. The use of informal credit makes the taxi operator financially vulnerable and limits opportunities, they do not maintain their vehicles, broaden their fleet or grow their business in other ways.

The lack of suitable financial products and services offered by mainstream financial institutions complicates this situation. Conventional banks view taxi operators as risky clients and they may have difficulties with timely cash flow, lack of formalised documentation and perceived instability (Ndlovu & Mohale, 2023b). The taxi industry unfortunately remains trapped in informality and exclusion from finance, with limited opportunities for upward mobility or growth. If one is analysing the taxi industry, it is essential to appreciate the

frustrations of limited financial literacy, limited access to credit and the unusual nature of the taxi industry in South Africa.

1.3 Research Problem

This study thus navigates the continuous battle taxi operators across South Africa are fighting in gaining access to formal credit that relates to a low level of financial literacy among taxi operators. Unfortunately, taxi operators remain on the margin of banking exclusion despite an industry that contributes to gross domestic product and public transport utility. Certainly, exclusion is not just a factor of economic marginalization but primarily an issue that includes an overlapping consideration of informality, information asymmetry and low financial literacy (Srithirath & Sukcharoensin, 2021)

Access to credit becomes problematic in the informal economy for several reasons; firstly, the obvious lack of formal financial record and reliable documentation. Taxi operators in the informal sector operate with a method of registration based on a cash basis but typically offer no credit history, no business plan and no collateral to banks and lenders to secure credit (Srithirath & Sukcharoensin, 2021; Aterido et al., 2013). Further, the lack of information asymmetry hinders credit access in that lenders and banks possess insufficient information to formulate personal assessment of credit application decisions that are made by credit applicants while taking a risk adverse lending approach and rationing the credit (Aterido et al., 2013). To mitigate credit issues, many taxi operators seek informal lending, which is a greater risk, less secure and can be much more expensive

The personal capabilities of financial literacy will allow taxi operators to overcome this dilemma. For example, with sufficient financial literacy taxi operators are likely to maintain record keeping, establish business plans and negotiate alternatives with formal institutional sources (Koomson et al., 2022). However, past research on taxi operators included the evidence that tax operators do not generally have higher financial literacy and most do not have the basic skills (e.g., credit applications, understanding credit interests and repayments) to make good decisions (Fatoki, 2021). This omission not only disables the taxi operators' decisions but makes them more vulnerable to lenders in terms of predatory lending and exploitation.

The social effects of credit exclusion in taxi operators involves each taxi operator as a single entity or outcome. When taxi operators do not have access to credit to repair vehicle, expand

the fleet, or not work at increased efficiency, those independent services offered in public transport may become fewer but the taxi operator's drivers, support staff and their community that depends on improved mobility and employment also suffer (Maseko & Manyani, 2011). The perpetual cycle of informal credit sources initiates a cycle of informal and exclusion issues in the taxi transportation sector, stagnating a clear focus on achieving full investment and further inclusive growth and development objectives for the sector of public transport.

This problem will require a careful examination of both the relationship between financial literacy and credit access for taxi operators in South Africa and the many other structural challenges facing them as well. While there are some examples of previous work on different components of financial literacy and credit access in the informal sector, most previous work has provided limited context to understand how these two factors are intertwined in the taxi industry and more importantly from the perspective of the operators themselves. Therefore, very little is known about the experience of taxi operators as they struggle to obtain formal credit, and the role financial literacy plays in either facilitating or limiting an operator's ability to access formal financial systems. This study intends to fill this knowledge gap by examining the interplay between financial literacy and formal financial system engagement among taxi operators using a qualitative methodology with the goal of developing practical recommendations to increase economic growth and decrease poverty through better financial inclusion in the taxi sector.

1.4 Aim of the Study

This research aims to explore how financial literacy impacts taxi operators' access to credit in South Africa. By investigating taxis operators lived experiences and financial behaviours, the research aims to understand the barriers to credit access and make recommendations that can improve financial inclusion and sustainability of businesses within the sector.

1.5 Research Objectives

1. To assess the level of financial literacy among taxi operators in selected regions of South Africa.
2. To investigate the relationship between financial literacy and access to formal credit in the taxi industry.

3. To identify barriers and propose strategies for improving credit access through enhanced financial literacy.

1.6 Research Questions

1. How do taxi operators in South Africa understand and experience financial literacy in the context of their daily business operations?
2. How does financial literacy affect taxi operators' ability to access formal credit?
3. What are the main barriers to credit access and how can financial literacy interventions address these challenges?

1.7 Justification or Rationale of the Study

Business Need

The taxi industry in South Africa is a pivotal component of the country's transport ecosystem, facilitating the movement of millions of commuters each day and providing direct and indirect work to a sizable portion of the working population (Molobela, 2024; National Department of Transport, 2020). The economic returns from the taxi industry are considerable, in terms of revenue, but also as an economic driver of other local economic activity, which demand taxi transport in order support surrounding businesses, e.g., car repair, fuel stations and informal vendors operating in taxi ranks (SANTACO, 2021). Despite the essential support provided to commuters and the economic contribution, the industry is continuously hampered in its development and sustainability by the lack of access to formal financial services, particularly the absence of credit (Motingwe & Brijlal, 2020).

When taxi operators are unable to obtain formal credit, the consequences for the operator, taxi industry and overall economic development are debilitating. The absence of affordable credit for taxi operators to invest in vehicle maintenance, fleet upgrades and enterprise development not only results in the decline of transport safety and standards but reduces the capacity of the taxi industry to create and sustain jobs to support both economic development and employment growth (SARB, 2023; Molobela, 2024). The taxi industry operator's inability to access formal credit necessitates reliance on the informal lending industry, which dominates credit access in a fragmented manner and charges outrageous interest rates and

provides predatory terms that threaten the operator's financial viability (Fatoki, 2021). Therefore, improving financial literacy should not only be viewed to empower individuals to make informed financial decisions, but also as a potential catalyst for modernizing the taxi industry and facilitating its integration into the formal economy (Koomson et al., 2023; Molobela, 2024). Enhanced financial literacy has been linked to better business practices, increased access to formal financial services, and greater economic inclusion in various informal sectors, including the taxi industry (Fatoki, 2021).

Greater access to credit through improved financial literacy will trigger a positive cycle of enterprise level sustainability, job creation and improvements in economic development. Operators with a better knowledge of how to manage financial matters as exploitation and injury will help him or her to maintain information provided to lenders, develop useful and concrete business plans and manage his or her social relations with lenders (Koomson et al., 2023). This would increase operator investment in the taxi industry, not only improving their service delivery, but aligning the opportunity of taxi transport to national aspirations of financial inclusion and poverty reduction (World Bank, 2021). The business case for this study is based on the need to reduce the equilibrium between the taxi industry economic potential and its current economic constraint with financial literacy as a mechanism for altering its current position.

Theoretical Need

The theoretical framework of this study is grounded in the Human Capital Theory and the Resource-Based View (RBV) of the firm. Human Capital Theory, as familiarized by (Becker, 1962), states that there are some returns to the investment in education and skills. In the context of the taxi industry, financial literacy is a form of human capital, which allows operators to make informed financial decisions, manage risks and identify economic opportunities (Xu & Zia, 2012). This suggests that financial education has the potential to transform the learning experience for not only individual operators, but for the taxi industry.

The RBV gives a deeper understanding financial literacy as an intangible resource, which as a firm could lead to a sustainable competitive advantage (Barney, 2021). In contrast to physical resources, such as assets, intangible resources which form as an operator's knowledge, skills and organizational capabilities, are difficult to imitate and go a long way to forming the difference between successful and their competitors. In the informal sector where

tangible resources are scarce, the ability of operators to leverage financial literacy becomes necessary (Wernerfelt, 2013). Financial literacy is positioned in relation to these theoretical frameworks as this research not only meet a practical business need but begin to contribute as an academic project the theoretical framing on the importance of intangible assets to economic inclusion and development for informal economies.

Scope and Context

The study will be conducted in Mpumalanga (the cities of Middelburg/Witbank) and Gauteng provinces of South Africa, due to accessibility and that Gauteng is the busiest city. Both study areas have a large population density, a lot of people travelling between places of work/leisure etc., and many taxis operating in an informal manner. The areas were selected based on their diverse range of taxi operations (i.e. a wide variety of taxi businesses including very small taxi operators, and many large taxi associations managing numerous taxi vehicles). These two study areas reflect the diversity and complexity of the taxi industry (Molobela, 2024). In addition to being informal, the taxi industry within the study area has multiple forms of regulation affecting it (Ndlovu & Mohale, 2023), and most taxi operators in the study area do not have access to formalised support services or finance tailored to their businesses. This context makes financial inclusion challenging because taxi operators are operating in a complex environment that is shaped by regulatory uncertainty, socio-economic challenges and lack of trust in formal institutions (Molobela, 2024). The focus of this study thus addresses the gap in the literature when it comes to understanding the challenges faced by informal taxi sector participants accessing credit. The research also satisfies the question of whether the findings can be useful for other informal sectors in South Africa and similar environments in developing economies. Thus, woven to the overall challenge of financial exclusion that still persists in economic development.

Literature Support

Growing evidence from empirical research indicates the importance of financial literacy to overcome obstacles to access to credit. (Ouyang & Zhang, 2020) found that financial education can address information asymmetry between borrowers and lenders, which can help improve both creditworthiness, as well as negotiating capacity. (Bruhn et al., 2016) showed that financial literacy programs contribute to improved financial behavior and increase the likelihood of accessing (and acquiring) formal credit. Koomson et al. (2022)

made similar findings where financial literacy programs aimed at informal businesses improved financial inclusion through increased access to capital.

While there is potential benefit from examining how access to credit may be studied through financial literacy programming, few studies to date have explored how these financial literacy programs apply to the taxi industry with regard to their specific effectiveness. Many of the studies which are related to the topic of the relationship between financial literacy programs and the ability to obtain credit for microenterprises or small businesses operating in an informal setting have failed to provide a detailed analysis of the taxi industry as it relates to the financial literacy programs provided to its owners/operators (Oseifuah, 2021; Fatoki, 2021; (Koomson et al., 2023). As such, many of the researchers who have suggested that further research should be conducted to provide insight into the relevance of the context of the specific informal business sectors (i.e., taxi) to the delivery of financial literacy programs have made recommendations regarding this very issue (Fatoki, 2021; Oseifuah, 2021). This limitation provides clarity on the broader need for more contextualized research as the basis for designing interventions and recommendations for policy. Considering the present study in relation to this body of literature aims to provide a new perspective on the relationship between financial literacy and access to credit in a vital industry with limited study.

Policy Relevance

The results of this research have implications for public policy decision-makers, finance providers and the taxi industry. The research provides information about the identified financial literacy needs of taxi operators and the barriers faced when accessing credit that will guide targeted financial literacy initiatives. These inform financial educator and taxi operator tailored offerings, financial aggregator loan applications, alternate (Big Data) credit scoring (Demirgüç-Kunt et al., 2022; Lyons et al., 2020). Such interventions enhance financial inclusion, reduce reliance on informal lending and promote and contribute to the sustainable development of the taxi sector. Policymakers can utilize insights from the research to develop a flexible regulatory environment acknowledging informal business characteristics while integrating informal businesses into the formal financial system. Financial institutions can draw on the insights provided by the research to develop new products and services designed around taxi operators. Industry associations can provide specific financial education and support services designed for taxi operators and organize them so that operators can obtain

financial literacy/computer literacy in the same setting. The research ultimately hopes to contribute to the improvement of the taxi industry with respect to economic development, poverty alleviation and inclusivity and to address the bleeding root causes related to financial exclusion by taxi operators. By linking theory to actionable policy, this research hopes to produce knowledge that can generate impact/solutions related to the taxi industry and inform others.

1.8 Conclusion

This chapter has demonstrated the need for further research into the relationship between financial literacy and access to credit in South Africa's taxi business. The research can be justified practically and theoretically, as it fills a significant gap in the literature relating to an urgent need for business and policy making. By investigating financial literacy and access to credit through understanding the experiences of taxi operators across the three provinces, which constitute key taxi operating regions, it is hoped that useful lessons can be harvested to promote financial inclusion and support the informal sector. A review of the relevant literature, the research methodology and findings and recommendations will be presented to follow.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Recent scholarly engagement with the related topics of financial literacy and access to credit has developed substantially in relation to development finance and entrepreneurship in general and more precisely, informal development finance in creating economies (Aterido et al., 2013). Financial literacy, as highlighted by Klapper and Lusardi (2019) and Lusardi and Mitchell (2013) is consistently being seen as an avenue to economic empowerment, enabling people and small business owners to make well informed financial decisions (Fatoki, 2021; Widyastuti et al., 2023), manage risk and interact with formal financial organizations (Peters & Sölvell, 2022). The challenges facing informal sectors in relation to financial inclusion entail persistent aspects of access to credit, where informal sectors broadly categorised by unregistered economic activity, cash transactions (Institute for Economic Justice, 2018; Aterido et al., 2013) and operating with low to non-existent government oversight or regulation (Aterido et al., 2021). conditions that continue to restrict their integration into formal financial systems and access to credit (Omri, 2020; Taruvinga & Sakarombe, 2024).

The South African taxi industry identified as an informal entrepreneurship case entrepreneurship (Kgwedi & Krygsman, 2017), presents significant challenges, further accentuating the challenges of financial literacy and credit access, as many operators lack formal financial management training and face exclusion from credit facilities (Motingwe & Brijlal, 2020; Taruvinga & Sakarombe, 2024). This chapter presents a critical literature review covering older models and definitions of financial behaviour to newer models based on recent empirical research to make sense of financial behaviour and credit outcomes in informal economies. By bringing together the existing literature and highlighting gaps in the literature on the important debates and considerations, the present review delineates the academy that underpins this research, as well as identifies the need for context sensitive studies which may help policy and practice in the South African taxi industry.

2.2 Defining Financial Literacy and Credit Access

Financial Literacy and Credit Access are vital concepts in comprehending the mechanics of economic participation and business continuity (Lusardi Olivia Mitchell et al., 2013; Klapper & Lusardi, 2020), especially in informal sectors where limited financial literacy constrains

inclusion and operational sustainability (Taruvunga & Sakarombe, 2024). Financial Literacy and access to credit have both advanced rapidly in academic literature over the past decade (Goyal & Kumar, 2021), leading to more detailed definitions and frameworks that reflect evolution. These frameworks increasingly acknowledge the multifaceted nature of both concepts and their significance in influencing and shaping financial behaviour and outcomes (Mwangi & Cheluget, 2018).

2.2.1 Financial Literacy: A Multi-Faceted Dimension

The wide-ranging definitions of Financial Literacy often emphasize a person's ability to understand and apply financial concepts to make decisions, as reflected in the multidimensional model proposed by (Potrich et al., 2016), which highlights financial literacy as a combination of awareness, knowledge, skills, attitudes, and behaviours that enable individuals to make sound financial choices and is supported by (Huston, 2010), who defines financial literacy as the ability to both comprehend and use financial knowledge in decision-making. Knowledge, skills, attitudes and behaviours are all essential for making prudent financial decisions. This leads to a more multi-dimensional view of financial literacy to include cognitive, affective and behavioural components.

The cognition dimension is the knowledge and understanding of financial concepts that relate to financial planning to assist in long-term personal finance decisions such as interest rates, inflation, budgeting and risk diversification. The affective dimension includes not only a person's attitude towards financial matters but a person's attitude towards financial decision-making and the level of confidence they feel. These elements emphasised in the multidimensional model of financial literacy proposed by (Potrich et al., 2016) and supported global evidence from Klapper & Lusardi (2020) highlighting universal importance of mastering such concepts for sound financial decision making. The behavioural dimension is the financial decision that a person or business owner chooses to engage in (Kadoya & Rahim Khan, 2020). multi-faceted perspective is also relevant in the informal sector where financial literacy means more than personal finance and skill sets such as business planning, records management and understanding credit are included.

In the informal sector, financial literacy is often formed based upon experiential learning rather than formal learning. Operators develop financial capabilities from their daily commercial practices, interactions with peers and networks in their community (Taruvunga & Sakarombe, 2024). Research further shows that social networks and peer effects play a crucial role in spreading financial knowledge and strengthening financial capability in developing economies (Xu & Zia, 2012). However, when institutional financial education programs are lacking; also, too many informal businesses rely only on basic knowledge (Taruvunga & Sakarombe, 2024), which is not adequate to navigate complex financial products or deal with formal financial institutions, as noted by (Koomson et al., 2023), who found that low levels of financial literacy directly constrain financial inclusion and resilience in African economies. Similarly, Klapper & Lusardi (2020) emphasize that without structured financial education, informal workers and entrepreneurs struggle to interpret and use formal financial services effectively.

2.2.2 Credit Access: Formal and Informal Dimensions

Credit access in broad terms can be defined as the ability of individuals or businesses to engage financial resources from lenders be either formal (banks, microfinance) and informal (moneylender, family, friends) (Elston et al., 2015; Tang et al., 2010). Access to credit supports business expansion, allows entrepreneurs invest in capital expenditures and proceeds to build their own working capital to facilitate more sales (also known as cashflow) or to seize market opportunity. Access to external finance has been shown to promote firm growth through financing new and existing investment projects, improving productivity, and supporting daily operations (Fatoki, 2021). However, the literature iterates that access to credit is not distributed evenly with participants from the informal sector having noticeably greater systematic limitations (whether cultural, institutional or regulatory) than their formal counterparts. Studies show that institutional and governance weaknesses reduce formal credit participation and sustain informal dependence (Nguyen & Canh, 2021; Omri, 2020). Moreover, according to Aterido et al., (2013) the World Bank highlights that such institutional barriers, including discriminatory financial frameworks, systematically disadvantage certain groups, reinforcing uneven access to finance across the economy.

Numerous limitations have been identified that constrain informal businesses from accessing formal credit. First, informal businesses do not have assets to use as collateral (Ayyagari et

al., 2014), a key condition for loan approval noted in studies of MSME financing (Widyastuti et al., 2023). In many cases, formal lenders rely heavily on collateral to reduce lending risk, meaning enterprises without such security are typically excluded from credit access (Elston et al., 2015). Second, informal businesses do not maintain reliable financial records or documentation, which makes it difficult for lenders to determine creditworthiness (Fatoki, 2021; Taruvinga & Sakarombe, 2024). Third, lenders also regard informal businesses as inherently high-risk, due businesses in the informal economy tend to have no steady income generation; do not register their business; and are seldom engage with their regulatory environment (Omri, 2020; Morgan & Trinh, 2021).

Therefore, informal entrepreneurs have few choices but to turn toward informal credit sources (Nguyen & Canh, 2021). While informal credit remains accessible to small and micro-enterprises excluded from the formal banking sector, it is typically more expensive and less secure. According to (Fatoki, 2021), informal lenders serving South African small businesses, particularly taxi operators, often impose unreasonably high interest rates and provide little recourse in the event of disputes or defaults, leaving borrowers financially exposed. Similarly, Nguyen & Canh (2021) find that firms which are unable to meet formal lending requirements are forced to rely on informal lenders who charge significantly higher interest rates to compensate for perceived risk. Beyond the African context, Bongani Sibindi & Mpofu (2022) explains that informal financial markets across developing regions lack regulatory oversight, which increases borrower vulnerability and limits protection in cases of default. Karaivanov & Kessler (2018) also highlights that informal loans operate with fewer guarantees and minimal institutional protection, reinforcing their insecure nature. Finally, Yimer (2024) observes that informal credits, though flexible and accessible, function largely outside legal regulation, exposing entrepreneurs to exploitative terms and elevated financial risk.

Consequently, informal entrepreneurs rely on these costly credit channels despite the financial and legal vulnerabilities they present (Fatoki, 2021). This reliance on informal credit not only makes individuals financially vulnerable but also limits their ability to scale and formalize businesses (Omri, 2020).

2.2.3 The Interplay Between Financial Literacy and Credit Access

A growing number of empirical studies have demonstrated a positive relationship between financial literacy and credit access (Lusardi Olivia Mitchell et al., 2013b). Financial literacy

improves borrowers' understanding of loan terms and repayment obligations, allowing them to make informed decisions and manage credit responsibly (Fatoki, 2021). It also strengthens entrepreneurs' ability to prepare accurate financial documentation, thereby improving their credibility with lenders (Widyastuti et al., 2023). Moreover, by reducing information asymmetry, financial literacy enables small business owners to engage more confidently with financial institutions (Srithirath & Sukcharoensin, 2022).

Financially literate individuals are more likely to know the terms and conditions of financial products (Klapper & Lusardi, 2020; Lusardi Olivia Mitchell et al., 2013a), and possess the ability to compare loan offers and are more knowledgeable about making borrowing decisions (Widyastuti et al., 2023). Financially literate individuals also could keep proper financial records, put together sound business plans and effectively communicate with lenders, making them more creditworthy (Koomson et al., 2023; Fatoki, 2021)

Where's the financial system is less developed, financial literacy is especially relevant. Morgan & Trinh (2019) found that in Cambodia and Vietnam, higher financial literacy was associated with greater access to formal credit by small business owners. Likewise, (Mwangi & Cheluget, 2018) found that financial education programs in Kenya helped micro and small enterprises access loans from both banks and other microfinance institutions.

While the relationship between financial literacy and credit access is not one direction. Financial literacy is expected to increase credit access, equally, access to credit may incentivise individuals to acquire financial knowledge and skills (Lusardi Olivia Mitchell et al., 2013). This interaction between financial literacy and credit access signals the need for formal credit institutions to be cognizant of the conditions in which informal businesses operate structurally, whilst also signalling the need to develop targeted interventions that would include essential financial education, capacity development opportunities, as well as responsible lending policies (Klapper & Lusardi, 2020).

2.2.4 Contextualizing Financial Literacy and Credit Access in the Informal Sector

The informal economy poses both challenges and opportunities for attaining financial inclusion. According to (Barrett, 2003) in the International Labour Organization (2018), informal businesses do not operate under formal regulatory authority or framework and often rely on cash transactions and unrecorded exchanges. In many African contexts, these enterprises depend on community-based financial networks and social trust for financial

exposure and support as highlighted by (Madichie et al., 2021). While the informal economy directly limits credit and capital exposure, it provides resilience and adaptability (Park and Mercado, 2018).

This is particularly evident in the South African taxi sector. Taxi operators have limited formal schooling and training around business, relying on likeness in structure together with peers to learn their trade (Kgwedi & Krygsman, 2017). More broadly, Madichie et al., (2021) emphasize that such experiential and community-based learning reflect a defining characteristic of informal entrepreneurship across Africa. As taxi operators lack access to structured financial literacy programs, they have limited true knowledge about credit products, interest rates and repayment schedules (Motingwe & Brijlal, 2020; Maseko, 2011). This lack of professional knowledge not only limits their ability to access formal credit products (Boungou, Soumaré, & Sawadogo, 2023) but also restricts their understanding, allowing predatory lending and simple poor financial practice to occur (Klapper & Lusardi, 2020).

Empirical studies which study financial literacy interventions in developing countries have shown improvements in credit access and business as a result of such interventions in the informal economy. It is evident in the study done by Sayinzoga et al. (2016) , wherein it was found that financial training increased savings and loan participation among informal households. Similarly, (Koomson et al., 2023) demonstrated that financial literacy significantly enhances access to formal credit and financial resilience in Ghana. These results are consistent with (Kaiser et al., 2019) who found broad improvements in borrowing outcomes across emerging markets. For example, (Koomson et al., 2023) illustrated how a financial literacy programme targeted at Ghana's informal economy resulted in increased uptake of loans and improved business performance. Similar results were stated by Kojo Oseifuah (2010) for the Youth Entrepreneurs who participated in a financial literacy training programme in South Africa who had greater access to formal credit, than their contemporaries who did not participate, using this credit to develop their businesses.

Financial literacy and credit access are interlinked constructs that affect the economic path of informal businesses (Boungou, Soumaré, & Sawadogo, 2023; Koomson et al., 2023). Financial literacy, encompassing knowledge, skills, attitudes and behaviours, provides entrepreneurs with opportunities to make informed financial choices and to have informed conversations with lenders (Lusardi Olivia Mitchell et al., 2013a; Klapper & Lusardi, 2020).

Credit access is essential for business growth, but financial literacy can be reduced to structural barriers in the informal economy (Motingwe & Brijlal, 2020). Literature overall identifies financial literacy in the formal economy as a key determinant of credit access, particularly in unorganised contexts where financial offerings remain underdeveloped (Boungou, Soumaré, & Sawadogo, 2023; Koomson et al., 2023). It is crucial we span these factors if we are to stimulate on financial inclusion and inclusive development of informal economies such as the taxi economy (Klapper & Lusardi, 2020).

2.3 Theoretical Perspectives on Financial Literacy and Credit Access

The connections between financial literacy and access to credit can be best examined through established management and economic theories, specific to the Resource-Based View (RBV), Human Capital theory and Dynamic Capabilities (Wernefelt, 1982) ;Barney, 1991; (Kero & Bogale, 2023). These theories provide a clear opportunity to analyse intangible resources to demonstrate the combinations of knowledge, skill and adaptive ability that can influence an organization and its access to finance and broader financial inclusion as they sit in an informal context(Becker, 1962 ;Deming, 2022).

2.3.1 Resource-Based View (RBV): Financial Literacy as an Intangible Asset

The RBV of the firm began through the academic effort of Wernerfelt (1984, reprinted in 2013), positing that sustainable competitive advantage could be achieved by possessing valuable, rare, inimitable, and non-substitutable resources and administering them effectively as supported by Barney (1991). The RBV initially aimed to develop consideration of tangible assets. However, over the last decade, scholarly work has cemented the importance of intangible resources, such as organizational knowledge, skills, culture, and reputation as critical levers for firm competitiveness and adaptive capacity (Kero & Bogale, 2023). These developments broaden the scope of RBV by integrating dynamic capabilities and cognitive dimensions that influence performance in volatile environments. Financial literacy might therefore be considered an inert preform, an underlying intangible capability, relevant to analysing a firm's success and its ability to access and manage resources, particularly within informal economic contexts (Fatoki, 2021).

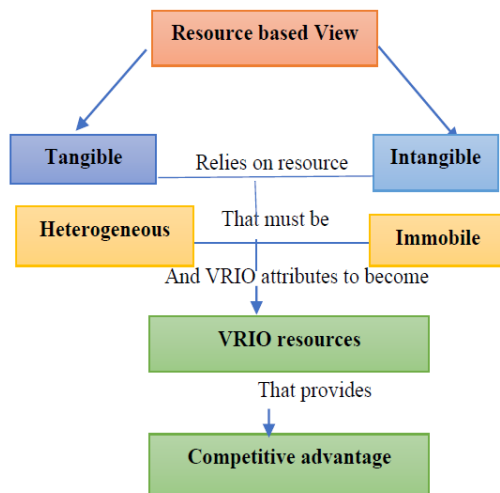


Figure 1: The model illustrates RBV's key points

Source: Adopted from Kero and Bogale 2023 (A build up from Barney, 1991)

The above illustration (Figure 1) is a simple adaptation of the RBV framework highlighting how financial literacy functions as an intangible resource that drives access to finance and performance. Moreover, how it enables business owners to interpret financial data, assess risks and make borrowing decisions, an idea consistent with the Resource-Based View (RBV) of firm advantage ((Kero & Bogale, 2023; Wernerfelt, 1984 reprinted in 2013; Barney 1991). This resource is especially salient when a firm operates under conditions of uncertainty and information asymmetries, such as the informal sector (Boungou, Soumaré, & Sawadogo, 2023). Firms with higher levels of financial literacy are better able to keep records, write strong business plans and transact with lenders productively, thereby increasing their creditworthiness and access to formal finance (Fatoki, 2021; Koomson et al., 2023). There is empirical evidence supporting this notion. Fatoki (2021) also found that micro-entrepreneurs from sub-Saharan Africa who possessed a higher level of financial literacy were more likely to gain access to credit and manage risks in their business. Ultimately, these findings reinforce the Resource Based View (RBV) that intangible resources such as financial literacy can provide a sustainable competitive advantage, even in environments with less resources (Kero & Bogale, 2023).

2.3.2 Human Capital Theory: Education, Skills and Economic Returns

Human Capital Theory (HCT), introduced by Becker (1962), provides another important perspective in interpreting the role of financial literacy on firm performance and access to credit. Becker's Human Capital Theory asserts that education and skill investment will generate economic returns because it enhances an individual's productive capacity to engage in useful work, be employable, or earn income. Building on this, Deming (2022) expands the traditional view of human capital by highlighting that productive capacity in modern economies also depends on cognitive, technical, and social skills that enable individuals to adapt and make sound decisions in uncertain environments. In entrepreneurial contexts, human capital extends beyond formal education to include experiential knowledge, managerial ability, and financial competence, which influence performance and sustainability (Ahmed et al., 2017; Kojo Oseifuah, 2010). Thus, while education contributes foundational learning, applied skills such as financial literacy form an essential dimension of human capital that determines entrepreneurial success.

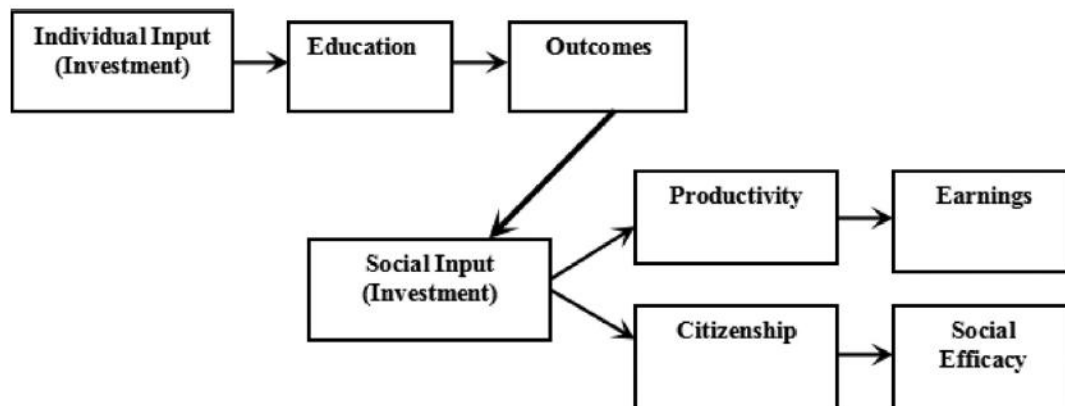


Figure 2: Human Capital Theory Framework (Sourced from Ahmed et al., 2017)

Financial literacy is a manifestation of human capital that enables business owners with knowledge and competencies that will help them to make decisions regarding finances, manage financial risks and act upon financial opportunities (Becker, 1962; Kojo Oseifuah, 2010). This viewpoint is particularly applicable to the informal sector where an individual's education is not formalized and experiential learning plays a large part in gaining skills (Koomson et al., 2023). If financial education and capacity building are fostered,

entrepreneurs will become more capable of accessing credit, productivity, manage their cash flow (increasing earnings) and ultimately develop their businesses as depicted by Figure 2 (Ahmed et al., 2017).

More recent literature has applied HCT to the informal economy and noted the transformative effects of financial literacy initiatives on entrepreneurial development (Becker, 1962). For example, Oseifuah (2021) found that youth entrepreneurs in South Africa who participated in financial literacy programs were more likely to obtain formal credit and concomitantly grow their businesses, underscoring the productive value of investing in human capital. Similarly, Koomson et al. (2023) reported that participation in financial education programmes in Ghana's informal economy led to better performance and greater financial inclusion.

2.3.3 Dynamic Capabilities Framework: Adapting to Financial Environments

While the RBV and HCT have provided frameworks around and informed the importance of resource endowments, Dynamic Capabilities Frameworks (DCF) show us the processes by which firms can adapt in a changing environment to take (Kero & Bogale, 2023; Teece et al., 1997). Dynamic capabilities are the "ability of firms, integrated-to build and reconfigure internal and external resources in response to environmental shifts." (Kero & Bogale, 2023; Helfat & Peteraf, 2009).

With financial literacy and access to credit, dynamic capabilities refer to the ability of firms to learn, innovate and adapt financial practices through evolving forms of markets and developing lender criteria (Koomson et al., 2023). Financial literacy enhances dynamic capabilities because informal business owners depend on their ability to establish routines, recognize the signs of financial situations, interpret regulatory environments and proactively respond to credit dynamics (Fatoki, 2021). Taxi operators who can understand the mechanics of digital banking and alternative credit scoring could take advantage of fintech by enabling new sources of financing (Demirgüç-Kunt et al., 2021). The provisional capacity to exploit existing knowledge will depend on existing conditions, more so for informal businesses, than making use of arrangements as part of seeking credit. In informal businesses, lending by formal banks is not as easily accessed and are also less predictable in informal environments (Fatoki, 2021; Omri, 2020)

Dynamic capabilities also emphasize continual learning and flexibility. The authors posit that firms that regularly invest in their financial literacy and learning will have a greater probability

of success in adapting experience to new financial situations, hence responding to new credit opportunities (Kero & Bogale, 2023; Helfat & Peteraf, 2009). This view corresponds with other studies that connect high levels of financial literacy to better-than-average performance as well as adapting to economic shocks and surprising isolation (Fatoki, 2021; Koomson et al., 2023)

2.3.4 Integrating Theoretical Perspectives: A Holistic View

Each of the theoretical perspectives described above has merit. In combination with each other, we can paint a broader picture of why financial literacy is important for accessing credit. The RBV emphasizes financial literacy as a source of competitive advantage, in particular, an intangible asset (Werner, 1984; Barney 1991; Kero & Bogale, 2023); HCT emphasizes the economic returns of investing in financial literacy through education and skill formation (Becker, 1962; Deming 2022; Ahmed et al., 2017); and dynamic capabilities emphasizes organizational ability to protect and augment financial literacy with relevant contextual knowledge through adaptation and learning (Teece et al., 1997; Helfat & Peteraf, 2009; Koomson et al., 2023).

In terms of taxi operators, the three theories together view financial literacy not only as a source, but also as a dynamic capability where financial literacy exists where operators have specific financial literacy knowledge and financial skills to access, utilize and cultivate financing that offers advantages in contexts that are changing (Wernerfelt, 1984; Becker, 1962; Kero & Bogale, 2023). In other words, taxi operators that have some financial knowledge and skills will better navigate the complexities of credit, engage with lenders and rival taxi operators and change regulatory arrangements, will have better access to formal credit services and invest in emerging growth businesses helping to foster relationship longevity (Helfat & Peteraf, 2009; Fatoki, 2021; Koomson et al., 2023)

The Resource-Based View, Human Capital Theory and the Dynamic Capabilities theoretical perspectives may provide a solid base to analyse the effects financial literacy has on credit access, performance and firms in connection to both a resale agency and informal taxi sector in more efficient perspectives changing (Wernerfelt, 1984; Becker, 1962; Kero & Bogale, 2023). Since financial literacy can be seen as both an intangible asset and an evolving (dynamic) corporate capability, it illustrates the theoretical and strategic importance of the informal sector (Barney, 1991; Helfat & Peteraf, 2009). Moreover, empirical research

suggests that financial literacy can promote credit access, performance and businesses resiliency and inclusion in times of resource dependency (Fatoki, 2021; Koomson et al., 2023). Understanding these different types of theoretical foundations can also inform intervention development designed to enhance financial literacy, improve credit and research more on the sustainable development of informal industries like the taxi sector in South Africa (Deming, 2022; Becker, 1962; (Kero & Bogale, 2023).

2.4 Financial Literacy in the Informal Sector

The informal sector is an extensive and vibrant element of many developing economies, providing a livelihood for millions and often serving as a buffer against unemployment and poverty (Chen & Alter, 2012; Bonnet et al., 2019). However, it is this same informality (unregistered businesses, cash-based and only lightly regulated) that creates a complicated environment for financial inclusion and sustainable business development (Madichie et al., 2021; Chen & Alter, 2012). For instance, the taxi industry in South Africa is an important example of this informal sector, given both its economic significance and the fact that half of all businesses are informal (Kgwedi & Krygsman, 2017; Bonnet et al., 2019)

2.4.1 Characteristics and Challenges of the Informal Sector

Generally, the informal sector can be characterized by a lack of formal registration, little access to legal protections and reliance on cash transactions (Chen, 2012; Bonnet et al., 2019). While this allows the sector to have flexibility and low barriers to entry, it also brings vulnerabilities. Informal operators are often unregulated and avoid the scrutiny of tax authorities, which limits their ability to access public services, legal recourse and formal financial products (Madichie et al., 2021; Aterido et al., 2013 Chen & Alter, 2012). Moreover, Aterido et al. (2011) and Chen (2012) continue to state that the informal sector businesses are categorically excluded from accessing formal financing and financial services because they often lack informed business records and credit histories.

The taxi industry is one of the largest employment sources and primary public transport providers in South Africa, yet it operates predominantly within the informal economy, where business practices are unregistered and unregulated (Kgwedi & Krygsman, 2017). Most

operators have limited formal education and business training, relying instead on experiential knowledge and community-based learning to manage their enterprises (Maseko & Manyani, 2011). While this informality fosters resilience and adaptability, it simultaneously perpetuates a cycle of vulnerability and financial exclusion by limiting access to structured finance and professional development (Madichie et al., 2021)

2.4.2 Prevalence and Consequences of Low Financial Literacy

More follow-up research support findings that a substantial barrier to broaden financial inclusion is low financial literacy among informal sector participants (Fatoki, 2021; Motingwe & Brijlal, 2020). Ndlovu & Mohale (2023) found that many South African taxi operators had some rudimentary degree of financial literacy but had limited knowledge of budgeting, record-keeping and credit management. This deficiency in financial knowledge directly leads to poor financial management practices, such as poor record-keeping practices, not separating business and personal finances and obtaining loans from informal lending networks (Motingwe & Brijlal, 2020; Fatoki, 2021). Collectively, these weaknesses constrain the ability of operators to access formal credit and engage effectively with financial institutions (Ndlovu & Mohale, 2023).

The problems associated with low levels of financial literacy yield a variety of problems. For example, without the ability to keep accurate records or create a business plan, informal entrepreneurs lack the verifiable evidence required by formal lenders to demonstrate favourable credit risk when seeking credit (Aterido et al., 2013; Ndlovu & Mohale, 2023). The absence of verifiable evidence often restricts informal entrepreneurs from gaining access to affordable forms of credit, leading them to secure informal loans from informal lenders who often charge exorbitant interest rates and lack dispute management (Fatoki, 2021). Consequently, informal entrepreneurs may be economically vulnerable, unable to develop their businesses sustainably and unable to escape broader economic exclusion patterns (Aterido et al., 2013 ;Fatoki, 2021).

2.4.3 Empirical Evidence: The Impact of Financial Literacy Interventions

There is an increasing number of empirical studies that investigate the outcomes of financial literacy programs or interventions for specific groups of informal entrepreneurs. Fatoki (2021) found that financially literate business owners in South Africa were significantly more likely to maintain financial records, plan effectively, and secure credit from formal financial institutions.

Similarly, Oseifuah (2021) observed that financially informed entrepreneurs demonstrated better financial management and were more capable of leveraging formal credit for growth. Complementary evidence from Koomson et al. (2022) shows that improvements in financial literacy enhance financial inclusion and resilience among informal participants in developing economies. Collectively, these findings suggest that financial literacy is not an optional skill but a critical enabler of business growth and inclusion.

Similarly, Fatoki (2021) found that financial literacy interventions among South African micro-entrepreneurs led to improved business planning, enhanced financial record-keeping, and greater access to formal credit facilities. These results align with the broader findings of Ozili et al. (2023), who highlight that financial inclusion and literacy contribute to sustainable economic growth by expanding credit participation and entrepreneurial activity. Collectively, these studies infer the ability of targeted financial education interventions to help informal entrepreneurs connect more effectively with formal financial systems.

Other studies found similar patterns in similar situations. Mwangi & Cheluget, (2018) in their study on financial literacy in Kenya found financial literacy initiatives were successful in increasing the ability of micro and small enterprises to receive loans from banks and microfinance institutions. Similarly, (Klapper et al., 2020) demonstrated that financial literacy is a major driver of financial inclusion worldwide while concluding that individuals with greater financial knowledge were more likely to use formal financial products and services.

2.4.4 Barriers to Financial Literacy in the Informal Sector

Despite the positive results about financial literacy, there are barriers to developing financial literacy in the informal sector. First, barriers from formal education and education and training means informal entrepreneurs have limited access to formal financial knowledge and skills (Kadoya & Rahim Khan, 2020). Consequently, most informal operators learn from informal education, learning impersonally from peer or community networks which may not always provide relevant or better information (Kgwedi, 2017; Oseifuah, 2021).

Second, because informal sector participants have either did not access, or did not access relevant financial education programming, possible programme interventions may fail to meet their practical needs and challenges. Studies shows that standardised financial literacy curricula often overlook the irregular income patterns, cash-based operations, and limited documentation typical of informal enterprises (Kaiser et al., 2020; Sayinzoga et al., 2016).

General curricula on financial literacy may have skipped over informal business realities such as non-regularly pooled income streams, running in cash and limited documentation (Kojo Oseifuah, 2010).

Socio-cultural issues can also impact attitudes towards financial management and interaction with formal financial institutions. For example, in certain contexts, the mistrust of banks and regulatory bodies prevents informal entrepreneurs from seeking out formalized credit and financial education programs (Ndlovu & Mohale, 2023). Gender and age differences also matter, and women and younger operators typically have greater barriers to achieving financial literacy and access to credit (Klapper et al., 2020).

2.4.5 Strategies for Enhancing Financial Literacy and Inclusion

Taking this all into account means moving forward with multiple solutions to tackle these challenges. First, there is a dire necessity for financial education programs to address different informal sector participants' contexts and create curricula geared towards cash-based business practices and irregular income levels or limited documentation. Programs should also look to leverage learning at the community level and peer learning, as networks are often people's trusted sources of information in the informal sector context (Oseifuah, 2021). Second, government agencies, financial institutions, and/or industry associations can work in partnership with the informal sector participants to be able to expand financial literacy initiatives and targeted interventions within the context. For example, taxi associations in South Africa could work with banks and NGOs that target populations and provide training and support services to assist their membership (Maseko & Manyani, 2011). It is imperative to use technology to broaden informal operators' access to financial literacy and formal financial services. Mobile banking and digital wallets and training platforms offer new pathways for knowledge acquisition and access for formal lending interactions (Demirgüç-Kunt et al., 2022).

Financial literacy exists to help empower the issues of financial inclusion and to enable business sustainability within the informal sector context. The South African taxi industry has been emblematic of current issues within the influx of lower financial literacy challenges and opportunities (Fatoki, 2021; Maseko & Manyani, 2011). Current evidence has shown that alterations to a financial management practice through active interventions can lead to increased access to credit and business growth (Oseifuah, 2021). Still, those with lower

financial literacy in this sector still face enormous challenges, such as limited access to education, supported materials and socio-cultural factors that hinder participation in formal finance (Maseko & Manyani, 2011). The need to address these issues is important going forward, as these suggestions require context-specific, collaborative and innovative ways and pathways to facilitate the unique realities of their sectors and to prepare informal entrepreneurs to actively participate in the formal financial system (Demirgüç-Kunt et al., 2022)

2.5 Barriers to Credit Access in Informal Economies

Access to credit is widely recognized as a major enabler of business growth, innovation and economic inclusion. For participants in the informal sector, which encompass significant proportions of employment in many developing countries, this access to credit remains hindered by a web of challenges, including structural, institutional and socio-cultural elements. An extensive literature has addressed these challenges, especially in relation to the South African taxi industry.

2.5.1 Lack of Collateral and Formal Documentation

One of the most cited barriers to accessing credit within the informal economy is the lack of collateral. When credit is provided to borrowers by formal financial institutions, they are often required to pledge something of value as collateral. This requirement is something most informal businesses cannot fulfil (Ayyagari et al., 2014; Fatoki, 2021). Taxi operators, for example, may not have vehicles or property that have been formally registered, nor does it mean their business assets would be an adequate collateral to a bank. The lack of collateral is coupled with a lack of formal documentation such as audited financial statements, tax records, or a business registration certificate, all of which are normally minimum requirements of a loan application in the formal sector (Ndlovu & Mohale, 2023) (Aterido et al., 2013).

The absence of documentation and collateral limits the formal entrepreneur's ability to demonstrate creditworthiness and, as a result, increases lender risk. This leads many banks and microfinance institutions to shy away from extending credit to informal businesses and prefer clients with a credit history and documented assets (Fatoki, 2021; Aterido et al., 2013).

Similar findings have been reported in Latin American and African contexts, where informality and collateral shortages significantly constrain firm investment and access to external finance (Gandelman & Rasteletti, 2013 ;Wellalage et al., 2014).

2.5.2 Information Asymmetry and Credit Rationing

Information asymmetry is another recurring issue in the literature surrounding credit access. During the lender-borrower relationship, lenders often lack the required knowledge and information regarding the financial health, cash flow and repayment capacity of informal businesses, preventing them from accurately assessing risk (Stiglitz & Weiss, 1981;Aterido et al., 2013). Consequently, credit rationing occurs, either by denying credit altogether or lending it with a credit risk premium because the lender does not have confidence in the borrower's repayments.

Information asymmetry in credit access may be worsened by the fact that the taxi industry in South Africa is poorly documented and relies heavily on cash transactions. Detailed levels of financial records do not form part of the operator's business practices and operators practically never distinguish between their personal and business finances, which makes it difficult to help potential lenders assess the performance of their businesses (Kgwedi; 2017; Maseko & Manyani, 2011). Even when lenders ask for information, there are no credit bureaus or central databases on informal businesses, so operators cannot provide explicit information and are often left to rely on anecdotal assessments suggested by subjective referrals (Ndlovu & Mohale, 2023).

2.5.3 High Transaction Costs and Regulatory Barriers

High transaction costs are noted as a further barrier to credit access in informal economies. Many entrepreneurs and start-ups are constrained by the time-consuming, costly and bureaucratic nature of applying for credit from a formal financial institution (Ayyagari et al., 2014; Fatoki, 2021). Simply meeting requirements like developing business plans, audited accounts and legal forms of documentation is an extremely high bar for an informal, micro, very small, or small businesses, most poorly, educated or inexperienced or have no follow-through capacity, let alone finance (Fatoki, 2021).

The regulatory context also negatively impacts access to finance, especially in the taxi industry in South Africa, where the legal and regulatory framework can be particularly complex

and dynamic (Maseko & Manyani, 2011). Operators might not be aware of licensing obligations, tax duties, or the legislative framework their businesses fall under, and this may be accompanied by operational uncertainty which leads them to avoid formal credit or working with financial institutions (Aterido et al., 2013; Ndlovu & Mohale, 2023)

2.5.4 Socio-economic Discrimination and Exclusion

Socio-economic discrimination restricts access to credit for especially women, youth and other marginalised communities. Research has found that female entrepreneurs in informal sectors have an even higher likelihood of being discriminated against for reasons of gender, property rights and limited networks and information (Klapper et al., 2020) . Women or younger individuals operating vehicles in the South African taxi industry, are at times subjected to exclusionary politics within taxi associations, they may also encounter scepticism and hostility when applying for finance and other related funding options (Madichie et al., 2021).

Such exclusionary practices are indicative of the financial systems' broader socio-economic inequalities that operate on access to credit arrangements mediated by other forms of social capital, networks and relationships (Madichie et al., 2021;Aterido et al., 2013). For example, without association to or cognitions of a person or group that wields significant social capital, all things considered, the perceived investment viability and creditworthiness of the operator will be irrelevant, as access to credit will be reportedly unavailable(Koomson et al., 2023).

2.5.5 Limited Trust in Formal Institutions

Trust is a well reported consideration within financial exchanges; limited trust of informal businesses in formal institutions may therefore act as an agent that limits access to credit and similar opportunities (Madichie et al., 2021; Aterido et al., 2013). Informal entrepreneurial may view banks or microfinance institutions as unable to respond to their needs, as bureaucratic and as exploitative. In fact, they would prefer to keep their financing informal by borrowing from f(Ndlovu & Mohale, 2023)lenders (Ndlovu & Mohale, 2023). This distrust is often the effect of prior instances of rejection, high costs and a lack of clarity in the lending terms (Madichie et al., 2021).

In the South African taxi industry, limited trust in the formal system is further exacerbated by a history of regulatory conflict with the taxi industry, changing government support when it

comes to the taxi industry and the overall perception of the bank sector (Maseko & Manyani, 2011). Taxi operators may hesitate to work with banks or partake in financial literacy due to a belief that doing so will not only formalize their operations but that the operators will receive more scrutiny of their business practices or that the money they make will lead to tax implications (Maseko & Manyani, 2011).

2.5.6 The Role of Financial Literacy in Overcoming Barriers

While there are a variety of barriers that individuals in informal economies can face when accessing credit, the literature highlights financial literacy as a means to combat some of these obstacles. Financial literacy allows entrepreneurs to keep better records, develop business plans and speak to lenders, all of which reduce information asymmetry, allowing them to appear more credit worthy to lenders (Potrich et al., 2016). Understanding what formal lenders want and expect dramatically facilitates the process of applying for loans, providing the required documentation and negotiating favourable loan terms (Fatoki, 2021).

Further, financial literacy can help entrepreneurs identify and scrutinize various credit options, rates of interest and repayment schedules, and, importantly, identify predatory lending practices. This is particularly important to acknowledge in environments that require borrowers to rely on informal lenders who may exploit asymmetrical information or who may dictate exorbitant fees (Koomson et al., 2023).

Barriers to accessing credit in informal economies are complex and multidimensional, in that barriers typically involve three different dimensions: structural, institutional and socio-cultural (Aterido et al., 2013; Omri, 2020). Barriers include, but are not limited to, lack of collateral, information asymmetries, transaction costs, uncertainty about regulations and policy changes, socio-economic discrimination and limited trust in formal institutions (Ayyagari et al., 2014 ;Koomson et al., 2023). For informal entrepreneurs, including taxi-cap operating entrepreneurs, the combined barriers are especially tense due to characteristics of the taxi industry's informality and the historic marginalization of the taxi industry within South Africa (Maseko & Manyani, 2011; Madichie et al., 2021). As such, financial literacy represents an important space for establishing linked access to credit. From an education standpoint, financial literacy can assist operators by teaching them the skills required to overcome barriers related to documentation, alleviating some risk which may contribute to information asymmetries with lenders (Maseko & Manyani, 2011; Fatoki, 2021) and allowing for operators

to engage progressively with lenders. To address the barriers associated with accessing credit in informal economies, it will require a hybrid approach that includes financial literacy, regulatory reform and alternative emerging-based approaches to credit access that respect and respond to the realities of entrepreneurs operating in informal sectors (Demirgüç-Kunt et al., 2022. ; F. Chen et al., 2022)

2.6 The Role of Financial Institutions and Policy Interventions

Financial institutions are important players in the access-to-credit ecosystem; however, they have been historically limited in their engagement with informal businesses. The limitations stem from risk aversion, regulatory constraints, and a lack of reliable information. When it comes to informal sector participants, most banks and microfinance institutions deem them as “risky businesses,” owing to their lack of collateral, absence of formal documentation, and limited or unverifiable credit histories (Morgan & Trinh, 2019 ; Aterido et al., 2013). Due to this perceived riskiness, informal entrepreneurs remain behind the credit curve, and consequently, informal entrepreneurs such as South African taxi operators often miss out on the opportunity to access mainstream financial services (Fatoki, 2021; Omri, 2020).

2.6.1 Traditional Barriers and Institutional Reluctance

When it comes to lending to informal businesses, the reluctance from financial institutions is based on perceived and actual small business risks. Since informal business owners typically have little to no formal registration, limited audited accounts and no tax records, they are difficult for conventional risk assessment models to evaluate (Aterido et al., 2013). There is often no way for lenders to verify income streams or whether the business would remain viable. This, of course, means that both higher risk of default and higher rates usually culminate in denial of credit (Fatoki, 2021). In South Africa's taxi industry, this tentatively has several axes of difficulties including the problems of informality, cash and volatile income levels making lending even more challenging for some banks (Ndlovu & Mohale, 2023).

2.6.2 Fintech Innovations and Alternative Credit Assessment

Fortunately, new developments in financial technology (fintech) are starting to shake up this inhibiting environment. Fintech and supportive banks use technology like digital platforms, mobile money and digital records to assess creditworthiness in different ways (Demirgüç-Kunt et al., 2022). Digital banking and mobile money services have proliferated throughout

Africa and provide millions of previously unbanked individuals and businesses access to essential financial services (Morgan & Trinh, 2019). These platforms create an ongoing source of rich data related to transaction history, savings behaviour and payments, which could be used to construct an alternative credit profile for informal entrepreneurs (Lyons et al., 2020

Koomson et al., 2023).

Alternative credit scoring models that use data from the use of mobile phones, utility payments and even social media activity are beginning to be used to assess the borrowing intentions of individuals who have no traditional documentation (Demirgüç-Kunt et al., 2022.). Such innovations have the potential to improve credit provision markets, reduce information asymmetry, lower transaction costs and ultimately expand credit provision to unmet segments of the population (Demirgüç-Kunt et al., 2022 ; Morgan & Trinh, 2019) for example, taxi operators who regularly use a mobile money platform could demonstrate to a lender the resilience of their business using transaction data indicating they have financial discipline and stable cash flow (Koomson et al., 2023).

Low digital literacy and access to technology continues to be a barrier to many informal entrepreneurs, particularly in rural or low-income situations (Demirgüç-Kunt et 2022.). Data privacy, cyber security, compliance and governance concerns are prominent and must be resolved to help support access to broader solutions and sustainable fintech innovations (Lyons et al., 2020).

2.6.3 Policy Interventions for Financial Inclusion

Given the limits of market-based solutions, governments students can intervene by creating an array of initiatives to grapple with financial inclusion and extend credit access to informal enterprises. Demirgüç-Kunt et al. (2022) talks about several good examples of interventions, including the provision of targeted financial literacy programs, streamlining loan applications and public-private partnerships to support financing small businesses.

Financial literacy programs prepare informal entrepreneurs to engage more successfully with financial institutions. The financial literacy programs can cover things like budgeting, basic record keeping, personal finance, credit and embracing digital decision making and services (Lyons et al., 2020) . Evidence shows these types of interventions can influence financial

behaviour, creditworthiness and ultimately loan approval (Koomson et al., 2022). For example, taxi operators that participated in financial literacy training, had a better prepared business plan, improved record keeping and ability to complete complex loan applications.

Loan applications also need to be streamlined to the extent possible by reducing paperwork, application processes and allowing informal businesses to use flexible collateral in place of standard collateral. Ayyagari et al. (2022) emphasize that such procedural and collateral innovations are essential to improving small firms' access to finance in developing countries, especially where formal documentation is limited. Additionally, some banks have developed "micro-loans" or "nano-loans" with less than usual paperwork and immediate funding for informal sector participants (Demirgüç-Kunt et al., 2022). Credit products are often backed by government guarantees or risk sharing arrangements to reduce the risk to lenders and cover increased bad debts when issuing informal credit.

Public-private partnerships allowed for order matters, a government or development agency and the private sector to come together to establish credit guarantee schemes, small business support centers and digital platforms for loan origination and loan management (Ayyagari et al., 2014) (Demirgüç-Kunt et al., n.d.). The partnership supports public funding and oversight and private sector creativity, accountability and process (Demirgüç-Kunt et al., 2022).

2.6.4 Tailoring Interventions to Informal Sector Needs

What financial institutions and policy interventions work depends on how well the institutions addresses the needs of informal sector actors (Madichie et al., 2021; Lyons et al., 2020). Financial products on their own are unlikely to succeed when policies and products are made with unique requirements of diversity and informality alongside limited resources (Koomson et al., 2022 Kojo Oseifuah, 2010). Each intervention must be context specific, taking into account the unique modalities on which informal businesses rely business models, cash flows and risk profiles (Ayyagari et al., 2014). In the South African taxi industry, for example, businesses operate on income that is not paid uniformly, meaning financial products need to provide flexibility to accommodate irregular income streams (Maseko & Manyani, 2011). The training and support must be provided in local languages, and they must build trust thorough community-based outreach (Fatoki, 2021; Ndlovu & Mohale, 2023). Continued conversations between policymakers, financial institution owners and associations must continue to ensure

interventions are relevant to continuously emerging requirements (Bilal et al., 2012) ;DSBD, 2023).

The landscape of credit access for informal businesses is shaped by financial institutions and policy interventions (Madichie et al., 2021; DSBD, 2023). While traditional barriers inhibited banks' engagement with the informal sector, FinTech and policy innovation now promise to break down those barriers (Demirgüç-Kunt et al., 2022; Lyons et al., 2020). Implementation is demanding on the institutions, which must address the lending and financing needs that informal entrepreneurs face, including limited digital literacy, low levels of trust, and the informality of the enterprises and sectors themselves (Klapper et al., 2022 ; Fatoki, 2021). The outcomes for financial inclusion and the formalisation of the informal financial sector require partners to act collaboratively, embrace technological innovation, and localise interventions to their unique contexts while supporting the growth of local economies such as South Africa's taxi industry (Maseko & Manyani, 2011; (Ndlovu & Mohale, 2023).

2.7 Empirical Evidence on Financial Literacy and Credit Access

The connection between financial literacy and access to credit has been a topic of significant empirical research in a range of economic environments. The key finding is a positive relationship; that is, people and business owners that are financially literate are able to more access formal credit, repay their debt and grow their business. This section aims to highlight some of the salient empirical findings from Africa and beyond but mostly in the informal sector with an emphasis on the South African taxi industry.

2.7.1 Evidence from sub-Saharan Africa

A growing body of research has examined the relationship between financial literacy and access to credit among micro-entrepreneurs and informal business owners in the sub-Saharan Africa context (Koomson et al., 2022; Fatoki, 2021; (Changweshwa & Mutezo, 2023.) Oseifuah (2021) examined this relationship using evidence from a study of micro-entrepreneurs in Nigeria, finding that financial literacy was one of the strongest predictors of whether an entrepreneur accessed credit. The more an entrepreneur understood basic financial concepts, such as interest rates, loan terms, and repayment schedules, as well as budgeting and planning processes, the more they were willing to approach a formal financial

institution for credit (Klapper et al., 2022; Chibesa & Mwange, 2024). Oseifuah (2021) found that financial literacy abilities improved entrepreneurs' competence to develop business records, build application skills, and strengthen negotiation processes with credit providers, aligning with findings from Koomson et al. (2022) that financial knowledge directly enhances credit-seeking confidence and inclusion among informal operators.

Similar findings emerged in Kenya, where Mwangi and Cheluget (2018) evaluated the effects of financial education programs for informal business owners. Their results showed that training participants had a much higher likelihood of accessing formal credit than non-training participants, and participants were much less likely to access credit from informal lending options (Mwangi & Kihui, 2012; Xu & Zia, 2012). The authors attributed this behavioural change to increased confidence in engaging with banks, improved record keeping, and a better understanding of financial products. Importantly, the research also established that financial education affects women and young entrepreneurs more than men and older entrepreneurs, a finding echoed in other sub-Saharan studies that highlight gender and age disparities in financial literacy and access to credit (Koomson et al., 2022; Xu & Zia, 2012). Ultimately, women and young entrepreneurs are the groups that most frequently experience exclusion in the credit marketplace.

2.7.2 The South African Context: The Taxi Industry

In South Africa, the taxi industry provides a unique context to critically examine the associations between financial literacy and access to credit. Maseko and Manyani (2011) surveyed taxi operators in Gauteng and Mpumalanga and found that taxi operators with the best financial literacy had higher engagement with formal financial institutions and were less dependent on informal lenders. Maseko and Manyani (2011) identified four pathways through which financial literacy was associated with access to credit: taxi operators with higher financial knowledge were more likely to maintain accurate records of their business transactions, have an understanding of the borrower requirements in loan applications, be able to communicate with bank officials about their financial position and understand loan applications, eligibility and process.

The evidence used in the Maseko and Manyani (2011) study was compelling, including that financial literacy also reduced the valuation of predatory lending against taxi operators. Taxi operators with limited financial understandings were likely to borrow from informal lenders

who charged exorbitant interest rates that often led to circular indebtedness and reduced financial stability. Taxi operators with measurable financial literacy were more capable of evaluating loan offers, understanding costs and the repayment terms of loans and identifying predatory lending charges. By highlighting the role of financial education in accessing financial services, the findings of Maseko and Manyani (2011) suggested that support in promoting financial continuation through financial literacy would not only improve the short-term chances of taxi drivers and operators but also promote sustainability in the informal sector. Furthermore, the findings suggest that with increased financial literacy drivers and operators would ultimately improve business resource management and access formal credits, finances and assistance.

2.7.3 International Evidence: Emerging Markets and Beyond

The relationship between financial literacy and credit access is not limited to Africa. In a study of emerging markets in Asia, Kadoya and Khan (2020) found financial literacy to be a significant factor influencing credit access and business performance of small and medium enterprises (SME's). They found financially literate business operators were more likely to have maintained formal relationships with banks, apply for loans and financed business expansion. While financial literacy did not appear to relate to rates of loan default, it exhibited a reduced likelihood of defaulting on loans as informed entrepreneurs had a better ability to manage their cash flows and planned for repayments.

2.7.4 Mechanisms Linking Financial Literacy and Credit Access

There exist various mechanisms identified to suggest how financial literacy can affect credit access as observed in empirical studies. Financial literacy can lead to improved maintenance of accurate business records and financial statements (Potrich et al., 2016), both of which are often key criteria in determining loan eligibility in a formal business lending environment. Financial literacy can also lead to enhanced confidence and capabilities of entrepreneurs in their interactions with financial institutions. Entrepreneurs' knowledge capacity and skill are paramount in dealing with the complexities of submitting loan applications and negotiating improved terms with financial institutions (Koomson et al., 2022). More directly, financial literacy decreases information asymmetries between borrower and lender allowing banks and other business lenders to judge credit worthiness and manage lending risks (Aterido et al., 2013).

Financial literacy also plays an important role in debt management. Research have demonstrated that financially literate borrowers were less likely to engage in over-borrowing, defaulting on loans or falling victim to predatory lending practices (Fatoki, 2021). These are useful outcomes, not only for the individual entrepreneurs, but also for stability and sustainability of the financial system.

2.7.5 Limitations and Contextual Factors

While the volume of empirical evidence has been encouraging, there are limitations and contextual limitations in the findings that can influence the relationship between financial literacy and access to credit. The findings revealed distinctions in effects, which could act as moderators of financial literacy for accessing credit including access to information, trust in financial institutions and access to fitting financial products (Morgan & Trinh, 2019). In some scenarios, financial literacy alone, may not be strong enough to overcome structural barriers such as lack of collateral, or the existence of lender discrimination against applicants.

Furthermore, the impact of financial literacy programs will depend upon the design and delivery. Koomson et al. (2022) advocated for the importance of considering the needs and contexts of informal sector participants in developing interventions on Financial Literacy. Generic or one-size-fits-all programs risk possibly being ineffective, particularly in diverse and resource constrained contexts.

2.8 Debates and Gaps in the Literature

While the literature broadly supports the importance of financial literacy to improve access to credit, there is considerable debate over the best ways to promote financial literacy and what role it plays in facilitating financial inclusion on its own. As some authors suggest, while financial education is important, education alone may not be enough. Aterido et al. (2013) suggest that financial literacy interventions could be futile if the education occurs without concurrent institutional reforms of credit opportunities such as simplified loan application processes, new alternative credit scoring systems and financial products that can better adjust to realities of the informal sector. Koomson et al. (2022) suggest that educational strategies should be targeted and be complementary to institutional barriers on the supply side and demand-side barriers.

Another issue of debate is whether financial literacy will have varying degrees of impact in different contexts. Fatoki (2021) acknowledges that cultural traditions, regulatory environments and socio-economic settings all mediate the effectiveness of financial literacy programs. For example, whether increased financial literacy will equal greater access to credit, will depend on systemic mistrust of informal institutions, relationships between men and women and local business practices.

A major gap in the literature is the limited amount of sector specific research. Most of the research available discusses financial literacy in informal sectors, but does not address specific challenges, business models and opportunities that taxi operators face. Most available empirical research on the topic utilizes a quantitative methodology that excludes the lived experience of operators. Chen et al. (2012) present a case for more qualitative studies that are context rich in detail and on how that different contexts can illuminate barriers and enablement of financial inclusion. Addressing these gaps of literature will be critical to designing and implementing effective and contextualized intervention.

2.9 Synthesis and Conceptual Model

The literature reviewed suggests more than one link between financial literacy, access to credit and business outcomes achieved in the informal sector. Financial literacy has been demonstrated to be both a direct and indirect driver of access to credit, partly through the focus of operational variables as financial literacy delivers individuals with the competence to budget, business plan and obtain finance. However, the effectiveness of financial literacy programs relies on contextualized institutional factors, such as the availability of financial products suitable for the individual and usable policy **environment** (Teece, 2021).

A conceptual model could be developed to explain the above processes whereby the role of financial literacy is act as a mediating variable between individual characteristics (education, experience, etc), institutional characteristics (lender policy, fintech disruptions, etc) and access to credit outcomes, indicating the need for integrated solutions for financial literacy, institutional constraints and product innovation.

2.10 Conclusion

This literature review has illustrated the centrality of financial literacy to encouraging access to credit and sustaining businesses in the informal sector. Multiple contributions have

contributed to advancements in our understanding of these questions, but the literature has also identified challenges, including sector-related challenges and lived experiences of operators. Within South Africa, the taxi industry presents a significant opportunity to extend this research agenda based on the industry's economic contribution and persistent barriers to financial inclusion. This chapter has placed the current study in the context of its academic ownership and demonstrated the necessity for qualitative and contextual research to expand policy and practice.

CHAPTER 3: RESEARCH QUESTION

The aim of this study is to assess the link between financial literacy and the ability to access credit amongst taxi drivers in the South African informal sector. Due to the lack of literature within this field and the contextual complexities described in the literature, this study approaches it via research question. This allows for a open, exploratory understanding of the phenomena, while being informed by recent empirical and theoretical developments.

Research Question 1:

What is the current level of financial literacy among taxi operators in selected regions of South Africa?

Justification:

Gaining insight into the financial literacy of taxi operators in selected parts of South Africa should be important for a number of reasons. Financial literacy is not a skill, it is the “culmination of knowledge, skills, attitudes and behaviours, which ultimately enable a person to make informed decisions about financial resources,” (Potrich et al. 2016). In the informal economy, which includes the taxi industry, most operators develop financial knowledge through informal and experiential learning rather than formalized education. Therefore, financial capability varies widely, with some taxi operators just utilizing a basic budget and recordkeeping skills, while others are not even able to consistently demonstrate basic financial concepts (Oseifuah, 2021).

Having a reasonable baseline of financial literacy is essential for the above reasons. First, it provides baseline information, policymakers and stakeholders can identify specific gaps and

develop interventions centred around the specific gaps, not just deliver non-targeted financial education that is not customized or applicable (Koomson et al., 2022). Secondly, understanding the baseline of financial literacy is critical to putting the current barriers to accessing credit, within context. Low financial literacy is frequently associated with poor recordkeeping, not business planning and informal lending. This research, by strongly establishing the baseline, can ensure specific, concentrated, financial literacy programs are offered, that can potentially increase access to credit and financial inclusion for the taxi sector.

Research Question 2:

How does financial literacy affect taxi operators' ability to access formal credit?

Justification:

Investigating the impact of financial literacy on taxi operators' formal credit access is critical to explicating the pathways of the financial inclusion of individual taxi operators in the informal sector. A body of empirical work across sub-Saharan Africa, including South Africa, find that financial literacy positively correlates to access to credit (Maseko & Manyani, 2011; Koomson et al., 2022). Financially literate taxi operators would have a higher likelihood of keeping records of businesses undertaken, writing a business plan and communicating with formal lenders. All of these items positively contribute to assessing who receives access to credit (Fatoki, 2021). These skills will also promote confidence in taxi operators to use banks, since financial literacy is associated with reduced reliance on informal and sometimes unscrupulous lenders.

While the relationship is positive, the specifics of the relationship and mechanisms for financial literacy led to being able to access to credit in the taxi industry have been unresolved. Specific aspects of the industry such as its informality, cash work, scant documentation, could further contribute to any mechanisms for financial literacy and access to credit. Therefore, examining this further, this research hopes to uncover learnings that can inform practices that could lead to greater financial inclusion and business longevity for taxi operators.

Research Question 3:

What are the main barriers to credit access for taxi operators and how can financial literacy interventions address these challenges?

Justification:

Identifying the primary barriers to credit access taxi operators experience and considering how financial literacy programs could help overcome these obstacles is necessary to improve financial inclusion in the informal sector. The literature identifies the following barriers as ongoing issues in securing finance: lack of collateral, information asymmetry of lenders and borrowers, high transactional costs and a mistrust of formal credit providers (Aterido et al., 2021; Ndlovu & Mohale, 2023b). The barriers noted above are particularly severe in the taxi industry due to the lack of formal registration, seamless financial records and collateral support from lenders that taxi operators do not have access to. This lack of access creates barriers, exclusion and reliance on informal, high-cost lending options.

A recent study has shown how financial literacy programs can offer potential solutions as lenders. Tailored financial literacy participants in the study used the financial literacy program to build key financial skills (like maintaining records of receipts, planning for business and understanding credit options) that are to begin to reduce information asymmetry, illustrate creditworthiness and overall provide taxi operators with knowledge to work with formal lenders (Koomson et al., 2022). Thus, this is a significant research question for understanding and developing programs for taxi operators to identify the key barriers they face in credit access and developing how context-based financial literacy programs can eliminate or at least reduce the barriers to credit and business sustainability.

CHAPTER 4: RESEARCH METHODOLOGY**4.1 Research Design**

This study's Research Design provides a broad framework for addressing the Study Objectives in an appropriately methodical and systematic way. As an example of how the philosophical stance of pragmatism is reflected in this study, pragmatism is concerned with developing research results that can be practically applied. For example, pragmatism views each situation as unique and recognizes that different situations require different solutions, even if they are traditionally viewed as being methodologically identical. A pragmatic research orientation is particularly suited to studies that seek to develop useful and practical knowledge that will guide both public policy and organizational practice, because pragmatism recognizes

the complexities of reality and the co-existence of many different perspectives (Saunders & Lewis, 2018) (Kaushik & Walsh, 2019)

In addition, pragmatism is helpful to studies that examine how financial literacy influences formal credit access among taxi drivers working in South Africa's informal economy, as it allows for the greatest degree of flexibility in selecting methodologies that best capture the experiences and realities of participants.

This study uses an Abductive Research Approach. The Abductive Research Approach is particularly good for examining complex social phenomena where existing theories provide a foundation, but new insights are expected to emerge from empirical data (Saunders et al., 2018). The Abductive Research Approach combines aspects of both Inductive and Deductive Reasoning, which enables researchers to move back and forth between theory and data in order to refine their understanding and create new theoretical insights (Saunders et al., 2018; Timmermans & Tavory (2012). Because the Abductive Research Approach is flexible and iterative, it is especially beneficial when conducting research in environments that are highly complex and highly dependent upon the context in which the research is taking place, as it allows for the creation of a nuanced explanation that is both theoretically supported and rooted in the real world (Braun & Clarke, 2012).

A qualitative methodology is used for this study, as qualitative research is well-suited for investigating complex social issues and for gaining insight into the experiences of people living in their own specific environment (Saunders et al., 2022). Qualitative research has been found to produce high quality, rich and detailed data about the perspectives of participants and the nature of these perspectives. Semi-Structured Interviews are used as the primary data collection method, as they allow for participants' experiences to be explored openly, while also providing enough structure so that the research questions are addressed (Braun & Clarke, 2012). Taxi operators operating in the Mpumalanga and Gauteng provinces were purposefully selected and recruited for this study to serve as participants, as they possess first-hand experience with formal credit access and financial literacy (Saunders & Lewis, 2018). Participants were interviewed at a location that was convenient for them (e.g. taxi rank or association office) to foster rapport and encourage participants to share their thoughts and experiences freely. Thematic Analysis is the primary analytical method for analysing the

qualitative data collected during this study, as it allows for both theory-based and data-based insights to emerge (Braun & Clarke, 2022).

The study takes a Cross-Sectional Time Horizon perspective, collecting data from participants at one point in time. This perspective is useful for obtaining a snapshot of current experiences and practices and is consistent with the study's objectives and resource constraints (Saunders et al., 2018). Overall, this research design is designed to provide methodological rigor, contextual grounding and actionable insights into the relationship between financial literacy and access to formal credit among taxi operators in South Africa's informal sector.

4.1.1 Philosophy

Pragmatism provides the philosophical basis for this study. As Saunders et al. (2018) describe, pragmatism is a research paradigm that emphasizes practical applications of research and encourages the selection of research methods that will provide the best possible answers to the research question, whether those methods are traditionally qualitative or quantitative. The pragmatist perspective is especially well-suited to research that aims to produce actionable insights and inform practice or policy because it acknowledges that reality is complex and multifaceted and that multiple perspectives exist within and across contexts (Kaushik & Walsh, 2019; Saunders et al., 2018).

This study's focus on exploring how financial literacy affects formal access to credit for taxi operators in South Africa's informal economy, makes pragmatism an appropriate philosophy to guide this inquiry, as it enables methodological flexibility. Flexibility is important for capturing the lived experiences and contextual realities of participants, because it affords researchers the opportunity to identify and then combine those methods that are best suited to address each research question (Braun & Clarke, 2022).

Additionally, pragmatism supports the abductive approach being employed in this study, as it allows for the iterative process of developing theories and testing them through data collection to create contextually relevant and theoretically robust insights. Through employing a pragmatic philosophy, this study has emphasized producing findings that are both meaningful and useful in addressing the real-world problems faced by taxi operators in South Africa's informal economy (Saunders et al., 2018).

Therefore, pragmatism serves as the guiding philosophy for this study providing direction based on the practical needs of the research context, supporting methodological pluralism and facilitating the creation of actionable knowledge that will be used to inform both academic understanding and practical interventions.

4.1.2 Approach

Using abductive research methods offers an excellent opportunity to explore complex social issues (such as how financial literacy impacts access to formal credit) by utilizing an existing body of literature to develop a framework for research but expecting new and additional insights to be developed from the data collected during the research process (Saunders et al., 2018). Abduction allows researchers to combine aspects of inductive and deductive reasoning. It provides the researcher with the ability to go back and forth between developing new theoretical insights based on data collected (inductive) and to test or apply theoretical models to understand the data collected (deductive), thereby providing the researcher with an ability to continuously refine their conceptualization of the problem being studied (Timmermans & Tavory, 2012; Saunders et al., 2018).

For example, in the case of this research project, the researcher will initially rely on a body of knowledge (theories) related to the resource-based view and human capital theory to help frame the research questions and provide a basis for understanding the research problem. However, the research does not seek to directly test hypotheses developed from these theories; instead, it seeks to identify new patterns and explanations from the lived experience of informal taxi operators in South Africa (Braun & Clarke, 2022).

Throughout the research process, the researcher will continue to iterate between analysing the data collected and developing the theoretical framework of the research. The researcher will continue to develop and refine the theoretical framework as they encounter new data. This iterative nature of the research process is typical of the abductive methodology and can be especially beneficial when the research problem is complex and has many contextual variables (Saunders et al., 2018).

By using the abductive methodology, the research will have been able to develop nuanced explanations of the relationships between financial literacy and formal credit accessibility that are theoretically informed and grounded in the reality of the informal taxi industry.

Additionally, the abductive methodology is consistent with the philosophical underpinnings of pragmatism, which stresses flexibility of methodology and the practical use of research findings (Saunders et al., 2018). This allows the research to be adaptable to the unique challenges and opportunities found in the informal taxi industry. Therefore, the research will be able to produce findings that are both useful and applicable.

Therefore, the abductive methodology used in this research study allows the researcher to engage dynamically and flexibly with both theory and data and support the development of theoretically informed, yet contextually relevant insights into the relationship between financial literacy and formal credit access for taxi operators.

4.1.3 Methodological Choice

A qualitative methodology was used in this study, due to the fact that it is a very good fit for examining complex social issues and the way people experience things (Saunders et al., 2018). The qualitative method was selected due to the fact that the research is interested in finding out how a person's level of financial knowledge affects their access to formal credit, which is something that can be examined in an environment that is characterized by informality, diversity and many social dynamics (Braun & Clarke, 2022). Qualitative research has the capability of producing rich, detailed information about what participants' thoughts and beliefs are (Braun & Clarke, 2022). Quantitative research, on the other hand, focuses on measurement, testing hypotheses and uses large sample sizes. Therefore, qualitative research is focused on meaning, context and the individual participant's subjectivity. These types of issues are common in the informal taxi industry where a number of social, economic and cultural factors affect the way participants manage their finances, deal with problems and find solutions (Saunders et al., 2018).

Semi-structured interviews were the main method of collecting data in this study. Semi-structured interviews allow for open ended questioning so that participants can provide as much detail as possible while also allowing for some structure so that all of the research questions will be explored (Saunders et al., 2018). Semi-structured interviews are useful when there is limited previous research available, as they allow the researcher to ask follow-

up questions and explore additional themes that emerge during the conversation (Braun & Clarke, 2022).

The qualitative methodological approach was selected based on the studies philosophical position of pragmatism, which is concerned with selecting methodologies that are the most effective at solving the research problem (Saunders et al., 2018). Pragmatism also provides researchers with the flexibility to select the methodologies that work best in the research setting and to select methodologies that provide the greatest insight into the reality of the research setting. Therefore, the qualitative methodologies were selected as the most suitable to identify the barriers, strategies and contextual factors that limit or facilitate taxi operators' access to formal credit.

The qualitative methodological approach fits the research objectives, the characteristics of the research setting and the philosophical underpinnings of the study. As such, the qualitative methodologies have provided the study with the opportunity to obtain rich, contextually based insights that can aid in advancing the academic understanding of the issue and developing practical interventions in the informal taxi industry.

4.1.4 Strategy

This study will use a qualitative research strategy using semi-structured interviews as the principal method of collecting data. Qualitative research strategies are most effective when studying complex social issues with many variables, such as context, meanings and participant views which are necessary to understand a problem (; Saunders et al., 2018).

Semi-structured interviews were used as they allow the researcher to follow a general outline of discussion topics by asking pre-determined questions; however, they allow for additional questioning based on what the interviewee says and thus provide an opportunity for them to raise additional topics (Braun & Clarke, 2022). They provide a degree of structure to the interview so that all required areas can be explored, while at the same time providing flexibility to accommodate the different experiences of taxi operators in the informal taxi sector.

Purposive sampling was used to select taxi operators in the Mpumalanga and Gauteng regions, as these are densely populated areas that have large numbers of taxis operating in them and include a variety of operators ranging from individual owner/drivers to larger groups/associations. Purposive sampling is often used in qualitative research as it selects

people who have knowledge of the subject matter being studied and who fit the research question(s) (Saunders et al., 2018).

Interviews are conducted at locations that are convenient and comfortable for the participant, such as taxi ranks, association offices and/or community centers, to promote rapport and trust building between the interviewer and participant, so that the participant feels confident to share their experiences and opinions openly and honestly (Saunders et al., 2018). Audio recordings of interviews are made with the consent of the participant and detailed field notes are kept during each interview to record non-verbal reactions and context related to the data collected (Saunders et al., 2018).

Thematic analysis will be applied to the qualitative data collected from the interviews. This includes coding the data, identifying common themes and interpreting the results in light of the study's research questions and previous literature (Braun & Clarke, 2022). Thematic analysis is suitable for this study as it allows for both theory-based and data-based insights to develop.

Ethical considerations and quality assurance mechanisms will be implemented throughout the study. All participants will sign informed consent forms prior to participating in the interviews and all will remain anonymous/confidential. An audit trail of decisions and actions will be developed by the researcher to enhance the study's transparency and credibility (Saunders et al., 2018).

4.1.5 Time Horizon

The time frame for a research project identifies the time span during which the data will be collected and analyzed. For this research project, a cross-section time frame was used; therefore, all the information was collected from each participant at one time, rather than collecting information over a longer period. Saunders et al. (2018) suggest that the decision to use a cross-section time frame was based on the fact that this is an exploratory study and that it would be difficult to obtain participation from taxi drivers operating informally.

Cross-section time frames are useful when you want to get a picture of what is currently happening with respect to people's experiences, perceptions and practices. In terms of this research, it has provided a means for collecting rich, detailed accounts of how taxi drivers perceive and act upon their understanding of financial literacy and formal credit as it exists

today. Additionally, the cross-section time frame provides a way to identify existing barriers, strategies and opportunities as they occur within the existing economic and regulatory climate (Saunders et al., 2018).

Although using a longitudinal time frame could provide insight into changes or trends that may develop over time, a cross-section time frame has been determined to best meet the goals of this research project and to utilize available resources. The use of a cross-section time frame enables the researcher to collect data from a large number of participants, providing a good representation of the variety of experiences of the taxi drivers in the selected geographic areas. Finally, the cross-section time frame is consistent with the qualitative, abductive methodology of the study, emphasizing depth and context over temporal development (Braun & Clarke, 2022).

The selection of a cross-section time frame has allowed this research to provide a focused and contemporary examination of the relationship between financial literacy and access to formal credit for taxi operators. The selection of a cross-section time frame will allow the researchers to generate actionable results that can be applicable to current policy and practices, while also meeting methodological requirements for the study (Saunders et al., 2018).

4.2 Research Methodology

4.2.1 Population

This study includes all taxi operators actively operating in the informal taxi sector in the Mpumalanga and Gauteng regions of South Africa. These two regions were chosen based on their high volume of active taxi operations and high levels of passenger traffic; and because there are both urban and peri-urban taxi operators present in each region (Saunders et al., 2018). These regions provide an important part of public transportation, as they serve millions of people every day and serve as a major source of employment and income (Saunders et al., 2018).

Individuals operating taxis in this study include individuals who operate their own vehicle(s), small business owners operating a few vehicles and individual or leadership members of taxi association organizations. These taxi operators are characterized by a very high level of informality, which means that most do not formally register their businesses; and therefore

mostly deal with cash transactions and usually do not have access to formal financial institutions; therefore the variety of these groups will allow researchers to obtain a wide variety of experiences and perspectives regarding the issues of financial literacy and access to credit (Saunders et al., 2018).

Specifically, the target population of this study consists of taxi operators who are financially responsible for their taxi operations; and who have sought out credit from either formal or informal sources. Therefore, this study seeks to determine the extent of financial literacy among taxi operators; however, it is expected that understanding the specific challenges and strategies used by taxi operators when accessing credit will be the primary contribution of this research (Braun & Clarke, 2022).

The target population for this study consists of all taxi operators in Mpumalanga and Gauteng who are currently operating in the taxi industry and have prior experience in making financial decisions and seeking credit. This will enable this research to identify themes that can be applied throughout the entire informal sector in South Africa (Saunders et al., 2018).

4.2.2 Unit of Analysis

Unit of analysis is defined as an individual taxi operator; and this is based upon the research purpose of investigating the personal experiences, attitudes and financial behaviors of individuals directly responsible for the ownership and operation of taxi enterprises in South Africa's informal economy. The use of the individual as the unit of analysis is beneficial as it will allow for the investigation of how individuals understand, practice and apply financial literacy in real world contexts (Saunders et al., 2018).

In South Africa's informal economy, many taxi operators perform dual roles as business owners/service providers and are responsible for all aspects of their business enterprise, including making financial decisions, recording transactions and providing information to potential credit providers. As such, the individual-focused approach to analysis will enable the study to identify the unique ways in which financial literacy impacts the ability of operators to gain access to formal credit, as well as the specific obstacles and strategies operators face on a day-to-day basis when operating their business (Saunders et al., 2018).

Although the primary focus of the study is on the individual, the study also acknowledges the role of taxi associations, regulatory frameworks and social networks, etc. within the broader context in which taxi operators operate. The study identifies the operator's direct experiences as the primary means of understanding the relationship between financial literacy and access to formal credit, as it is through their actions and decisions that the relationships can be identified (Braun & Clarke, 2022).

Qualitative research best practices provide direction on how to select a unit of analysis that is relevant to the research goals and will provide rich contextualized data. Selecting the individual taxi operator as the unit of analysis will allow for an in-depth exploration of the relationship between financial literacy and access to formal credit in the informal sector.

4.2.3 Sampling

Purposive sampling is a type of non-probability sampling technique used to collect qualitative research, where researchers select participants based on knowledge about the area of study (Saunders et al., 2018). It is the most common method of selecting participants for research seeking in-depth insight from "information rich" cases (as opposed to generalizing results to a larger population) (Braun & Clarke, 2022).

Based on the requirements of the study, participants were selected if they were currently working in the taxi industry in either the Mpumalanga or Gauteng provinces, were making decisions related to their financial management of their businesses and had applied for credit from both formal and/or informal lenders. Participants meeting these requirements would provide valuable and varied views on the topic of financial literacy and access to credit for the informal taxi sector (Saunders et al., 2018).

In order to create a sample with an abundance of diverse and rich data, attempts were made to select participants with a variety of ages, gender, years of experience and size of their businesses. It was believed that a diverse sample would allow researchers to gather a wider array of experiences and also identify which variables could affect financial literacy and access to credit (Saunders et al., 2018). The size of the sample was decided upon based on the concept of data saturation. Data saturation occurs when no further interviews produce new themes or ideas. It was expected that a sample of approximately 10 to 15 taxi operators would be required to reach data saturation and consistent with existing qualitative research (Saunders et al., 2018).

Recruitment of participants occurred primarily through direct contact at taxi rank locations, association offices and community centers as well as referral from local taxi associations. Recruitment was structured to ensure transparency and respect for the participants' rights and participants were given clear information about the purpose and procedures of the research as well as the ethical aspects of the research (Saunders et al., 2018). Informed consent was obtained from all participants prior to them participating in the research.

The use of purposive sampling as a means of participant selection for this study has resulted in the collection of meaningful and contextualized insights into the relationship between financial literacy and the ability of taxi operators to obtain formal credit. By using a focused approach to collecting data from "information rich" cases and attempting to achieve diversity in the sample, the study has been able to collect a broad range of experiences associated with the informal taxi industry in South Africa.

4.2.4 Measurement Instrument

Qualitative data was gathered through use of a semi-structured interview guide. An interview guide is well regarded in social research as an effective method to gather qualitative data (Saunders et al., 2018).

The interview guide has been constructed by combining a literature review of pertinent material, the objectives of this project and the particular context of the informal taxi industry in South Africa. As such it is designed to collect a large amount of contextually relevant narrative detail whilst at the same time maintaining enough structure and consistency so that data collected during each interview will allow for comparison with other interviews.

Demographic information (e.g. age, gender, years of experience operating a taxi business) is collected first by asking about the participant's business size. Information on demographic variables is important because it allows for the interpretation of the participant's responses and for examining whether there are differences in the degree to which different demographic characteristics affect financial literacy and access to formal credit (Saunders et al., 2018).

The remainder of the interview guide focuses on the participant's comprehension and application of financial concepts and their experiences in the management of business finances. The participant will also be questioned regarding their past efforts to obtain credit from both formal and informal creditors.

Throughout the interview guide open-ended questions have been used to permit the participant to tell their story in their own words and to provide a space for follow-up probes or additional questions to enable a deeper investigation into any specific issues raised (Braun & Clarke, 2022).

For example, participants will be asked to explain their methods of recording income and expenses, how difficult it was to apply for credit and what they believe to be the importance of financial literacy in their business activities.

To increase the reliability and validity of the measurement instrument used in this study, the interview guide was piloted with a small number of taxi operators who were not part of the overall study sample. The feedback received from those participating in the pilot testing of the interview guide was incorporated into the development of the final version of the interview guide to improve the clarity of question wording, the sequence in which topics were presented and the cultural and contextual relevance of the interview guide (Saunders et al., 2018).

This process is important because it ensures that the measurement instrument is relevant and capable of capturing the complexities of the participant's experience.

As a result of its semi-structured format, the interview guide provides a good balance of structure and flexibility. It ensures that all relevant topics are covered but permits the interviewer to follow up on new themes as they develop.

In the informal sector, where participants' experiences can be very varied and difficult to predict, this ability to adapt is particularly valuable (Saunders et al., 2018).

Overall, the semi-structured format of the interview guide has provided a robust and adaptable measurement instrument which will enable the collection of rich and detailed data that is relevant to the objectives of this study and enables the exploration of both anticipated and unanticipated themes.

4.2.5 Data Gathering Process

This study has planned the data-gathering method with great care so that it will be possible to gather rich, reliable and context-specific data from taxi operators in the Mpumalanga and Gauteng provinces. For this reason, the primary source of data collection was through face-to-face, and online semi-structured interviews, because they are highly regarded as an

appropriate way to gather in-depth insights into participants' experiences and perspectives (Saunders et al., 2018).

Before conducting data collection, approval was obtained from the applicable Institutional Review Board, as per the best practice for research including human participants (Saunders et al., 2018). Additionally, all participants were informed about the purpose and procedure of the study, as well as their rights as participants in the research. Prior to beginning the interviews, informed consent was obtained from each participant so that there would be no coercion involved in participating in the study and to foster a climate of trust and openness during the interviews (Saunders et al., 2018).

When scheduling the interviews, they were scheduled them at a time and location most suitable and comfortable for the participant, i.e., taxi rank, association office, or community center and online. By doing so, the researcher is able to assist the participant in becoming involved and by providing a comfortable setting for the participant to share his/her experiences freely and without reservation (Saunders et al., 2022). Interviews generally lasted approximately 45 – 60 minutes to have ample opportunity to discuss all of the pertinent items while being mindful of the participant's time constraints.

Throughout the interviews, the researcher utilised a semi-structured interview guide to direct the conversation, thereby ensuring that all the essential themes are discussed while being open to pursuing other issues that may arise (Braun & Clarke, 2018). Open-ended questions and follow-up questions were used to elicit the participant's response and to obtain a more in-depth account of their experience. With the participant's permission, the interview was recorded using audio-recording equipment to accurately capture their responses. Additionally, the researcher documents the participant's non-verbal behaviours, the context surrounding the interview and any observational findings that may add to the richness of the data (Saunders et al., 2018).

To enhance the quality of the data, the researcher was sensitive to issues of language and culture. As such, when necessary, the interview was conducted in the participant's native language and translation assistance was required as I was familiar with the language that was used by all respondents, this allowed for clear communication. This is particularly important given the culturally and linguistically diverse nature of South African society and to allow the participant to fully and openly articulate their experiences (Saunders et al., 2018).

Following the completion of each interview, the audio recording was transcribed verbatim by the researcher, and the transcript was thoroughly reviewed for accuracy and completeness. After reviewing each interview, the researcher provided reflection upon each interview, noting emergent themes, possible biases and areas to explore further in subsequent interviews. This ongoing reflective process enabled the researcher to continually refine the data collection strategy, while simultaneously enabling the study to remain responsive to the realities of the field (Braun & Clarke, 2022).

The data collection process was been designed to collect a high-quality and thorough set of data, based on the lived experiences of taxi operators. Through the implementation of thoughtful planning, ethical conduct and cultural sensitivity, the study aims to produce meaningful and practical insights regarding the relationship between financial literacy and access to formal credit in the informal taxi industry.

4.2.6 Data Analysis Process

The analysis of the data of this study was done using thematic analysis; an accepted method of identifying, analysing and reporting patterns of qualitative data (Braun & Clarke, 2022). Thematic analysis is particularly well suited to research that explores the complexities of social issues and generates detailed understanding of participants' accounts. This method enables the researcher to analyse the data obtained through semi-structured interviews with taxi drivers and go beyond surface level summaries of the data to identify more generalizable meanings and associations relevant to the research questions.

The first step in the analysis process is the transcribing of each recorded interview in its entirety. After each transcript has been checked for accuracy and completeness and any personally identifiable information has been deleted to protect the anonymity of the participants (Saunders et al., 2018), the researcher will immerse themselves in the data by repeatedly reviewing the transcripts, taking initial notes and observations regarding the repetition of ideas, concepts and possible themes (Braun & Clarke, 2022).

Coding is another important step in the analysis process. Coding is defined as assigning labels to specific parts of the text that relate to the research questions and conceptual framework of the study. A combination of deductive and inductive coding strategies was used. Deductive coding strategies involve the use of codes that have been informed by previous research and the theoretical framework of the study, i.e. expected themes including the

financial literacy practices of taxi drivers, the barriers to accessing formal credit for taxi drivers and how taxi drivers interact with financial institutions (Saunders et al., 2018). Inductive coding strategies, on the other hand, allow the researcher to identify new insights and perspectives not identified previously, that were provided by the participants (Saunders et al., 2018).

Following coding, the researcher will organize the codes into broad themes and sub-themes. In organizing the codes into broad themes and sub-themes, the researcher will group related codes, examine their relationships and refine the thematic structure until the researcher is satisfied that the thematic structure accurately represents the data (Braun & Clarke, 2018). It may also be useful for researchers to create thematic maps and matrices to illustrate the relationships between themes and to facilitate comparisons across different participants or groups (Saunders et al., 2022).

While conducting the analysis, the researcher will remain aware of the context in which the participants experienced their situation. The researcher will consider differences in the responses of participants based on regional location, number of years of experience and size of their business, as well as the impact of broader social, economic and regulatory environments on the experiences of participants (Saunders et al., 2018). Additionally, the researcher will practice reflexivity by regularly considering his/her assumptions and potential biases and by developing alternative explanations for the findings (Saunders et al., 2018).

To increase the credibility and trustworthiness of the analysis, the researcher will utilize multiple strategies. Member checking, where preliminary findings will be discussed with a select number of participants for their input and validation and peer debriefing, where the researcher will discuss emerging themes and interpretations of the findings with peers or supervisors are two such strategies. The researcher will also keep an audit trail, which documents the researcher's decision-making and provides transparency during the entire process (Saunders et al., 2018).

In conclusion, the analysis of the data for this study was thorough, systematic and grounded in the tenets of thematic analysis. Through the utilization of both deductive and inductive coding strategies, while practicing a high degree of awareness of the context in which participants experienced their situations and engaging in reflexive thinking, the study was

able to provide rich and informative understandings of the interrelationship between financial literacy and formal credit access for taxi operators working in South Africa's informal sector.

4.3 Quality Assurance

To provide credibility and reliability to qualitative research, it is critical that qualitative researchers utilise methods to increase the quality of their studies and therefore the quality of their conclusions. The current study utilizes multiple strategies to create rigor in the research process and validity within its findings, each of which have been widely accepted and recommended in qualitative research methodologies (Saunders et al., 2018)

Triangulation, one of the most well-established quality assurance techniques, is a method that uses multiple forms of data to create corroborative evidence. For example, the researcher will compare participant data and cross check participant interview data with field notes and consult with literature pertinent to the study to ensure a more accurate representation of the participant's experience. The use of triangulation can help to alleviate bias in the research and thus increase the strength and consistency of the findings (Saunders et al., 2018).

Another method used in the current study is member checking. Member checking occurs after preliminary analysis has taken place, at which time the researcher shares a summary of the findings with a subgroup of participants to verify whether the participant views the researcher's interpretations as accurate representations of their experiences. Member checking provides an opportunity for the participant to affirm or deny the researcher's interpretation of their experiences and therefore, aids in increasing the credibility of the findings (Saunders et al., 2018).

In addition to the above-mentioned strategies, peer debriefing is also being used in this study. Peer debriefing is a process where the researcher meets with academic supervisors and/or colleagues to discuss emerging themes, coding decisions and interpretations. Peer debriefing provides an external review of the researcher's decisions and therefore, the ability to critically evaluate and challenge the researcher's assumptions and biases and ultimately refine the analytical process (Braun & Clarke, 2022).

The researcher kept an audit trail of all major decisions, methodological choices and analytic steps made during the course of the research process. An audit trail is a transparent process,

allowing other researchers to trace the development of the study and assess the dependability of the findings (Saunders et al., 2018).

The researcher is practicing reflexivity continuously. The researcher maintained a reflective journal throughout the duration of the study and records personal assumptions, reactions and potential influences on the research process. Practicing reflexivity continuously minimizes the influence of the researcher's bias on the research process and supports the integrity of the study (Saunders et al., 2018).

Lastly, the researcher pre-tested the interview guide with a small group of taxi operators to ensure that the questions are clear, relevant and culturally appropriate. The feedback received from the pre-test is then used to modify the interview guide, which contributed to the reliability and validity of the data collection process (Saunders et al., 2018).

4.4 Ethical Considerations

Ensuring ethics within your study can help build credibility and integrity into the study and its findings, especially when conducting studies using human participants in contextually sensitive areas (such as informal taxi industries). Ethics are therefore essential for protecting the rights and dignity of participants and for ensuring that participants' rights and dignity are protected throughout the entire research process (Saunders et al., 2018).

Obtaining approval prior to collecting data through an Institutional Review Board (IRB) allows you to provide participants with complete information about the purpose of your study, how you will collect and store data, the risks of participating in this type of study and the benefits of participating. Providing participants with written and verbal informed consent ensures that participants understand fully the implications of their decision to participate in this study and it provides assurance that they have made a voluntary choice to do so (Saunders et al., 2018).

To ensure confidentiality and anonymity of participants, all identifiable information has been removed from transcriptions and reports. Participant names were replaced with pseudonyms. Transcripts and reports are stored securely, access is limited to the researcher and supervisor(s), passwords are used to restrict access. Maintaining confidentiality and anonymity of participants allows them to be open and honest regarding their experiences during the research study (Saunders et al., 2018).

When designing this study, the researcher recognized that there may be some risk to participants of being asked to share their financial situation or fear of disclosure due to private nature of their employment status. Therefore, participants are notified of their ability to withdraw from the study at any time without consequence or reason. Additionally, the researcher monitors for signs of emotional distress and will suspend or end an interview session if they perceive a need to protect the well-being of the participant (Saunders et al., 2018).

In addition to cultural and contextual awareness, participants are interviewed in their preferred language. The researcher is aware of and respectful of local customs and practices. Through these approaches, the researchers can create a sense of respect and inclusivity among participants and to create an environment where participants are able to openly express their views and experiences (Saunders et al., 2018).

Lastly, the researcher intends to report the findings of this study truthfully and transparently while ensuring that the voices and experiences of the participants are clearly represented. The researcher will not engage in the fabrication, falsification, or misrepresentation of data. The researcher will acknowledge any limitations of this study and/or conflicts of interest (Braun & Clarke, 2022).

4.5 Limitations of the Study

Although this research was developed to generate comprehensive insight into the relationship between financial literacy and access to formal credit for taxi drivers operating in South Africa's informal sector, there are several important limitations to consider. Understanding these limitations will allow for the placement of the research findings in a broader context and inform future studies (Saunders et al., 2018).

The first limitation arises from the fact that the qualitative research methodology used has a limited ability to generalize the research findings to other populations. Since the research design uses purposive sampling and is based upon a relatively small sample size, the results represent the experiences and views of only a specific subset of taxi drivers in the Mpumalanga and Gauteng areas and therefore cannot be generalized to all taxi drivers operating in South Africa (Saunders et al., 2018). Therefore, care should be taken when extrapolating the conclusions from this study to other settings outside of those examined in this study.

Another limitation of the study relates to the exclusive reliance on self-report data generated through semi-structured interviews. The respondents' responses may have been influenced by a conscious or unconscious desire to portray themselves positively, or to exclude potentially sensitive information, or to misremember past events. Although steps were taken in this study to improve the reliability of the data through the use of triangulation and member checking, these limitations are endemic to qualitative research methods (Braun & Clarke, 2022).

A third limitation of the study relates to the cross-sectional time frame, which allows the researchers to collect data regarding the participants' experiences and viewpoints at one particular moment in time. However, this time frame does not account for any changes or developments that may take place over longer time frames, including changes in the level of financial literacy, the regulatory environment, or the availability of credit. To understand how the above-mentioned variables change and interact over time, longitudinal research is needed (Saunders et al., 2018).

In addition to the limitations discussed above, the study was also constrained by the fact that it was conducted in a particular geographic and cultural setting. These contextual elements may affect the way financial practices are performed and the manner in which access to credit is experienced by the respondents. For example, local economic conditions, the regulatory environment and community norms may have an impact on the participants' experiences that is not adequately accounted for in the research design (Saunders et al., 2018).

Finally, the researcher's personal history, perspectives and interactions with the respondents may also have affected both the collection and analysis of the data. While reflexivity and peer debriefing were used to minimize the effect of any possible researcher biases, complete objectivity is difficult to achieve in qualitative research (Braun & Clarke, 2022).

To summarize, while the study provides significant insights into the financial literacy and credit access issues that taxi drivers experience, the study's results should be viewed in conjunction with the methodological and contextual limitations identified above. Future studies can utilize larger and more diverse samples, longitudinal designs and mixed methods approaches to develop a greater understanding of this topic.

Chapter 5: Presentation of Results

5.1 Introduction

This chapter presents the research results based on the qualitative data collected through 15 in-depth interviews with 15 currently working South African Taxi Industry Members. The purpose of this chapter is to analyse and understand how taxi operators experience and think about financial literacy and how it influences their ability to obtain formal financing/credit. The data was analysed using a thematic analysis methodology outlined in Chapter 4 to assist in answering the research questions/objectives.

The chapter starts off by providing an overview of the demographics of the participants, followed by a description of the emerging themes/subthemes. In addition, participant quotes will be provided to support the findings of this study and add depth and credibility to them. The results of this study will be compared to other studies on financial literacy and credit accessibility in the informal economy including the taxi industry in South Africa (Ndlovu & Mohale, 2023) to ensure that the analysis is grounded in contemporary literature.

5.2 Demographic Profile of Participants

Fifteen participants in this study are all active in the South Africa Taxi Industry and are either owners, drivers or managers. A demographic survey of the participants was completed to provide additional information regarding the participants' experiences based on their demographics and to ensure that the participants represented a variety of opinions concerning the taxi industry. The participants had a wide variation of age, gender, years of experience and education; they were representative of the taxi industry's diversity. In terms of gender, most participants were male, and this is typical of the gender demographics of the taxi industry (Ndlovu & Mohale, 2023). In terms of age, participants' ages ranged from early 30s to early 70s and many of the participants had more than 10 years of experience in the taxi industry. In terms of education, participants' educational backgrounds ranged from completing primary school to post-high school education, but many participants indicated they only have a basic education. The variation in participant demographics allowed for an examination of how financial knowledge and ability to access credit differs by subgroup within

the taxi industry. A summary of the demographics of the participants is provided in Table 5.1 below.

Table 1: Demographic Profile of Participants

Participant	Gender	Age	Role in the Industry	Area	Education Level
P1	Male	50 -60	Taxi owner and Secretary of an Association	Mpumalanga	Primary
P2	3x Females	40 - 55	2x Taxi owners plus Admin lady at the Association	Mpumalanga	Primary
P3	Male	40 - 50	Taxi owner Consultant in the taxi industry, Business development, stakeholder engagement in the industry	Gauteng	Post Secondary
P4	Male	40 - 50	Toyota Financial Services focusing in the taxi industry	Mpumalanga	Post Secondary
P5	Female	30 - 40	Toyota Dealership Sales Person and Finance	Mpumalanga	Post Secondary
P6	Male	40 - 50	Toyota Financial Services		Post Secondary
P7	Male	40 -40	Head Taxi Finance Group strategy ABSA	Gauteng	Post Secondary
P8	Male	40 -50	Taxi Driver and Administrator		Post Primary
P9	Male	50 - 50	Business marketing officer on the executive committee in Brakpan Taxi Association	Gauteng	Post Primary
P10	Male	30 - 40	President of Steve Tshwete Taxi Associations	Mpumalanga	Post Secondary
P11	Male	40 -50	Standard Bank Head of Finance Taxi and Programmes	Gauteng	Post Secondary
P12	Male	50 - 60	Chairman Taxi Association and Taxi Owner	Mpumalanga	Primary
P13	Male	30 - 40	Taxi Driver	Mpumalanga	Post Primary
P14	Female	40 -50	Taxi owner	Mpumalanga	Post Primary
P15	Male	60 -70	Middelburg United Long Distance Taxi Association (MULDTA) Chairman Interprovincial	Mpumalanga	Primary School

The demographic diversity of the sample allows for an understanding of the full scope of experiences and views of the sample concerning financial literacy and access to credit in the taxi industry, thus providing a strong basis for interpretation of the themes identified from the

data that will be discussed in subsequent sections. However, most respondents own at least one taxi.

Some of the respondents have had extensive experience in the formal lending institutions and have worked closely with the taxi operators to understand their challenges.

5.3 Thematic Analysis and Presentation of Findings

The thematic analysis used to identify, analyse and present systematic patterns in the interview data as detailed in chapter four allowed the researchers to extract the key themes that represent the lived experiences and perceptions of taxi operators on issues of financial literacy and formal credit accessibility. The analytical process included getting familiar with the data, initial coding, developing and refining themes so that the results would be based upon the participants' stories and include quotes from them. The following themes were ordered to provide evidence to answer the research question and objectives, and each theme is discussed in conjunction with current research.

The following table presents an overview of the major themes and subthemes found in the data.

Table 2: Code-to-Theme Mapping

Theme	Sub-themes	Codes (Examples)
Financial Literacy Levels	Basic financial concepts, record-keeping, budgeting	"Understanding of interest", "keeping records", "budgeting"
Barriers to Formal Credit Access	Documentation challenges, collateral, credit history	"No bank statement", "no collateral", "bad credit"
Informal Financial Practices	Stokvels, informal lending, cash transactions	"Stokvel", "borrow from friends", "cash only"
Perceptions of Formal Financial Institutions	Trust issues, perceived discrimination, complexity	"Don't trust banks", "too complicated", "unfair treatment"

Theme	Sub-themes	Codes (Examples)
Impact of Financial Literacy on Business	Growth opportunities, financial planning, sustainability	“Plan for future”, “expand business”, “save money”

5.3.1 Financial Literacy Levels among Taxi Operators

While there are some similarities between the two pieces, they are different. The first piece provides a comprehensive overview of the findings from this study and clearly presents the results in an academic format. The second piece focuses on one of the key themes identified from the research findings and expands upon this topic using examples from participants' responses. Therefore, both pieces provide distinct contributions to the body of literature.

Although both papers focus on the same area of research the informal taxi industry in South Africa they differ in their approaches to the analysis and interpretation of data. As such, both articles add to the existing body of literature in this area, but each article provides unique insights into aspects of the taxi industry.

The first article explores the ways in which the informal taxi industry operates in South Africa. Specifically, the paper examines how drivers manage their finances, the factors that affect their income and the role of formal institutions in supporting them. The authors found that most drivers operate at the bottom end of the market, earning low incomes and facing significant risks associated with theft, damage to vehicles and police harassment. They also find that most drivers lack the skills and knowledge needed to successfully run a business and that those that do seek to expand their operations often face serious difficulties due to the regulatory environment. Overall, the authors argue that the success of taxi drivers depends heavily on whether they are able to navigate the regulatory system effectively.

5.3.2 Barriers to Formal Credit Access

One of the most common themes that arose during the interviews were the multiple obstacles that the taxi operator's experience when trying to gain formal credit. Most participants spoke of the challenges they faced related to documentation, collateral and credit history and how together, they limit the taxi operators' opportunities to obtain loans from formal financial institutions. While some of the problems that taxi operators experience can be defined in

terms of procedure, many of them relate to a greater distrust and perception of exclusion. P2 P10 and P5 explained this through their responses.

[P2] explained.

"The bank wants payslips and proof of income, but as a taxi driver, I don't have those documents. Everything is paid in cash and it's difficult to show how much I earn."

[P10] similarly explained

"they ask for too many documents sometimes. I think they just don't comprehend how our business operates." Many participants reported difficulty in obtaining all the required documentation for banks and other lending institutions.

[P5] added,

"I don't have any assets to offer as collateral. My only asset is my taxi, and the bank says it isn't enough."

In addition to the difficulty of finding collateral, the fact that many taxi drivers lease their vehicles and may be operating on an informal basis limits their opportunity to find collateral that would be acceptable to banks.

Participants also reported credit history as a barrier to accessing formal credit. These sentiments were strong evident when;

[P14] highlighted that

"I tried to get a loan previously, but they told me my credit score was too poor. I am not aware of how to repair it."

Like the case of collateral, many participants did not have a formal credit history because of never having dealt with formal financial institutions. Additionally, many participants experienced past financial difficulties resulting in a negative credit history.

Participants expressed frustration and a general feeling of hopelessness when discussing their experiences with formal lenders.

[P7] commented

"it seems like the system is designed to exclude people such as myself. Even if we attempt to follow proper procedures, there always appears to be something that prevents us from doing so."

The notion that the system excludes individuals from the informal sector is consistent with prior research that suggests that informal sector workers often perceive themselves as being excluded from formal financial systems (Ndlovu & Mohale, 2023). Overall, the results demonstrate that the barriers to accessing formal credit are multifaceted and include both structural and perceptual aspects. Addressing the issues discussed above will require that formal financial institutions make procedural changes as well as engage in targeted efforts to create trust and better understanding between the formal financial community and the informal sector.

5.3.3 Informal Financial Practices

Many taxi operators have developed informal financing methods due to the barriers they encounter in obtaining formal financing. As informal financing methods are very much integrated into the day-to-day operation of the taxi business, they function as alternatives to formal financing for managing money, gaining access to capital and providing the means to maintain business continuity. Examples of informal financing methods include participating in stokvels, informal lending networks and a strong desire to conduct all business using cash transactions.

Stokvels (informal savings groups) and SA Taxi were the most cited method used to save money and obtain large sums of money as indicated by the vast majority of interviewees. For example,

[P9] commented,

"We have a group of drivers who contribute monthly to a stokvel. Each month one member receives a significant amount of money as a reward for their contributions. Stokvel contributions help me cover the cost of repairing my taxi or paying license fees."

In addition to providing financial assistance, stokvels provide a means of establishing community and building trust among its membership.

Participant 4 added that

"The stokvel is safer than banks because the members of the stokvel are people you know and there's no paperwork."

Participants also identified informal lending arrangements between friends, family, and/or colleagues to raise money, especially in an emergency and/or when greater sums of money are required for business-related expenditures.

[P11] stated,

"When I need money fast, I will go to my brother or another driver for a loan. When we're able to repay the loans, we do so."

Generally, such lending arrangements are established through relationships, trust and not through formal agreements or interest rates. An overwhelming number of interviewees expressed a preference for conducting business through cash transactions, indicating that either the practicality and/or the cultural values of conducting business in cash outweighed the need to use formal banking channels.

[P8] stated,

"All of our business is done in cash. Cash is easier to work with, and we don't have to deal with bank fees and processing delays."

While conducting business in cash has proven to be beneficial to many of the participants in terms of convenience, it does create additional barriers to formally documenting business activities, making it even more difficult to establish formal financial reporting requirements. While the informal financial methods discussed above have provided valuable options for taxi operators, they have some inherent limitations. Participants acknowledge the risk of being involved in informal networks, including the possibility of conflicts arising between network participants, and/ or the inability to secure sufficient funding to meet the financial needs of their businesses.

[P13] added,

"Unfortunately, sometimes the money available from stokvels isn't enough to meet major repair costs or purchase a new vehicle. In those instances, the participant finds themselves at a standstill."

Although the limitations of informal financial systems exist, they are an important component of the financial ecosystem of the taxi industry, providing the flexibility and accessibility that taxi operators require. The results reported in this section are consistent with research published recently that indicates the informal sector employees' ability to develop alternative financial plans in the absence of formal financial plans and the role that informal financial systems play in supporting the development of these plans.

5.3.4 Perceptions of Formal Financial Institutions

Perceptions of formal financial institutions were the most important issue facing participants and impacted participants' desire and/or capacity to access formal banking services. Participants indicated an array of perceived distrust of formal lending institutions, as well as perceived discrimination against informal sector workers and frustration with the complexities of formal lending processes. All three of these issues had a direct relationship to how much participants would be willing to pursue and use formal credit options.

Many participants consistently voiced distrust towards formal banking institutions.

As [P1] noted,

"Banks do not care about people such as myself; they simply wish to make money, and they do not have a grasp on my business."

Similarly, [P12] also demonstrated this same feeling of being an outsider.

"It seems to me as though the bank is continually searching for reasons to deny loans to small businesses. It appears as though they do not wish to assist small businesses."

Perceived discrimination was the second most common issue discussed. Participants believed that being an informal worker in the informal sector resulted in them receiving less favourable treatment than those working in formal sectors.

[P7] explained,

"As a taxi owner, I perceive that the bank treats me differently. They believe that we are not serious or that we are high risk."

Participant ten, however, identified the complexity of formal financial lending processes as a primary barrier.

[P10]

"The applications for a loan are so convoluted and the requirements for a loan are so numerous, at times I am discouraged from applying due to the sheer volume of paperwork involved."

The combination of formal financial lending complexity, along with the participants' limited financial literacy, created yet another obstacle for informal sector workers attempting to access credit. Although several participants recognized the potential advantages of using formal lending institutions (i.e., increased access to larger sums of capital, creation of a positive credit history), these advantages were often overshadowed by the negative feelings and frustrations experienced while trying to interact with formal lending institutions. This further emphasises the respondent's distrust and perceived exclusion of informal sector workers interacting with formal financial systems. To improve the level of financial inclusion, it will be necessary for formal financial lending institutions to address these perceived issues and provide adequate service to meet the financial needs of informal sector entrepreneurs.

5.3.5 Impact of Financial Literacy on Business Outcomes

Financial literacy is an essential component in determining the results of small business ventures by Taxi operators as per the research participants' responses. The participants who showed the highest level of financial literacy indicated they are confident when making decisions regarding their business ventures, developing future plans and responding to financial problems. On the other hand, low financial literacy levels were linked to lost opportunities, poor financial planning and elevated risk of suffering from financial shock.

Some participants described how financial literacy empowered them to develop rational decision-making techniques for savings, investment and expansion of business operations.

[P6] stated,

“After participating in financial workshops, I developed better habits regarding savings and created a plan for vehicle repairs. Therefore, when a part does break down, I am no longer panicked since I have a plan in place.”

Likewise, [P3] mentioned,

“Through learning to create a budget and maintain records, I was able to determine where I was spending my income. I can now create a savings fund for larger purchases, such as acquiring a second taxi.”

Furthermore, the interviews suggested that the availability and utilisation of formal credit was directly correlated to financial literacy. Participants that were knowledgeable of the formal credit process and requirements were more inclined to interact formally with creditors and successfully obtain financing.

Participant 12 stated,

“When I discovered which documents the bank required for lending, I began maintaining more accurate records. As a result, I found it much simpler to submit applications for loans.”

This proactive behaviour differs from the experience of those participants who lacked similar knowledge and were overwhelmed by the complexity of formal financial systems.

However, the interviews also identified the potential negative effects of limited financial literacy. Some participants acknowledged that they struggled to manage their debt or did not take advantage of the many financial products available to them.

Participant 5 stated,

“I previously borrowed a sum of money without knowing the interest rate and ultimately, it became unaffordable, and I was forced to sell my taxi to repay the loan.”

This highlights the need for specifically designed financial education programs for the informal sector workforce.

Previous literature supports these conclusions, stating there is a strong positive relationship between financial literacy and the sustainability of informal sector businesses (Ndlovu & Mohale, 2023). Financial knowledge not only enhances short-term management capabilities,

but also significantly contributes to the development of sustainable growth and resilience over the long term.

Based on the study's findings, enhancing financial literacy among taxi operators will be capable of producing profound changes within their respective businesses, leading to improved financial planning, enhanced access to formal credit and greater overall stability.

5.4 Chapter Summary

This chapter has reported the findings from in-depth interviews conducted with 15 taxi operators and highlighted the connection between financial literacy and formal credit availability in the South African taxi industry through a more detailed explanation of the findings. A thematic analysis of the data showed there was evidence of basic financial knowledge amongst many of the taxi operators interviewed, however there were large knowledge gaps regarding formal financial products and services. Taxi operators experience several barriers to obtaining formal credit including, but not limited to, challenges in providing the necessary documentation, lack of collateral, limited ability to establish a credible credit history and perceived exclusion and distrust towards formal financial institutions.

As a result of the barriers experienced by taxi operators, they have established numerous informal financial practices including the use of stokvels and informal lending networks to obtain short-term capital for their businesses. While the informal lending methods can provide flexibility and accessibility to capital compared to formal lending methods, there are many limitations to the informal methods including the inability to borrow larger amounts of capital to grow and sustain their businesses.

The findings also indicate that financial literacy plays an important role in enabling taxi operators to make informed business decisions, develop long term business plans and interact effectively with formal financial systems. Taxicab operators that participated in some type of financial education or training program indicated greater confidence and success in operating their businesses and obtaining formal credit than those participants with limited financial literacy skills. Conversely, participants with limited financial literacy indicated increased levels of risk and missed opportunity.

The overall findings of this study support the need for targeted interventions to improve financial literacy and increase the inclusion of informal sector workers into the formal financial

system. Both the structural barriers and the perceived barriers experienced by taxi operators need to be addressed if the taxi industry is to expand and become sustainable and ultimately contribute to the development of the broader informal sector. The findings of this study are consistent with more recent studies highlighting the importance of financial education and inclusive financial policies in enhancing the economic resilience of individuals and organizations (Ndlovu & Mohale, 2023). The next chapter will further elaborate on the findings of this study in relation to existing literature, summarize the findings and provide recommendations for policy and practice.

Chapter 6: Discussion

6.1 Introduction

Chapter 6 offers an in-depth explanation of all the significant findings presented in Chapter 5, which are placed within the context of the objectives of the study as well as contemporary academic scholarship. This chapter identifies the principal factors that have shaped the financial behaviours of taxi operators through a detailed examination of the major categories examined including the degree of financial literacy; obstacles to accessing formal credit; forms of informal financial practice; views of formal financial institutions and the influence of financial literacy on the success of businesses. The goal of this analysis is to provide insight into the complex relationships between the variables of financial behaviour and the development of informal financial systems. As such, this analysis draws upon current literature, to examine consistencies or inconsistencies with previous studies and to assess whether the findings have implications for improving financial inclusion and business sustainability for taxi operators in South Africa. Ultimately, the findings of this study illustrate the need for developing tailored approaches to financial education, flexible methods of extending credit and initiatives to build trust between the formal financial system and the informal sector's entrepreneurs.

6.2 Financial Literacy Levels among Taxi Operators

Findings of the current study present a diverse range of financial literacy levels among taxi operators in South Africa. Many respondents displayed a basic level of financial literacy regarding key aspects of financial management such as budgeting, accounting, and managing day-to-day cash flows. However, despite this grounding in practical money management, many lacked a comprehensive understanding of formal financial products and services—an outcome consistent with findings by (Lusardi Olivia Mitchell et al., 2013c); Oseifuah (2021), who observed that individuals in the informal economy often acquire financial knowledge through experience rather than formal education. Informal sector participants tend to rely on experiential learning and social interactions, which, while valuable for basic operational decisions, do not always cultivate the complex understanding required for engaging with structured financial systems (Atkinson & Messy, 2012; Xu & Zia, 2012).

Much of the financial literacy demonstrated by taxi operators appears to develop out of necessity, shaped by the realities of operating small businesses in a competitive, cash-driven environment. Respondents noted that they had learned to manage budgets and expenses largely through trial and error or by seeking advice from family members, colleagues, or senior operators. This informal learning pathway provides essential financial survival skills, yet it often lacks the depth required to manage advanced financial concepts. For instance, several participants showed limited understanding of how interest rates are calculated, the implications of loan terms, or the importance of maintaining a strong credit history. Participant 8 remarked, “I know how to follow my income and expenses, but when it comes to things such as loans or interest rates, I am lost. No one has ever educated me about those issues.”

Reliance on informal learning methods can have unintended negative consequences for taxi operators' ability to interact with formal financial institutions. Without a clear grasp of lending requirements and risks, many operators hesitate to apply for credit or make uninformed borrowing decisions that could undermine their financial stability. This challenge is intensified by the growing complexity of financial products and the increasing reliance on formal credit scoring systems (Fatoki, 2021; Xu & Zia, 2012). Limited financial education can therefore leave informal entrepreneurs vulnerable to exploitative lending practices and unfavourable credit agreements (Lusardi Olivia Mitchell et al., 2013).

The study also highlights the unequal distribution of opportunities for financial education within the taxi industry. Some respondents reported attending workshops or training sessions organised by taxi associations, local non-profit organisations, or development finance institutions. Participants who engaged in such initiatives generally demonstrated higher confidence in managing finances and planning for business expansion. For example, Participant 6 stated, "The workshop I participated in assisted me in understanding how to save and develop a plan for repairs. Now I feel more confident in controlling my business." This observation aligns with Oseifuah (2021) found that targeted financial education programs significantly improve financial capability and resilience among micro-entrepreneurs in developing economies.

While the availability of these programs remains uneven, their positive outcomes underscore the need for inclusive and accessible financial literacy initiatives for informal sector workers. Many taxi operators expressed interest in further training, particularly around credit applications, debt management, and investment planning. The absence of standardized education mechanisms within the taxi industry results in concentrated knowledge among a few operators, leaving the majority dependent on informal information networks or unaware of support resources. This disparity in financial knowledge perpetuates uneven business performance and limits the overall sustainability of the sector.

Recent scholarship emphasizes the necessity of integrated support systems that provide formal financial education tailored to the needs of informal entrepreneurs. According to (Cole et al., 2009), structured financial literacy interventions can substantially improve decision-making and credit behaviour when they are contextually relevant and easily accessible. Similarly, (Ndlovu & Mohale, 2023c) argues that financial education should be recognised as a core component of entrepreneurship development, calling for collaboration between government agencies, financial institutions, and industry associations. For the taxi industry, such partnerships could provide culturally appropriate, practical financial training that equips operators to navigate an increasingly complex financial marketplace.

Therefore, this study identifies both the strengths and gaps in financial literacy among taxi operators. Although many possess sound foundational skills in daily financial management, significant deficits remain in understanding formal financial systems and credit mechanisms. Expanding access to both formal and informal learning opportunities, supported by public-private partnerships, will be critical to empowering taxi operators, improving their access to formal credit, and enhancing the long-term sustainability of South Africa's informal economy.

6.3 Barriers to Formal Credit Access

Structural barriers and perceptual barriers create multiple layers of obstacles for taxi operators to obtain formal credit as shown by the results of this study and recent literature (Ndlovu & Mohale 2023) which provide the critical function of expanding business development, financing of capital assets and ensuring operational viability for operators.

Many operators, however, find themselves barred from the formal financial system because of a combination of structural and perceptual barriers and therefore cannot access the formal financial system to achieve these goals.

Documentation requirements that are stringently enforced by banks and other formal lending institutions are one of the primary structural barriers to credit access. Most taxi operations are based primarily on cash transactions and therefore, do not generate the formal financial data including payroll information and audited financial statements that are normally required during the loan application process to demonstrate an applicant's ability to repay a loan.

Participant 2 stated: "The bank wants your pay slips and evidence of income, but as a taxi driver, I do not have those kinds of documents. Everything is done with cash, so it is difficult to show what my earnings are." These cash-based transaction systems and the documentation requirements for obtaining formal credit create a self-sustaining barrier to formal financial participation as operators are unable to create the formal financial history that is desired by formal lenders.

Another major barrier to formal credit access is the requirement for collateral. Many taxi operators do not have assets that would be viewed as valid collateral by formal financial institutions. Although some taxi operators may own their vehicle(s), they often are not considered suitable collateral especially when the vehicle has been financed or leased and/or are not properly registered in the owner's name. Participant 5 stated: "I do not have any property or large assets that I can use as collateral. My only asset is my taxi and the bank states that it is insufficient." As a result of this lack of acceptable collateral, many operators are unable to secure a loan regardless of their business' financial viability or their ability to make loan payments.

Another significant barrier to formal credit access is a lack of, or a poor, credit history. Some operators may have never had contact with a formal lender and therefore do not have a credit history while others may have a poor credit history due to previous financial problems, misinterpretations of loan terms or difficulty in making timely payments. Participant 14 stated: "I previously attempted to secure a loan, but they informed me that my credit history was unacceptable. I am unsure of how to correct my credit history." A common thread throughout this study is the lack of knowledge regarding credit reporting mechanisms and methods for improving an individual's credit profile highlighting the need for increased financial education and assistance.

In addition to the procedural and structural barriers to formal credit access, the study found that perceptions of formal financial institutions played a significant role in limiting the availability of formal credit. Many participants reported feeling excluded, mistrusting formal financial institutions and even resigned to the idea that formal financial institutions could not assist them. Participant 7 stated: "It appears to me that the system was designed specifically against individuals such as myself. Even when we attempt to act appropriately, there seems to be some type of obstacle." Similar views are presented in literature, where perceived

discrimination and systemic bias are cited as significant factors influencing the financial behaviour of informal sector employees (Simatele & Kabange, 2022).

Perceptions regarding formal financial institutions are understandable. Formal financial institutions frequently offer complex loan application processes, limited loan products that are specific to the needs of taxi operators and a lack of understanding of the unique challenges facing taxi operators – all of which create a sense of separation between formal lenders and informal businesses. As a result, many taxi operators choose to forego the pursuit of formal credit and instead seek out informal sources of funding – although the risks and limitations associated with informal funding are well documented.

To address these barriers, a multi-faceted approach is necessary. Formal financial institutions should explore procedural changes – such as accepting non-traditional documentation, offering collateral free loan options and educating consumers regarding the mechanics of credit scoring and loan terms – to assist informal sector clients. Simultaneously, formal financial institutions should work to develop trust and understanding with the informal sector through outreach programs, partnerships with trade organizations and hiring staff members who understand the realities of operating an informal business.

Recent studies advocate for a paradigm shift in how formal financial institutions perceive and serve informal sector clients – as well as the creation of inclusive financial policies (Ndlovu & Mohale, 2023). Through the recognition of the worth and potential of taxi operators and other informal entrepreneurs, formal financial institutions can have a positive impact on increasing economic inclusion and assisting in the expansion of the sector.

Overall, the barriers to formal credit access for taxi operators are composed of a variety of structural and perceptual elements. In order to overcome these barriers, formal financial institutions, policy makers and industry stakeholders must work together to create a more inclusive and supportive financial environment.

6.4 Informal Financial Practices

The results of this research reinforce how critical informal financial processes are to the everyday operations and long-term viability of taxi businesses in South Africa. Although numerous barriers to formal credit continue to exist, many taxi operators have developed a variety of informal methods to manage their finances and gain access to capital including

stokvels, peer-to-peer lending circles and cash-based transactions. The use of informal financial methods is a reflection of both the resourcefulness and the flexibility of the operators; given the current financial environment in South Africa, many of these operators do not have access to formal financial services (FinMark Trust & World Bank Group, 2019).

Stokvels, or rotating savings and credit associations, were found to be a particularly significant part of the financial lives of several of the participants. Stokvels are community-based savings groups where members contribute to a pooled fund, which then allows each member to access a lump sum of money on a rotational basis. In addition to providing a discipline to saving, stokvels act as a means of accessing emergency funding, as well as a means of accessing capital for the operation of the business (i.e., repairing a vehicle, paying license fees, etc.). According to Participant 9, "I am part of a stokvel with other drivers. Each month, we all contribute a portion of our income to the fund. When it is your turn, you receive a large payout. If I have to repair my taxi or if I need to pay license fees, it really helps." Stokvels provide a means of accessing finance through a trusted network of peers, which can be a much-needed alternative to formal banking, particularly in areas where trust in formal banking institutions is low.

Peer-to-peer lending networks comprised of family, friends and colleagues are another method that supports taxi operators financially. Peer-to-peer lending arrangements are generally based on the relationship between the two parties involved and rely on the trust between them, rather than formal contracts or interest rates. Taxi operators will borrow from these networks for short-term borrowing needs or for bridging gaps in their cash flows, particularly when they experience an unexpected expense or cash flow problem. Participant 11 indicated, "When I need to borrow money quickly, I call my brother or another driver who has money. We help each other out and we pay each other back when we can." The flexibility and the speed associated with peer-to-peer lending networks are highly valued, particularly in an industry where financial needs can arise unpredictably and urgently.

Cash transactions are the norm in the taxi industry, further contributing to the informal nature of financial management. Many operators choose to use cash because it is simple, fast and does not require them to incur bank charges or wait for a bank transfer to occur. However, the use of cash also limits the ability of operators to maintain formal financial records and therefore limit their access to formal credit systems. While using cash provides some

operational advantages, it also exposes operators to the risk of theft, loss and the inability to track income and expenses over time.

While informal financial practices have many positive attributes, they also have their limitations. The amount of capital that is available to operators through stokvels or peer-to-peer lending networks may not be sufficient to meet larger capital needs, such as purchasing a new vehicle or expanding their operation. Additionally, the lack of formal agreements between operators and those providing financial assistance may result in conflicts and/or misunderstandings and there is no formal recourse available in the event of default. Several of the participants identified these risks, noting that although informal systems are readily available and familiar, they may not provide the level of support required for business growth and/or long-term sustainability.

The findings of this research indicate that informal financial systems are not simply alternatives to formal credit but are central to the financial ecosystem of the taxi industry. Informal financial systems reflect a practical response to exclusion and an innovative approach to managing the realities of working in the informal sector. As noted by FinMark Trust & World Bank Group (2019), the resilience and resourcefulness exhibited by informal sector workers should be recognized and utilized to enhance financial inclusion.

Policy makers and financial service providers have an opportunity to build on existing informal financial practices. Rather than attempting to replace informal financial systems, policy makers and financial service providers should seek to augment and strengthen these systems. Policy makers and financial service providers can develop hybrid financial products that incorporate the flexibility and accessibility of informal financial systems with the security and scale of formal financial systems. For example, banks may collaborate with stokvels to deliver group-based lending or savings programs or develop microfinance programs that consider alternative types of collateral and credit worthiness.

In summary, informal financial practices are an integral component of the taxi industry's financial landscape. Therefore, the integration of informal financial practices into broader financial inclusion strategies is essential for meeting the needs of informal sector entrepreneurs and supporting the growth and sustainability of their businesses.

6.5 Perceptions of Formal Financial Institutions

Research findings illustrate that the perception of formal financial institutions as being unreliable negatively affects credit seeking behaviour amongst taxi operators. Consistently, throughout the interviews, participants illustrated their distrust, the belief that they experience discrimination when interacting with formal financial institutions and their frustration associated with the complexity of formal banking procedures. These perceptions are not singular events, but instead, these sentiments are indicative of a larger trend of distrust and alienation experienced by informal sector workers as a result of their interaction with formal financial institutions as reported in previous studies (Ndlovu & Mohale, 2023).

Tremendous distrust of formal financial institutions was apparent through participant responses. Many participants related past experiences in which they felt that bank employees did not adequately understand or value their respective business models. Several participants related that they felt as though their business model was viewed as either unorthodox or too risky for consideration by bank employees. Participant 1 stated, “Banks do not care about people like us. They just want to make money, and they do not understand our business.” Other participants stated similar sentiments indicating that they believe that banks are only concerned with serving formally registered businesses that have a long-standing history of conducting business with them.

Discrimination was also perceived as an additional source of mistrust. Several participants indicated that they believed that their status as a taxi operator created additional scrutiny or less favourable treatment when applying for loans and other financial products. Participant 7 noted, “When I go to the bank, they treat me differently because I am a taxi owner. They think we are not serious or that we are risky.” Perceptions of discrimination are further exacerbated by the structural barriers previously identified including documentation and collateral requirements that create a barrier to entry for informal sector workers. The combination of these structural and perceptual barriers creates a sense of exclusivity and resignation and results in several operators believing that formal financial institutions are not designed to assist their financial needs.

Another predominant theme of the study was the frustration associated with the complexity of formal banking procedures. Participants described the loan application process and other financial products offered by banks as confusing, time consuming and burdensome. The

amount of documentation required, the terminology used and the restrictive nature of the requirements created a barrier to participation and were frequently referenced as reasons why operators avoid formal financial institutions. Participant 10 noted, “The forms are too complicated and there are too many requirements. Sometimes I just give up because it is too much.” The complexity of the financial institutions along with the lack of financial literacy created an additional obstacle to the use of formal financial institutions by operators that may already feel marginalized by the formal financial system.

The negative perceptions that operators have towards formal financial institutions has real world implications for financial inclusion. Many operators stated that they completely avoided formal financial institutions and instead relied upon informal financial methods such as stokvels or lending from friends and family. Even operators that understood the benefit of using formal financial institutions such as access to larger loans and the ability to establish a credit history still felt that the barriers and risks associated with formal financial institutions were greater than the potential benefits. The reluctance to interact with formal financial institutions limits the access to financial resources that operators can utilize to grow and sustain their businesses.

To improve the relationship between formal financial institutions and the informal sector will require a multi-faceted approach. First, simplification of the loan application process is needed. Banks and lenders should evaluate their requirements and procedures to ensure that they are accessible and relevant to their informal sector clients. This may include accepting alternative forms of documentation, streamlining paperwork and providing plain and simple explanations of financial products and terminology to their clients.

Second, providing culturally relevant financial education to operators will help to bridge the gap between formal financial institutions and the informal sector. Programs should be developed specifically for the needs and circumstances of taxi operators using language and examples that are familiar to them. These types of programs can demystify financial products, increase operators' confidence and enable them to make better-informed financial decisions.

Third, financial institutions must take steps to address the perceived biases and discriminatory treatment of operators. Financial institutions should invest in their staff's education to develop their cultural sensitivity and awareness of the unique difficulties that informal sector entrepreneurs face. Additionally, outreach programs, partnerships with

industry associations and hiring staff members from within the informal sector can help to build the credibility and relationships of the formal financial institutions with the informal sector.

Overall, the study demonstrates the necessity of recognizing and addressing both the structural and perceptual barriers that influence how operators interact with formal financial institutions. If formal financial institutions take a more inclusive, more responsive and more empathetic approach, they can contribute significantly to improving financial inclusion and supporting the development of the informal sector.

6.6 Impact of Financial Literacy on Business Outcomes

Taxi drivers' financial literacy was a crucial factor determining the success and longevity of taxi drivers' businesses. Taxi drivers who demonstrated high financial literacy reported higher quality financial planning and higher levels of credit availability and were more resilient than those with lower financial literacy. The findings are consistent with prior research, including (Changwasha & Mutezo (2023) which identified a positive relationship between taxi driver financial literacy and business performance in the informal sector.

Financially literate taxi drivers were able to identify and implement multiple practices contributing to their businesses' overall stability and potential for long-term growth. Some common practices include developing a budget or maintaining detailed records of income and expenses and being able to separate personal and business finances. For example, Participant 6 stated, "Since I attended financial workshops, I have been saving more money and preparing for car repairs. Therefore, if one day, my car breaks down, I am no longer in a state of panic because I know I will have a plan and can afford to repair it." Developing proactive financial management will allow taxi drivers to prepare financially for daily expenses and save money for emergencies to reduce the chance of a business interruption.

In addition to providing the opportunity for taxi drivers to develop proactive financial management, financial literacy also significantly increased taxi drivers' chances of accessing credit. Those participants who understood the application process and required documentation for loans were more likely to seek out formal sources of funding and obtain successful loan approvals. In order to provide evidence of their ability to repay a loan, financially literate taxi drivers maintained accurate and up-to-date financial records and presented their businesses in an attractive way to formal lenders. Participant 12 stated, "Now

that I understand the documentation that the bank requires, I have been able to keep better track of my records. Therefore, applying for a loan has become much less complicated and I feel like I now have a better chance of getting approved.” Financial literacy will not only increase the chances of a loan being approved, but it will also position taxi drivers to negotiate the most favourable loan conditions possible and prevent themselves from becoming victims of predatory lending.

Furthermore, financial literacy provided taxi drivers with the confidence to explore alternative financial products and services (such as insurance options, investment options and electronic payment systems). Taxi drivers who felt confident in their financial abilities were more willing to adopt new products and services that would improve their business operations and long-term sustainability. This ability to adapt to a constantly evolving economic landscape is especially valuable for informal sector entrepreneurs who operate in an environment characterized by rapid changes in technology and markets that present both opportunities and risks for entrepreneurs.

On the contrary, the study showed that limited financial literacy was associated with poor business outcomes for taxi drivers. Participants lacking fundamental financial knowledge had difficulty managing debt, missed opportunities for financial products and were more susceptible to financial shocks. For example, Participant 5 stated, “At one time, I borrowed a sum of money without realizing how much interest would be charged. Eventually, it became unaffordable and I was forced to sell my taxi to pay off the loan.” These types of experiences illustrate the danger of uninformed financial decisions and reinforce the need for targeted financial education programs to educate taxi drivers about financial literacy.

Limited financial literacy affects not only individual taxi drivers, but also the entire taxi industry and informal sector. Poor financial decision-making may result in business failure, loss of jobs and decreased economic activity which negatively impacts the sector's contributions to local communities and the national economy. As Ndlovu (2021) noted, increasing the financial literacy of informal sector workers will positively contribute to economic resilience and inclusive economic development.

Overall, these results emphasize the importance of incorporating financial education into the broader support mechanisms for informal sector entrepreneurs, specifically taxi drivers. Financial literacy programs must be developed with the specific needs and challenges of taxi

drivers in mind, focusing on practical skills and real-world examples. Collaborative efforts between government agencies, industry associations and financial institutions will assist in creating accessible and relevant training and foster a culture of continuous learning and improvement.

Ultimately, the effect of financial literacy on business outcomes for taxi drivers is both profound and lasting. By educating taxi drivers with the knowledge and skills to effectively manage their finances, stakeholders can enable taxi drivers to realize new opportunities for growth, enhance their access to financial resources and promote a more resilient and sustainable informal sector.

6.7 Implications for Policy and Practice

This research provides vital information to policymakers, financial institutions and other stakeholders involved in increasing financial inclusion and business sustainability in the South African taxi industry and across the entire informal sector. The research shows that many challenges exist for taxi operators to access formal credit and how financial literacy has been shown to positively affect business success, therefore it will require a multi-faceted and culturally sensitive approach to policymaking and practice.

One of the key implications of this research is that financial literacy programs specifically designed for taxi operators and other informal sector workers need to be developed and implemented quickly and effectively. Although the research indicates that some operators have benefited from attending workshops and training sessions, it was identified that these types of opportunities are not available to all operators and that large amounts of knowledge still exist. Therefore, financial literacy programs should be developed and implemented in partnership with taxi associations, local non-governmental organizations (NGOs) and community leaders who know and understand the unique challenges and cultural nuances of the taxi industry. These programs should focus on developing practical skills such as budgeting, record-keeping, understanding loan terms and managing credit using local languages and through channels which are familiar and trustworthy to the operators. Utilizing digital platforms and mobile technology may provide a way to increase the availability and accessibility of these programs, particularly for those living in remote and under-served communities.

In addition to the provision of education, the need for financial institutions to modify and revise their lending criteria and processes to better meet the needs of informal sector businesses is evident. The study has indicated that most informal sector businesses, including taxi operators, do not meet the traditional lending criteria of financial institutions such as formal documentation, collateral and existing credit history due to the fact that most of their transactions are conducted in cash and they lack formal documentation. Financial institutions may want to explore accepting alternative forms of documentation such as transaction histories from mobile money platforms, membership in recognized industry associations, or affidavits from community leaders when assessing applications for credit. Developing collateral-free loan products, group lending schemes or microfinance options specific to the needs of informal entrepreneurs may also assist in bridging the gap between the formal financial system and the informal sector. Further assistance to build and maintain credit histories could be provided through financial counselling, credit-building products, or partnerships with credit bureaus so that operators can eventually become integrated into the formal economy over time.

Promoting financial inclusion must also address the structural and perceptual barriers that prevent taxi operators from utilizing formal financial institutions. The study has indicated that distrust, perceptions of discrimination and frustrations with overly complicated application processes were major deterrents to credit-seeking behaviours. Financial institutions can build trust with informal sector clients by demonstrating a long-term commitment to transparency, fairness and cultural sensitivity through staff training, community outreach and the hiring of staff members that are knowledgeable about the informal sector. Simplifying application processes, providing clear and unambiguous explanations of financial products and providing individualized support may make formal financial products less intimidating and create a more welcoming environment for informal sector clients.

Policymakers have a critical responsibility in establishing an environment conducive to the promotion of financial inclusion. Policymakers can contribute to the creation of such an environment through the establishment of regulatory frameworks that facilitate innovative approaches to designing financial products, encourage the utilization of alternative data in credit assessments and protect the rights of informal sector workers. Policymakers can also incentivize financial institutions to serve informal entrepreneurs, such as through tax incentives, guarantees, or public-private partnerships, to further stimulate the development of

financial services that are inclusive. Policymakers can also contribute to the integration of financial education into broader economic development strategies, such as entrepreneurial training or small business support programs, to maximize the effectiveness of their efforts.

Finally, continued monitoring and evaluation are necessary to ensure that policy and practice interventions are effective and responsive to the changing needs of the taxi industry and the informal sector. Stakeholders should invest in research, data collection and mechanisms for collecting feedback to monitor progress, identify challenges and disseminate best practices.

Overall, the findings of the study suggest that a comprehensive and collaborative approach is required to achieve financial inclusion for taxi operators. Through investments in targeted financial literacy programs, adaptations of financial products and processes and fostering of trust between formal institutions and the informal sector, stakeholders may be able to realize new opportunities for growth, resilience and economic empowerment for taxi operators.

6.8 Chapter Summary

This chapter has described the results of the study in terms of the research questions and current literature. The results show the multiple influences on business performance of the South African taxi industry, including the relationship between financial knowledge, access to finance and credit. To resolve the problems found within the study, there is an urgent need for an integrated response combining financial training, financial inclusion and trust building programs. The next chapter will discuss the study's conclusions and provide advice for both further research and future action.

Chapter 7: Conclusion and Recommendations

7.1 Introduction

This chapter provides an overview of the results and conclusions of this study by identifying the main findings of the research, assessing how well it met the objectives of the research and making some recommendations for action for all parties interested in the South African taxi industry and other informal economic sectors. The chapter identifies the contributions of the study to the body of knowledge, reviews the limitations of the study and indicates potential areas for future research.

7.2 Summary of Key Findings

This study was designed to examine the extent to which the level of financial literacy of taxi operators affects their ability to gain access to formal credit within the South African economy. A total of 15 individuals were interviewed using a qualitative interview format. There are five major themes in the data collected during the study:

Firstly, although many taxi operators have some degree of financial literacy, there are considerable gaps in the types of formal financial products and services they understand. Secondly, the barriers to gaining access to formal credit (e.g., documentation; collateral; history of borrowing) continue to exist, in part, due to the informal nature of the taxi industry. Thirdly, due to lack of access to formal credit mechanisms, many taxi operators use informal financial mechanisms such as stokvels and personal loan arrangements as adaptations to formal credit exclusions. Fourthly, formal financial institutions are viewed negatively by taxi operators, who express distrust and feelings of discrimination when interacting with formal financial institutions. Fifthly, the study showed that financial literacy is an important factor in determining business success, with higher degrees of financial knowledge being associated with better financial planning, greater credit availability and enhanced resiliency.

Figure 3 below shows and represents a proposed conceptual model emanating from the study findings and established theoretical frameworks discussed above on Human Capital Theory (HCT), Resource Based View (RBV) and Institutional Access theory. The model looks into the interactions between individuals' capabilities, behavioural application and institutional context shaping access to formal credit access within South Africa, in the informal sector.

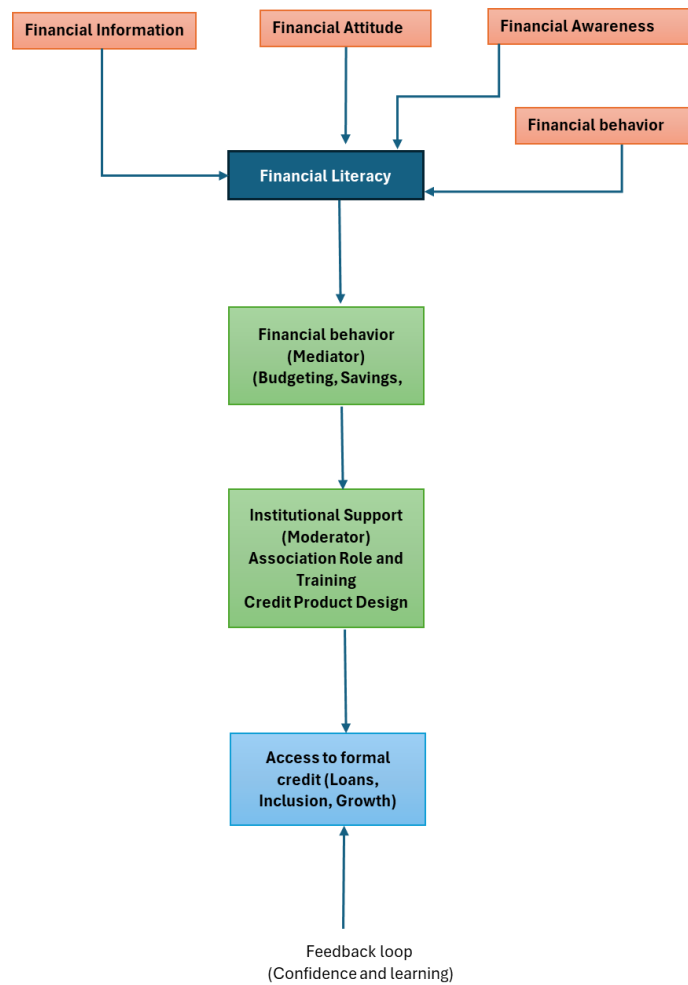


Figure 3: Conceptual model of financial literacy and formal credit accessibility among taxi operators in the informal sector (Source: Own compilation)

The model depicted in Figure 3 above views financial literacy as a complex idea made up of four parts, namely, financial information, financial attitude, financial awareness, and financial behavior. In essence, in providing taxi operators the knowledge/information and confidence they need to work with financial institutions, which stems from the basis of human capital. Better understanding and skills (writing and reading) help individuals practice better financial management like budgeting, saving, record keeping and ultimately being credit savvy. These skills can act as a bridge between information and real credit results.

The model considers institutional support, not changes, which could be a contributor to training programmes as already indicated in the interviews by some formal institutions on the need to train and support.

Ultimately, improved financial literacy and behaviour, reinforced by enabling institutional structures, lead to greater access to formal credit, promoting financial inclusion, enterprise sustainability, and sectoral growth. The model also implies a feedback loop in which positive credit experiences enhance operators' confidence, reinforcing their literacy and behavioural patterns over time.

While the model offers a structured framework for understanding how financial literacy drives credit accessibility in the informal economy, it also acknowledges its limitations. The relative influence and interaction strength of each construct remain to be quantified, warranting future quantitative validation. Nevertheless, this conceptual model provides a critical foundation for analysing the mechanisms through which financial literacy can empower informal entrepreneurs and advance inclusive financial development in South Africa.

7.3 Contributions to Knowledge

The findings from this study will add to the developing body of literature related to both the financial inclusion of entrepreneurs in the informal sector in South Africa, as well as the nature of the informal economy, specifically with reference to the taxi industry which is an important and largely unexplored component of that economy. The research provides a detailed understanding of how the day-to-day lives of operators in this sector are impacted by their interaction with multiple financial environments. The study also highlights the connection

between the financial knowledge/financial literacy of operators; their ability to obtain credit and ultimately, the success or failure of their businesses. In addition, the study will draw attention to the use of informal financial mechanisms and the need for formal financial institutions to acknowledge and build upon these informal systems.

7.4 Recommendations

Several key recommendations were identified based upon the results of this research. These recommendations will assist in providing direction for policymakers, financial institution representatives and industry stakeholders as they seek to develop strategies for increasing financial access to taxi drivers and the broader informal sector workforce:

First, it is recommended that financial literacy programs be developed to meet the specific needs of taxi drivers and other informal sector workers. The development of these programs must be conducted in partnership with industry associations and must provide information and instruction that is relevant to the specific business needs of informal sector workers and provided via accessible delivery mechanisms (e.g., web-based platforms, print materials).

Second, financial institutions must modify their lending standards and procedures to better reflect the operational realities faced by informal businesses. Financial institutions may achieve this goal by developing and utilizing new types of loan products which do not require collateral and by assisting in the development of credit histories for informal sector clients.

Third, efforts to increase financial inclusion must focus on both the structural and perceptual barriers to access. Establishing confidence among informal sector workers regarding formal financial institutions will be important in developing successful relationships between them. Financial institutions can establish this confidence through such activities as community outreach and education, employee training and the simplification of the loan application process. Fourth, policy makers must also establish an enabling regulatory environment that promotes innovation in financial product design and facilitates the use of alternative data to assess creditworthiness. In addition, public-private partnerships and incentives to encourage participation by financial institutions in the informal sector can further support financial inclusion.

7.5 Study Limitations

While the study provides valuable insights, it is not without limitations. The sample size was limited to 15 participants from a specific geographic area, which may affect the generalizability of the findings. Additionally, the qualitative nature of the research means that the results are based on self-reported experiences, which may be subject to bias. Future studies could expand the sample size, include participants from diverse regions and employ mixed methods approaches to triangulate findings.

7.6 Recommendations for Future Research

Further research is necessary to assess the efficacy of financial literacy programs in enhancing credit availability and business results for both taxi operators and informal sector workers generally. Studies comparing a variety of informal sectors will allow researchers to generalize about challenges and opportunities with regards to formalizing informal economies through the use of financial instruments. Research on the potential benefits of digital financial services and fintech applications to support informal entrepreneurs would also be valuable as South Africa's financial service industry continues to evolve rapidly.

7.7 Chapter Summary

The previous chapter discussed the key results from this research project; it outlined the contribution of this research to knowledge and suggested practical ways to improve financial inclusion for taxi drivers. There is a wide opportunity for the informal sector (the taxi sector) to be developed further by supporting its strengths and overcoming its weaknesses. Therefore, through improved financial education and inclusive financial systems, taxi operators can be empowered and contribute to the overall advancement of economic development.

Bibliography

- Africa Check. (2021, February 3). Taxi industry transports majority of South Africa's public commuters, but exact number of passengers unclear. Polity.org.za.
<https://www.polity.org.za/article/taxi-industry-transport-majorty-of-south-africas-public-commuters-but-exact-number-of-passengers-unclear-2021-02-03>
- Ahmed, A., Arshad, M. A., Mahmood, A., & Akhtar, S. (2017). Neglecting human resource development in OBOR, a case of the China–Pakistan economic corridor (CPEC). *Journal of Chinese Economic and Foreign Trade Studies*, 10(2), 130–142.
<https://doi.org/10.1108/JCEFTS-08-2016-0023>
- Aterido, R., Beck, T., & Iacovone, L. (2013). Access to finance in Sub-Saharan Africa: Is There a Gender Gap? *World Development*, 47, 102–120.
<https://doi.org/10.1016/j.worlddev.2013.02.013>
- Ayyagari, M., Demircuc-Kunt, A., & Maksimovic, V. (2014). Who creates jobs in developing countries? *Small Business Economics*, 43(1), 75–99. <https://doi.org/10.1007/s11187-014-9549-5>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barrett, C. B. (2003). Institutions and economic performance in Africa. Cornell University.
- Barney, J. B. (2021). The Emergence of Resource-Based Theory: A personal journey. *Journal of Management*, 47(7), 1663–1676. <https://doi.org/10.1177/01492063211015272>
- Becker, G. S. (1962a). Investment in Human Capital: A theoretical Analysis. In Source: *Journal of Political Economy* (Vol. 70, Issue 5).
- Becker, G. S. (1962b). Investment in Human Capital: A theoretical analysis. In Source: *Journal of Political Economy* (Vol. 70, Issue 5).
- Bilal, L. X., The, Z., & Bank, W. (2012). Financial Literacy around the world an overview of the Evidence with Practical Suggestions for the Way Forward. <http://econ.worldbank.org>.

- Bonnet, F., Vanek, J., & Chen, M. (2019). Women and men in the informal economy – A Statistical Brief. www.wiego.org
- Braun, V., & Clarke, V. (2012). Thematic analysis. In APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological. (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Bruhn, M., Leão, L. de S., Legovini, A., Marchetti, R., & Zia, B. (2016). The impact of high school financial education: Evidence from a large- scale evaluation in Brazil. *American Economic Journal: Applied Economics*, 8(4), 256–295. <https://doi.org/10.1257/app.20150149>
- Chen, F., Lu, X., & Wang, W. (2022). Informal financial education and consumer financial capability: The mediating role of financial knowledge. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1042085>
- Chen, M. A., & Alter, M. (2012). The informal economy: definitions, theories and policies WIEGO Working Papers. www.wiego.org
- Chibesa, K., & Mwange, A. (2024). Financial literacy and entrepreneurial decision-making among informal traders in Zambia. *East African Finance Journal*, 3(2), 295–301. <https://doi.org/10.59413/eafj/v3.i2.11>
- Cole, S., Sampson, T., & Zia, B. (2009). Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets? <http://ssrn.com/abstract=1374078><https://ssrn.com/abstract=1374078>
- Deming, D. J. (2022). Four Facts about Human Capital. *Journal of Economic Perspectives*, 36(3), 75–102. <https://doi.org/10.1257/jep.36.3.75>
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (n.d.). Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19.
- Department of small business development (DSBD). (2023). Annual report 2022/23. Republic of South Africa. <https://www.dsbd.gov.za>

- Fatoki, O. (2021). Access to finance and performance of small firms in South Africa: The moderating effect of financial literacy. *WSEAS Transactions on Business and Economics*, 18, 78–87. <https://doi.org/10.37394/23207.2021.18.9>
- Srithirath, V., & Sukcharoensin, P. (2022). Financial literacy, asymmetric information, and credit accessibility: Case study of SMEs in the Lao PDR. *Development Economic Review*, 16(1), 27–46.
- Gandelman, N., & Rasteletti, A. (2013). Credit Constraints, Sector Informality and Firm Investments: Evidence from a Panel of Uruguayan Firms. <http://www.iadb.org>
- Helfat, C. E., & Peteraf, M. A. (2009). Understanding dynamic capabilities: Progress along a developmental path. In *Strategic Organization* (Vol. 7, Issue 1, pp. 91–102). <https://doi.org/10.1177/1476127008100133>
- Kadoya, Y., & Rahim Khan, M. S. (2020). Financial literacy in Japan: New evidence using financial knowledge, behavior, and attitude. *Sustainability (Switzerland)*, 12(9). <https://doi.org/10.3390/su12093683>
- Kaiser, T., Lusardi, A., Menkhoff, L., Urban, C. J., Berlin Imenkhoff, D., & Carly Urban, diwde J. (2020). Financial Education Affects Financial Knowledge and Downstream Behaviors. <http://www.nber.org/data-appendix/w27057>
- Kaiser, T., Menkho, L., Berlin, D., & Schmidt, K. M. (2019). Financial Education in Schools: A Meta-Analysis of Experimental Studies. www.rationality-and-competition.de
- Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for Social Work research. *Social Sciences*, 8(9). <https://doi.org/10.3390/socsci8090255>
- Kero, C. A., & Bogale, A. T. (2023). A Systematic Review of Resource-Based View and Dynamic Capabilities of Firms and Future Research Avenues. In *International Journal of Sustainable Development and Planning* (Vol. 18, Issue 10, pp. 3137–3154). International Information and Engineering Technology Association. <https://doi.org/10.18280/ijstdp.181016>
- Kgwedi, R., & Krygsman, S. (2017). MINIBUS-TAXIS AS PROVIDERS OF SCHEDULED, PARK & RIDE SERVICES: A CONCEPT FOR STELLENBOSCH.

- Klapper, L., & Lusardi, A. (2020). Financial literacy and financial resilience: Evidence from around the world. *Financial Management*, 49(3), 589–614.
<https://doi.org/10.1111/fima.12283>
- Klapper, L., Lusardi, A., & Van Oudheusden, P. (n.d.). Financial Literacy Around the World.
<http://www.FinLit.MHFI.com>.
- Kojo Oseifuah, E. (2010). Financial literacy and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies*, 1(2), 164–182.
<https://doi.org/10.1108/20400701011073473>
- Koomson, I., Villano, R. A., & Hadley, D. (2023). The role of financial literacy in households' asset accumulation process: evidence from Ghana. *Review of Economics of the Household*, 21(2), 591–614. <https://doi.org/10.1007/s11150-022-09603-z>
- Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1).
<https://doi.org/10.1186/s41937-019-0027-5>
- Lusardi Olivia Mitchell, A. S., Bucher-Koenen, T., Currie, J., van Rooij for suggestions, M., de Bassa Scheresberg, C., Kim, H., St Louis, D., Yu, Y., Lusardi, A., & Mitchell, O. S. (2013a). The Economic Importance of Financial Literacy: Theory and Evidence.
<http://www.nber.org/papers/w18952>
- Lusardi Olivia Mitchell, A. S., Bucher-Koenen, T., Currie, J., van Rooij for suggestions, M., de Bassa Scheresberg, C., Kim, H., St Louis, D., Yu, Y., Lusardi, A., & Mitchell, O. S. (2013b). The Economic Importance of Financial Literacy: Theory and Evidence.
<http://www.nber.org/papers/w18952>
- Lusardi Olivia Mitchell, A. S., Bucher-Koenen, T., Currie, J., van Rooij for suggestions, M., de Bassa Scheresberg, C., Kim, H., St Louis, D., Yu, Y., Lusardi, A., & Mitchell, O. S. (2013c). The Economic Importance of Financial Literacy: Theory and Evidence.
<http://www.nber.org/papers/w18952>
- Lyons, A. C. ;, Kass-Hanna, J. ;, Liu, F. ;, Greenlee, A. J. ;, & Zeng. (2020). Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa.
<https://www.adb.org/publications/building-financial-resilience-through-financial-digital->

- Madichie, N. O., Gbadamosi, A., & Rwelamila, P. (2021). Entrepreneurship and the Informal Sector: Challenges and Opportunities for African Business Development. In *Journal of African Business* (Vol. 22, Issue 4, pp. 441–447). Routledge.
<https://doi.org/10.1080/15228916.2021.1893055>
- Molobela, T. (2024). Exploring the role of the minibus-taxi industry on promoting taxi entrepreneurship in South Africa. *International Journal of Research in Business and Social Science* (2147- 4478), 13(10), 12–24. <https://doi.org/10.20525/ijrbs.v13i10.3660>
- Morgan, P. J., & Trinh, L. Q. (2019). Determinants and Impacts of Financial Literacy in Cambodia and Viet Nam. *Journal of Risk and Financial Management*, 12(1).
<https://doi.org/10.3390/jrfm12010019>
- Motete, P. (2025, August 6). Barriers to credit for MSMEs: Why access remains elusive and why it matters. FinMark Trust. <https://www.finmark.org.za/knowledge-hub/blog/barriers-to-credit-for-msmes-why-access-remains-elusive-and-why-it-matters?entity=blog>
- Motingwe, K., & Brijlal, P. (2020). An Assessment of Financial Management Skills of Minibus Taxi Operators in the Cape Town Metropole, South Africa. *Journal of Economics and Business*, 3(2). <https://doi.org/10.31014/aior.1992.03.02.242>
- Mwangi, W. P., & Cheluget, J. (n.d.). Role of Financial Literacy, Financial Innovation, Financial Inclusion on SME Access to Credit in Kenya: A Case of Kumisa SACCO.
- Ndlovu, J., & Mohale, E. (2023a). the Creative Commons Attribution-ShareAlike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>) Innovative Approaches for Tackling Tax Evasion in the South African Minibus Taxi Industry: Lessons from Ghana, Zambia, and Zimbabwe. *Article Journal of Law, Society*. <https://doi.org/10.25159/2520>
- Ndlovu, J., & Mohale, E. (2023b). the Creative Commons Attribution-ShareAlike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>) Innovative Approaches for Tackling Tax Evasion in the South African Minibus Taxi Industry: Lessons from Ghana, Zambia, and Zimbabwe. *Article Journal of Law, Society*. <https://doi.org/10.25159/2520>
- Ndlovu, J., & Mohale, E. (2023c). the Creative Commons Attribution-ShareAlike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>) Innovative Approaches for

Tackling Tax Evasion in the South African Minibus Taxi Industry: Lessons from Ghana, Zambia, and Zimbabwe. Article Journal of Law, Society. <https://doi.org/10.25159/2520>

Ndlovu, J., & Mohale, E. (2023d). the Creative Commons Attribution-ShareAlike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>) Innovative Approaches for Tackling Tax Evasion in the South African Minibus Taxi Industry: Lessons from Ghana, Zambia, and Zimbabwe. Article Journal of Law, Society. <https://doi.org/10.25159/2520>

Nelson Maseko. (2011). Accounting practices of SMEs in Zimbabwe: An investigative study of record keeping for performance measurement (A case study of Bindura). Journal of Accounting and Taxation, 3(8). <https://doi.org/10.5897/jat11.031>

Omri, A. (2020). Formal versus informal entrepreneurship in emerging economies: The roles of governance and the financial sector. Journal of Business Research, 108, 277–290. <https://doi.org/10.1016/j.jbusres.2019.11.027>

Ouyang, R., & Zhang, X. (2020). Financialization of agricultural commodities: Evidence from China. Economic Modelling, 85, 381–389. <https://doi.org/10.1016/j.econmod.2019.11.009>

Parliamentary Monitoring Group. (2024, March 20). Assessment of financial stability conditions (Committee meeting No. 37153). [https://www.pmg.org.za/committee-meeting/37153/#:~:text=Matrix%20\(RVM\).-.Assessment%20of%20financial%20stability%20conditions,Discussion](https://www.pmg.org.za/committee-meeting/37153/#:~:text=Matrix%20(RVM).-.Assessment%20of%20financial%20stability%20conditions,Discussion)

Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. Management Research Review, 39(3), 356–376. <https://doi.org/10.1108/MRR-06-2014-0143>

South African National Taxi Council (SANTACO). (n.d.). Presentation on the AARTO Amendment Bill. SANTACO.

Saunders, M., & Lewis, P. (n.d.). DOING RESEARCH IN BUSINESS AND MANAGEMENT An essential guide to planning your project. www.pearson.com/uk

Sayinzoga, A., Bulte, E. H., & Lensink, R. (2016). Financial Literacy and Financial Behaviour: Experimental Evidence from Rural Rwanda. Economic Journal, 126(594), 1571–1599. <https://doi.org/10.1111/ecoj.12217>

Simatele, M., & Kabange, M. (2022). Financial Inclusion and Intersectionality: A Case of Business Funding in the South African Informal Sector. *Journal of Risk and Financial Management*, 15(9). <https://doi.org/10.3390/jrfm15090380>

Stiglitz, J. E., & Weiss, A. (1981). Credit Rationing in Markets with Imperfect Information. In *The American Economic Review* (Vol. 71, Issue 3).

Teece, D. J., Pisano, G., & Shuen, A. (1997). DYNAMIC CAPABILITIES AND STRATEGIC MANAGEMENT. In *Strategic Management Journal* (Vol. 18).

The relationship between financial literacy and. (n.d.).

Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, 30(3), 167–186. <https://doi.org/10.1177/0735275112457914>

Wellalage, N., Locke, S., & Wellalage, N. H. (n.d.). Informality and credit constraints: Evidence from Sub-Saharan African MSEs. <http://ssrn.com/abstract=2645481>

Wernerfelt, B. (2013). Small forces and large firms: Foundations of the RBV. In *Strategic Management Journal* (Vol. 34, Issue 6, pp. 635–643). <https://doi.org/10.1002/smj.2043>

Wernerfelt, B. (1982). A resource-based view of the firm: Foundations of the RBV. The University of Michigan