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**THE INFLUENCE OF BUSINESS GROUP FACTORS ON THE FINANCIAL
PERFORMANCE OF INFORMAL MICRO RETAIL ENTERPRISES IN NAIROBI,
KENYA**

CAROLINE GRACE WANJIKU

MDF/102724/17

**A Research Dissertation Submitted to Strathmore Business School in Partial Fulfilment for
the Degree of Master of Science in Development Finance of Strathmore University.**

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DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published nor written by another person except where due reference is made in the thesis itself.

Caroline Grace Wanjiku



.....
24th Mar 2020

..... [Signature]

Approval

The thesis of Caroline Grace Wanjiku was reviewed and approved by the following:

Dr. David Mathuva,
Strathmore University



.....
24th March 2020

..... [Signature]



ABSTRACT

The study focused on the informal micro retail sector in Nairobi researching on the enterprises in the Smart Duka project run by a Non-Governmental Organization. The study offered novelty by focusing on the most marginalized of micro enterprises in informal settlements in Nairobi while considering the effect of business groups and magnitude effect of group factors on financial performance of micro enterprises. Prior studies have focused more on areas outside the informal sectors of Nairobi and have had limited focus on the effect of group participation on financial performance of enterprises which the current study sought to address. In the project, various formal practices are used, which include training, merchandizing, book keeping, coaching, use of technology and innovation, inventory management, joint supply sourcing, loan accessibility and group associations which were considered under three main factors in the study; financial, managerial and strategic fit factors. The factors were also supported by various studies in literature review and the study motivated by research gaps in prior studies and the economic importance that the informal micro enterprise sector holds. The theories related to this study were the resource-based view theory and the social exchange theory. The study was based on an experimental research design with an explanatory purpose to explain the causal relationship between business group factors and financial performance of the enterprises and used primary and secondary data. Diagnostics, descriptive and inferential analysis using non-parametric tests were done which included correlation and ordinal regression. The financial performance and business factors of the enterprises that joined groups (treated group) were compared to financial performance and business factors of the enterprises that did not join groups (control group) in the project. Based on the results of the study, the null hypothesis of the study which stated that financial performance of enterprises in business groups (treated group) is less or equal to that of enterprises not in business groups (control group) was accepted due to the difference between the treated and control groups being statistically insignificant. However, the treated group financial performance was higher and hence ways of making this difference significant should be addressed. The managerial factors had positive insignificant effects; strategic fit factors had positive significant effects while financial factors had negative insignificant effects on financial performance of the enterprises.

Key words; Informal enterprises, Business Groups, Micro enterprises

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ABBREVIATIONS AND ACRONYMS

CPG- Consumer Packaged Goods

GDP- Gross Domestic Product

KIHBS- Kenya Integrated Household Budget Survey

KNBS- Kenya National Bureau of Standards

KS- Kolmogorov-Smirnov

LR- Likelihood Ratio Statistic

MSME- Micro Small and Medium Enterprises

NBSSI -National Board for Small Scale Industries, Ghana

RBV- Resource-Based View Theory

SET- Social Exchange Theory

SPSS- Statistical Package for the Social Sciences

VIF- Variance Inflation Factor



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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In Kenya, unemployment has been one of the major issues affecting the nation and stood at 7.4% in 2015/2016 while the global unemployment rate was at 5.7% in 2017 and 5.3% in 2018 (Economic Survey, 2018) and (Economic Survey, 2019). Economic Survey (2019) reported that the economy created 840,600 new jobs in 2018 of which 83.6% were in the informal sector. As per National Micro, Small and Medium Establishment Survey by KNBS (2016) the micro enterprises under the category of wholesale & retail trade enterprises cover a large proportion of the informal Micro Small and Medium Enterprises, hence there is need to investigate on ways in which these enterprises can increase their financial performance for their sustainable growth to provide more employment opportunities in Kenya.

The National Micro Small and Medium Enterprises Survey by KNBS (User, 2016) categorizes Micro Small and Medium Enterprises using number of employees ; Micro are those that have 1-9 employees, Small have 10-49 employees and Medium 50-99 employees. As Chatterjee and Wehrhahn (2017) posit, most economies depend on the financial contributions of Small and Medium Enterprises with up to 95% of global enterprises being Small and Medium Enterprises with the proportion being as high as 99% in countries such as Japan. A World Bank report further highlights that up to 60% of total employment and 40% of national GPD in emerging countries is contributed by Small and Medium Enterprises (The World Bank, 2019). These support their significance in various economies while portraying the significance of the study.

Beck and Cull (2014), focusing on the situation in Africa posit that despite the high reliance of economies on small and micro-enterprises, the financial situation in the continent is by and large characterized by financial systems that are small, costly and shallow; these institutions are therefore often unable to supply much needed support for micro enterprises in the region. The resulting situation in the continent, as Brink Asah et al. (2015) observe, is the failure of up to 80% of entrepreneurial ventures. It may therefore be inferred that micro enterprises play a vital role in global economies and particularly so in Africa. However, such establishments in the continent face eminent ruin on account of a stark lack of support.

The informal sector in Kenya has been growing rapidly and is currently the highest form of employment. According to the ATKearney Global Consumer Institute (2016), the informal

sector in Kenya accounts for USD 26 billion with the sector contributing to 35% of the country's GDP. As per the National Micro, Small and Medium Establishment Survey by Kenya Bureau of Statistics (2016), many Micro, Small and Medium Enterprises are undocumented enterprises and are informal while most of the Micro, Small and Medium Enterprises are micro enterprises and are operated by owners with a few or no employees. The bigger firms which are few, are owned by individuals who are highly educated. As per the National Micro, Small and Medium Establishment Survey by Kenya Bureau of Statistics (2016) the Micro sector makes major contributions to the economic and social sectors of the country by large scale employment across the country.

Many of the business owners adopt self-sponsored training indicating that business owners are aware of their deficiency in skills and seek training to improve their entrepreneurial skills (Bureau of Statistics, 2016). The 2016 survey further indicates that the highest concentration of Micro Small Medium Enterprises is in micro categories as majority of such enterprises are operated by their owners. It is therefore apparent that there is potential for invigorating the micro subsector through offering adequate support for such establishments. This study centred on the provision of support through business group participation by micro enterprises operating in informal settlements in Nairobi. The focus was on the effect of the micro enterprises coming together to form business groups to access various facilities and advantages offered by such collaboration of the micro enterprises in these business groups whereby the micro enterprises were members of the business groups formed. The study focused on the informal micro retail sector in Nairobi researching on enterprises in the Smart Duka project run by a Non-Governmental Organization and investigated the use of factors in business groups and their effect on the financial performance of these enterprises. The study was based on an experimental design having a treated group (enterprises in business groups) and a control group (enterprises not in business groups) and also had an explanatory purpose to explain the causal relationship between business group factors and financial performance of the enterprises. The study also tested the null hypothesis that the financial performance of treated group (enterprises in business groups) was equal or less to the financial performance of control group (enterprises not in business groups). The focus of the objectives of the study on business groups was to determine the business group and factors in business groups effect on financial performance and determine their level of importance and input to the financial performance of the enterprises, which contribute a big proportion of the GDP of the country. The experimental

data was obtained from the Smart Duka Project run by a Non-governmental organization which has been ongoing from 2016.

In the project, various formal practices are used, which include training, merchandizing, bookkeeping, coaching, use of technology and innovation, inventory management, joint supply sourcing, loan accessibility and group associations. The groups formed have been used to access various facilities in the market including supplier group discounts, ease of delivery of merchandize to the enterprises, accessibility to loans and better negotiating power. From various studies, various factors have been highlighted as important factors in the financial performance of micro enterprises which include but not limited to financial, managerial and strategic fit factors. The studies have been carried out in various countries and in Kenya in various regions. However, their magnitude effect needs to be researched further in Nairobi which has the highest population of Kenya and more so in the very marginalized areas in the informal sector which is a gap in the existent literature. There is also a gap on research on the effect of business group participation on financial performance especially in the informal areas and more so in Nairobi as most studies focus on the effect of groups on financial credit and loan availability. Studies have also highlighted there is need to research on these group network linkages further. The three main aspects and factors of business group participation that were studied include – financial, managerial, and strategic-fit interventions. This study therefore sought to fill the gap in research by providing empirical evidence of the effect of business group participation on the financial performance of micro enterprises while considering various factors under the financial, managerial and strategic fit categories. The study further offered novelty by focusing on the most marginalized of micro enterprises– those operating in informal settlements within Kenya’s capital – Nairobi while considering the effect of business group networks and magnitude effect of factors in business groups on financial performance of micro enterprises. Prior studies have put their focus more on areas outside the informal sectors of Nairobi and limited focus on the effect of group participation has been accorded in prior studies which the current study seeks to address.

The factors that were considered relevant in this current study were based on prior studies and categorized to encompass most relevant factors which were also available in the project. The objectives of the study were centred around these factors as based on prior studies. The factors include financial factors, managerial factors and strategic fit factors, they were considered in relation to financial performance of the micro enterprises

1.1.1 Financial Factors and Financial Performance

Kamalrulzaman, Koe and Ismail (2017) define financial intervention as mechanisms aimed at allowing easier access of finance and financial support services to marginalized enterprises. Abor and Quartey (2010) posit that of all factors deemed limiting to the burgeoning of SMEs, inaccessibility of finances and financial-services support present as the leading hurdle. Kamalrulzaman, Koe and Ismail (2017), focusing on SMEs in Malaysia, highlight that government policy is effective in ensuring the provision of financial services to microenterprises. However, focusing on Africa, Beck and Cull (2014) posit that the financial institutions in the continent are shallow and scarcely distributed hence rendering inaccessible, financial support to most institutions in need of assistance. Kamunge, Njeru & Tirimba (2014), in their study on factors affecting the performance of micro and small enterprises located in Limuru, Kenya included access to finance as one of the factor. These results were congruent with Ntakobajira (n.d.) and Abor and Quartey (2010) in their study results. Ntakobajira (n.d.) posits in the study in 2013 on SMEs in City Park Nairobi, Kenya that access to finance needs to be made available for SMEs to realize their full potential.

Maina (n.d.) in the study of 2016 on factors affecting growth of micro enterprises and small family enterprises in Nairobi central business district recommends that managers and employees of these organizations should be given training to enhance performance skills. This recommendation supports the conclusion of the study by Siekei, Wagoki and Kalio (2013) who cited financial training as an important aspect in performance and growth of SMEs. Siekei, Wagoki and Kalio (2013) in their study on funding initiatives by equity bank Kenya and on the financial training aspects provided to select SMEs in Njoro, Kenya, their findings indicate that businesses that participated in the bookkeeping training fared better than those that did not.

Financial institutions lag in the creation of suitable economic solutions for the demographic. The authors point to a need for financial products that are tailored around the specific needs of the subsector. Among these is the need for products that take into account the risk factors of the segment. Such a product, as the authors postulate, would involve external funding in some cases and the creation of innovative products that leverage the pooling of resources, for instance through consideration of business volume among grouped enterprises (Chatterjee & Wehrhahn, 2015). This study therefore serves to underpin the theme of under representation of the segment in the financial markets space. The study further highlights the prominence of micro-enterprises both in the global setting and more so in developing countries where informal sector forms

most of the employment opportunities that exist. This is in line with the study by Beck & Cull (2014) who propose the need for innovation in financing approaches.

Based on prior studies, financial factors that have been highlighted in various studies as affecting the financial performance of enterprises include; access to finance, financial training and bookkeeping, however, it was important to find out the extent of effect these factors have on financial performance. In this study, financial factors deemed pivotal to the performance of micro enterprises included - group-based loans, group financial training, and financial book keeping (Siekei, Wagoki & Kalio, 2013; Ntakobajira (n.d.); Smart Duka, 2019)

1.1.2 Managerial Factors and Financial Performance

Managerial factors pertain to the manner through which resources are administered and controlled within an organization (Janvier-James, 2012). Jeppesen (2005) posits that SMEs are of particular importance in the African context given that they play a pivotal role in in the bid to ensure economic equity and competitiveness among businesses. To achieve this, and in light of failing financial support, management factors present as a make or break factor as entrepreneurs seek to weather the challenge of limited resources and constraining market factors. According to Atristain-su (2018), shortcomings in the planning, decision making, delegation, and communication aspects of companies present as the most challenging aspects behind SME impedance. Solly (2016) in proposing potential approaches aimed at bridging the gap of managerial inexperience in entrepreneurship, put forward a networking model that would allow for collaboration of managers operating with a region. The approach, as put forward by the author, would allow for prospective entrepreneurs to learn from seasoned counterparts that have gained insights into possible pitfalls particular to the region.

Kamunge, Njeru and Tirimba (2014), in their study on factors affecting the performance of micro and small enterprises located in Limuru, Kenya included; management experience, business information access and infrastructure access. These results were congruent with the study results by Ntakobajira (n.d.). Ntakobajira (n.d.) posits in the study in 2013 on SMEs in City Park Nairobi that, business information and experience of managers need to be all made available for SMEs to realize their full potential and also recommend on having infrastructures in place to share business information with large numbers of entrepreneurs.

Asah, Olufunso, et al.(2015) in an evaluation of the significance of managerial skills in assessing the performance of firms conclude that managerial factors, alongside personal value and motivation, presented as antecedents of favourable economic performance. The author

conceptualized managerial skills as involving such aspects as financial management skills, strategic planning, and human resource management concluding that managers who showed a high competence in such aspects were likely to steer their organizations towards improved financial performance. The inference from this finding is that micro enterprise managers involved in the exchange of managerial insights would gain in entrepreneurial management competencies thus resulting in the gaining of competitive advantage in the market within which they operate. In line with this is imperative to study the effect that managerial factors have on micro enterprises to enable improve their performance. This study is in line with Atristain-su (2018) who highlights lack of planning as part of the managerial issues experienced by enterprises in Mexico.

Based on prior studies, managerial factors that have been highlighted in various studies as affecting the financial performance of enterprises include; management experience, business information, infrastructure access and planning, however, it is important to find out the extent of effect these factors have on financial performance. The main managerial factors considered in this study included - inventory management, coaching and merchandising, merchandizing is a practise of arranging and displaying goods in an orderly manner which is appealing to the customers and helps customers identify what they need easily and identify product information easily like pricing. (Atristain-su, 2018; Solly, 2016; Asah et al., 2015; Smart Duka, 2019).

1.1.3 Strategic-fit Factors and Financial Performance

Strategic fit factors speak to the ability of micro enterprise owners to identify points of synergy with other entrepreneurs in the bid to create competitive advantage; strategic fit factors therefore relate to collaborative ad hoc approaches aimed at benefiting enterprises through leveraging unique resources – a seminal idea constituting the Resource Based View theory (Barney, 1991). Strategic-fit factors are of particular importance to the ongoing study as given Asah et al.'s (2015) observations; up to 80% of SMEs in Africa fail due to a scarcity of resources. The need to create competencies through collaboration is therefore heightened in the African context.

Mungai & Ogot (2017) conclude that micro enterprises use diverse competitive business strategies and pointed out the ones that dominate are; the value chain approaches and horizontal networks and linkages, which improve performance. Micro enterprise participation in value chains involve vertical linkages both forward and backward with larger enterprises while horizontal linkages are informal and formal networks with enterprises of similar size either

directly or through associations and organizations. However, they do mention that these alternative strategies were not covered in their study and were an opportunity of further research. This was similar to the findings by the study by (Asah, Fatoki, et al., 2015).

Mashal (2018), in a study focused on non-financial factors affecting small and medium enterprises in Jordan, observes that different businesses faced similar challenges. Among the notable of these challenges, a factor highlighted in the foregoing study, is the impact of competition. Another noteworthy observation was that the government policies in place played a significant role in determining the profitability of enterprises. The inference from this study therefore is that where such factors as competition present as challenges to collaboration, the mutual challenges facing industries should serve to spur strategic partnerships in their bid to ensure survival. Efforts towards mutual training and innovation play the role of improving the financial position of involved entities. This is supported by the study by Pindado & Sánchez (2018) who highlighted that firms operating in markets characterized by low competition achieve faster growth while those with limited resources seek strategic fits to get a competitive advantage.

Based on prior studies, strategic fit factors that have been highlighted in various studies as affecting the financial performance of enterprises include; partnerships, networking, associations and collaboration however, it is important to find out the extent of effect these factors have on financial performance. The main strategic fit factors considered in this study include - Joint supplies sourcing, Innovation partnerships and technology use (Kibry & Kaiser, 2003; Pindado & Sánchez, 2018 Smart Duka, 2019).

1.1.4 *The Smart Duka Project*

The Smart Duka Project is an initiative in Kenya spearheaded by a Non-Governmental Organization in partnership with other Foundations and has been in operation since 2016 (Smart Duka, 2019). The Smart Duka project encompasses ‘mom and pop’ retail establishments within informal settlements in Nairobi county, the specific areas of focus are Githurai, Kayole, Mwiki, Kangemi, Kawangware, Huruma, Mathare, Umoja, Pipeline and Dandora. In the project, various formal practices are used, which include training, merchandizing, bookkeeping, coaching, use of technology and innovation, inventory management, joint supply sourcing, loan accessibility and group associations. The groups formed have been used to access various facilities in the market including supplier group discounts, ease of delivery of merchandize to the enterprises, accessibility to loans and better

negotiating power. The goal of the initiative is to transform the informal retail sector in Kenya through the offering of support services ranging from financial, managerial to strategic support interventions.

The project also aims to improve and grow the performance of the micro enterprises within the informal settlements of Nairobi which are highly depended on by many as a source of livelihood or as a source of goods for their daily needs. As of 2018, 874 organizations were involved, with participants reporting average revenue increase to the tune of 19% and 30% profit increments by year end. There are other similar projects by the same Non- Governmental Organization in Kenya and three other countries – Pan African Youth Entrepreneur Development (PAYED) program in Tanzania, Nigeria, and Cote d’Ivoire, Jaza Duka program-partnered with Unilever Kenya. Other programs that are available outside the country are the box shop in South Africa, a lifestyle and retail initiative which tries to resolve market access issues in SMEs in some industries, The box shop (2019).

The Reshape Tomorrow, which is a global financial inclusion initiative for small business owners across the world from India to Toronto empowering communities that are underserved, entrepreneurs, financial advisors with financial knowledge and resources (Moody’s Corporate Social Responsibility- Empowering People, 2019). Shakti solution in India by Hindustan Unilever (Neath & Sharma, 2008). The Smart Duka Project was chosen due to its wide reach in the informal settlements of Nairobi which are the main areas of interest in the study, the Smart Duka Project has been ongoing for over two years which is a good period for the effects of the project to have been manifested, the other projects like PAYED and Jaza Duka have not been in operation for long. The project is located in Nairobi, Kenya which is the main county of interest in the study as it holds the highest population proportion in Kenya, the project has business groups which is the main treatment form of interest in the study while other programs do not have the group networks within the programs.

1.2 Statement of the Problem

Kamunge, Njeru & Tirimba (2014), in their study on factors affecting the performance of micro and small enterprises located in Limuru, Kenya included such factors as; access to finance, management experience, business information access, infrastructure access, government policy and regulations. These results were congruent with the study results by Ntakobajira (n.d.). Ntakobajira (n.d.) posits in the study in 2013 on SMEs in City Park Nairobi that, access to finance, business information and experience of managers need to be all made available for

SMEs to realize their full potential and also recommend on having infrastructures in place to share business information with large numbers of entrepreneurs. The access to finance is considered as a subfactor of the financial factors in the study while the management experience would be considered an essential part of the managerial factors considered in the study and were considered important factors in the project. Hence the study sought to establish their effect on financial performance on the informal enterprises in Nairobi.

Maina (n.d.) in the study of 2016 on factors affecting growth of micro enterprises and small family enterprises in Nairobi central business district recommends that managers and employees of these organizations should be given training to enhance performance skills. This recommendation supports the conclusion of the study by Siekei, Wagoki and Kalio (2013) who cited financial training as an important aspect in performance and growth of SMEs. Siekei, Wagoki and Kalio (2013) in their study on funding initiatives by equity bank Kenya and on the financial training aspects provided to select SMEs in Njoro, Kenya, their findings indicated that businesses that participated in the bookkeeping training fared better than those that did not. Financial training and bookkeeping were subfactors under the financial factors category in this study and were considered important factors in the project. Hence the study sought to establish their effect on financial performance on the informal micro enterprises in Nairobi.

Mungai & Ogot (2017) in their study in Muranga, Kenya concluded that micro enterprises use diverse competitive business strategies and pointed out the ones that dominate are; the value chain approaches and horizontal networks and linkages, which improve performance. Micro enterprise participation in value chains involve vertical linkages both forward and backward with larger enterprises while horizontal linkages are informal and formal networks with enterprises of similar size either directly or through associations and organizations. However, they do mention that these alternative strategies were not covered in their study and were an opportunity of further research. In the study, factors in business groups were analysed and the effect of group participation on financial performance was studied. Networks and partnerships are also considered as important factors under strategic fit factors. This study therefore sought to fill the gap in research by providing empirical evidence of the effect of group participation in the financial performance on micro enterprises while considering various factors under the financial, managerial and strategic fit categories which have been highlighted in various studies as important factors in the financial performance of enterprises. The various studies have highlighted various factors that are important to the financial performance of micro enterprises, however there is need to investigate the magnitude of the effect that these factors have on the

financial performance of the micro enterprises. The studies also focus on various countries and regions in Kenya, however there is need to focus on research in Nairobi which has the highest population in the country and also in the most marginalized areas in Nairobi in the informal sector that have not been focused on by existent literature. The study thus does offer novelty by focusing on the most marginalized of micro enterprises– those operating in informal settlements within Kenya’s capital – Nairobi while considering the effect of group networks and effect of factors in business groups on financial performance of micro enterprises.

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study is to establish the relationship between factors in business groups affecting the financial performance of micro enterprises in Nairobi, Kenya.

1.3.2 Specific Objectives

The study sought to address the following specific objectives:

- i) To assess the effect of financial factors in business groups on the financial performance of informal micro retail enterprises in the Smart Duka project.
- ii) To assess the effect of managerial factors in business groups on the financial performance of informal micro retail enterprises in the Smart Duka project.
- iii) To assess the effect of strategic fit factors in business groups on the financial performance of informal micro retail enterprises in Smart Duka project.

1.3.3 Research Questions

The study sought to answer the following research questions:

- i) What is the effect of financial factors in business groups on the financial performance of informal micro retail enterprises in Smart Duka project?
- ii) What is the effect of managerial factors in business groups on the financial performance of informal micro retail enterprises in Smart Duka project?
- iii) What is the effect of strategic fit factors in business groups on the financial performance of informal micro retail enterprises in Smart Duka project?

1.4 Scope of the Study

The population of the study encompassed ‘mom and pop’ retail establishments within informal settlements in Nairobi county as covered under the Smart Duka project. The specific areas of focus were Githurai, Kayole, Mwiki, Kangemi, Kawangware, Huruma, Mathare, Umoja, Pipeline and Dandora. These regions were selected as the retail enterprises are a thriving economy in the informal sectors of Kenya where large supermarkets cannot reach the crowded households in these areas (ATKearney Global Consumer Institute, 2016). The enterprises under consideration were the micro enterprises with less than 9 employees as per the National Micro Small and Medium Enterprises Survey by KNBS (User, 2016). The Smart Duka Project was chosen due to its wide reach in the informal sectors of Nairobi which are the main areas of interest in the study.

1.5 Significance of the Study

1.5.1 Policy makers

The study is beneficial to the governments in formulation of regulatory and policy structures as they can gain insights into the effect of business group participation in the micro informal sector. Possible inferences from the study will inform approaches to be applied in a wider scale in all the informal MSMEs segments in the bid to ensure progressive growth hence higher fiscal policy revenues. The study is also of significance to the country and the international community in terms of establishing how groups involvement can grow the informal sector and hence grow the macro and micro economy through leveraging findings from this study. The study also highlights the effect of various factors on the financial performance and hence more emphasis can be placed on the factors causing positive effect on the financial performance.

1.5.2 Practitioners

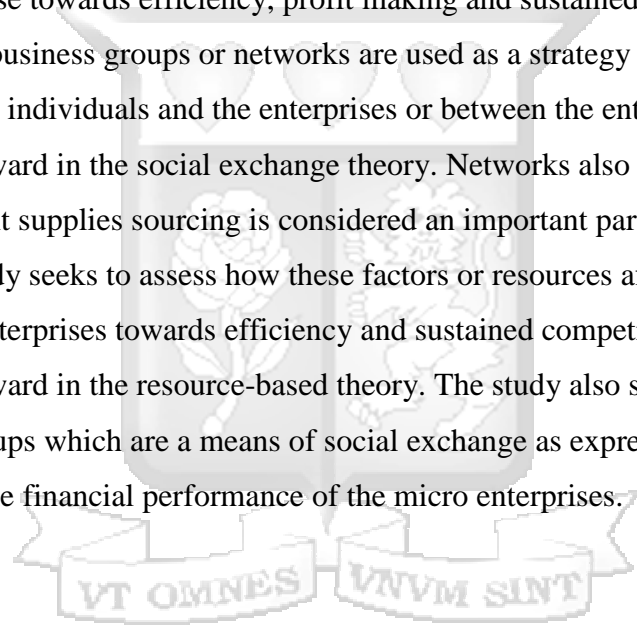
The study is of benefit to the informal entrepreneurs who will be able to adopt the most beneficial business factors and strategies and be able to determine the most effective ways by which to spur economic growth among micro enterprises. It is of benefit to the formal sector in that insights on business group involvement may be used to recommend possible structuring avenues of the formal sector to approach or offer assistance to informal enterprises in the bid to leverage group participation through the highlighted factors because the groups give the informal enterprises some form of structure unlike where enterprises are operating at an individual level.

1.5.3 *Researchers*

The study is useful in support of research in the area of micro entrepreneurship which is still not highly covered in research while adding to the body of knowledge around this area. The study benefits other academic and private researchers in this area while also highlighting potential areas of research in the same area.

1.6 **Theoretical Significance**

The study is based on two theories i.e. the resource-based view theory and the social exchange theory. The factors highlighted in the study i.e. the financial factors, the managerial factors and the strategic fit factors are considered the resources that are accessible to the micro enterprises to use towards efficiency, profit making and sustained competitive strategies. While the business groups or networks are used as a strategy to exchange these resources between the individuals and the enterprises or between the enterprises and enterprises as put forward in the social exchange theory. Networks also under the strategic fit factors e.g. use of joint supplies sourcing is considered an important part of social exchange theory. Hence the study seeks to assess how these factors or resources affect the financial performance of the enterprises towards efficiency and sustained competitive strategy of the enterprises as put forward in the resource-based theory. The study also seeks to assess the effect of business groups which are a means of social exchange as expressed of the social exchange theory on the financial performance of the micro enterprises.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter consists of the reviewed literature on informal enterprises in Kenya in relation to information discussed in the previous chapter on Introduction. It consists the theoretical review of literature, empirical review of extant literature on factors in business groups and financial performance of micro enterprises, research gaps, conceptual framework and operationalization of variables. The purpose of this chapter is to provide an analysis of the various theories and empirical findings that related to the ongoing study.

2.2 Theoretical Review of Literature

Two main theories are considered in assessing the rationale behind business group formation among micro enterprises – RBV (Resource Based View Theory) and SET (Social Exchange Theory). The entails of the theories and their relation to the ongoing study are subsequently discussed.

2.2.1 *The Resource Based View Theory*

The resource Based View Theory focuses on the firm's resources which are used to give firms a competitive edge. The theory related to the study regarding the resources and capabilities that the micro enterprises possess and which they can use to leverage on towards profitability of the firm. Penrose (2009) first published in 1959, was the first to discuss on resources and stated that a firm is a collection of resources and that owners of businesses believe there is need to know more about the resources they work with because more knowledge would improve efficiency and profitability of their firm. In the study various resources in terms of financial, managerial and strategic fit resources were assessed and how they affect financial performance and the study looked at group-based interventions as a tool for efficient management of limited resources.

In her book, Penrose states that various fields such as strategic management, organizational economics and strategic human resource management have revisited the resource based, competence based or knowledge-based theory of the firm which was part of her original work. Penrose's book was influential in the early resources-based contributions, however, there are criticisms of resources based ideas from Michael Porter who dismissed these as vague concepts

and Oliver Williamson who critiques these due to lack of supporting evidence and operationalizability (Penrose, 2009).

Barney (1991) who proposed Resource Based View Theory on firm resources and sustained competitive advantage, suggests that firms obtain advantages of sustained competitiveness by using strategies to exploit their internal strengths by responding to environmental opportunities while avoiding weaknesses that are internal and removing external threats. The resource based model of sustained competitive advantage, suggests the sources of sustained competitive advantage are firm resources of a range of organizational, social and individual phenomena within firms that are valuable, rare, imperfectly imitable and non- substitutable. The Resource Based Theory is based on the assumption that capabilities and resources are heterogeneously distributed across firms and the differences may be long lasting (Barney, 1991).

Barney (2001) The author highlights that the theory has its foundation in the Structure-Conduct-Performance (SCP) approach as elaborated upon by Porter who postulates that economic performance of an organization is predicated upon the structure of the economic environment within which the organization operates and the conduct of the firm within the market. The author further states that the resource based view is positioned relative to three theoretical traditions; Structure-Conduct-Performance (SCP) based theories of industry determinants of firm performance, neo-classical microeconomics and evolutionary economics which are based on common assumptions that resources and capabilities may be heterogeneously distributed across firms and that the differences may be long lasting with common emphasis on understanding why some firms consistently outperform others.

In the study, group participation was studied as a means of collaboration to give enterprises some form of competitive advantage. This was in line with Barney (1991) and Lechner & leyronas (2009) in terms on competitive advantage. The various factors i.e. the financial factors, managerial factors and strategic fit factors were considered as the resources available to the enterprises for efficiency, profit making and sustained competitive strategy. These factors form the resources that the enterprises use including but not limited to loans, bookkeeping, financial training, coaching, inventory management, merchandizing, joint supplies, innovation and technology use.

Van Rijnsoever, Kempkes & Chappin (2017) in their study of UK and Germany SMEs posit that small and medium size enterprises can engage in three different strategies; make, buy and ally (MBA). The authors give an alternative theory that can explain MBA strategy choice as

the resource based view and further state that although the RBV initially focussed on resources within the firm emphasis was increasing on the role partners play as source of resources for competitive advantage where knowledge is considered a key resource which can be acquired by firms engaging in an MBA strategy. Resources can be tangible resources like physical or financial capital or intangible resources like knowledge or social capital. They state that Ally refers to the development of knowledge by the firm and external parties, parties combine their knowledge bases to make combinations that can lead to new knowledge and innovation and can share costs and risks. This ally component can be accessed through group participation in the study where collaboration and partnerships are experienced. This study thus centres on the idea that group formation results as a means towards gaining proficiencies that confer a competitive advantage to group members. The competencies gained, as assessed in this study, fall into three empirical literature informed umbrella groupings – financial, managerial and strategic-fit competencies.

2.2.2 *The Social Exchange Theory*

Most of the participants in micro enterprises are individual owners of businesses. The interactions between the business entity and the individual is intricate hence the association between one business and another, and in the group formation context often involves interactions between individuals. The social exchange theory centres on the nature and purpose of group interactions. Malinowski (1914) first published in 1922 states two classics of anthropology appeared in 1922 one of which was Bronislaw Malinowski's *Argonauts of the Western Pacific* which was a detailed account of exchange in a few neighbouring Melanesian islands.

Cropanzano & Mitchell (2005) state that the Social Exchange Theory resources originated from classic studies on anthropology by Malinowski and Mauss bridging social psychology disciplines by Gouldner, Homans and Thibault & Kelley. The social exchange theory has principles and assumptions based on reciprocity and negotiated rules. Emerson (1976) attributed the distinct approach on social exchange theory that emerged in sociology and social psychology to George Homans, John Thibaut, Harold Kelley and Peter Blau.

Lange (1997) analyses that although Kelly and Thibaut, who made important contributions to the interdependence theory, in their prior articles of 1959, 1978 and 1984, distinguished various interdependence types but focussed on outcome interdependence which form various social interactions, such as cooperation, competition and equality.

Homans (1992) states that the Homan's Theory has 3 variables which relate to the Social Exchange Theory; Activities can be required formally or informally for a group task, Interaction refers to the frequency, duration and reciprocity of communication of the group individuals and Sentiments relates to the feelings of the individuals or internal state of the human body. Applying these principles to the groups involved in micro enterprises, it is evident that the interactions between different entities are birthed of the activities stipulated in the formation of the group. Homans (1992) suggests the principal aspect of social behaviour is the exchange of tangible or intangible activity which could be costly. For instance, a group formed to leverage economies of scale in the sourcing of goods from suppliers would have to interact through such activities as group stock taking and joint inventory management/creation.

Cropanzano & Mitchell (2005) state that the SET's explanatory power includes rules and norms of change, resources exchanged and relationships that emerge. They state that reciprocity or repayment in kind is the highly known exchange rule. One type of reciprocity is the reciprocity as a transactional pattern of interdependent exchanges where one party can have at least three postures to another person; independence where outcomes are due to one person's effort, dependence where outcomes are due to the other person's effort and interdependence where outcomes are based on the combination of both parties' efforts. Reciprocal exchange created by interdependence is where one party's actions are contingent on the other person's behaviour hence increasing cooperation yet reducing risk.

Despite the various applications and conceptualizations, two main ideas present as the tenets of the theory – interactions and obligations. Groups are formed with the intention of having participants interact with entities and these interactions come with a set of obligations to the involved parties. This was in line with the 3 variables of SET that Homan put forward which included interaction. The SET theory therefore offers the guiding principle to the actual interaction between firms/individuals involved in the quest to – as highlighted in the RBV – achieve competencies in a harsh business environment. The resources highlighted under the resource-based view theory are thus exchanged between individual and enterprise or between enterprise and enterprise using the social exchange theory. This theory is thus included alongside the RVB theory to highlight the reasons for and nature of interaction between various firms in light of the pursuit for competencies in the three umbrella groupings – financial, managerial and strategic-fit competencies.

2.3 Empirical Review of Extant Literature

The foregoing section has provided a discussion on the grounding theories of the study. This section is divided into three main subsections group financial, managerial, and strategic-fit factors in light of informal micro enterprises financial performance. Two subsequent sections-one highlighting the gap in research, and another providing the conceptual framework and operationalization of variables - are also presented in this section.

2.3.1 *Financial factors and financial performance of Informal Micro Enterprises*

Tinajero & Lopez-Acevedo (2010) in their study find evidence that participation in small and medium enterprise programs leads to improvement in factors such as valued added, gross production and wages. Although the positive factors take a long time they do bring greater efficiency in Mexico's small and medium enterprise programs. This is also evident in the Smart Duka Project that requires time for positive and sustainable results to be achieved. Program participation in certain types of SME programs is associated with higher sales, employment, export and value additions, these SME programs yield positive returns due to their fiscal incentive to reach the higher class SMEs with higher technology, cleaner processes and human and capital intensive production techniques (Tinajero & Lopez-Acevedo, 2010).

Tinajero & Lopez-Acevedo (2010) found in their study of SME programs in Colombia, Peru, Mexico and Chile, that participation in SME programs results in increased sales across the various countries. The study was motivated by the fact that SMEs make up a high proportion of enterprises and workforce but perform poorly in comparison to larger firms due to the constraints they face; lack of finance, management issues, lack of skilled workers, in economies of scale, poor technology, lack of information and markets, bureaucratic processes of start-up, operations and growth. Programs are put in place for SMEs for skills development, training on management, upgrade of technology, improve productivity and quality and for network formation. This finding was similar to Kamunge, Njeru & Tirimba (2014) in their study in Muranga who cited business information and infrastructure access as important factors in the financial performance of micro enterprises.

Governments set up SME programs to address social issues like poverty, unemployment, poor working condition and strategic industry promotion. SME programs are rarely well evaluated to know the effectiveness of such programs and to provide information on how best to implement such programs because most government SME programs are poorly executed. In the United States, evaluation studies on enterprise support programs have demonstrated that such

programs can improve firm performance significantly as compared to control groups (Acevedo & Tan, 2010). This is congruent to the study of Tinajero & Lopez-Acevedo (2010) that reported that such programs resulted in increased sales across various countries.

Kodongo & Kendi (2013) from their study results conclude that among micro finance institution clients, a group lending program is more effective than individual lending program to reduce the risk of default. This implies a collaborative lending approach centring on the grouping of micro enterprises to allow for financial competencies through extension of loans to groups. This approach of leveraging groups to allow for allocation of resources is in keeping with the RVB and SET theory. However, they do also conclude in their study that Kenyan microfinance institutions prefer individual lending which does not meet the borrowers' financials needs and is wasteful (Kodongo & Kendi, 2013).

Beck & Cull (2014) state that more than 95% of enterprises are under micro, small or medium sized categories while more than half the population of employees work in companies with less than 100 employees in the low and lower middle income countries as per finding by (Ayyagari, Demirguc-Kunt and Maksimovic 2011). Beck & Cull (2014), posit these enterprises experience operational and growth obstacles such as lack of access to financial services most notably, lending services as is also highlighted by (Tinajero & Lopez-Acevedo, 2010). For these smaller enterprises, the following are proposed; leasing is preferable due to lack of collateral requirements as the option provides the asset instead of financial resources, factoring (the discounting of sales receivables), financial innovations, segmenting the enterprises as per profiles, financial needs and equity finance.

Beck & Cull (2014) also posit that growth of firms is due to individuals who have different levels of management skills, education and motivation and hence understanding the effect of social networks and education is important for success in entrepreneurship, which was also supported by Kamunge, Njeru & Tirimba (2014) who highlighted management experience as an important factor for financial performance. The authors, through a regression model, point to similarity in financing determinants across regions in that such factors as age of enterprise, sector and firm size play a pivotal role in determining the financing approaches applied by companies. However, the authors posit that the financial situation in Africa is characterized by financial systems that are small, shallow and costly and often limited in reach hence highlighting the need for innovation in financing approaches and particularly so for micro enterprises.

According to statistics presented in contrasting financing by company size, it was apparent that companies with less than 20 employees (micro enterprises) were significantly underfunded across all loan categorizations. This finding in light of the RBV theory would therefore imply that a collaborative lending approach centring on the grouping of micro enterprises can be leveraged to allow for financial competencies through extension of loans to groups with less than 20 employees which is supported by SET theory. Such an innovative approach would navigate the highlighted challenge of inaccessible financing for the segment. The recommendation by Beck & Cull (2014) on innovation in financing approaches was in line with the recommendation by Chatterjee & Wehrhahn (2017) to create innovative products that leverage on pooling of resources.

Kadocsa & Francsovcics (2011) in their study of SMEs in Hungary conclude that after Hungary's accession to the European Union, the small businesses did not take advantage of the European Union new markets and opportunities due to lack of information. The eventual situation therefore, was that organizations were operating in a promising market yet did not leverage the tools that were at their disposal. The authors highlight networking among enterprises as a possible approach towards remedying the situation in the country. The study therefore indicates that economic competencies can be developed through partnership aimed at identifying opportunities in the broader market. Mungai & Ogot (2017) in their study in Muranga also did highlight networks and linkages as important factors for financial performance.

Kadocsa & Francsovcics (2011) in their study concluded that two thirds of SMEs consider the economy as stagnating or slightly improving and mainly sell in the retail market and have moderate development and mostly use their own resources. The study further found that a reliable monetary policy had the most impact on business operation among economic policy factors while for the micro economic factors the important ones were cost management, marketing, trade, financing, technical development and production. Chatterjee and Wehrhahn (2015) provide telling statistics on the prominence of SMEs to the global economy - up to 95% of enterprises are SMEs; these account for up to 90% of private sector employment. The proportion of SMEs differs by country with countries such as Japan posting up to 99% of SME representation. Further highlighting the prominence of the micro-SME sector, the authors point to a World Bank study indicating that up to 70% of the MSMEs are operating in the informal sector and are mainly defined as micro enterprises. However, despite the high proportion in the global economy such enterprises remain heavily underfunded.

Financial institutions lag in the creation of suitable economic solutions for the demographic. The authors point to a need for financial products that are tailored around the specific needs of the subsector. Among these is the need for products that take into account the risk factors of the segment. Such a product, as the authors postulate, would involve external funding in some cases and the creation of innovative products that leverage the pooling of resources, for instance through consideration of business volume among grouped enterprises (Chatterjee & Wehrhahn, 2017). This study therefore serves to underpin the theme of under representation of the segment in the financial markets space. The study further highlights the prominence of micro-enterprises both in the global setting and more so in developing countries where informal sector forms most of the employment opportunities that exist. This is in line with the study by Beck & Cull (2014) who propose the need for innovation in financing approaches.

Creation of micro insurer solutions may be the most effective way of addressing risk among small enterprises in Africa (Sampson Ukpong, Acha, & Sampson 2019). In a study conducted in Nigeria, the authors surmise that the challenge of inaccessibility of funds among small enterprises results in the inability of firms to meet the threshold requirements for mainstream insurance. Such enterprises are therefore, in light of lack of options, left uninsured. To navigate this challenge, the author after assessing 6 possible possibilities, conclude that the formation of cooperatives would serve to create the common pool of resources that can allow for the insurance of groups or firms. The authors further observed that seeking insurance through cooperatives as opposed to community-based schemes offered the advantage of formality; where as in the former cooperatives interact with mainstream insurance companies, community-based schemes were less formally oriented and therefore, did not require engagement with mainstream insurance companies that typically serve a regulatory function. Relating this finding with the previous study by Chatterjee & Wehrhahn (2017), it is evident that financial institutions that appreciate the predominance of small enterprises in the economy of developing countries can create innovative solutions that allow for the advancement of the much needed assistance while sufficiently shielding the funders from defaulters.

Sieki, Wagoki and Kalio (2013) provide a case study of the performance of 82 farms in Njoro County in Kenya. The study centres on funding initiatives by equity bank Kenya. Specifically, the authors focus on the financial training aspects provided to select SMEs. The study seeks to assess whether such competences as bookkeeping present a significant impact on the financial performance of firms. Findings indicate that indeed businesses that opted to participate in the training that was offered to the group, fared better than those that did not gain the training

provided by the bank. This finding points to the training aspect involved in group initiatives aimed at achieving financial performance among small and medium sized enterprises. It is therefore evident that among the benefits of group participation is the ease of training, training that has been shown to have a financial impact on the performance of involved firms. This study was congruent to the one by Maina (n.d.) regarding training having a significant impact on financial performance.

Maina (n.d.) in the study of 2016 on factors affecting growth of micro enterprises and small family enterprises in Nairobi central business district recommends that managers and employees of these organizations should be given training to enhance performance skills. This recommendation supports the conclusion of the study by Siekei, Wagoki and Kalio (2013) who cited financial training as an important aspect in performance and growth of SMEs.

2.3.2 *Managerial factors and financial performance of Informal Micro enterprises*

Whereas financial factors present as the most telling limiting issue in the performance of small firms, managerial factors also play a significant role, most SMEs do not have management solutions that are cost effective and hence cannot compete with larger firms (Abor & Quartey, 2010). Essentially, given the lack of financial support among most enterprises in Africa, it is paramount that managers find effective and efficient approaches that shield their companies from financial ruin. This is particularly important in the African context as SMEs are considered to contribute towards economic equity and competitiveness among businesses. Thus, it is important to research on how managerial factors affect the financial performance of micro enterprises.

Jeppesen (2005) as the author observed, weak financial institutions and wanting regulations, as applicable in different industries, result in peculiar challenges among small enterprises operating in the continent. Managerial competencies therefore present as fundamental determinants of the financial progress of firms. This is similar to the study of Ntakobajira (n.d.) and Kamunge, Njeru & Tirimba (2014) who concluded that experience of managers is an important factor affecting the performance of enterprises.

Atristain-su (2018) in a study of managerial practices in small and medium enterprises in Mexico, highlights that the institutions are plagued by a variety of managerial issues. Among the most noteworthy shortcomings are in the planning, decision making, delegation, and communication aspects of the companies. The author points to family business ownership as among the main reasons behind the lack of professionalism within most of the institutions

considered in the study. The author further points to the reliance on intuition in management of firms as a possible reason behind the lack of internal controls within considered institutions. Essentially, interactions between family members in their business setting makes creation of controls and measures in a professional environment a daunting task. The author further recommends that managers of the various institutions focus on aligning strategic goals with managerial practices so as to achieve intended financial outcomes. This is similar with the study by Asah & Olufunso (2015) who highlight planning as part of the management skills that increase performance of enterprises.

Obadi, Aristovnik, & Ravšelj (2017) in a study conducted in Croatia, highlight that small and medium sized enterprises in the European Union, face the challenge of navigating cryptic employment regulations. This challenge presents as a hindrance to the financial performance of firms as managers are forced to address administrative issues pertaining to hiring, firing, work hours and other employment regulations that impact on the financial performance of the firm. The authors further posit that regulatory environments with less stringent employment regulations have more registered firms. This finding therefore points to the prevalence of administrative challenges as a common hindrance to the operation of firms in the European Union.

The inference therefore is that groupings among small and medium sized enterprises would allow for the necessary collaboration required in navigating the common administrative challenges presenting among firms. This is because firms that have successfully weathered administrative challenges in this regard would be well positioned to provide insights into approaches that can be leveraged by other firms to achieve the same end. This approach would be in agreement with the SET as it would emphasise interactions based on reciprocity whereby member entities benefit from the activity of sharing information on the common challenge of navigating regulations pertaining to employment. The findings by this study was congruent to that of Kamunge, Njeru & Tirimba (2014) who highlighted that government policy and regulations were important factors affecting the performance of enterprises.

Kamunge, Njeru & Tirimba (2014), in their study on factors affecting the performance of micro and small enterprises located in Limuru, Kenya included factors such as; infrastructure access, government policy and regulations. These results were congruent with the study results by Obadi, Aristovnik & Ravšelj (2017) who highlighted that employment regulations pose a challenge for the enterprises.

Solly (2016) in an assessment of the various reasons behind the failure of small enterprises in South Africa, highlights that managerial factors play a significant role in determining the success or lack thereof, of businesses. Employing a qualitative approach involving the use of interviews, the author posits that such factors as lack of understanding of approaches to managing resources present as a main hindrance to entrepreneurs seeking to set up shop without prior experience. The author proposes a networking approach whereby seasoned entrepreneurs can use their experience to equip new business owners with the requisite skills to ensure efficient management of resources. The author further proposes consultations with managerial experts who would highlight specific areas of failures thereby allowing the affected to better navigate the perils of setting up new businesses. This approach, as was the case with the previous, emphasises the validity of the SET as such interventions centre on the idea of reciprocity in the exchange of valuable information. The recommendation by Solly (2016) on use of experienced entrepreneurs is similar to the finding of the study by Ntakobajira (n.d.) and Kamunge, Njeru & Tirimba (2014) who highlight that managerial experience is an important factor of enterprise performance.

Asah, Olufunso, et al.(2015) in an evaluation of the significance of managerial skills in assessing the performance of firms conclude that managerial factors, alongside personal value and motivation, presented as antecedents of favourable economic performance. The author conceptualized managerial skills as involving such aspects as financial management skills, strategic planning, and human resource management concluding that managers who showed a high competence in such aspects were likely to steer their organizations towards improved financial performance. The inference from this finding is that micro enterprise managers involved in the exchange of managerial insights would gain in entrepreneurial management competencies thus resulting in the gaining of competitive advantage in the market within which they operate. In line with this is imperative to study the effect that managerial factors have on micro enterprises to enable improve their performance. This study is in line with Atristain-su (2018) who highlights lack of planning as part of the managerial issues experienced by enterprises in Mexico.

Kamunge, Njeru & Tirimba (2014), in their study on factors affecting the performance of micro and small enterprises located in Limuru, Kenya included; management experience, business information access and infrastructure access. These results were congruent with the study results by Ntakobajira (n.d.). Ntakobajira (n.d.) posits in the study in 2013 on SMEs in City Park Nairobi that, business information and experience of managers need to be all made

available for SMEs to realize their full potential and also recommend on having infrastructures in place to share business information with large numbers of entrepreneurs.

2.3.3 *Strategic-fit factors and financial performance of Informal Micro enterprises*

The essence of strategic fit factors as applicable to micro enterprises is the notion that identifying points of synergy between institutions operating in the same market environment would allow for the gaining of competitive advantage. This premise stems from the RBV theory. Kibry and Kaiser (2003) postulate that joint ventures, among other competencies, allow for the common sourcing of raw materials by SMEs. Through this approach, such small enterprises are able to leverage the economies of scale to allow for lower payments and in most cases efficiency gains in the process of sourcing for raw materials. This reduction in costs and increasing efficiency stems from the fact that suppliers are better able to deliver products and services in bulk as opposed to individuals as they cut costs through, for instance, decreased travel payments when supplying bulky goods. The practical application of this strategic fit factor in the local context would involve communal ordering of products and services from wholesalers to retail establishments involved in a group partnership. This finding by Kibry and Kaiser (2003) is similar to the proposal by Mungai & Ogot (2017) on use of vertical and horizontal linkages or networks and value chains to improve performance of enterprises.

Hoffmann & Schlosser (2001) in a study involving 164 Australian companies operating in the SME space observed that strategic alliances are gaining increasing popularity. This is because companies are able to access competencies that would otherwise not be available to them except for partnership with other like-minded firms that offer abilities that are not inherently available in their respective companies. In assessing the various determinants of strategic alliances, the authors point out that factors such as trust predicted the success or lack thereof of partnership endeavours. However, other more technical factors such as the nature of the fit between the enterprises play a significant role in determining the success of partnerships. The authors further posit that establishing the rights and duties of each of the parties involved in partnerships and the outlining of the processes in terms of engagement allow for the streamlining of the interaction between enterprises seeking to achieve the common goal of profit making. This study therefore highlights the nuance involved in achieving effective partnership between firms and supports the tenets of the SET theory as put up by Cropanzano & Mitchell (2005) of interactions and obligations which are under the rules of exchange.

Pindado & Sánchez (2018) opine that the resources capabilities in the context of the market with which organisations operate have a significant effect on the growth curve of new enterprises. Firms that have substantial internal resources and operate in markets characterised by low competition are likely to achieve faster growth than their counterparts with limited resources. This finding therefore indicates that limitation in resources predicates the need for the seeking out of strategic fits as companies with few resources strive to find a competitive advantage. The authors further highlight the pivotal role of competitive forces within markets; as the level of competition increases the importance of vast internal resources also increases with companies with few resources being at the forefront in experiencing the strains of highly competitive industries. It therefore may be inferred that companies should seek good strategic fit options if they anticipate harsh financial conditions and especially so if operating in highly competitive environments. The level of competition in the developing countries would be considered high given the large population of enterprises especially in the micro retail category as supported by the MSME survey (2016) done by the KNBS, hence use of strategic partnerships would assist the micro enterprises leverage from the advantages the partnerships would offer. This study is in support of the subsequent study by Mashal (2018) who identifies competition as a challenge for the enterprises in Jordan.

Mashal (2018), in a study focused on non-financial factors affecting small and medium enterprises in Jordan, observes that different businesses faced similar challenges. Among the notable of these challenges, a factor highlighted in the foregoing study, is the impact of competition. Another noteworthy observation was that the government policies in place played a significant role in determining the profitability of enterprises. The inference from this study therefore is that where such factors as competition present as challenges to collaboration, the mutual challenges facing industries should serve to spur strategic partnerships in their bid to ensure survival. Efforts towards mutual training and innovation play the role of improving the financial position of involved entities. This is supported by the study by Pindado & Sánchez (2018) who highlighted that firms operating in markets characterized by low competition achieve faster growth while those with limited resources seek strategic fits to get a competitive advantage.

BEWG (2017) technical report on the procurement practices of small and medium enterprises posit that such companies are preferred in assigning public contracts as they form up to 99% of businesses in the European Union. Moreover, as compared to bigger established companies, such companies offer improved value, increased innovation, and increased opportunities for

job creation. Other benefits include improvement of the social and economic equity. These findings therefore indicate that partnerships between SMEs and micro enterprises in the sourcing of public procurement opportunities, would allow for increased business propensity for the involved firms. This finding further highlights the importance of the RBV model as it underlines the significance of partnership in the creation of internal competences that can then be leveraged in the identification and exploitation of opportunities in the market. This study does reconcile with the one by Kibry and Kaiser (2003) where enterprises engaged in communal ordering to leverage economies of scale and efficiency gains.

Mungai and Ogot (2017) in their study in Muranga conclude that micro enterprises use diverse competitive business strategies and pointed out the ones that dominate are; the value chain approaches and horizontal networks and linkages, which improve performance. Micro enterprise participation in value chains involve vertical linkages both forward and backward with larger enterprises while horizontal linkages are informal and formal networks with enterprises of similar size either directly or through associations and organizations. However, they do mention that these alternative strategies that had shown support towards performance improvement were not covered under the activity based competitive business strategy typologies by Porter and in their study and were an opportunity of further research. This study by Mungai and Ogot (2017) does support various aforementioned studies under this section of strategic fit factors that highlight the various advantages of synergies and networking such as those by Kibry and Kaiser (2003) and Pindado & Sánchez (2018).

2.3.4 *Financial performance of Informal Micro enterprises*

Hill (n.d.) concluded that group performance was higher than that of individuals in their study which was similar to Mungai and Ogot (2017), who in their study concluded that value chain approaches and horizontal linkages and networks that assist in cooperation between firms improve performance.

Kamunge, Njeru & Tirimba (2014), in their study on factors affecting the performance of micro and small enterprises located in Limuru, Kenya included such factors as; access to finance, management experience, business information access, infrastructure access, government policy and regulations with access to finance and availability of management experience cited as the most important social economic factors required to improve performance. These results were congruent with the study results by Ntakobajira (n.d.). Ntakobajira (n.d.) posits in the study in 2013 on SMEs in City Park Nairobi that, access to finance, business information and

experience of managers need to be all made available for SMEs to realize their full potential and also recommend on having infrastructures in place to share business information with large numbers of entrepreneurs.

Maina (n.d.) in the study of 2016 on factors affecting growth of micro enterprises and small family enterprises in Nairobi central business district recommends that managers and employees of these organizations should be given training to enhance performance skills. This recommendation supports the conclusion of the study by Siekei, Wagoki and Kalio (2013) who cited financial training as an important aspect in performance and growth of SMEs. Siekei, Wagoki and Kalio (2013) in their study on funding initiatives by equity bank Kenya and on the financial training aspects provided to select SMEs in Njoro, Kenya, their findings indicate that businesses that participated in the bookkeeping training fared better than those that did not.

Mungai & Ogot (2017) in their study in Muranga, Kenya conclude that micro enterprises use diverse competitive business strategies and pointed out the ones that dominate are; the value chain approaches and horizontal networks and linkages, which improve performance. Micro enterprise participation in value chains involve vertical linkages both forward and backward with larger enterprises while horizontal linkages are informal and formal networks with enterprises of similar size either directly or through associations and organizations

Financial performance of the informal micro enterprises which was the independent variable was measured by sales growth, profit growth, inventory growth and growth in cash float. The use of these measures as the dependent variable was considered as appropriate due to the information available to the micro enterprises. Bookkeeping is a challenge to most of the enterprises due to the high granularity product levels they use hence a relative measure of growth was the form of information that was available from the micro enterprises rather than absolute sales figures over the years which were not available. Questions in relation to the dependent variable to supplement this that were included were on; sales growth, inventory growth, profit growth and cash float growth.

Isaksson & Seifert (2014) conclude that managing of inventories gives businesses competitive advantages which results in better financial performance. This was in line with the study by Caroline (n.d.) in 2017 who concluded that in cases where there is a unit of inventory turnover growth this would lead to increase in turnover of inventory and that inventory turnover is one of the variables that affect financial performance. Hence use of inventory growth as a subfactor of financial performance was used in this study.

2.4 Research Gaps

Atristain-su (2018) suggested to have further studies on the effect of managerial practises on internal controls within family businesses to determine best performance strategies and for continuity. Thus, this study accesses the impact of managerial factors on financial performance of micro enterprises. Kirby & Kaiser (2003) stated that there were many proponents of the strategy of joint ventures to enable SMEs with limited resources and knowledge to enter international markets yet few have focused on joint venturing activities of SMEs. In this study, partnerships as a means of joint ventures and group associations were assessed in terms of their impact on performance on micro enterprises.

Kamunge, Njeru & Tirimba (2014), in their study on factors affecting the performance of micro and small enterprises located in Limuru, Kenya included such factors as; access to finance, management experience, business information access, infrastructure access, government policy and regulations. These results were congruent with the study results by Ntakobajira (n.d.). Ntakobajira (n.d.) posits in the study in 2013 on SMEs in City Park Nairobi that, access to finance, business information and experience of managers need to be all made available for SMEs to realize their full potential and also recommend on having infrastructures in place to share business information with large numbers of entrepreneurs. These studies focussed on micro and small enterprises in Limuru and small and medium enterprises in City Park hence there is need to study the micro enterprises especially in the informal settlements of Nairobi and establish the effect of these factors on the financial performance of these enterprises.

Maina (n.d.) in the study of 2016 on factors affecting growth of micro enterprises and small family enterprises in Nairobi central business district recommends that managers and employees of these organizations should be given training to enhance performance skills. This recommendation supports the conclusion of the study by Siekei, Wagoki and Kalio (2013) who cited financial training as an important aspect in performance and growth of SMEs. Siekei, Wagoki and Kalio (2013) in their study in Njoro on funding initiatives by equity bank Kenya and on the financial training aspects provided to select SMEs. Their findings indicate that businesses that participated in the bookkeeping training fared better than those that did not. These studies were focussed on the Nairobi central business district and Njoro areas hence there is need for the study of micro enterprises in the informal settlements of Nairobi and how such factors affect the performance of these enterprises which this study focuses on.

Mungai & Ogot (2017) in their study in Muranga conclude that micro enterprises use diverse competitive business strategies and pointed out the ones that dominate are; the value chain approaches and horizontal networks and linkages, which improve performance. Micro enterprise participation in value chains involve vertical linkages both forward and backward with larger enterprises while horizontal linkages are informal and formal networks with enterprises of similar size either directly or through associations and organizations. However, they do mention that these alternative strategies were not covered in their study and were an opportunity of further research, which this study delves into.

This study therefore seeks to fill the gap in research by providing empirical evidence of the effect of group participation in the financial performance on micro enterprises while considering various factors under the financial, managerial and strategic fit categories. The study further offers novelty by focusing on the most marginalized of micro enterprises– those operating in informal settlements within Kenya’s capital – Nairobi while considering the effect of group networks and significance effect of factors in business groups on financial performance of micro enterprises.

2.5 Conceptual Framework

In the study the dependent variable is the financial performance of the informal micro enterprises, which is measured by sales growth, profit growth, inventory growth and cash float growth. The construct is deemed the dependent variable as the main aim of group interventions is to optimize the financial performance of participating enterprises. The independent variables are the financial, managerial and strategic fit factors in business groups; these entail the main means through which business interventions and through group participation, were effected. Other control factors that may have impact on the financial performance that were considered were; age, gender, level of education, marital status and number of employees. The study was based on an experimental design having a treated group (enterprises in business groups) and a control group (enterprises not in business groups) and also had an explanatory purpose to explain the causal relationship between factors in business group (financial, managerial and strategic-fit factors) and financial performance of the enterprises. The study also tested the null hypothesis which stated that the financial performance of treated group (enterprises in business groups) was equal or less to the financial performance of control group (enterprises not in business groups). The conceptual framework provides a depiction of the relationship between the group variables considered. Financial, managerial, and strategic factors in the business groups were considered independent variables with a direct effect on financial performance

(the dependent variable) of the informal micro enterprises which was measured by sales growth, profit growth, inventory growth and cash float growth. The use of these relative growth measures as the dependent variable was considered as appropriate due to the information available to the micro enterprises. Bookkeeping is a challenge to most of the enterprises due to the high granularity product levels they use hence a relative measure of growth was the form of information that was available from the micro enterprises rather than absolute sales figures over the years which were not available. Questions in relation to the dependent variable to supplement this that were included were; sales growth, inventory growth, profit growth and cash float growth. The variables; age, education, marital status, gender and geographical number of employees were included as control variables while location was used for spillover effect analysis.

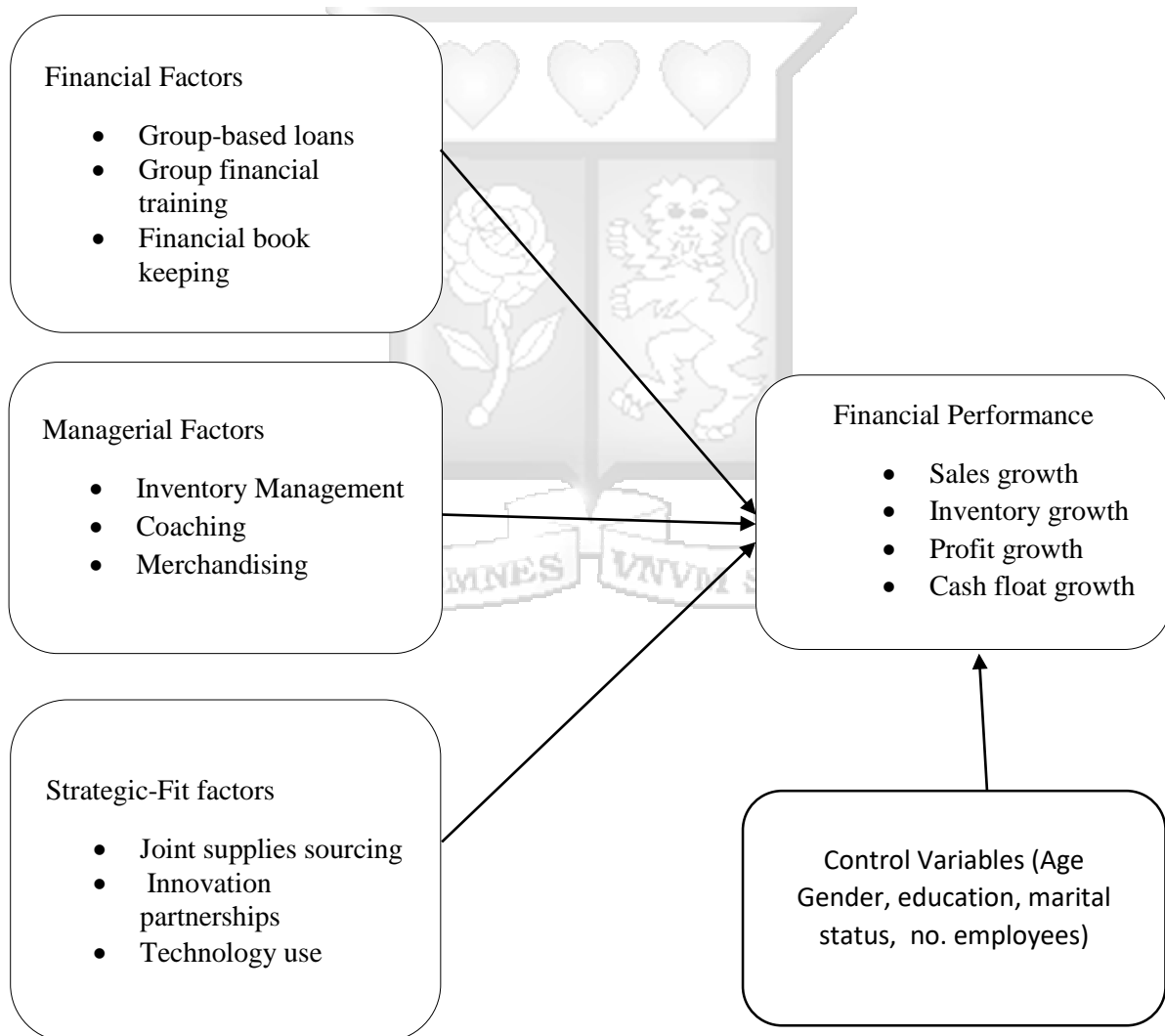


Figure 1: Conceptual framework

2.6 Operationalization of variables

The table below highlights the manner through which each of the variables were operationalized in the assessment of the relationship between the dependent and the independent variables. All the sub-variables/ constructs considered for each variable were derived from literature.

Table 2.1: Operationalization of variables

Variables	Constructs	Measurements	Source
Dependent	Financial Performance <ul style="list-style-type: none"> Sales growth Inventory growth Profit growth Cash float growth 	<ul style="list-style-type: none"> Ordinal data 	Kamunge, Njeru & Tirimba(2014), Ntakobajira (n.d.); Smart Duka, (2019); Isaksson & Seifert (2014)
Independent	Financial Factors <ul style="list-style-type: none"> Group-based loans Group financial training Financial bookkeeping Managerial Factors <ul style="list-style-type: none"> Inventory Management Coaching Merchandising Strategic-Fit factors <ul style="list-style-type: none"> Joint supplies sourcing Innovation partnerships Technology use 	<ul style="list-style-type: none"> Ordinal data Ordinal data Ordinal data Ordinal data Ordinal data Ordinal data Ordinal data Ordinal data 	Siekei, Wagoki and Kalio (2013); Smart Duka (2019). (Atristain-su, 2018; Solly, 2016; Asah et al., 2015; Smart Duka, 2019). (Kibry & Kaiser, 2003; Pindado & Sánchez, 2018 Smart Duka, 2019).

The dependent variable was the financial performance of the enterprise while the independent variables were the factors in business groups i.e. financial, managerial and strategic fit factors. These factors in any enterprise relate to the resources that the enterprise possess or has access to, which is in line with the Resource based view (RBV) theory. The business group networks are then used to exchange these resources between the individual to enterprise or between enterprise to enterprise in line with the Social Exchange Theory (SET). Siekei, Wagoki and Kalio (2013) as published on the world academic journal of business and applied sciences, on their assessment of financial literacy on performance of SMEs sought to understand whether financial literacy in terms of book keeping, financial analysis and credit management translated to better access to credit and better finance management in which they used structured questionnaires. They analysed the data using descriptive statistics and T test analysis to establish the difference in performance before and after the training. In this study, the financial factors were measured using group-based loans, group financial training financial bookkeeping. Questionnaires and secondary data were used, while analysis was via ordinal regression analysis and non-parametric independent samples test to obtain differences.

Atristain-su (2018) analyses the best management practices enabling SMEs in Mexico to achieve desired performance and the role internal controls play on managerial practices. Management practices in conjunction with Human Resources, Organization Innovation, and Strategic Planning were addressed. In this study, the managerial factors accessed included inventory management, coaching and merchandising. Questionnaires and secondary data were used while analysis was done via ordinal regression analysis and non-parametric independent samples test to obtain differences.

Kirby & Kaiser (2003) conclude that for SMEs, joint ventures can be a lucrative market entry strategy because they have limited resources and limited knowledge. They further state that joint ventures provide a means to access resources in other organizations and conclude that joint ventures of SMEs are similar to those of large multi-national companies, in this study survey questionnaires and in-depth case interviews were used. In the current study, partnerships as means of joint ventures or strategic partnerships were accessed using questionnaires and secondary data while analysis was via ordinal regression analysis and non-parametric independent samples test to obtain differences.

Other control factors that may have impact on the financial performance that were considered were; age, gender, level of education, marital status and number of employees. The study

checks how the independent variable of use of factors in business group affect the dependent variables of financial performance of the informal micro retail enterprises. However, other factors are also critical to the performance of these enterprises and hence their effect is checked as part of other controlling variables and to cater for endogeneity.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains the research philosophy, research design, population and sampling, data collection methods, data analysis, and ethical issues in research.

3.2 Research Philosophy

Saunders, Lewis & Thornhill (2009) define Epistemology as the assumption about knowledge of what constitutes valid, legitimate and acceptable knowledge. Objectivism, which is an aspect of Epistemology, portrays social entities existence, externally to social actors that are concerned with their existence. This research is based on Epistemology assumptions and Objectivism aspect under the Epistemological assumptions. The research philosophy used is positivism, which deals with quantitative research methods. Positivism as Saunders et al. (2009) state is related to the philosophical stance of the natural scientist and works with an observable social reality to make generalizations that are law like.

In Epistemologically under positivism, the researcher focuses on discovering measurable and observable facts leading to the production of meaningful data as Crotty describe (Saunders et al., 2009). Causal relationships can be derived from data to create law like generalizations as those produced by scientists, these universal laws and rules can be used to predict behavior and events in organizations (Saunders et al., 2009). The positivism approach for this study is a good one as the study deals with observable social reality and looks at the causal link observed between factors in business groups and the financial performance of informal micro enterprise and is used to create generalizations of the micro enterprise population.

3.3 Research Design

The research design is an experiment to study causal links investigating if there is a link between variables. The study is based on an explanatory approach, which Saunders et al. (2009) describe as a study that establishes relationships between variables, it studies a situation or problem in order to explain the relationships between variables. The study was a scientific research. The research data was cross sectional, collecting different types of data at one point in time.

The study was based on an experimental design having a treated group (enterprises in business groups) and a control group (enterprises not in business groups) and also had an explanatory

purpose to explain the causal relationship between business group factors (financial, managerial and strategic-fit factors) and financial performance of the enterprises. The study also tested the null hypothesis that stated that the financial performance of treated group (enterprises in business groups) was equal or less to the financial performance of control group (enterprises not in business groups). The experimental data was obtained from the Smart Duka Project run by a Non-governmental organization which has been ongoing from 2016. The need to have the experimental design was because the study was based on actual project in the retail enterprises in the informal areas of Nairobi. There was also the need to study the effect of group participation intervention on the enterprises to be able to compare the financial performance of the enterprises in groups who were the treated group and those not in groups who were the control group.

The aim of study was to research the effect of business groups on the performance of the informal micro retail enterprises in Nairobi, Kenya including determining the effect of factors in business groups; financial, managerial and strategic fit factors on the financial performance of the informal micro retail enterprises. The data was analyzed using quantitative analysis and statistical inferences made. The treated group sample was selected from the population of the informal micro retail enterprises and were those enterprises that joined business groups in the project while the control group sample was from the population of the informal micro retail enterprises that did not join groups in the project. The differences in the treated and control groups were analyzed using non-parametric independent samples tests.

3.4 Population and Sampling

The study focused on a project run by a Non-Governmental Organization that dealt with informal micro retail enterprises in the informal sectors of Nairobi. The enterprises in the project were in informal settlements of Nairobi including Githurai, Kayole, Mwiki, Kangemi, Kawangware, Huruma, Mathare, Umoja, Pipeline and Dandora. The main aim of the project was to assist grow and equip the informal retail micro enterprises.

The population of the informal micro retail enterprises in the project was 874 from the informal micro enterprises that were onboarded to the project in various cohorts with the initial baseline selection being Dec 2015 and the endline in June 2018 (Smart Duka,2019). The sampling process was quantitative and was done using probability sampling and using simple random sampling from the different areas where the project was being carried out in the informal settlements in Nairobi, Kenya. The sample was picked putting into consideration time and cost constraints. The sampling unit was the micro enterprise while the sample element was the

owner of the enterprises or the main manager of the enterprises. Owners and managers of micro enterprises not in the Smart Duka Project were not eligible to take part in this study.

The basis of the sample size determination was the ‘standard formula’: $n = 2 (Z_{\alpha} + Z_{1-\beta})^2 \sigma^2 / (\Delta^2)$, where n was the appropriate sample size, Z_{α} was a constant set according to the accepted α error: $\alpha = 10\%$ $Z_{\alpha} = 1.28$; $Z_{1-\beta}$ dependent on the desired statistical power of the test: the study used 80% power, conventionally deemed reasonable, yielding $Z_{1-\beta} = 0.8416$ Kadam & Bhalerao (2010), Δ is the expected difference in the effect of the two groups (treated and control group) – approximately 0.07; and σ , the standard deviation. variability of the population is approximately 0.25, both from the (Drexler et al., 2014). However, Borm, Fransen & Lemmens (2007) have shown that this formula does not attain the desired statistical power and that addition of 1 unit to the resulting value of n results into a sample size with the desired statistical power. This formula was used to obtain the sample size for both the treated group-enterprises in business groups and the control group-enterprises not in business groups, the same sample target number was used for both the treated and control group. Thus, the optimal sample size for the study was calculated as:

$$n^* = 2(Z_{\alpha} + Z_{1-\beta})^2 \sigma^2 / (\Delta^2) + 1 \quad (1)$$

$$; n^* = 2(1.28 + 0.8416)^2 0.25^2 / (0.07^2) + 1 = 116$$

Table 3.1: Sample breakdown

Description	Sample Number	Retailer Population
<i>Treated group:</i> Number of informal micro enterprises onboarded in business groups on Smart Duka Project as at Jun 2018	116	
<i>Control group:</i> Informal enterprises not in business groups on Smart Duka Project	116	
Total	232	874

3.5 Data Collection Methods

Primary and secondary data from the project was used to get quantitative data collected from the sample of 116 retail enterprises in groups randomly picked using probability sampling from the project and 116 retail enterprises not in groups. The enterprises in business groups were considered the treated group while those not in business groups were considered as the control group. Group participation status was considered as at initial stages of the project. Both the

enterprises in business groups (treated group) and the enterprises not in business groups (control group) were all part of the smart duka project, enterprises that were not part of the smart duka project were not included in the study as participants. The secondary data was obtained from the Non-governmental organization that has the records for different cohorts both at the baseline as from December 2015 and endline in June 2018. The main secondary data that was used was the enterprise information, this information was used to get access to the participants of the study and the information on group participation during initial phase of the project since status of group participation seemed to have been changing after initial phase of the project with some leaving groups during the project and some joining groups which may not have necessarily been business groups as is interpreted in this study. This secondary data on group participation was augmented with the primary data and used in the tests and analysis of the study results. Initially the baseline sales data which was part of the secondary data held by the non- governmental organization was to be used however due to lack of endline sales data during data collection from the enterprises who seemed not to have good bookkeeping practices this information was not used and the ordinal data on financial performance based on relative growth was used. The information obtained from the secondary data was augmented with the primary data in the research analysis especially on segmenting between the results on the treated and the control group respectively. Primary data was directly collected from the micro retail enterprises randomly selected by use of a questionnaire and with the aid of research assistants. The closed type questionnaires that were used were structured on the specific objectives of the study using Likert scale for rating the questions hence ordinal data for the dependent and independent variables obtained, There were 5 main sections of the questionnaire which related to: the financial factors, managerial factors, strategic fit factors, financial performance and demographics. On each of the questions on the factors and financial performance there were questions to address the subfactors. Under the financial factors sections there were 6 questions with two questions each on the loans, financial training and bookkeeping sub factors. On the managerial factors sections there were 6 questions with two questions each on the inventory management, coaching and merchandizing sub factors. On the strategic fit factors sections there were 6 questions with two questions each on the joint supplies sourcing, technology use and innovation partnerships sub factors. On the financial performance sections there were 6 questions on sales growth, inventory growth, profit growth and cash float growth sub factors. Under financial performance there was a section to include the sales figures as at January 2017 and December 2019, however due to the limitations that the enterprises have on daily bookkeeping the absolute sales figures were not readily available from the enterprises

hence the ordinal data on financial performance on growth was used. On the group participation and demographic section there were questions on group participation, location of business, age, gender, marital status, level of education, number of persons/employees in the enterprise. For the section on financial factors, managerial factors, strategic fit factors and financial performance the questions were on a likert scale of 1-5 with 1 being the least favourable and 5 the most favourable. For the demographic section on the age, marital status, level of education, number of people/ employees in the enterprise there were three categories each to choose from while the gender and group participation had two categories and a section to include location. Training on the collection of the data and process to follow was done by the main researcher. To help increase response rate, the questions were made short, simple and specific and were available in English and Kiswahili languages. There was an information and consent form that was also used alongside the questionnaire that was also in English and Kiswahili languages that was used to provide participants with relevant information and seek their consent before embarking on the data collection exercise. There was a letter of introduction from the university and the non-governmental organization that handles the smart duka project had communicated with the enterprise owners that the study would be held and telephone messages would be sent by the organization a day before a certain area was visited to help increase the response rate.

3.6 Data Analysis

Data was analyzed using quantitative analysis methods using ordinal regression modelling and diagnostic, descriptive and inferential statistics obtained as the data was quantitative in nature and hence findings were inferred for the whole population. Statistical Package for the Social Sciences (SPSS) was used for the analysis. Demographic summary statistics using Mann Whitney U tests of nonparametric data for comparison of two independent groups were done. Statistical assumptions/Diagnostic tests were done for Test of Normality (Kolmogorov-Smirnov (KS) and Shapiro-Wilk tests), Homogeneity, Multi collinearity (VIF), Auto correlation (Durbin Watson), and Tests of Parallel lines/proportional odds. Descriptive analysis was done on the 3 business factors (financial, managerial and strategic fit) and financial performance using Mann Whitney U tests of nonparametric data for comparison of two independent groups. Inferential analysis was done using- Spearman Correlation Coefficient and Ordinal Regression using the data on Treated group- Enterprises that joined business groups and Control group- Enterprises that did not join business groups were used and regressed for both the treated and control combined and for the treated only and control only.

The Hypothesis that was tested- Use of business groups has a positive effect on financial performance of the informal micro retail enterprises and used the difference of two populations/samples using mean or P value

- H₀- Null Hypothesis- Financial performance of enterprises in business groups \leq financial performance of enterprises not in business groups
- H₁- Alternative Hypothesis- Financial performance of enterprises in business groups $>$ financial performance of enterprises not in business groups

To increase the efficiency of the estimates, the study followed Sayingzoga, Bulte & Lensink (2016) who include control variables (covariates).

The estimate followed the model equation by Drexler et al. (2014) below which was used to analyze the impact of training on micro enterprises in a study in Dominican Republic:

$$PER^{ALL} = \alpha + \gamma_2 FIN^{ALL} + \gamma_3 MAN^{ALL} + \gamma_4 STR^{ALL} + \gamma_1 GRP + \delta Xi^{ALL} + \epsilon_i \quad (2)$$

$$PER^{TRT} = \alpha + \gamma_5 FIN^{TRT} + \gamma_6 MAN^{TRT} + \gamma_7 STR^{TRT} + \delta Xi^{TRT} + \epsilon_i \quad (2a)$$

$$PER^{CON} = \alpha + \gamma_8 FIN^{CON} + \gamma_9 MAN^{CON} + \gamma_{10} STR^{CON} + \delta Xi^{CON} + \epsilon_i \quad (2b)$$

Where;

PER^{ALL} – Financial Performance for all (treated and control) sample enterprises

PER^{TRT} – Financial Performance for treated group only sample enterprises

PER^{CON} – Financial Performance for control group only sample enterprises

GRP – Group Participation Dummy (where 1 was a representation of Yes in group and 0 No not in group)

FIN^{ALL} - Financial Factors: “for all-treated and control group” (were obtained by the average aggregate from the loans, financial training and financial bookkeeping data)

FIN^{TRT} - Financial Factors: “for treated group only” (were obtained by the average aggregate from the loans, financial training and financial bookkeeping data)

FIN^{CON} - Financial Factors: “for control group only” (were obtained by the average aggregate from the loans, financial training and financial bookkeeping data)

MAN^{ALL} - Managerial Factors: “for all-treated and control group” (were obtained by the average aggregate from the inventory management, coaching and merchandizing data)

MAN^{TRT} - Managerial Factors: “for treated group only” (were obtained by the average aggregate from the inventory management, coaching and merchandizing data)

MAN^{CON} - Managerial Factors: “for control group only” (were obtained by the average aggregate from the inventory management, coaching and merchandizing data)

STR^{ALL} - Strategic Fit Factors: “for all-treated and control group” (were obtained by the average aggregate from the joint supplies sourcing, innovation partnerships and technology use data)

STR^{TRT} - Strategic Fit Factors: “for treated group only” (were obtained by the average aggregate from the joint supplies sourcing, innovation partnerships and technology use data)

STR^{CON} - Strategic Fit Factors “for control group only” (were obtained by the average aggregate from the joint supplies sourcing, innovation partnerships and technology use data)

Xi^{ALL} - Vector of covariates: “for all-treated and control group (included age, level of education, gender, marital status, number of employees)

Xi^{TRT} - Vector of covariates: “for treated group only” (included age, level of education, gender, marital status, number of employees)

Xi^{CON} - Vector of covariates: “for control group only” (included age, level of education, gender, marital status, number of employees)

Anderson (n.d.) recommends collecting of all controls/covariates that are most likely to confound on the relationship between the independent and dependent variable as a means of taking care of endogeneity problem. In the study various control variables were used. They conclude that in experimental designs, especially the ones with mediation, endogeneity exists from measurement errors, confounding variables and effects on selection.

3.6.1 Externalities

The informal settlements in Nairobi covered in the study or project are densely populated and the informal micro retail enterprises are usually in close proximity to each other and some work together in social scenarios in business and outside business. This way, spillovers from one section of the study group like the treated group to the control group are a day to day occurrence. According to Drexler et al. (2014), spillovers can take two forms: first, trained subjects may consciously pass on newly acquired skills to their peers or neighboring businesses may observe and mimic better management practices. The research studied the presence of spillovers using the strategy by (Miguel & Kremer, 2004). Thus, density measures were constructed to capture the number of informal micro retail enterprises within the same area/strata of enterprises in the study (Ni^S); and within the same area/strata of enterprises in the treatment group, i.e. enterprises in groups (Ni^{SG}).

$$PER^{ALL} = \alpha + \gamma_2 FIN + \gamma_3 MAN + \gamma_4 STR + \gamma_1 GRP + \delta Xi + \eta_1 Ni^S + \eta_2 Ni^{SG} + \varepsilon_i \quad (3)$$

The study inferred positive spillovers if $\eta_1, \eta_2^{SG} > 0$

(Ni^S) ; the number of informal micro retail enterprises within the same area/strata of enterprises in the study

(Ni^{SG}) ; the number of informal micro retail enterprises within the same area/strata of enterprises in the treatment group, i.e. enterprises in groups

3.7 Research quality, Reliability and Validity

Reliability refers to consistency and replication and is concerned with the robustness of the questionnaire and whether or not it produces consistent findings under different conditions and different timings (Saunders et al., 2009). To assess reliability, the internal consistency approach was used which involves correlating responses to questions in the questionnaire to each other across a subgroup of questions. The Cronbach's alpha was used to measure internal consistency and the primary data obtained during the study was used to compute reliability. There were initial plans to have a pilot study, however, the number of the enterprises in the smart duka project were fixed as the study reference period was based on prior years and hence it proved difficult to get a different set of enterprises to do the pilot test on as the same enterprises would have been included in the final study which would have affected the participants responses hence affecting the study results. Internal validity refers to the ability of the questionnaire to measure what it is intended to measure also known as measurement validity. Internal validity occurs when the research shows a causal relationship between two variables, from the research results the results did show good measurement as the results were able to show the causal relationships between the dependent and independent variables using the correlation and regression analysis results hence confirming internal validity. Content validity which is the extent to which the questions provide adequate coverage to the investigative questions was checked based on the literature reviewed. Based on the literature reviewed there was adequate coverage of the sub factors under each of the factors and performance section by having 2 questions covering each sub factor hence good content validity. External validity which refers to study's research findings being generalized to other relevant groups was checked to see if statistical generalisability can be used using the results of both the treated and control group which were in sync across the business factor data and the financial performance data hence indicating external validity.

This study is based on an experiment/project using quantitative data. The quality of the research was assessed on the randomness that the control and treated group were created, and the presence of a control group removing any possible effects of an alternative explanation to the

intervention and eliminate threats to internal validity. The control group was subjected to the same external influences as the treated group apart from the group participation being tested.

3.7.1 Reliability

Reliability of the study instrument was determined to establish the level of consistency of study measurement over time. Using Cronbach's alpha coefficient values between 0 and 1.00, Kothari (2012) stated that the rule of thumb for Cronbach's alpha is that the closer the alpha is to 1 the higher the reliability. Findings were presented in Table 3.2.

Table 3.2: Reliability Results

Construct Measurements	Cronbach's alpha	Number of Items
Financial factors	.712	6
Managerial factors	.815	6
Strategic-fit factors	.865	6
Financial performance	.923	6

Source: Research Findings (2020)

Findings in Table 3.2 established that the Cronbach's alpha for all the study variables was above .7 or closer to 1.00, hence the research instrument was considered reliable and was used in the study. The reliability of the constructs was deemed excellent in establishing internal consistency, suggesting that the instrument of the study was applicable in giving consistent results over time.

3.8 Ethical Issues in Research

Ethics is the standard of behaviour guiding the researcher's conduct relative to the rights of those who are the subject of the research or those affected by it (Saunders et al., 2009). The data used was treated with the necessary confidentiality and anonymity to the participants and consent to use the data sought. The data was collected from willing participants and the data analysed by the researcher objectively. Necessary approvals were sought from the Strathmore Institutional Review Board and NACOSTI license obtained before the field research. The letter of introduction from the school and the Information Consent Form as attached in the appendix were used during the data collection process as a form of introduction and information. The non-governmental organization that handles the smart duka project had communicated with the enterprise owners that the study would be held and telephone messages would be sent by the organization a day before a certain area was visited to help increase awareness and

psychologically prepare the respondents. Ethical issues considerations were part of the main focus in the research and beyond.

The various ethical principles that were considered include but are not limited to; integrity and objectivity of the researcher, respect for others, avoidance of harm, privacy of the participants, voluntary nature of participation with right to withdraw, informed consent of participants, confidentiality of data and anonymity of participants, responsibility in data analysis and findings, compliance in data management, safety of the researcher. The results of the study will be shared with the officials of the Smart Duka Project and copies given to them for access, they will share the information with the micro enterprises in the project or they can be obtained directly from the researcher.



CHAPTER FOUR

PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

This study sought to test the hypothesis that use of business groups has a positive effect on financial performance of the informal micro retail enterprises in Smart Duka Program, Nairobi, Kenya. The study also sought to access the effect of financial factors, managerial factors, strategic fit factors on the financial performance of the informal micro retail enterprises in Smart Duka Program, Nairobi. The study findings were presented in line with the research objectives, as well as using the model highlighted in the methodology. The findings include the following; Demographic statistics between the treated and control group. Various diagnostic tests and descriptive analysis presented the findings of both treated and control groups, and their differences in business factors and financial performance over the study period using mean ranking and significance levels. Inferential analysis, showing correlation and regression were also adopted to illustrate the effect of factors in business groups on financial performance of informal micro retail enterprises in Smart Duka Program, Nairobi Kenya using regression estimates and significance levels.

4.2 Sample Characteristics

A total of 232 questionnaires were sent out to the respondents to fill where 116 represented treated group (those in groups) and another 116 represented control group (those not in groups). A total of 220 questionnaires were filled and returned for analysis, representing 94% response rate; where 76 were filled by treated group while 144 were filled by control group. This is because the number of enterprises that were in business groups which were part of the treated group was lower than the number of enterprises not in business groups which were part of the control group. The numbers were also fixed in that the group participation status were considered during the initial stages of the project hence higher numbers than this could not be achieved. To cater for the total sample of treated and control group more enterprises of the control group were added to the total sample size. Unbalanced sample tests were done due to these unbalanced counts of the treated group against control group. Findings are indicated in table 4.1.

Table 4.1: Response Rate

Questionnaire Issued	Sample Size	Response Rate
Filled and returned questionnaires	220	94%
Un-returned Questionnaires	12	6%
Total	232	100%

Source: Research Findings (2020)

4.3 Demographics

The study determined the general information of the respondents based on the data gathered from the field work, which was gathered by the researcher. The information was collected using structured questionnaires. The information gathered included age, gender, marital status, level of education and number of the people/employees in the enterprises. The demographics were used to control all possible covariates likely to confound on the relationship between the independent and dependent variable as a means of taking care of endogeneity problem. The survey information was then augmented with the secondary data from the Non-Governmental organization (Smart Duka Programme). The secondary data used was the enterprise information and group participation information at the initial stages of the project. Mann Whitney U Test was used to establish the difference between the treated and control groups of the study; where ranked mean, z-score and significance level were used to interpret the findings of the study.

4.3.1 *Gender, age, level of education, marital status, number of people in the enterprise*

The study sought to find out the gender of the respondents, their age, education level, marital status and number of people in the business. Gender was an important factor as it revealed the proportion of the respondents. Level of education was important in establishing whether there was a difference in business performance as a result of education of the respondents. Marital status was considered to establish availability of someone to always be present to manage the shop at any given time as spouses assist each other. Lastly, number of people in the enterprise was considered to critically illustrate manpower resources available to the business. Likert scales of 1-2 and 1-3 were used with 2 and 3 selections listed respectively.

Table 4.2: Demographic Summary Statistics

	Frequency		Response rate %	General Mean	Mean Rank		z-score	Sig.
	Control	Treated			Control	Treated		
Gender				1.55	113.90	104.05	-1.266	.206
Male	61 (42.4%)	39 (51.3%)	45.5%					
Female	83 (57.6%)	37 (48.7%)	54.5%					
Total	144	76	100%					
Age				2.59	105.44	120.08	-1.915	.056
<25 years	5 (3.5%)	2 (2.6%)	3.2%					
25 – 35 years	56 (38.9%)	20 (26.3%)	34.5%					
>35 years	83 (57.6%)	54 (71.1%)	62.3%					
Total	144	76	100%					
Level of Education				1.83	108.27	114.72	-.850	.395
Tertiary	38 (26.4%)	19 (25%)	25.9%					
Secondary	96 (66.7%)	47 (61.8%)	65%					
Primary	10 (6.9%)	10 (13.2%)	9.1%					
Total	144	76	100%					
Marital status				1.13	111.43	108.74	-.681	.496
Married	133 (92.4%)	72 (94.7%)	93.2%					
Divorced	1 (0.7%)	1 (1.3%)	.9%					
Single	10 (6.9%)	3 (3.9%)	5.9%					
Total	144	76	100%					
Number of employees				1.05	111.35	108.88	-.798	.425
1 person	137 (95.1%)	74 (97.4%)	95.9%					
2 – 5 people	6 (4.2%)	2 (2.6%)	3.6%					
6 – 9 people	1 (0.7%)		.5%					
Total	144	76	100%					

Source: Research Findings (2020)

Table 4.2 presents summary statistics of demographic data of each of the two sampled groups of the study based on the information gathered from the field. Mann Whitney U test with significance level of .05 was used to make interpretation of the study findings. On gender demographic of the study, there were 100 (45.5%) of male and 120 (54.5%) of female respondents who participated in the study. Of this finding, the study established that 61(42.4%) males and 83 (57.6%) females were in the control group while 39 (51.3%) males and 37 (48.7%) females were in treated group. However from the significance value of .206 > .05, the study established that there was no significant difference in gender participation between the treated and control groups of the study. The mean ranking of the control group was higher than that of the treated group. From the analysis the control group had a higher percentage of females at 57.6% while the treated group had a higher percentage of male at 51.3%. This could infer that the higher percentage of the female representation in the control group could have led to

the higher mean ranking in the control group under the gender category since the ranking of the female category was higher than the male category.

The study also established that majority of the respondents 137 (62.3%) were above 35 years of age in both categories of the study. That is, control had 83 (57.6%) respondents while treated group had 54 (71.1%) respondents above 35 years of age. Also, 76 (34.5%) of the respondents were in the age category of 25 – 35 years; where 56 (38.9%) were in the control group whereas 20 (26.3%) respondents in the treated group. There were only 7 (3.2%) respondents below the age of 25 years in which 5 (3.5%) were in control group while 2 (2.6%) of them were in treated group. Significance value of $.056 > .05$ indicated that there was no statistical significance difference in age between the two groups of the study as shown in table 4.2. The mean ranking of the treated group was higher than that of the control group. This could infer of the category of above 35 years of age which had the highest proportion of respondents in the study at 62.3%, of this represented 71.1% of the treated group and 57.6% of the control meaning that the category of above 35 years had higher ranking in the study of which the treated group carried higher ranking in this category than the control group hence causing the treated group mean rank to be higher. During the study it was noted that the older category of business owners those above 35 years of age seemed more focussed with their enterprises and were more interested in the project in comparison to the younger owners who seemed to still have other business or career options they were interested in venturing into so as to decide which path to focus on while considering the micro retail enterprise as a temporary phase of their life. However, the older ones seemed more set and decided to stick with this line of business and grow it further.

Level of education was an important demographic factor in the study. This notably on the fact that the two groups may have received training during the business period. However, of interest was to establish whether education has been mostly significant to either of the two groups of the study; treated and control as shown in table 4.2. Findings revealed that majority of the respondents 143 (65%) had secondary level of education; where 96 (66.7%) were in the control group and 47 (61.8%) in the treated group. A total of 57 (25.9%) had tertiary level of education; where 38 (26.4%) were in the control group and 19 (25%) in the treated group. 20 (9.1%) of the respondents had primary level of education; where 10 (6.9%) were in control group and another 10 (13.2%) in treated group. The overall significance value of $.395 > .05$ showed that there was no significant difference in terms of education among the two groups of the study. The mean ranking of the treated group was higher than that of the control group. In both the

tertiary and secondary categories the percentage proportions were higher under the control than in the treated while the primary category was higher in the treated group in comparison to the control group. Due to the higher ranking of the primary group the mean ranking was higher under treated group than control group as the treated group had higher primary proportions than control group. These findings could support the descriptive results under the business factors which shows that the financial and strategic fit factors under control group in the regression had a higher estimate than the control group while managerial factors under treated group had a higher ranking than the control group although this difference was insignificant. This can be due to higher education levels under the control group under the tertiary and secondary categories leading to higher financial and strategic fit factors.

The study established the marital status of the respondents. Majority of the respondents 205 (93.2%) were married; where 133 (92.4%) were in control group while 72 (94.7%) in treated group. 2 respondents (0.9%) were divorced; where 1 (0.7%) was in control group and 1 (1.3%) in treated group. 13 respondents (5.9%) were single; where 10 (6.9%) were in control group while 3 (3.9%) in treated group. A significance value of $.496 > .05$ revealed that the difference between the groups was insignificant as shown in table 4.2. The mean ranking of the control group was higher than that of the treated group. This could be due to the higher ranking of the single group in which the control group had higher proportions than the treated group.

Further, the study established number of people or employees in the enterprise as shown in table 4.2. This was basically to describe whether family members are involved or not, and whether the ownership seek for assistance from other people in running the operations of the enterprise. The findings indicated that majority of the enterprise with respondents of 211 (95.9%) have 1 person as the employee/owner with 137 (95.1%) under control and 74 (97.4%) under treated, 8 (3.6%) respondents had 2-5 people, where 6 (4.2%) were in control group and 2 (2.6%) in treated group. Only 1 (0.7%) respondent was in the 6-9 people category being under the control group representing 0.5%. In addition, established significance value of $.425 > .05$ indicate that there was no significant difference in number of employees between the treated and control group of the study as shown in table 4.2. The mean ranking of the control group was higher than that of the treated group, these could be due to the ranking of 6-9 people being higher where only the control group had representation.

4.4 Diagnostic Tests

4.4.1 Test of Normality

Findings in table 4.3 reveal the normality of the residuals and dependent variable. From the results using the Kolmogorov-Smirnov (KS) and Shapiro-Wilk tests. These tests test the normal distribution of the residuals with the null hypothesis stating that the residuals or dependent variable are normally distributed. From the results, both the standardized and unstandardized residual and Financial performance factors had a significance level of <0.05 hence leading to the rejection of the null hypothesis and confirming the lack of normal distribution of the residuals and dependent variable of financial performance factors.

Table 4.3: Test of Normality

Test of Normality						
	Kolmogorov-Smirnov ^a			Shapiro Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.086	220	.000	.952	220	.000
Unstandardized Residual	.086	220	.000	.952	220	.000
Financial Performance Factors	.159	220	.000	.888	220	.000

a. Lilliefors Significance Correction

Source: Research Findings (2020)

4.4.2 Serial Autocorrelation Test

Serial autocorrelation test was undertaken to establish whether residuals of the model were auto correlated. The rule of thumb is that autocorrelation values ranging 1.5 to 2.5 indicates no issues of serial autocorrelation between the residuals of the model. Durbin-Watson test was used as shown in table 4.4.

Table 4.4: Serial Autocorrelation test

Model Summary ^b		
Model	Std. Error of the Estimate	Durbin-Watson
1	.8567	1.856

a. Predictors: (Constant) Financial Factors, Managerial Factors, Strategic Fit Factors

b. Dependent Variable: Financial Performance

Source: Research Findings (2020)

The findings in table 4.4 reveals Durbin-Watson statistic measure for serial autocorrelation. Durbin-Watson measure of 1.856 indicate that there is no serial autocorrelation among residuals of the study. The finding hold the view concluded that a Durbin-Watson measure of 1.5 – 2.5 reveals no issues of serial autocorrelation in the study.

4.4.3 *Multicollinearity Tests*

Multicollinearity test was estimated to examine whether the independent study variables had correlation between them. A good model for the study should not have correlation between its independent variables. The 3 independent variables were obtained from literature review, the sub variables were also obtained from literature review and the products as available in the project. All sub variables and variables are essential, and their contribution effect is necessary in the study and hence all variables and sub variables were considered in the analysis as part of this study.

Table 4.5: Multicollinearity Test

Model	Coefficients ^a	
	Tolerance	VIF
1 Financial Factors	.861	1.162
Managerial Factors	.797	1.255
Strategic Fit Factors	.877	1.140

a. Dependent Variable: Financial Performance

Source: Research Findings (2020)

The results in table 4.5 indicate that the VIF (variance inflation factor) for all the study independent variables are far below 4; where financial factors had 1.162, managerial factors had 1.125 and strategic factor had 1.140. VIF below 4 reveals no problem of correlation between independent variables of the study as indicated by (Field, 2013).

4.4.4 *Homogeneity Test*

Homogeneity test was conducted to make conclusions whether populations of the study had the same distribution. Non-parametric test for homogeneity was used and findings recorded in table 4.6. The non-parametric levene test includes pooling the group data, ranking scores, applying the rank transformation and performing the levene test (Nordstokke & Zumbo, n.d.)

Table 4.6: Homogeneity Test

Test for Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Financial factors	0.010	1	218	.922
Managerial factors	0.064	1	218	.934
Strategic fit factors	0.538	1	218	.807
Financial performance	1.270	1	218	.460

Source: Research Findings (2020)

The null hypothesis states there is equality between groups. Findings in table 4.6 reveal that for the independent variables; financial factors, managerial factors, strategic fit factors and financial performance all had significance values above 0.05 hence accepting the null hypothesis. The non-parametric lavene’s test was used to verify that there was equality of variances in the sample hence the population among the treated and control group, there was homogeneity of variance $p > 0.05$). Hence there is statistical assumptions of equal variances of population distribution on the variables based on the treated and control group.

4.4.5 Test of Parallel Lines/Proportional Odds

The study tested the null hypothesis which states that the slope of coefficients in the model are the same across response categories; and whether the one equation model of the study is valid. Findings established a significance of Chi-Square of $.000 < .05$. This implies that the assumption of proportional odds fail to hold. We therefore reject the null hypothesis of the proportional odds assumption for the model considering both the treated and control groups model together. However, where the Control and Treated groups models were tested separately the null hypothesis of proportional odds assumption was accepted with significance > 0.05 . In the case of combined model (both treated and control groups), the generalized linear model-Ordinal logistic was also used and the same results were obtained as under the ordinal logistic regression results on the table 4.7 hence supporting the use of the ordinal logistic regression results. Test of parallel lines results were as below on table 4.7

Table 4.7: Test of Parallel Lines

Test of Parallel Lines^a				
	-2 Log			
Model	Likelihood	Chi-Square	df	Sig.
(1) Null hypothesis	1168.969	1168.969	260	.000

General	.000 ^b				
(2) Null hypothesis	370.872				
General	217.454 ^b	153.419 ^c	154	.498	
(3) Null hypothesis	767.811				
General	640.781 ^b	127.030 ^c	240	1.000	

Source: Research Findings (2020)

Note: The null hypothesis states that the location parameters (slopes coefficients) are the same across response categories.

(1) All a. Link function: Logit.

b. The log-likelihood value is practically zero. There may be complete separation in the data. The maximum likelihood do not exist.

(2) Treated a. Link Function: Logit.

b. The log-likelihood value cannot be further increased after maximum number of step-halving.

c. The Chi-Square statistic is computed based on the log-likelihood value of the last iteration of the general model. Validity of the test is uncertain.

(3) Control a. Link Function: Logit.

b. The log-likelihood value cannot be further increased after maximum number of step-halving.

c. The Chi-Square statistic is computed based on the log-likelihood value of the last iteration of the general model. Validity of the test is uncertain.

4.5 Descriptive Analysis of Study Variables

Descriptive analysis was determined based on the objectives of the study; financial factors, managerial factors, strategic fit factors, and financial performance. The analysis used mean and significance to explain the outcome of construct measurements for each study variables. In this section too, the data gathered from the field was augmented with the secondary data on group participation, mean difference of the treated group from control was established using tests statistics of Mann Whitney U tests of ordinal nonparametric data.

4.5.1 Financial Factors

This section is aimed to assess the significance of the differences of various financial factors between the treated and control groups of micro enterprise under Smart Duka programme. Tests statistics from Mann Whitney U test were used to interpret the study findings as presented

in table 4.8. Likert scale of 1-5 had been used with 5 being most favourable while 1 was least favourable.

Table 4.8: Financial Factors Descriptive Results

	Obs	General		Mean Rank		Test Statistics ^a	
		Mean	Std. Dev	Control	Treated	z score	Sig.
I am currently able to receive loans for my business pursuits	220	2.09	1.286	109.78	111.86	.247	.805
I have access to more than one business loan	220	2.03	.849	111.83	107.97	.478	.632
I am able to access financial training if I need to	220	4.07	.737	111.73	108.18	.491	.623
I perceive myself to be financially literate	220	4.39	.716	106.03	118.96	1.610	.107
I can readily get information on financial bookkeeping	220	2.40	1.087	107.84	115.55	.915	.360
I regularly keep my financial bookkeeping records upto date	220	4.31	.826	111.47	108.66	.344	.731
Composite Mean		3.22		110.89	109.76	.129	.900

Source: Research Findings (2020)

Table 4.8 presents the findings on financial factors of the study. The overall composite mean of 3.22 clearly illustrate that respondents agreed that financial factors were critical for the success of the business. This was supported by the fact that across the two groups of the study, majority with a mean of 4.39 agreed that “they perceive themselves to be financially literate”. Also, respondents with a mean of 4.31 and 4.07 agree that “they can regularly keep their financial bookkeeping records upto date” and that “they are able to access financial training if they need to”, respectively. The study also presented the mean findings of the two groups of the study using mean rank. The overall composite mean rank of control group was 110.89 while that of treated group was 109.76. The Control group had a higher ranking in terms of financial factors. There was slight difference between the groups. Using test statistics, findings revealed that across the two groups of the study, there was insignificant difference of application of financial factors in their businesses. Overall significance value of .900 > .05 confirms that challenges of financial accessibility remains common for the two groups of businesses as shown in table 4.8. Thus, despite the difference of mean rank being higher for the control group the difference between the two groups was statistically insignificant. The findings of this study therefore disagrees with the study findings of Kodongo and Kendi (2013) whose study

insinuated that enterprises in groups may apply financial factors effectively than individual enterprises.

Further, respondents in these two groups of the study also disagreed that they are currently able to receive loans for their business pursuit (mean $2.09 < 3.0$); as well as being unable to have access to more than one business loan (mean $2.03 < 3.0$). Based on these findings, the study can affirm that despite efforts made by the programme to enhance financial aspects of these micro enterprises, financial factors especially access to various loans remains a challenge for many business. Therefore, programmes to educate these micro enterprises how they can have access to capital or ease loan availability and improve their bookkeeping would be important as suggested by Tinajero and Lopez-Acevedo (2010).

4.5.2 *Managerial Factors*

This section is aimed to assess the significance of the differences of various managerial factors between treated and control groups of micro enterprise under Smart Duka programme. Tests statistics from Mann Whitney U test were used to interpret the study findings as presented in table 4.9.

The second objective of the study was to assess the effect of managerial factors on financial performance of micro enterprises. The findings in table 4.9 revealed that there was a composite mean of $3.35 > 3.0$ for the study. This could imply that respondents across the two groups of the study agree that managerial factors are effective in enhancing financial performance of the enterprises. This finding is in agreement with the previous finding of Asah, Olufunzo et al (2015) who found out that strategic planning, and efficient management of enterprises resources can efficiently enhance enterprise performance and growth. This was supported by the findings that respondents strongly agreed that “ I have been able to organize my shop in a manner appealing to my customers through merchandising”, with an overall mean of 4.15 for the two groups. They also agreed that “they have been able to get more customers due to the merchandising” managerial concept introduced to them during the course of project period with an overall mean of 4.73 as shown on table 4.9. Merchandizing is a practise of arranging and displaying goods in an orderly manner which is appealing to the customers and helps customers identify what they need easily and identify product information easily like pricing. Likert scale of 1-5 had been used with 5 being most favourable while 1 was least favourable.

Table 4.9: Managerial Factors Descriptive Results

	Obs	General		Mean Rank		Test Statistics ^a	
		Mean	Std. Dev	Control	Treated	z score	Sig.
My inventory management skills are sufficiently advanced to enable effective management of records	220	2.60	1.211	109.20	112.95	-.431	.666
I keep an upto to date track of my inventory regularly	220	4.10	.593	110.66	110.20	-.064	.949
I have access to sufficient coaching facilities	220	2.08	1.063	107.77	115.66	-.921	.357
I regularly receive coaching advice regarding handling of my business	220	2.48	.914	106.93	117.26	-1.22	.222
I have been able to organize my shop in a manner appealing to my customers through merchandising	220	4.15	.687	111.38	108.84	-.344	.731
I do get more customers after organizing my shop using merchandising skills	220	4.73	.586	110.50	110.50	.000	1.00
Composite Mean		3.35		107.53	116.13	-.959	.337

Source: Research Findings (2020)

While aspects of merchandising was considered effective for the success of performance of micro enterprises by the respondents, the respondents also indicated that “they disagree that they have had sufficient coaching facilities”, with a mean of $2.08 < 3.0$ as shown on table 4.9. However, this low ranking aspect is due to the fact that coaching is done intensively during the project period when funding of the programme is ongoing hence the coaching intensity was not felt much after the project when the business coaches left the project sites. The issues disagreed upon by the respondents who are business owners, have indeed been mentioned by Solly (2016) whose study argued that managerial issues such as coaching remain critical factors that may hinder the performance of SMEs. That is, lack of professionalism and efficient coaching practices for micro enterprise owners may hinder efficient management of business resources. From the mean rank findings, the study established control group had a mean rank of 107.53 while treated group had a mean rank of 116.13. The Treated group had a higher ranking in terms of managerial factors. Using test statistics to establish the difference between the group of the study based on managerial factors, findings indicated a significance value of $.337 > .05$, suggesting that there is no significant difference in managerial factors across the two groups of the study. Thus, despite the difference of mean rank being higher for the treated group the difference between the two groups was statistically insignificant. This is supported by the higher financial performance ranking of treated group in comparison to the control group

as shown in table 4.11. The higher managerial factors ranking is also supported by the higher regression estimate under treated group on the managerial factors as shown in table 4.18.

4.5.3 Strategic Fit Factors

This section describes the assessment of significance of the differences of various strategic fit factors between the treated and control groups of micro enterprise involved in the programme of the study. Mann Whitney U test statistics were used as shown in table 4.10.

Table 4.10: Strategic Fit Factors Descriptive Results

	Obs	General		Mean Rank		Test Statistics ^a	
		Mean	Std. Dev	Control	Treated	z score	Sig.
I have partnered with other businesses to get better deals on orders	220	2.11	1.023	106.84	117.43	-1.227	.220
I get tips on better prices from other businesses	220	2.85	1.210	106.26	118.54	-1.428	.153
I have engaged with other businesses to come up with innovative solutions to problems	220	2.69	.986	107.25	116.66	-1.091	.275
I have learnt other ways of handling business issues or business ventures from other businesses	220	2.25	1.264	108.55	114.20	-.656	.512
I have used technology to improve the efficiency of my business	220	2.26	.897	107.22	106.72	-1.111	.267
I have access to a smartphone that I can use in my business	220	4.22	.641	108.07	115.11	-.918	.359
Composite Mean		2.73		105.49	120.00	-1.615	.106

Source: Research Findings (2020)

The third objective of the study sought to determine the effect of strategic fit factors (joint supply sourcing, innovation partnership and technological use) on the financial performance of micro enterprise businesses in the programme of the study. Findings as presented in table 4.10, clearly indicate that respondents across the groups of the study did not entirely agree (disagree) that strategic fit factors has been effective in the performance of the informal micro enterprises (composite of 2.73 < 3.0). This is because respondents across the study groups disagreed that “they have partnered with other businesses to get better deals” (mean of 2.11 < 3.0). Despite majority of the respondents agreeing that “they have access to smartphones that they can use in their business” (mean of 4.22 > 3.0), they also disagreed “that they have used technology to improve the efficiency of their business” (mean of 2.26 < 3.0). Findings also showed that respondents disagreed that “they get tips on better prices from other businesses” (mean of 2.85

< 3.0). The study findings therefore did not fully support Kibry and Kaiser (2003) whose study found out that joint-ventures and group participation improves the competencies, and allow for the common sourcing of resources for businesses by the enterprises.

Using the mean rank findings, the study showed that the overall mean rank for control group of the study was 105.49 while mean rank for treated group was 120.00. The Treated group had a higher ranking in terms of strategic fit factors. Test statistics based on the significance value of the study indicated that all the constructs of strategic fit factors across the groups of the study were insignificant. That is, they all had a significance value above .05. Overall significance value of $.106 > 0.05$ suggested that there was no significant difference in effective usage and benefits of strategic fit factors across the two groups of the study. Overall, the observation was that the level of strategic fit factor is ineffective due to the low mean ranking at 2.73. Also to note is that, despite treated group having some strategic fit such as better deals, the level of effectiveness of the strategic fit factors in these businesses has been low. This is despite studies such as Hoffman and Schlosser (2001) indicating that strategic alliances are currently gaining popularity across businesses with the aim of enhancing enterprise competencies. Thus, despite the difference in mean rank being higher for the treated group the difference between the two groups was statistically insignificant. This is supported by the higher financial performance ranking of treated group in comparison to the control group as shown in table 4.11.

4.5.4 Financial Performance

The study examined the financial performance of informal micro enterprises of Smart Duka Programme by examining level of agreements on the previous performance of the business. Using performance constructs based on sales growth, profit growth, inventory growth and cash float growth, the study used Mann Whitney U test statistics to indicate the significance difference in performance between the two groups of the study.

The study aimed to establish performance of the informal micro enterprises across the study groups, as well as the difference in performance between the groups, using Mann Whitney U test for significant difference. First, the study established as presented in table 4.11, the overall performance of the two groups. Composite mean of $3.56 > 3.0$ showed that respondents agreed that performance of the businesses across the groups have been fair or good. This was in accordance with respondents agreement that “over the past two years, they have been able to increase their inventory” (mean of $3.63 > 3.0$), “over the two years, I have seen my shop increase in size” (mean of $3.80 > 3.0$) as shown in table 4.11. Across all the constructs of

performance, respondents agreed that the business have been faring well (general mean above 3.0).

The study also established mean ranks for each groups of the study. Overall mean rank established that control group had a mean rank of 104.95 while treated group had a mean rank of 121.01. The treated group had a higher ranking in terms of financial performance factors. Using test statistics of significance value, findings established that there was a significant difference between the two groups based on the performance of the businesses in the last two years. That is, treated group had performed better than control as indicted by a significance value $< .05$ in 3 of the factors under financial performance on increase in inventory, increase in profit and more access to cash float over the last 2 years. However, the overall significance value of $.074 > .05$ established insignificant difference in performance of informal micro enterprises in control and treated groups as shown on table 4.11. Thus, despite the difference of mean rank being higher for the treated group the difference between the two groups was statistically insignificant.

Table 4.11: Financial Performance Descriptive Results

	Obs	General		Mean Rank		Test Statistics ^a	
		Mean	Std. Dev	Control	Treated	z score	Sig.
Over the past two years I have been able to increase my inventory	220	3.63	1.067	104.95	121.01	-2.111	.035
Over the past two years I have seen my shop increase in size	220	3.80	1.027	105.33	120.29	-1.775	.076
Over the past two years I have seen a significant increase in sales	220	3.65	.969	106.34	118.38	-1.462	.144
Over the past two years I need to replenish my stock more often as most of my stock is quickly depleted due to faster sales	220	3.34	1.142	105.90	119.22	-1.532	.125
Over the past two years I have noted a significant increase in profit	220	3.38	1.016	104.35	122.14	-2.149	.032
Over the past two years the business has more access to cash float	220	3.55	1.221	104.05	122.73	-2.137	.033
Composite Mean		3.56		104.95	121.01	-1.788	.074

Source: Research Findings (2020)

4.6 Inferential Statistics

This section aimed at providing critical information for making study conclusions. Four main sets of analysis were applied. First, the study estimated the correlation analysis, robustness or test of model significance, Kruskal wallis which is a non-parametric one way ANOVA analysis and regression coefficient which forms part of regression analysis. Ordinal regression analysis was performed since the study used ordinal data.

4.6.1 Correlation analysis

To assess the correlation analysis, the study used Spearman's correlation coefficient which measures the strength of relationship between variables in the study (financial factors, managerial factors, strategic fit factors and financial performance). The Spearman's coefficient ranges between -1 and +1. A negative coefficient value shows negative correlation whereas a positive coefficient shows positive correlation. However, a coefficient value of 0.5 and above was considered strong while below 0.3 was considered weak.

The Spearman's correlation coefficient summary shown on table 4.12 reveals that the correlation between managerial factors and strategic fit factors with financial performance was positive and significant; at significant level of 0.05 and 0.01. This was established after determining the differences between treated and control micro enterprise groups of the study. The correlation analysis to find out the strength of relationship between financial factors measured by (loans, group financial trainings and financial bookkeeping) and financial performance was insignificantly correlated ($r = .024, p > 0.05$). This indicated a weak positive and insignificant correlation between financial factors and financial performance of group informal micro enterprises. The study also established a positive significant correlation between managerial factors measured by (inventory management, coaching and merchandising) and financial performance ($r = .169, p < 0.05$).

Table 4.12: Spearman’s Correlation Coefficient Results

		Correlations				
		Financial performance	Financial factor	Managerial factor	Strategic fit factor	Group
Financial performance	Spearman’s Correlation	1				
	Sig. (1-tailed)					
	N	220				
Financial factor	Spearman’s Correlation	.024	1			
	Sig. (1-tailed)	.364				
	N	220	220			
Managerial factor	Spearman’s Correlation	.169**	.381**	1		
	Sig. (1-tailed)	.006	.000			
	N	220	220	220		
Strategic fit factor	Spearman’s Correlation	.194**	.224**	.368**	1	
	Sig. (1-tailed)	.002	.000	.000		
	N	220	220	220	220	
Group	Spearman’s Correlation	.121*	-0.009	.065	.109	1
	Sig. (1-tailed)	.037	.450	.169	.053	
	N	220	220	220	220	220

**Correlation is significant at the 0.01 level (1-tailed)

*Correlation is significant at the 0.05 level (1-tailed)

Source: Author (2020)

This revealed a weak but significant relationship between the variables. Lastly, the findings established a weak but significant positive correlation between strategic fit factors measured by (joint suppliers sourcing, innovation partnership and technology) and financial performance ($r = .194, p < 0.05$). Of the three variables of the study, the study established that both strategic fit and managerial factors had a significant but weak positive correlation with financial performance. However, financial factors had insignificant weak positive correlation as presented in table 4.12.

Further, a correlation analysis on business group (treated and control) and financial performance of informal micro enterprises established a weak but significant positive correlation ($r = 0.121, p < 0.05$) as shown in table 4.12. This finding reaffirmed the findings of Siekei, Wagoki and Kalio (2013) whose study found out that businesses that tend to participate

in groups are more effective than individual businesses. They gave out reasons such as training, coaching and partnership as reasons why these businesses get through group participation, unlike individual micro enterprises. The findings were also echoed by Kibry and Kaiser (2003) who indicated that joint ventures have high level of competencies compared to individually managed ventures.

4.6.2 Regression Analysis

Ordinal Regression analysis was carried out to establish the relationship between independent variables (financial factors, managerial factors and strategic fit factors) and dependent variable (financial performance) of the study. The analysis was assessed to show the effect of financial factors, managerial factors and strategic fit factors on financial performance of micro enterprises. The analysis was based on the equation (2) of the study as discussed on methodology section of the study.

4.6.2.1 Model Summary

Model summary was estimated to establish percentage of variation in the financial performance of informal micro enterprises caused by factors in business groups such as financial factors, managerial factors and strategic fit factors using Pseudo R-Squares. As shown in table 4.13, Pseudo R-Square has three squared values. For explaining the percentage change on financial performance of informal micro enterprises caused by independent variables, the study uses Nagelkerke R-Square value of .150. This explains that that 15.0% of changes in financial performance of informal micro enterprises involved in the study are caused by changes in financial factors, managerial factors and strategic fit factors, together with control factors. This implies that other changes (85.0%) may be caused by other factors not included in the study. Correlation coefficient which reveals the relationship of study variables is explained by Cox and Snell R-Square value of .015, which indicates that there is a positive relationship between study variables.

Table 4.13: Model Summary

	Pseudo R-Square
Cox and Snell	.150
Nagelkerke	.150
McFadden	.030

Link function: Logit. Source: Author (2020)

Table 4.14: Model Fitting-Ordinal Regression

Model Fitting Information				
Model	-2 Log			
	Likelihood	Chi-Square	df	Sig.
Intercept Only	1204.668			
Final	1168.969	35.700	13	.001

Link function: Logit.

Source: Research Findings (2020)

Table 4.15: Model Fitting-Generalized linear model-ordinal logistic

Omnibus Test ^a			
	Likelihood		
	Ratio Chi-Square	df	Sig.
	35.700	13	.001

a. Compares the fitted model against the thresholds-only model

Source: Research Findings (2020)

Logistic regression is based on logit which deals with the natural logarithm of an odds ratio and are used to test hypotheses on relationships of an outcome variable that is categorical and one or more predictor variables that are categorical or continuous (Peng et al., 2002). The logit is the natural log of the odds or expressed as probability/(1-probability). The Chi-Square in (table 4.14) using ordinal regression is the Likelihood Ratio (LR) Chi-Square test. It tests whether at least one of the independent's regression coefficient is not equal to zero in the model of the study and can be established by $(1204.668 - 1168.969 = 35.700)$. Significance (Sig.) is the probability of getting a LR statistic above the null hypothesis which assumes that regression coefficients of independent variables are zero and that the intercept only/null model is better than the final model.

The Chi-Square test, tests if there is significant improvement in fit of final model relative to intercept only model. The study established a significance level ($p = .001 < .05$) which shows that at least one of the regression coefficients in the model is not equal to zero, and that the

model is fit and shows significant improvement in fit of final model relative to intercept only model at significance level of $.001 < .05$. The Likelihood ratio Chi-Square from omnibus test as shown in table 4.15 using generalized linear model- ordinal logistic gave the same results as the ordinal regression under Ordinal regression results on table 4.14 hence providing legitimacy to the ordinal regression results which were similar to the generalized linear model-ordinal logistic.

4.6.2.3 *Goodness of Fit*

The study performed goodness of fit to estimate whether data for the study is consistent with the model or if data fits the model as shown in table 4.16.

Table 4.16: Goodness of Fit

Goodness of-Fit			
	Chi-Square	df	Sig.
Pearson	3862.238	4523	1.000
Deviance	1168.969	4523	1.000

Link function: Logit

Source: Author (2020)

Table 4.16 presents Goodness of fit results. The null hypothesis states that the model in use is adequate in comparison to a perfect model with all cell counts and is a good model fit to data (Peng et al., 2002). The study established a significance value ($p = 1.000 > .05$) which reveals that data fits the model of the study and the model is adequate in comparison to a perfect model.

4.6.2.4 *Kruskal Wallis Test*

The Kruskal Wallis test which is the non- parametric one way ANOVA was done with results presented in table 4.17 from the results all the factors and covariates were non significantly different from the two groups-Treated and control as the significance levels were all >0.05 . The significance results were similar to the significance under descriptive results in table 4.8, 4.9, 4.10 and 4.11 and demographic summary statistics in table 4.2.

Table 4.17:Kruskal Wallis Test

Kruskal Wallis-Test Statistic^{a,b}						
	Financial Factors	Managerial Factors	Strategic Fit Factors	Financial Performance Factors		
Kruskal Wallis H	.016	.920	2.609	3.197		
df	1	1	1	1		
Asymp. Sig.	.900	.337	.106	.074		

	Age	Gender	Marital Status	Education	No. of employees
Kruskal Wallis H	3.666	1.602	.464	723	638
df	1	1	1	1	1
Asymp. Sig.	.056	.206	.496	.395	.425

- a. Kruskal Wallis Test
b. Grouping Variable: Treated/Control

Source: Research Findings (2020)

4.6.2.5 *Regression Coefficients/Estimates*

To accept or reject the null hypothesis of the study, regression estimates with a significance level of 0.05 was used to estimate the effect and extent of effect of financial factors, managerial factors and strategic fit factors on financial performance. Control factors/variables were also included in the model. Ordinal regression was estimated and findings presented in table 4.18.

Table 4.18 presents the findings on ordinal regression estimates which were similar to the generalized linear model-ordinal logistic. The study established that of the three predictor variables of the study; that is, financial factors, managerial factors and strategic fit factors; only financial factors had a negative estimate on financial performance ($\beta = -.164$). Both managerial and strategic factors had positive estimates of ($\beta = .381$) and ($\beta = .596$) respectively. Both financial factors ($p = .597 > .05$) and managerial factors ($.198 > .05$) had insignificant effect on the performance. However, managerial factors had insignificant positive relationship while financial factors had insignificant inverse relationship with performance of informal micro enterprises in the study. Only strategic fit factor as a predictor variable of the study had

significant strong positive relationship ($p = .004 < .05$) with financial performance of informal micro enterprises in the study. For the managerial and strategic fit factors which had positive estimates, this means with increasing scores of the managerial and strategic fit factors there are increased chances of falling at a higher level of the financial performance variable. However, for the financial factors which had a negative estimate, this means as the financial factors increase there is decreased probability of falling at a higher level on the financial performance variable.

Therefore, from the data extracted from table 4.18, the regression equation was based on the equation (2) of the study. This indicates that if all factors were held constant; financial performance of the control and treated informal micro enterprise groups would be at 12.348 on the higher level as presented on table 4.18.

Table 4.18: Regression Estimates Results

		Parameter Estimates				95% Confidence Interval		
		Estimates	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[ses = 1.333]	1.057	2.322	.207	1	.649	-3.494	5.607
	[ses = 4.666]	12.348	2.403	26.408	1	.000	7.638	17.057
Location	Financial factors	-.164	.310	.280	1	.597	-.772	.444
	Managerial factors	.381	.296	1.257	1	.198	.199	.960
	Strategicfit factors	.596	.209	8.155	1	.004	.187	1.005
[2]	Group							
	Treated	.254	.256	.986	1	.321	-.755	.247
	Control	0 ^a	.	.	0	.	.	.
[3]	Age							
	(<25 Years)	-.540	.805	.449	1	.503	-2.119	1.039
	(25-35 Years)	-.055	.263	.043	1	.835	-.570	.461
	(>35 Years)	0 ^a	.	.	0	.	.	.
	Gender							
	Male-1	.012	.245	.002	1	.962	-.468	.491

						95% Confidence Interval	
						Lower Bound	Upper Bound
		Estimates	Std. Error	Wald	df	Sig.	
	Female-2	0 ^a	.	.	0	.	.
	Marital-Status						
	Married-1	.990	.595	2.763	1	.096	-1.177 2.156
	Divorced-2	-1.514	1.388	1.188	1	.276	-4.235 1.208
	Single-3	0 ^a	.	.	0	.	.
	Education						
	Tertiary-1	.603	.486	1.537	1	.215	-.350 1.556
	Secondary-2	-.143	.431	.110	1	.740	-.988 .702
	Primary-3	0 ^a	.	.	0	.	.
	No. of employees						
	1 person	3.365	1.852	3.302	1	.069	-.265 6.995
	2-5 people	3.324	1.943	2.926	1	.087	-.485 7.133
	6-9 people	0 ^a	.	.	0	.	.
(4)Location	Financial factors	-.546	.514	1.131	1	.288	-1.553 .460
	Managerial factors	.485	.467	1.078	1	.299	-0.431 1.400
	Strategicfit factors	.091	.403	.051	1	.821	.698 0.880
(5)Location	Financial factors	.199	.407	.238	1	.626	-.600 .997
	Managerial factors	.282	.404	.489	1	.484	.509 1.073
	Strategicfit factors	.796	.257	9.548	1	.002	.291 1.300

Link function: Logit

a. This parameter is set to zero because it is redundant

(2) Group participation regression coefficient

(3) Control factors as presented in equation (2)

(4) Treated group regression coefficients with control factors as presented in equation (2a)

(5) Control group regression coefficients with control factors as presented in equation (2b)

Source: Research Findings (2020)

However, with changes such as unit increase in managerial factors and strategic fit factors, there is a predicted increase of .381 and .596 respectively of log odds of falling at a higher level of the financial performance of informal micro enterprises. As for a unit increase in financial factors, there is a predicted decrease of .164 of log odds of falling at a higher level of the financial performance of informal micro enterprises. This therefore implies that only

managerial and strategic fit factors variables have a positive effect on the financial performance of informal micro enterprises of the study, with managerial factor having insignificant positive effect and strategic fit factor having significant strong positive effect on financial performance. Also, strategic fit factor was the most dominant factor as it contributes 59.6% of changes in the financial performance of the informal micro enterprises.

It was followed by managerial factor which contributes 38.1% on the performance of informal micro enterprises as shown in table 4.18. These findings are in agreement with the previous findings of Asah, Olufunso et al (2015) whose study indicated that strategic planning through applying effective management practices such as coaching and merchandising which entails arrangement of products/resources of the micro enterprises can enhance enterprise growth. Also, Hoffman and Schlosser (2001) affirmed that businesses that form strategic alliances through groups attain business competencies which assist in micro enterprise management and pricing, leading growth of the business.

Parenthesis [2] in table 4.18 indicates the estimates of group effect. Findings shows that group factor have insignificant positive effect on performance of informal micro enterprises ($\beta = .254, p = .321 > .05$). Based on the findings in parenthesis [2], this means with increasing scores of the group participation (treated group) relative to the enterprises not in groups (control group) there are increased chances of falling at a higher level of the financial performance variable although these is statistically insignificant. With unit increase in group participation, there is a predicted increase of .254 of log odds of falling at a higher level of the financial performance of informal micro enterprises. The study also presented findings on control factors as shown in table 4.18 in parenthesis [3]. Of all the control variables of the study; age, gender, education, marital status and number of employees, none had significant effect on the performance of informal micro enterprises. All had significance values $> .05$. This is similar to the significance results on the demographic summary statistics on table 4.2.

The study also presented findings on treated group data based on equation (2a) as shown in table 4.18 in parenthesis [4]. Of all the factors -financial , managerial and strategic fit factors were statistically insignificant, all had significance values $> .05$. The managerial and strategic fit factors had positive estimates while the financial factors had negative estimate which would increase and decrease respectively the probability of falling at a higher level of the financial performance. It was only the managerial factor estimate that was higher under treated group in comparison to control group

The study also presented findings on control group data based on equation (2b) as shown in table 4.18 in parenthesis [5]. Of all the factors -financial and managerial factors were statistically insignificant, had significance values > .05 while strategic fit factors were statistically significant, had significance values <0.05. All factors, financial, managerial and strategic fit factors had positive estimates which would increase the probability of falling at a higher level of the financial performance. The financial and strategic fit factors had higher estimates in the control group in comparison to the treated group while the strategic fit factor was significant in the control group while in the treated group it was not.

4.7 Treatment Spillover Effect

The spillover effect was determined to establish whether trained group or subjects may pass on newly acquired skills to the other businesses through better management and business practices. The study estimated this effect through treated micro enterprise group. The goal was to establish whether skills and management practices gained through coaching can be passed to other businesses within the region of the study. This was based on equation (3) of the study.

Table 4.19: Treatment spillover effect

		Parameter Estimates					95% Confidence Interval	
		Estimates	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[ses = 1.333]	.010	2.344	.000	1	.997	-4.584	4.604
	[ses = 4.666]	11.487	2.420	22.533	1	.000	6.744	16.230
Location	Financial factors	-.245	.314	.605	1	.437	-.861	.372
	Managerial factors	.555	.326	2.889	1	.089	-.085	1.195
	Strategic fit factors	.719	.212	11.536	1	.001	.304	1.134
[2]	Group	.082	.260	.099	1	.753	-.429	.592
[3]	No. of businesses in same area	-.103	.032	10.198	1	.001	-.166	-.040
	No. of treated businesses in same area	.176	.061	8.439	1	.004	.057	.295
	Age							
	(<25 Years)	-.033	.819	.002	1	.968	-1.638	1.572
	(25-35 Years)	.051	.265	.037	1	.846	-.468	.571

	Estimates	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
(>35 Years)	0 ^a	.	.	0	.	.	.
Gender							
Male-1	.069	.246	.078	1	.779	-.414	.552
Female-2	0 ^a	.	.	0	.	.	.
Marital-Status							
Married-1	.861	.597	2.079	1	.149	-.309	2.031
Divorced-2	-1.031	1.399	.542	1	.461	-3.773	1.712
Single-3	0 ^a	.	.	0	.	.	.
Education							
Tertiary-1	.731	.492	2.207	1	.137	-.233	1.696
Secondary-2	-.043	.434	.010	1	.921	-.894	.808
Primary-3	0 ^a	.	.	0	.	.	.
No. of employees							
1 person	2.736	1.863	2.156	1	.142	-.916	6.388
2-5 people	2.907	1.949	2.224	1	.136	-.913	6.728
6-9 people	0 ^a	.	.	0	.	.	.

Link function: Logit

- a. This parameter is set to zero because it is redundant
 (2) Group participation regression coefficient
 (3) Spillover effect regression coefficients as presented in equation (3)

Source: Research Findings (2020)

As indicated in table 4.19, the spillover effect was feasible in number of businesses within the same area or location ($p = .001 < .05$) and number of treated business groups within the same area or location ($p = .004 < .05$). The study also established that existing spillover effect resulting from treated business groups within the same location may improve financial performance of other businesses by 17.1% or increases the chances of falling at a higher level of financial performance. The findings is in line with the findings of Drexler et al (2014) that business owners when trained on how to effectively run their businesses, can pass the skills through business groups to other micro enterprises.

However, the spillover effect of number of businesses within the same area of location may result to performance decrease or losses of 10.3% both to the business and other businesses in the area or decrease the chances of falling at a higher level of financial performance. Under strategic fit factor, the study established spillover effect with a p-value of $.001 < .05$. This imply that strategic alliances have significant spillover effect on the financial performance of informal micro enterprises included in the study. For the managerial and strategic fit factors which had positive estimates, this means with increasing scores of the managerial and strategic fit factors there are increased chances of falling at a higher level of the financial performance variable while for financial factors which had a negative estimate, this means there are decreased chances of falling at a higher level of the financial performance. However, the financial and managerial factors had insignificant spillover effects with p value $>.05$. For other control factors and covariates of the study, findings revealed that none have effect on the performance of informal micro businesses since they both have p-value $>.05$.

4.8 Summary of important results

Table 4.20: Summarized Demographic Summary Statistics

Mann Whitney U Test Statistics

	General Mean	Mean Rank		Sig.
		Control	Treated	
Gender	1.55	113.90	104.05	.206
Age	2.59	105.44	120.08	.056
Level of Education	1.83	108.27	114.72	.395
Marital status	1.13	111.43	108.74	.496
Number of employees	1.05	111.35	108.88	.425

Table 4.21: Summarized Business Factors Descriptive Results- Mann Whitney U Test Statistics

	General	Mean Rank		Test Statistics ^a
	Mean	Control	Treated	Sig.
Financial Factors Composite Mean	3.22	110.89	109.76	.900
Managerial Factors Composite Mean	3.35	107.53	116.13	.337
Strategic Factors Composite Mean	2.73	105.49	120.00	.106

Table 4.22: Summarized Financial Performance Descriptive Results- Mann Whitney U Test Statistics

	General	Mean Rank		Test Statistics ^a
	Mean	Control	Treated	Sig.
Over the past two years I have been able to increase my inventory	3.63	104.95	121.01	.035
Over the past two years I have noted a significant increase in profit	3.38	104.35	122.14	.032
Over the past two years the business has more access to cash float	3.55	104.05	122.73	.033
Composite Mean	3.56	104.95	121.01	.074

Table 4.23: Summarized Spearman's Correlation

Coefficient Results

Financial performance		
Financial factor	Spearman's Correlation	.024
	Sig. (1-tailed)	.364
Managerial factor	Spearman's Correlation	.169**
	Sig. (1-tailed)	.006
Strategic fit factor	Spearman's Correlation	.194**
	Sig. (1-tailed)	.002

Group	Spearman's Correlation	.121*
	Sig. (1-tailed)	.037

Table 4.24: Summarized Regression Estimates Results

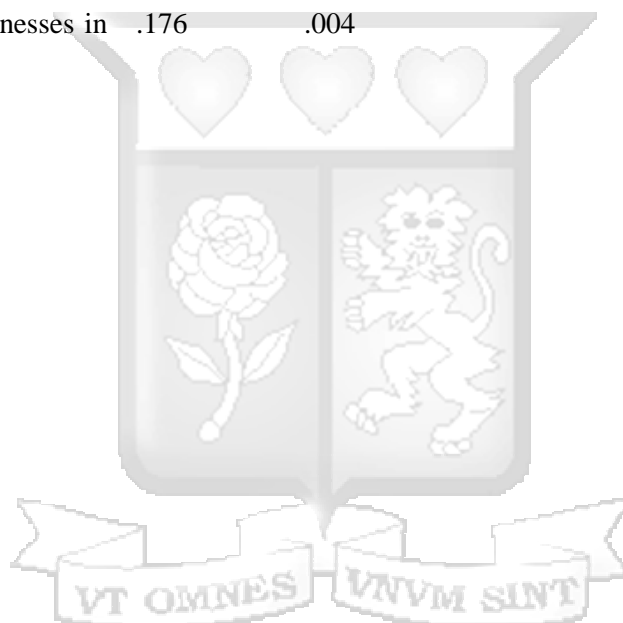
Parameter Estimates

		Estimates	Sig.
Location (Treated and Control Groups)	Financial factors	-.164	.597
	Managerial factors	.381	.198
	Strategicfit factors	.596	.004
	Group		
	Treated	.254	.321
	Control	0 ^a	.
Location (Treated group only)	Financial factors	-.546	.288
	Managerial factors	.485	.299
	Strategicfit factors	.091	.821
Location (Control group only)	Financial factors	.199	.626
	Managerial factors	.282	.484
	Strategicfit factors	.796	.002

Table 4.25: Summarized Treatment spillover effect

Parameter Estimates

		Estimates	Sig.
Location	Financial factors	-.245	.437
	Managerial factors	.555	.089
	Strategic fit factors	.719	.001
[2]	Group	.082	.753
[3]	No. of businesses in same area	-.103	.001
	No. of treated businesses in same area	.176	.004



CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study sought to test the hypothesis whether use of business groups have a positive effect on financial performance of the informal micro enterprises in the Smart Duka project. The study also sought to assess the effect of financial factors, managerial factors, strategic fit factors on the financial performance of the informal micro retail enterprises in Smart Duka Program, Nairobi. The chapter presents the discussion, conclusion and recommendations of the study based on the findings obtained in the previous chapter. Discussion and conclusion of the study relates directly to the research objectives/questions, and recommendations are drawn on the discussion of the study findings and conclusions. Also in the chapter are suggestions for areas of further studies that could be undertaken to enhance understanding on business group participation programmes among informal micro enterprises in Kenya.

5.2 Discussion of the Findings

This section discusses findings of the study based on the research objectives. The study was guided by three specific objectives; to assess the effect of financial factors, managerial factors and strategic fit factors in business groups on financial performance of informal micro retail enterprises in the Smart Duka Project. The analysis of the study was based on business groups. Micro enterprises in the group were referred to as treated group while those not in groups were referred to as control group. The financial, managerial and strategic fit factors in the project are the resources that are available to the micro enterprises and are used towards efficiency and for profit making as the resource-based view theory supports. The vast range of resource sub-products under each category of factors forms the resources available to the enterprises to use. Difference in difference analysis using Mann Whitney U test statistics was conducted at the descriptive level to determine how each factor performed across the business groups. Discussion of the study follows:

5.2.1 *Effect of financial factors in business groups on financial performance*

The first objective of the study was to assess the effect of financial factors in business groups on financial performance of informal micro retail enterprises in the Smart Duka project. Financial factors were measured by group based loans, group financial trainings and financial bookkeeping. This would be considered as the financial resources available to the firm as per

the resource-based view theory. From the descriptive findings, the results revealed that financial factors remain a major challenge for most businesses, both treated and control groups. Majority of the respondents indicated that accessibility to loans and financial bookkeeping to record sales have not been effectively mastered by the business owners. Despite having been coached and gone through financial trainings on how to undertake bookkeeping practices so as to be able to track sales and financial performances, the findings revealed that most micro enterprises do not follow these practices. The mean ranking of the control group was above that of the treated group under the financial factors however, this difference was not statistically significant.

The study also established a correlation between financial factors and financial performance of the informal micro retail enterprises. The findings established a weak insignificant positive correlation between the variables of the study. One important assumption made during correlation analysis was based on the descriptive findings. This is because from the respondents' perspectives, micro enterprises still face financial factors challenges by both the treated and control group. Only a few respondents confirmed that they could access loans and trainings. However, majority of the respondents indicated that most of their businesses are not doing well as a result of lack of access to enough funds to increase their inventories in the business. This finding agrees with previous studies Tinajero & Lopez-Acevedo (2010), which have highlighted financial factors as a major challenge that informal micro enterprises face in the current business environment.

The study also determined the effect of financial factors on financial performance of micro enterprises using ordinal regression estimates analysis. The results shows that there exists insignificant negative relationship between financial factors in group business and financial performance. This was based on the p-value which is above the recommended significance level. Interestingly, the study also found out that inability to access capital, ineffective to turn financial skills in the business to achieve results can hinder business performance. The insignificant negative relationship between financial factors and financial performance would be explained by the lack of easy accessibility to loans and lack of proper bookkeeping practices by the informal enterprises. Despite having had adequate financial training on book keeping practices during the project, thereafter most of the enterprises were unable to keep up with the daily bookkeeping practices owing to the vast range of their products on sale, lack of easier recording technology and lack of time due to the fast flow of customers. This did lead to lack of accessible records on inventory, sales, profits and cash float in most of the enterprises in the

project. In addition to having weak insignificant positive correlation, the study findings indicate that due to the aforementioned challenges that informal group micro enterprises face, most of these businesses cannot grow or expand. The findings concur with the findings of Kodongo and Kendi (2013) that even though group participation enhances business competencies and access to lending benefits, they remain challenges that must be addressed effectively in order to grow micro enterprises.

Thus, there is insignificant negative effect of financial factors on financial performance. On the ordinal regression estimate results for the treated group of the businesses in groups the financial factors had a negative estimate that was insignificant while the control group of the businesses not in groups had a positive estimate that was insignificant. This does seem to tally to the findings on the descriptive results on mean rankings where the mean ranking of the control group was higher than the treated group although insignificant. Hence it seems for the financial factors, these seem to work better for the control group than the treated group. This could be related to the fact that under the control group the proportions of the respondents who had tertiary and secondary education was higher than the treated group, however, there is need to investigate more why this would be so. Although the current results show the difference is insignificant it does show that this could be a significant difference with time and with increased financial factors.

In summary, findings established that financial factors in business groups remain a major challenge that must be addressed effectively. With a weak positive insignificant correlation and insignificant inverse effect on the financial performance of informal micro enterprises in the programme, most respondents attributed these challenges to inability to access loans even within business groups as well as the inability to effectively utilize bookkeeping practices to grow their businesses. Across the business regions and/or areas of business, findings established that financial factors were a challenge across, both for treated and control groups. There was insignificant negative spillover effects in relation to being in a group that can enhance chances of getting access to loans and other financial trainings. However, the composite mean in the descriptive results did clearly illustrate that respondents agreed that financial factors are critical for the success of the business but the level of administration seems to be causing the negative effect on financial performance from the loans, to financial bookkeeping and to financial training practices.

5.2.2 *Effect of managerial factors in business groups on financial performance*

The study also sought to assess the effect of managerial factors in business groups on financial performance of informal micro enterprises in the Smart Duka project. From the descriptive findings, the findings showed that respondents in both groups of the study agreed that managerial factors measured through inventory management, coaching and merchandising have been effective towards the performance of their businesses. This would be considered as the managerial resources available to the firm as per the resource-based view theory. Of importance to them was the merchandising concept which was introduced in the programme. Majority of the respondents agreed that they have been able to organize their shop in a manner appealing to the consumers/customers through merchandising. They also agreed that they do get more customers after organizing their shop using the skills they attained through training on the merchandising practice. The findings are in line with the study of Asah, Olufunso et al (2015) that organizing an enterprise in a way that appeals to the consumers is one of the strategic planning skills that businesses can learn through management practices to enhance their growth.

A correlation analysis was determined in the study between managerial factors in the enterprises and financial performance. The findings established that there a significant correlation between these two variables of the study. While the previous studies such as Solly (2016) indicated that managerial issues remain critical to the success of informal micro retail enterprises, the findings of the current study found that to these respondents especially those in business groups, the coaching they have received from various stakeholders in the business programme have significantly helped them to arrange their shops and manage their inventories in ways that appeal to the customers in the market. Also to note is of the three variables of the study, managerial factor had the second highest correlation coefficient value with financial performance of the business groups. Therefore, the study noted that across the groups, that is, treated and control, respondents agreed that managerial factors has been effective towards their businesses. The mean ranking of the treated group was above that of the control group under the managerial factors however, this difference was not statistically significant.

The study further found out an insignificant positive effect between managerial factors and financial performance of informal micro retail enterprises under Smart Duka project. The established higher p-value (significance level) above the recommended level further revealed that managerial factor have insignificant positive effect on the performance of informal micro enterprises. Of the three variables of the study, findings reveal that managerial factors had the

second highest positive regression estimate. This implies that increase in coaching, merchandising practices and inventory management increases the performance of the group businesses insignificantly compared to variables like financial factors. The finding agree with Atristain-Su (2018) that if business have professionalism, planning, decision making and communication skills, chances of growing are high. However, lack of all these can lead to closure or poor performing businesses.

Thus, there is insignificant positive effect of managerial factors on financial performance. On the ordinal regression estimate results for the treated group of the businesses in groups, the managerial factors had a positive estimate that was insignificant but higher than the combined and control only group, however, in all instances they were insignificant. This does seem to tally to the findings on the descriptive results on mean rankings where the mean ranking of the treated group was higher than the control group although insignificant under managerial factors. Hence it seems for the managerial factors, these seem to work better for the treated group than the control group and hence there is need to investigate more why this would be so. This could be due to the networks in group settings which could be enhancing the managerial factors effects in the treated group. Although the current results show the difference is insignificant it does show that this could be a significant difference with time and with increased managerial factors.

In establishing the spillover effect of business trainings that treated group can pass to other micro enterprises, the results of the study established that for managerial factors which comprise of coaching, merchandising and inventory management practices, they do have insignificant positive spillover effect. One assumption that the study made based on the findings of spillover effect is that across the two groups of testing, merchandising was introduced to each of them. Meaning all the two groups undergo training, coaching and merchandising on similar occasion. This could be the reason as to why the spillover effect is positively insignificant.

5.2.3 *Effect of strategic fit factors in business groups on financial performance*

The third and final objective of the study was to investigate the effect of strategic fit factors in business groups on financial performance of informal micro retail enterprises in the Smart Duka programme. Strategic fit factors were measured using joint suppliers sourcing, innovation partnerships and technology use. This would be considered as the strategic fit resources available to the firm as per the resource-based view theory. From the descriptive

findings, both the tested groups; treated and control, agreed that to some extent they have been involved in joint supply sourcing business practice so as to easily access product at the lowest cost in the business. This supports the findings by Kibry and Kaiser (2003) who concluded that joint ventures, among other business competencies, allow for the common sourcing of raw materials and other resources for the micro enterprises. Respondents also agreed that indeed they have access to a smart phone that can be used in their businesses. However, the study also found out that most micro enterprises lack technological devices that they can use to track inventory management and sales in their businesses. This was supported by the insignificant difference results established between the two groups. The mean ranking of the treated group was above that of the control group under the strategic fit factors however, this difference was not statistically significant. From the descriptive findings, the findings showed that respondents in both groups using the composite mean ranked the strategic fit factors lowest in comparison to financial and managerial factors

Level of innovation partnerships however are still low across the businesses. The study established that most shop owners' objective in joint venturing or business groups is to get tips on better prices of the business, with little engagement with other businesses to come up with innovative solutions to their problems. A correlation analysis established that there is a statistical significant positive correlation between strategic fit factors and financial performance of micro enterprises. Among the three variables of the study, strategic fit factors had the highest correlation coefficient value with the financial performance of micro enterprises under the programme of the study. This could be due to the ability of the business groups to bring informal micro enterprises owners together Hoffman & Schlosser (2001), and allow them to identify business challenges and seek for better management practices that may impact their individual living standards as well as the growth of businesses within a given business region.

The study also estimated the ordinal regression estimate analysis between strategic fit factors and financial performance of micro enterprises. Findings revealed that there was a significant strong positive relationship between these two variables of the study. This implies that strategic fit factors in the micro enterprises significantly affect their financial performances. Of the three variables of the study, strategic fit factors had the highest positive effect on financial performance. However, analysing the treated group alone, the strategic fit factors were insignificant while for the control group and combined group these were significant. Hence there is need to investigate more on this cause of disparity. Thus, one of the assumption of the

study findings is that when businesses form groups, they can easily access better pricing strategy and the business strategy that can allow them to grow their businesses during and after hard economic conditions. This is in accordance with the findings of Mungai and Ogot (2017) who concluded that micro enterprises need to use diverse competitive business strategies through value chain approaches, technology and networks so as to improve their performance. The spillover effect analysis in regards to strategic fit factors had a higher estimate in comparison showing that its effect of spillover is significant and has a higher positive effect on financial performance.

5.2.4 *Financial performance of Informal micro enterprises*

The results from the study established that the treated group had a higher mean ranking than the control group in terms of financial performance factors. Using findings on test statistics of significance value, the study established that there were significant differences between the two groups based on the performance of the enterprises in the last two years in some of the categories/sub factors under financial performance. That is, the treated group had performed significantly better than the control group under financial performance sub factors related to increase in inventory, increase in profit and more access to cash float over the last 2 years. However, the study results established that the difference between the treated and the control group on the overall composite mean of the financial performance was higher under the treated group than the control group but statistically insignificant. Thus, despite the difference of mean rank being higher for the treated group the difference between the two groups was statistically insignificant.

5.2.5 *Treatment spillover effect*

The study also performed treatment spillover ordinal regression estimates. First, the study estimated the spillover effect of number of businesses within a region on the financial performance of enterprises. Findings obtained reveal that there was significant inverse relationship between number of businesses within a region in the study and the financial performance. One of the assumption the study made on this findings is that when businesses are located within the same locality, spillover effect can therefore reduce the performance of the business, while giving other businesses opportunity to maximize profit. This can happen where other businesses imitate and apply same business practices such as merchandising and strategies used by a given number or some businesses in the area hence increasing competition. Second, the study established the spillover effect of number of treated business groups in a region on the financial performance of the business. Findings provided significant positive

spillover effect on performance of informal micro enterprises, this was in line with the inference of the study. This imply that companies can learn and acquire the strategic fit practices used by treated groups businesses and enhances their performance. However, there was no significant spillover effect of covariates of control factors on performance of the businesses. The spillover effect is also supported by the social exchange theory, which is related with the exchange of resources, in this project this would be related to the exchange of financial, managerial and strategic fit factors. It is thus evident that through the social exchange of the enterprises, there is transfer of resources and knowledge which has some effect on the financial performance of the enterprises.

5.3 Conclusions

The study made a number of conclusions and was discussed based on the research objectives of the study. The conclusion was drawn from the research discussion and findings of the study as discussed;

5.3.1 *Effect of financial factors in business groups on financial performance*

The study explored the effect of financial factors in business groups on the financial performance of informal micro enterprises in the Smart Duka programme. Based on the findings and discussion of the study, the study concluded that financial factors which entail group based loans, group financial training and financial bookkeeping remain a challenge for many micro enterprise businesses both in treated and control groups. Despite having an insignificant weak positive relationship with financial performance using the correlation results, the study also concluded that majority of the respondents agreed that they are still unable to receive loans, and majority do not have access to more than one loan. Most micro enterprises owners do not practice bookkeeping practices thus establishing monthly, quarterly, semi-annually and yearly sales is a challenge for them. None of the respondents in both treated groups were able to provide numerical sales volume of their businesses.

From the regression analysis financial factors had insignificant negative effect on the financial performance of the businesses despite having a weak positive insignificant relationship from the correlation results. The control group had higher ranking mean compared to the treated group which were the enterprises in business groups under financial factors category although insignificant. The spillover effect of financial factors was also found to be insignificant. The study therefore concluded that there is insignificant negative spillover effect of financial factors on financial performance of the informal micro enterprises in the Smart Duka Project. Interventions are required to address the challenges since there is negative relationship between

financial factors and financial performance of informal micro enterprises involved in the programme. This is mainly due to lack of access to loans and poor financial bookkeeping among the enterprises and more so the lack of knowledge of application of these factors may cause the inverse relationship.

5.3.2 *Effect of managerial factors in business groups on financial performance*

The study concluded that of all the efforts that the stakeholders as well as Smart Duka programme organizers have made towards improving informal micro enterprises in the densely populated informal areas of Nairobi, managerial factors through coaching, inventory management and merchandising have been the most appreciated businesses practice by the micro enterprise owners. This is based on the descriptive findings of the study where respondents across the business groups agreed that indeed, the managerial practices have been effective, this factor had the highest composite mean. Correlation established significant positive relationship while regression analysis established insignificant positive relationship between managerial factors and financial performance of the informal micro enterprises involved in the programme of the study.

Based on this finding, the study concludes that managerial factors have insignificant positive effect on financial performance of the informal micro enterprises. The treated group which were the enterprises that were in business groups had higher ranking mean in comparison to control group under managerial factors although statistically insignificant. The spillover effect of managerial factors was also found to be insignificant. The study therefore concluded that there is insignificant positive spillover effect of managerial factors on financial performance of informal micro businesses in the Smart Duka Project. This positive spillover may be due to the enterprises in the smart duka project imitating the managerial practices in the other shops including inventory management, coaching and merchandizing. Merchandizing which entails arranging and displaying the products in the shop in an orderly and enticing manner can easily be observed by other enterprises and apply the same layout in their enterprises. Prices of the goods on display where goods have visible price tags can also be copied by other enterprises hence causing spillovers. However, this positive spillover effect is insignificant and ways of making this spillover effect significant should be sought to make it significant similar to the positive correlation of managerial factors and financial performance. The differences between the treated and control groups although currently insignificant can be translated into significant differences with time using various interventions given the positive effect of managerial factors on financial performance.

5.3.3 *Effect of strategic fit factors in business groups on financial performance*

Based on the study findings and discussion, the study concluded that strategic fit factors have significant positive effect on the financial performance of informal micro enterprises in the Smart Duka programme. Further, the study concluded that respondents indeed agreed that they have partnered with other businesses to get better deals on orders and tips on better prices from other businesses. Despite having access to smart phones, the study concluded that majority of the informal micro enterprises still face technological challenges. Most of the micro enterprises both treated and control, do not have technological devices that they can use to track inventory flow/management and daily or monthly sales in the businesses. Thus, there is need for the programme to expound on the need for group informal micro enterprises to adopt modern technology in their businesses as they enhance transparency, provide effective management practices including inventory management and enhance capacity of shop owners to track down their sales easily and effectively.

Based on findings, the study concludes that strategic fit factors have significant positive effect on the financial performance of the micro enterprises. The treated group which were the enterprises in business groups had higher ranking mean in comparison to control group under strategic fit factors although statistically insignificant. The spillover effect of strategic fit factors was also found to be significant. The study therefore concluded that there is significant positive spillover effect of strategic fits factors on financial performance of informal micro enterprises in the Smart Duka Project. The differences between the treated and control groups although currently insignificant can be translated into significant differences with time using various interventions given the significant positive effect of strategic fit factors on financial performance as obtained from the regression analysis.

5.3.4 *Financial Performance of Informal micro enterprises*

Based on the findings, the study concluded that the treated group had a higher mean ranking than the control group in terms of financial performance factors. Using findings on test statistics of significance value, the study concluded that there were significant differences between the two groups based on the performance of the enterprises in the last two years in some of the categories/sub factors under financial performance. That is, the treated group had performed significantly better than the control group under financial performance sub factors related to increase in inventory, increase in profit and more access to cash float over the last 2 years. However, the study concluded that the difference between the treated and the control group on the overall composite mean of the financial performance was higher under the treated group

than the control group but statistically insignificant. Thus, despite the difference of mean rank being higher for the treated group the difference between the two groups was statistically insignificant.

5.3.5 *Treatment spillover effect*

The study also aimed to establish the treatment spillover effect. It is assumed that business management practices and skills acquired through training and coaching can be easily transferred within the business environment. The study concluded that the number of businesses within the same location in the study had significant inverse effect on financial performance. That is, number of businesses within the same region in the study may experience significant spillover effect which can result to negative performance of the business as a result of other businesses applying the same concepts of business in the area or location increasing competition. The study also established that the number of treated businesses, that is the enterprises in business groups, within the same location had a significant positive spillover effect on the financial performance of the business. Strategic fit factors also had a significant positive spillover effect on the financial performance of the business as businesses can learn positive practices from interacting with other businesses.

5.3.6 *Main conclusion*

The study concludes the following in regards to the informal micro enterprises in the Smart Duka Project; The treated group which are the enterprises in business groups have higher ranked means on managerial, strategic fit factors and financial performance however all at a statistically insignificant level while financial factors under the control group had a higher ranking mean than the treated group at a statistically insignificant level. From the regression analysis; managerial factors have a positive but insignificant effect on financial performance, strategic fit factors have a positive but significant effect on financial performance while financial factors have a negative but insignificant effect on financial performance. From the correlation results with financial performance; managerial, strategic fit and group factors were positive and significant however, the financial factors were positive but insignificant. What was unique of the results was the significance of the strategic fit factors from both the regression and correlation results indicating that strategic fit factors highly impacted the financial performance. The results on the ranking differences whereby the managerial, strategic fit factors and financial performance of the treated group were higher than the control group despite being insignificant were also unique. From the study the fact that other factors apart from financial factors are significant in the financial performance was unique and diverted from

the myth that financial factors are the main significant factors towards the success and increased financial performance of a business.

The correlation between the group participation and financial performance of the micro enterprises was however positive and significant but the effect as per regression results of the treated group in reference to the control group on the financial performance was positive but insignificant. The control variables of age, education, marital status, gender, number of employees, their differences between treated and control group are insignificant and their effect on financial performance are insignificant. Spillover effect on businesses within the same area is negative but significant on the financial performance while treated businesses within the same area has a positive and significant effect on the financial performance of informal micro enterprises in the Smart Duka Project. The null hypothesis that stated that the financial performance of enterprises in business groups is less or equal to that of enterprises not in business groups was accepted due to the difference in financial performance between the treated and control groups being statistically insignificant despite the mean of the financial performance under treated group being higher than the control group. Hence ways of making this difference significant should be addressed as it seems there is an opportunity to enhance financial performance using business groups.

However, it is important to note that the study responses were obtained before the onset of the Covid 19 epidemic in the country of Kenya. Hence, the results do not put into consideration the effects of the Covid 19 epidemic that hit the globe.

5.4 Recommendations

The findings of this study suggest that factors in business groups such as managerial factors, strategic fit factors, financial factors and group participation can indeed enhance performance of informal micro retail enterprises involved in the study. However, the significance of these factors/practices depend on how best micro enterprises apply them towards improving their performances. A number of recommendations were provided in the study.

5.4.1 Policymakers

Much emphasis and focus has been given to business factors that are important in other businesses such as SMEs with less focus on small and micro enterprises in the informal settlements in Kenya and other countries. The study recommends that governments need to formulate regulatory and policy structures that can be useful in creating an enabling environment for these micro enterprises. Such enabling environments could include increasing

business group participation in the informal micro enterprise sector that would encourage business groups among micro enterprises. Easier and quicker registration processes of business groups, offering of tax and other beneficial incentives, easier access of facilities to such groups could be used to encourage the formation of such groups. Such mechanisms by the policymakers would lead to the performance growth of the informal sector in countries while expanding the macro and micro-environments in those countries. This would also increase such indexes such as ease of doing business and country ratings which would have a ripple effect in attracting other investors and in other market categories and sectors.

Policies on various business practices especially those related to promotion of managerial and strategic fit factors should be formulated as they have positive effects on the financial performance of the informal micro enterprises. These factors among the informal micro enterprises have not been given a lot of focus in the past as much as the financial factors have been and yet seem to be less costly and contribute significant to the financial performance of micro enterprises.

5.4.2 *Practitioners*

The study also recommends that practitioners should be able to develop and adopt informal micro enterprise management strategies and other strategic fit practices that can be adopted effectively by the informal micro enterprises, especially where challenges of running micro businesses are still rampant like in Kenya. The study also recommends that practitioners need to design and formulate effective formal structures that the formal sector in the economy can use to gain access and be able to support the informal micro enterprises in the economy especially using business group structures. This is in order to leverage group participation and target factors which can give informal micro enterprises ability to diversify their businesses and operate at various levels of economic conditions.

5.4.3 *Research*

On this area, the study recommends that scholars and academicians should continue researching on business factors and business groups aimed at improving the performance of informal micro enterprises. This recommendation is aimed at providing more knowledge on the relevance of effective informal micro enterprise practices which significantly contribute to the economic development of any country as this is a promising sector to most economies.

5.5 Suggestions for future study

More research is needed to determine how the established factors in business groups in this study may be applied more rigorously on the successful management of micro enterprises in the informal sector of the economy. This is because projections from statistics support that the informal micro enterprise sector is critical not only to creation of employment, but also to the contribution of the economy. Studies have also established that most businesses fail at the initial stage due to lack of appropriate skills, knowledge and resources.

More focus on the area of financial factors and the cause of the negative effect on financial performance which could be related to the administration of these factors should be addressed. Areas of research on how to increase significance of managerial and strategic fit factors should be addresses to fully experience the positive effects the factors have on the financial performance of the micro enterprises. In this study it was observed that differences of managerial and strategic fit factors in the enterprises in business groups were higher than those not in business groups. These factors also had positive effect on financial performance, hence studies to show how these factors can be enhanced in the micro enterprises should be an area of more focus in other further studies.

Areas of research on how to increase significance of the positive differences between the treated group (enterprises in business groups) and the control group (enterprises not in business groups) of the business factors and financial performance should also be addressed. From this study it was concluded that the treated group had higher composite means than the control group under the managerial factors, strategic fit factors and financial performance categories. Hence studies on how to make these differences significant should be explored to increase the business factors and financial performance under the business groups.

More similar studies outside of Nairobi could be done to cover the country holistically, in Africa and on a global view if possible. This way, focus of the various business factors and their effect on financial performance can be established on a geographical wide view and avenues established in which the different businesses in different geographical locations can utilize their comparative advantage to increase their performance and yet share the knowledge, skills and resources across regions and countries where applicable.

More studies therefore need to be carried out to establish whether there is need for technology use in informal micro enterprises and how trainings on the use of such innovation can enhance their performance in managing the businesses and in financial records. The objective should

be to allow informal micro enterprises to measure their performance in terms of sales and profits and be able to have actual financial performance records of the business on a daily, monthly and annual basis. It seems the hindering issue is not the accessibility of gadgets like smart phones but technologies and applications which could be used to ease the business processes of this informal micro enterprises.

Studies on other business factors which may have not been covered under this study should be explored and their effect on the financial performance of the enterprises to try and have comprehensive information on the various factors.

Similar studies should be carried to establish how the Covid 19 has affected the informal micro enterprise sector and possible solutions to assist the enterprises who may be struggling to stay afloat due to the effects of the epidemic.

5.6 Limitation of the study

This study was limited to informal micro enterprises in the Smart Duka programme and did not involve other business groups that might be under similar programmes in the informal sector and informal settlements in Nairobi, Kenya due to limited availability of such programmes which have been in progress over some time. The study targeted treated and control group of informal micro enterprises in the programme. The study was also limited to only three variables; financial factor, managerial factor and strategic fit factor in the business groups and did not involve other business factors outside the study. The study also only focussed on Nairobi only due to resources and time constraints.

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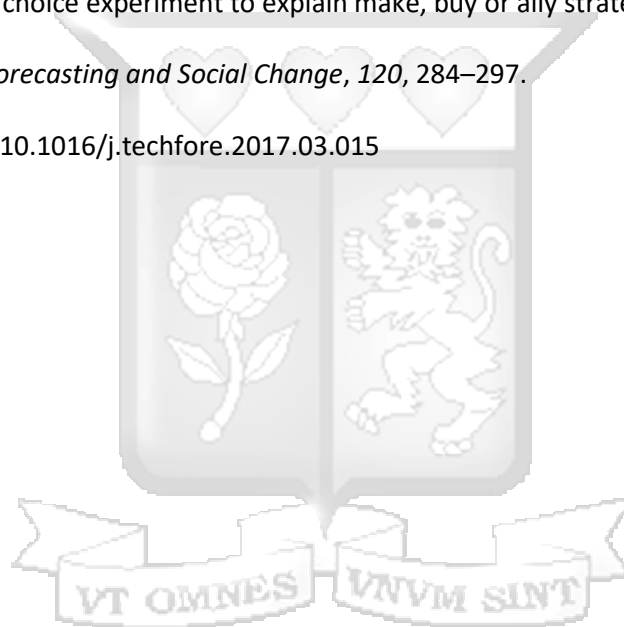
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APPENDICES

APPENDIX 1. QUESTIONNAIRE

Dear respondent,

This research is being conducted to assess the impact of group participation factors on the financial performance of informal micro retail enterprises in Nairobi. This questionnaire has five sections and takes about ten minutes to complete. Please note that participation is purely voluntary and upon embarking on answering the questions, you can stop when you please. All information will be kept confidential and no personal identifiable information is required.

For more information, Kindly contact Ms. Caroline Wanjiku 0722347799

SECTION A – FINANCIAL FACTORS (Select only one answer)

This section assesses the importance of various financial factors on the performance of shops.

Kindly indicate your level of agreement with the following statements where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I am currently able to receive loans for my business pursuits					
I have access to more than one business loan					
I am able to access financial training if I need to					
I perceive myself to be financially literate					
I can readily get information on financial bookkeeping					
I regularly keep my financial bookkeeping records up to date					

SECTION B – MANAGERIAL FACTORS (Select only one answer)

This section assesses the importance of various managerial factors on the performance of shops.

Kindly indicate your level of agreement with the following statements where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
My inventory management skills are sufficiently advanced to enable effective management of records					
I keep an up to date track of my inventory regularly					
I have access to sufficient coaching facilities					
I regularly receive coaching advice regarding handling of my business					
I have been able to organize my shop in a manner appealing to my customers through merchandising					
I do get more customers after organizing my shop using merchandizing skills					

SECTION C – STRATEGIC FIT FACTORS (Select only one answer)

This section assesses the importance of various strategic fit factors on the performance of shops.

Kindly indicate your level of agreement with the following statements where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I have partnered with other businesses to get better deals on orders					
I get tips on better prices from other businesses					
I have engaged with other businesses to come up with innovative solutions to problems					

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I have learnt other ways of handling business issues/or business ventures from other businesses					
I have used technology to improve the efficiency of my business					
I have access to a smart phone that I can use in my business					

SECTION D – PERFORMANCE FACTORS (Select only one answer)

This section assesses the importance of various financial performance factors on the performance of shops.

Kindly indicate your level of agreement with the following statements where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Over the past two years, I have been able to increase my inventory					
Over the past two years, I have been seen my shop increase in size					
Over the past two years, I have seen a significant increase in sales					
Over the past two years, I need to replenish my stock more often as most of my stock is quickly depleted due to faster sales					
Over the past two years, I have noted a significant increase in profits					
Over the past two years, the business has more access to cash float					

Sales	Jan 2017	Dec 2019
Sales		

SECTION E – GROUP PARTICIPATION AND DEMOGRAPHICS (Select only one answer)

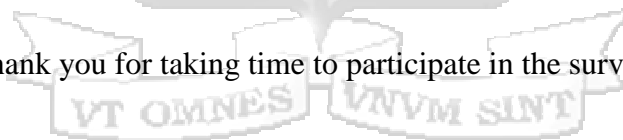
This section assesses the participation in a business group and demographics information

Kindly indicate Yes if you are in a business group or No if not in a business group

Group Participation	Yes	No
I belong to a business group		

Demographics						
Location of business						
Age	<25		25-35		>35	
Gender	Male		Female			
Marital Status	Married		Divorced		Single	
Level of Education	Tertiary		Secondary		Primary	
No of people/employees in the enterprise	1		2-5		6-9	

Thank you for taking time to participate in the survey



KIAMBATISHO 1. Dodoso

Mpendwa mhojiwa,

Utafiti huu unafanywa ili kutathmini athari za makundi ya ushiriki wa kikundi juu ya utendaji wa hali ya juu ya biashara ndogo za rejareja nchini Nairobi. Hojaji hii ina sehemu tano na inachukua muda wa dakika kumi kukamilika. Tafadhali kumbuka kwamba ushiriki ni wa hiari na juu ya kuendelea kujibu maswali, unaweza kuacha wakati wewe unapopenda tafadhali. Maelezo yote yatakuwa ya siri na hakuna taarifa ya kibinafsi ya kujitamburisha inayohitajika.

Kwa habari zaidi, wasiliana na Ms. Caroline Wanjiku

0722347799

SEHEMU ya A-sababu za KIFEDHA (Teua Jibu moja tu)

Sehemu hii atathmini umuhimu wa mambo mbalimbali ya fedha juu ya utendaji wa maduka.

Tafadhali onyesha kiwango chako cha mkataba na taarifa zifuatazo ambapo 1 ni kabisa hawakubaliani, 2 ni kutokukubaliana, 3 ni upande wowote, 4 ni kukubaliana na 5 ni sana kukubaliana.

	Hawakubaliani sana 1	Hawakubaliani 2	Upande wowote 3	Kukubaliana 4	Kukubaliana sana 5
Mimi kwa sasa nina uwezo wa kupokea mikopo kwa shughuli zangu za biashara					
Nina upatikanaji wa mkopo wa biashara zaidi ya moja					
Nina uwezo wa kupata mafunzo ya kifedha ikiwa ninahitaji					
Ninahisi mwenyewe kuwa na masoma ya kifedha					
Ninaweza kupata taarifa kwa urahisi juu ya kuweka vitabu vya kifedha					
Huwa ninaweka kumbukumbu za kuweka alama za kifedha kwa kila mara					

SEHEMU ya B – sababu za usimamizi (Teua Jibu moja tu)

Sehemu hii atathmini umuhimu wa mambo mbalimbali ya usimamizi juu ya utendaji wa maduka.

Tafadhali onyesha kiwango chako cha mkataba na taarifa zifuatazo ambapo 1 ni kabisa hawakubaliani, 2 ni kutokukubaliana, 3 ni upande wowote, 4 ni kukubaliana na 5 ni sana kukubaliana.

	Hawakubaliani sana 1	Hawakubaliani 2	Upande wowote 3	Kukubaliana 4	Kukubaliana sana 5
Ujuzi wangu wa usimamizi wa hesabu ni wa kutosha ili kuwezesha usimamizi bora wa rekodi					
Mimi hufuatilia tarehe ya hesabu yangu mara nyingi					
Nina upatikanaji wa huduma za kutosha za kufundisha					
Mimi kila mara kupokea ushauri wa kufundisha kuhusu utunzaji wa biashara yangu					
Nimekuwa na uwezo wa kuandaa duka langu kwa namna ya kuvutia wateja wangu kwa njia ya merchandising					
Ninapata wateja zaidi baada ya kuandaa duka langu kwa kutumia ujuzi merchandizing					

SEHEMU ya C-mambo ya KIMKAKATI (Teua Jibu moja tu)

Sehemu hii atathmini umuhimu wa mambo mbalimbali ya kimkakati juu ya utendaji wa maduka.

Tafadhali onyesha kiwango chako cha mkataba na taarifa zifuatazo ambapo 1 ni kabisa hawakubaliani, 2 ni kutokukubaliana, 3 ni upande wowote, 4 ni kukubaliana na 5 ni sana kukubaliana.

	Hawakubaliani sana 1	Hawakubaliani 2	Upande wowote 3	Kukubaliana 4	Kukubaliana sana 5
Nimeshirikiana na biashara nyingine ili kupata mikataba bora juu ya amri					
Ninapata vidokezo kwa bei bora kutoka kwa biashara nyingine					

	Hawakub aliani sana 1	Hawakub aliani 2	Upande wowote 3	Kuku balian a 4	Kukubali ana sana 5
Nimejikusisha na biashara nyingine ili kuja na ufumbuzi wa ubunifu wa matatizo					
Nimejifunza njia nyingine za kushughulikia masuala ya biashara/au biashara zingine					
Mimi kutumika teknolojia ya kuboresha ufanisi wa biashara yangu					
Nina upatikanaji wa simu ya smart ambayo ninaweza kutumia katika biashara yangu					

SEHEMU ya D – sababu za utendaji (Teua Jibu moja tu)

Sehemu hii atathmini umuhimu wa mambo mbalimbali ya utendaji wa fedha juu ya utendaji wa maduka.

Tafadhali onyesha kiwango chako cha mkataba na taarifa zifuatazo ambapo 1 ni kabisa hawakubaliani, 2 ni kutokubaliana, 3 ni upande wowote, 4 ni kukubaliana na 5 ni sana kukubaliana.

	Hawakub aliani sana 1	Hawakub aliani 2	Upande wowote 3	Kuku balian a 4	Kukubali ana sana 5
Katika miaka miwili iliyopita, Nimekuwa na uwezo wa kuongeza hesabu yangu					
Katika miaka miwili iliyopita, nimeona duka langu likiongezeka kwa ukubwa					
Katika miaka miwili iliyopita, nimeona ongezeko kubwa la mauzo					
Zaidi ya miaka miwili iliyopita, ninahitaji kujaza hisa yangu mara nyingi zaidi kwa sababu ya hisa yangu kupunguakwa haraka kwa sababu ya mauzo ya haraka					
Zaidi ya miaka miwili iliyopita, nimebainisha ongezeko kubwa la faida					
Zaidi ya miaka miwili iliyopita, biashara ina upatikanaji zaidi wa pesa					

Mauzo	Jan 2017	Desemba 2019
Mauzo		

Sehemu ya E - ushiriki wa kundi na demografia (Teua Jibu moja tu)

Sehemu hii atathmini ushiriki katika kikundi cha biashara na habari za demografia

Tafadhali aonyesha ndiyo kama wewe ni katika kundi la biashara au hapana kama si katika kundi biashara

Ushiriki wa kundi	Ndiyo	La
Mimi niko kwa kundi la biashara		

Demografia					
Eneo la biashara					
Umri	< 25	25-35		> 35	
Jinsia	Kiume	Kike			
Hali ya ndoa	Ndoa	Talaka		Moja	
Kiwango cha elimu	Elimu ya juu	Sekondari		Msingi	
Watu/wafanyakazi katika biashara	1	2-5		6-9	

Asanteni kwa kuchukua muda wa kushiriki katika utafiti

APPENDIX 2: INFORMATION AND CONSENT FORM
BUSINESS GROUP FACTORS AND FINANCIAL PERFORMANCE OF INFORMAL MICRO RETAIL ENTERPRISES; EVIDENCE FROM THE SMART DUKA PROGRAM, NAIROBI

SECTION 1: INFORMATION SHEET

Investigator: CAROLINE GRACE WANJIKU

Institutional affiliation: Strathmore Business School (SBS)

SECTION 2: INFORMATION SHEET–THE STUDY

2.1: Why is this study being carried out? (Page 8-Section 1.3)

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study is to establish the relationship between business group factors deemed effectful on micro enterprise financial performance measured by sales. The specific objectives are highlighted below.

1.3.2 Specific Objectives

- i) To assess the effect of financial factors in business groups on the financial performance of informal micro retail enterprises in the Smart Duka project.
- ii) To assess the effect of managerial factors in business groups on the financial performance of informal micro retail enterprises in the Smart Duka project.
- iii) To assess the effect of group strategic-fit factors in business groups on the financial performance of informal micro retail enterprises in Smart Duka project.

2.2: Do I have to take part? (Page 36- Section 3.8-Ethical Issues in Research)

No. Taking part in this study is entirely optional and the decision rests only with you. If you decide to take part, you will be asked to complete a questionnaire to get information on business group factors and financial performance. If you are not able to answer all the questions successfully the first time, you may be asked to sit through another informational session after which you may be asked to answer the questions a second time. You are free to decline to take part in the study from this study at any time without giving any reasons.

2.3: Who is eligible to take part in this study? (Page 31- Section 3.4 - Population and Sampling)

The owners of the micro enterprises or the main manager of the micro enterprises in the Smart Duka Project

2.4: Who is not eligible to take part in this study? (Page 31- Section 3.4 Population and Sampling)

Owners and managers of micro enterprises not in the Smart Duka Project

2.5: What will taking part in this study involve for me?

You will be approached and requested to take part in the study. If you are satisfied that you fully understand the goals behind this study, you will be asked to sign the informed consent form (this form) and then taken through a questionnaire to complete.

2.6: Are there any risks or dangers in taking part in this study? Page 36- Section 3.8-Ethical Issues in Research

There are no risks in taking part in this study. All the information you provide will be treated as confidential and will not be used in any way without your express permission.

2.7: Are there any benefits of taking part in this study?

The information will be used as below (Page 9-Significance of the study)

1.5 Significance of the Study

1.5.1 *Policy makers*

The study will be beneficial to the governments in formulation of regulatory and policy structures as they can gain insights into the effect of business group participation in the micro informal sector.

Possible inferences from the study may inform approaches to be applied in a wider scale in all the informal MSMEs segments in the bid to ensure progressive growth hence higher fiscal policy revenues. The study will also be of significance to the country and the international community in terms of establishing how groups involvement can grow the informal sector and hence grow the macro and micro economy through leveraging findings from this study.

1.5.2 *Practitioners*

The study will benefit the informal entrepreneurs who will be able to adopt the managerial strategies and be able to determine the most effective ways by which to spur economic growth among micro enterprises. It will also benefit the formal sector in that insights on business

group involvement may be used to recommend possible structuring avenues of the formal sector to approach or offer assistance to informal enterprises in the bid to leverage group participation through the highlighted factors because the groups give the informal enterprises some form of structure unlike where enterprises are operating at an individual level.

1.5.3. *Research*

The study will be useful in support of research in the area of micro entrepreneurship which is still not highly covered in research while adding to the body of knowledge around this area. The study will be beneficial to other academic and private researchers in this area while also highlighting potential areas of research in the same area.

2.8: What will happen to me if I refuse to take part in this study? Page 36- Section 3.8-Ethical Issues in Research

Participation in this study is entirely voluntary. Even if you decide to take part at first but later change your mind, you are free to withdraw at any time without explanation.

2.9: Who will have access to my information during this research? Page 36- Section 3.8-Ethical Issues in Research

All research records will be stored in securely locked cabinets. That information may be transcribed into our database, but this will be sufficiently encrypted and password protected. Only the people who are closely concerned with this study will have access to your information. All your information will be kept confidential. The information collected will also be anonymous and cannot be directly linked to you and hence private and confidential.

2.10: Dissemination of the results of the study? Page 36- Section 3.8-Ethical Issues in Research

The results of the study will be shared with the officials of the Smart Duka Project and copies given to them for access, they will share the information with the micro enterprises in the project. The results information can also be obtained from the investigator directly using the below contact information.

2.11: Who can I contact in case I have further questions?

You can contact me, Caroline Grace Wanjiku, at SBS, or by e-mail Caroline.Wanjiku@Strathmore.edu, or by phone 0722347799. You can also contact my supervisor, Dr. David Mathuva, at the Strathmore Business School, Nairobi, or by e-mail dmathuva@strathmore.edu or by phone 254 703 034587

If you want to ask someone independent anything about this research, please contact:

The Secretary–Strathmore University Institutional Ethics Review Board, P. O. BOX 59857, 00200, Nairobi, email ethicsreview@strathmore.edu Tel number: +254 703 034 375

I have had the study explained to me. I have understood all that I have read and have had explained to me and had my questions answered satisfactorily. I understand that I can change my mind at any stage.

Please tick the boxes that apply to you;

Participation in the research study

I AGREE to take part in this research

I DON'T AGREE to take part in this research

Storage of information on the completed questionnaire

I AGREE to have my completed questionnaire stored for future data analysis

I DON'T AGREE to have my completed questionnaire stored for future data analysis

Participant's Signature: _____

Date: ____/____/____

DD / MM / YEAR

Time: ____/____

I, _____ (Name of person taking consent) certify that I have followed the SOP for this study and have explained the study information to the study participant who has signed above, and that s/he has understood the nature and the purpose of the study and consents to the participation in the study. S/he has been given opportunity to ask questions which have been answered satisfactorily.

Investigator's Signature: _____

Date: ____/____/____

DD / MM / YEAR

Investigator's Name: _____

Time: _____ / _____

FOMU YA HABARI NA RIDHAA

VIPENGELE VYA BIASHARA NA UTENDAJI WA FEDHA WA MAKAMPUNI YASIYO RASMI YA REJAREJA; USHAHIDI KUTOKA PROGRAMU YA SMART DUKA, NAIROBI

SEHEMU YA 1: KARATASI YA HABARI

Mchunguzi: CAROLINE GRACE WANJIKU

Ushirikiano wa kitaasisi: shule ya biashara ya Strathmore (SBS)

SEHEMU YA 2: KARATASI YA HABARI – MASOMO

2.1: kwa nini utafiti huu unafanywa? (Ukurasa wa 8-sehemu ya 1.3)

1.3. *Malengo ya utafiti*

1.3.1 *Lengo kuu*

Lengo la jumla la utafiti ni kuanzisha uhusiano kati ya mambo ya biashara ya shughuli kuonekana athari juu ya utendaji wa kifedha wa biashara ndogo ambazo sio rasmi za rejareja kipimo na mauzo. Malengo mahususi yameangaziwa hapa chini.

1.3.2 *Malengo mahususi*

Kutathmini athari za mambo ya fedha katika makundi ya biashara juu ya utendaji wa kifedha wa biashara ndogo ambazo sio rasmi za rejareja katika mradi wa smart duka.

Kutathmini athari za usimamizi wa mambo ya kibiashara katika vikundi vya biashara juu ya utendaji wa kifedha wa biashara ndogo ambazo sio rasmi za rejareja katika mradi wa smart duka.

Kutathmini athari za vikundi vya kimkakati katika makundi ya biashara juu ya utendaji wa kifedha wa biashara ndogo ambazo sio rasmi za rejareja katika mradi wa smart duka.

2.2: Je, ni lazima kushiriki katika utafitafiti uwa na kuchukua sehemu? (Ukurasa was 36 - sehemu ya 3.8) Masuala ya kimaadili katika utafiti)

La. Kushiriki katika utafiti huu ni hiari kabisa na uamuzi upo tu na wewe. Ikiwa unaamua kushiriki, utaulizwa kukamilisha Dodoso ili upate habari kuhusu vipengele vya kikundi cha

biashara na utendaji wa kifedha. Ikiwa huwezi kujibu maswali yote kwa mafanikio mara ya kwanza, unaweza kuulizwa kukaa kupitia kikao kingine cha taarifa baada ya hapo unaweza kuulizwa kujibu maswali kwa mara ya pili. Wewe ni huru kukataa kushiriki katika utafiti kutoka kwa utafiti huu wakati wowote bila kutoa sababu yoyote.

2.3: nani anayestahili kushiriki katika utafiti huu? (ukurasa 31-sehemu ya 3.4 idadi ya watu na sampuli)

Wamiliki wa biashara au Meneja Mkuu wa biashara ndogo ambazo sio rasmi za rejareja katika mradi wa smart duka

2.4: nani anayestahili kushiriki katika utafiti huu? (Ukurasa 31-sehemu ya 3.4 idadi ya watu na sampuli)

Wamiliki na mameneja wa biashara ndogo ambazo sio rasmi za rejareja ambazo hazipo katika mradi wa smart duka

2.5: nini kitakacho Shiriki katika utafiti huu unahusisha mimi?

Utaamkiwa na kuombwa kushiriki katika masomo. Ikiwa unakuridhika kwamba unaelewa kikamilifu malengo ya utafiti huu, utaulizwa kusaini fomu ya idhini ya taarifa (fomu hii) na kisha kuchukuliwa kupitia Dodoso ili kukamilisha.

2.6: Je, kuna hatari au hatari yoyote katika kushiriki katika utafiti huu? (Ukurasa was 36 - sehemu ya 3.8) Masuala ya kimaadili katika utafiti)

Hakuna hatari katika kushiriki katika utafiti huu. Maelezo yote unayotoa yatakuwa ya siri na haititumike kwa njia yoyote bila ruhusa yako ya kuonyesha.

2.7: Je, kuna faida yoyote ya kushiriki katika utafiti huu?

Taarifa itatumika kama ilivyo hapo chini (Ukurasa 9-umuhimu wa utafiti)

1.5 Umuhimu wa masomo

1.5.1 Watunga sera

Utafiti huo utakuwa wa manufaa kwa serikali katika uundaji wa miundo ya udhibiti na sera kwa vile wanaweza kupata ufahamu katika athari za ushiriki wa kundi la biashara katika sekta isiyo rasmi.

Kuna uwezekano mkubwa kutoka kwa utafiti huo kunaweza kuwajulisha mbinu za kutumiwa kwa kiwango kikubwa katika makundi yote ya MSMEs yasiyo rasmi katika jitihada za kuhakikisha ukuaji endelevu wa mapato ya sera ya fedha. Utafiti huo pia utakuwa wa umuhimu kwa nchi na jumuiya ya kimataifa katika suala la kuanzisha jinsi vikundi vinavyohusika vinaweza kukua katika sekta isiyo rasmi na hivyo kukua kwa uchumi mkubwa na kwa biashara ndogo ambazo sio rasmi za rejareja kupitia matokeo kuinua kutoka kwa utafiti huu.

1.5.2 *Practitioners*

Utafiti huo watafaidika na wajasiriamali wasio rasmi ambao wataweza kupitisha mikakati ya usimamizi na kuwa na uwezo wa kuamua njia bora zaidi ambazo kuhimiza ukuaji wa uchumi miongoni mwa makampuni ya biashara ndogo. Pia itaifaidika kwa sekta rasmi katika ufahamu huo juu ya ushiriki wa kundi la biashara inaweza kutumika kupendekeza uwezekano wa uongozi ya sekta rasmi ili kufikia au kutoa msaada kwa makampuni yasiyo rasmi katika jitihada za kushiriki ushiriki wa kundi kwa sababu ya mambo yaliyodhulishwa kwa sababu vikundi hutoa makampuni yasiyo rasmi ambayo aina ya muundo tofauti na pale ambapo makampuni yameendesha kazi kwa kiwango cha mtu binafsi.

1.5.3 *Utafiti*

Utafiti utakuwa muhimu katika kusaidia utafiti katika eneo la ujasiriamali wa biashara ndogo ambazo sio rasmi za rejareja ambayo bado si sana katika utafiti wakati kuongeza kwa mwili wa maarifa karibu eneo hili. Utafiti utakuwa wa manufaa kwa watafiti wengine wa kitaaluma na wa kibinafsi katika eneo hili wakati pia kuonyesha maeneo ya utafiti katika eneo moja.

2.8: nini kitatokea kwangu kama nitakataa kushiriki katika utafiti huu? (Ukurasa was 36 - sehemu ya 3.8) Masuala ya kimaadili katika utafiti)

Kushiriki katika masomo haya ni ya kujitolea kabisa. Hata kama unaamua kushiriki mara ya kwanza lakini baadaye mabadiliko ya akili yako, wewe ni huru kutoka wakati wowote bila maelezo.

2.9: Nani atakuwa na uwezo wa kufikia taarifa yangu wakati wa utafiti huu? (Ukurasa was 36 -sehemu ya 3.8) Masuala ya kimaadili katika utafiti)

Rekodi zote za utafiti zitakuwa zimehifadhiwa katika makabati yaliyofungwa salama. Taarifa hiyo inaweza kuwa tukiyaandika katika database yetu lakini hii itakuwa imehifadhiwa na number ziri na ulinzi kutosha. Ni watu ambao wana wasiwasi wa karibu na utafiti huu

watakuwa na upatikanaji wa habari zako. Maelezo yako yote yatakuwa ya siri. Taarifa iliyokusanywa pia itakuwa isiyojulikana na haiwezi kuunganishwa moja kwa moja na wewe na hivyo binafsi na siri.

2.10: usambazaji wa matokeo ya utafiti? (Ukurasa was 36 -sehemu ya 3.8) Masuala ya kimaadili katika utafiti)

Matokeo ya utafiti huo itakuwa pamoja na maafisa wa mradi wa smart duka na nakala aliyopewa kwa ajili ya kupata, wao kushiriki taarifa na biashara ndogo katika mradi. Taarifa ya matokeo inaweza pia kupatikana kutoka kwa mchunguzi moja kwa moja kwa kutumia maelezo ya chini ya mawasiliano.

2.11: nani anaweza kuwasiliana naye ikiwa nina maswali zaidi?

Unaweza kuwasiliana na mimi, Caroline Grace Wanjiku, katika SBS, au kwa barua pepe Caroline.Wanjiku@Strathmore.edu, au kwa simu 0722347799. Unaweza pia kuwasiliana na msimamizi wangu, Dr. David Mathuva, katika shule ya biashara ya Strathmore, Nairobi, au kwa barua pepe dmathuva@strathmore.edu au kwa simu 254 703 034587

Kama unataka kuuliza mtu huru chochote kuhusu utafiti huu Tafadhali wasiliana na:

Katibu Mkuu wa Chuo Kikuu cha taasisi ya Strathmore Review SANDUKU 59857, 00200, Nairobi, barua pepe ethicsreview@strathmore.edu namba ya simu: + 254 703 034 375

Nimekuwa na utafiti ulielezwa kwangu. Nimeelewa yote ambayo Nimesoma na nimeelezea kwangu na nilikuwa na maswali yangu kuridhisha. Ninaelewa kwamba ninaweza kubadilisha mawazo yangu katika hatua yoyote ile.

Tafadhali weka alama kwenye visanduku ambavyo vinatumika kwako;

Kushiriki katika utafiti wa utafiti

Ninakubaliana kushiriki katika utafiti huu

Mimi sikubaliani kufanya na kushiriki katika utafiti huu

Uhifadhi wa taarifa kuhusu Dodoso iliyokamilika

Ninakubaliana na Dodoso langu la kukamilisha kuhifadhiwa kwa uchambuzi wa data ya baadaye

Mimi sikubaliani na maswali yangu kukamilika kuhifadhiwa kwa ajili ya uchambuzi wa takwimu za baadaye

Saini ya mshiriki: _____

Tarehe: ____/____/____

DD/MM/MWAKA

Muda: ____/____

Mimi, _____ (jina la mtu kuchukua kibali) kuthibitisha kwamba mimi kufuata SOP kwa ajili ya utafiti huu na alielezea taarifa ya utafiti kwa mshiriki wa utafiti saini yake hapo juu, na kwamba yeye ameelewa asili na madhumuni ya utafiti na mafunzo kwa ushiriki katika utafiti. Yeye amepewa fursa ya kuuliza maswali ambayo imekuwa akajibiwa kuridhisha.

Sahihi ya mchunguzi: _____

Tarehe: ____/____/____

DD/MM/MWAKA

Jina la mchunguzi: _____

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APPENDIX 3: INTRODUCTION LETTER

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P.O Box 59857 00200, Nairobi, Kenya.
Cell: +254 703 414/6/7, Twitter: @SBSKenya
Email: info@sbs.ac.ke or visit www.sbs.strathmore.edu



Tuesday, 19 November 2019

RE: FACILITATION OF RESEARCH – WANJIKU, CAROLINE GRACE

This is to introduce Wanjiku, Caroline Grace who is a Master of Science in Development Finance (MDF) student at Strathmore University Business School, admission number MDF 102724/17. As part of the MDF Program, Caroline is expected to do applied research and undertake a project. This is in partial fulfilment of the requirements of the MDF course. To this effect, she would like to request for appropriate data from your organization.

Caroline is undertaking a research paper on **“Business group factors and financial performance of informal micro retail enterprises; evidence from the smart duka program, Nairobi.”** The information obtained from your organization shall be treated confidentially and shall be used for academic purposes only.

The MDF seeks to establish links with industry, and one of these ways is by directing our research to areas that would be of direct use to industry. We would be glad to share our findings with you after the research, and we trust that you will find them of great interest and of practical value to your organization.

We appreciate your support and shall be willing to provide any further information if required.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Veronica Muniu'. The signature is stylized and fluid.

Veronica Muniu.
Programme Manager – Master of Science in Development Finance

APPENDIX 4: ETHICAL APPROVAL



Strathmore
UNIVERSITY

14th January 2020

Ms Wanjiku Caroline, carolyne_gw@yahoo.com

Dear Ms Wanjiku,

RE: Business Group Factors and Financial Performance of Informal Micro Retail Enterprises: Evidence From the Smart Duka Program, Nairobi

This is to inform you that SU-IERC has reviewed and approved your above research proposal. Your application approval number is SU-IERC0592/19. The approval period is 14th January, 2020 to 13th January, 2021.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

Dr Virginia Gichuru,
Secretary; SU-IERC

cc: Prof Fred were,
Chairperson; SU-IERC

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This is to Certify that Ms.. Caroline Wanjiku of Strathmore University, has been licensed to conduct research in Nairobi on the topic: Business Group Factors and Financial Performance of Informal Micro Retail Enterprises; Evidence from the Smart Duka Program, Nairobi for the period ending : 03/February/2021.

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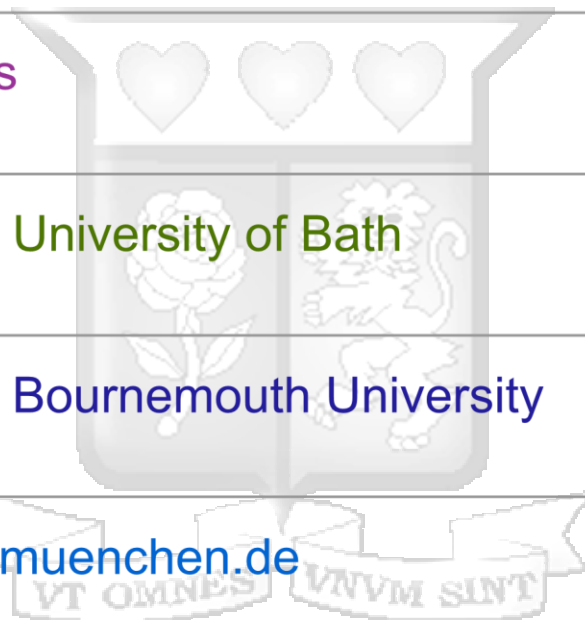
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