RELATIONSHIP BETWEEN FINANCIAL LITERACY AND BORROWING BEHAVIOUR OF SMALL-SCALE BUSINESS OWNERS IN HOMA BAY TOWN, KENYA

BY

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ABSTRACT

Small-scale businesses play an important role in the global economy with over 60% of the population depending on them for employment. In Kenya, statistics indicate that about 30% of the population depends on the Small-scale businesses for their livelihoods. However, research indicates that up to 70% of the businesses are collapsing under the burden of unserviced loans. In Homa Bay town, 60% of the non-performing loans portfolio among commercial banks is from small-scale businesses indicating poor borrowing behaviour. While prior studies indicate that financial literacy influences borrowing behaviour, the effects of this on borrowing behavior of small-scale business owners in Homa-bay town are unknown. The main objective of the study was to establish the relationship between financial literacy and borrowing behavior among small business owners in Homa Bay town. The specific objectives were to; establish the relationship between knowledge of key money concepts and borrowing behaviour; determine the relationship between knowledge of financial institutions and borrowing behaviour; and to establish the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town. The study was anchored on the theory of Reasoned Action and guided by correlational research design. Population of the study was the 1220 business owners who were classified into three categories; retail, manufacturing and service from which a sample of 301 small scale business owners were selected through stratified random sampling technique. Interviews and structured questionnaires were used to collect primary data while secondary data were collected from records available in the businesses. A test-retest of the questionnaires was conducted and reliability coefficient of 0.815 obtained. Content validity index of 0.723 was also computed. The results were greater than the threshold of 0.7, suggesting that the questionnaire was reliable and valid. Correlation analysis indicated that 65%, 49.8% and 30.2% changes in the borrowing behaviour are associated with knowledge of key money concepts, financial institutions and cash budgeting respectively. Multiple regression analysis was used to analyze the data. The study revealed that an increase in knowledge of key money concepts would lead to 0.581 significant improvement in borrowing behavior (β=0.581, p =0.00), while an increase in knowledge of financial institutions would lead to 0.338 significant increase in borrowing behavior (β=0.338, p = 0.03), and an increase in knowledge of cash budgeting would lead to 0.299 insignificant increase in the borrowing behavior (β=0.299, p = 0.052). The explanatory power of the estimated model was R^2= 0.596, meaning that 59.6% changes in the borrowing behaviour was explained by the three independent variables. It was concluded that knowledge of key money concepts and financial institutions were significant determinants of borrowing behavior. It is recommended that commercial lenders educate small-scale business owners on key money concepts and awareness on financial institutions. Findings from the study may benefit borrowers in understanding the need to be more financially literate. Researchers may also use the findings in this study as a basis of more research in the area of borrowing behaviour.

CHAPTER ONE: INTRODUCTION

This chapter presents a preview to the concepts of financial literacy and borrowing behaviour. In the section, the research problem, the purpose of the study, the objectives of the study, the statement of the problem, and the limitations of the study are also presented.

1.1 Background of the Study

Borrowing behavior remains an interesting issue in both developed and developing economies and has therefore elicited much interest in the recent past with the rapid change in the finance landscape (Gitari, 2012). The idea has interested scholars since it is seen as the combination of consumers' and investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being (Miller *et al.*, 2009).

Financial literacy has been defined as the ability to make informed judgments and to make effective decisions regarding the use and management of money (Worthington, 2005), and it enables individuals to build their financial skills and gives them confidence to undertake financial decisions for their pension schemes (Agnew *et al.*, 2007). Knowledge on borrowing, savings and plans to save is critical for effective long term financial decision making that is relevant to small businesses (Gitari, 2012). The key competencies of financial literacy are money basics, budgeting, saving and planning, borrowing and debt literacy (Schagen and Lines, 1996). Hypothetically, therefore, financial literacy helps in empowering and educating consumers so that they are knowledgeable about finance in a way that is relevant to their lives and enables them to use this knowledge to evaluate products and make informed decisions (Mwangi & Kihiu, 2012). Schagen and Lines (1996) argue that a financial-literate person would demonstrate three critical abilities; an understanding of key concepts central to money management; a working knowledge of financial institutions, systems and services; and a range of specific and general skills (analytical and synthetically) such as cash budgeting.

The relationship between knowledge of key money concepts and borrowing behaviour has been a subject of previous empirical studies. Bruhn and Zia (2011) in their study on the impact on business of financial literacy for young entrepreneurs in Bosnia and Herzegovina using a descriptive design found that training individuals on key money concepts such as interest rates

improved their business performance significantly. They also found that entrepreneurs with relatively high ex-ante financial literacy exhibit improvements in sales due to the training program. French and Mackillop (2005) used a correlational research design to study the relationship between financial literacy and over-indebtedness in low-income households in Northern Ireland. The main finding from the analysis was that money management skills are important determinants of consumer debt behaviour and household net worth but that numeracy has almost no role to play. These results indicate that financial literacy knowledge of key money concepts had mixed results in terms of influencing debt levels among the low-income households on the Northern Ireland.

Mandel and Klein (2009) conducted a research on the impact of financial literacy on subsequent financial behaviour of young entrepreneurs in the United Kingdom using a survey research design. Results from the survey indicated that there was no significant relationship between numeracy skills and entrepreneurial skills of the students after school. Njoroge (2013) carried out a research on the relationship between financial literacy and entrepreneurial success in Nairobi County. Knowledge of key money concepts was found to have the highest positive significance on entrepreneurial success. Mwangi and Kihiu (2012) studied the impact of financial literacy on access to financial services in Kenya. Using a multinomial logit approach to explain access the four major financial service access strands, the study found that financial literacy remains low in Kenya and that there is no relationship between knowledge of key money concepts and borrowing behaviour.

Studies on the relationship between knowledge of key money concepts and borrowing behaviour have demonstrated that there is no agreement on the relationship between the variables. However, a possibility of knowledge of key money concepts influencing borrowing behaviour is demonstrated. Bruhn and Zia (2011) and Njoroge (2013) find a significant positive relationship between knowledge of key money concepts and various measures of financial success, Mandel and Klein (2009) and Mwangi and Kihiu (2012) find no significant relationship between knowledge of key money concepts and various financial performance measures. Methodologically, Bruhn and Zia (2011) and Njoroge (2013) used descriptive research design while Mandel and Klein (2009) used survey research design, methods which don't provide confirmatory results. Furthermore, the reviewed studies have concentrated on entrepreneurs in

general which leaves a gap for the specific group of small-scale business owners. Studies by Bruhn and Zia (2011), Mandel and Klein (2009) and French and Mackillop (2005) were conducted in developed economies indicating that the findings cannot be generalised to Kenya which is an emerging economy. The reviewed studies indicate mixed results on the various aspects relating financial literacy to borrowing behavior and this may be due to differences in business environment in different countries.

Reviewed studies on the relationship between knowledge of key money concepts and borrowing behaviour have demonstrated that there is no agreement on the relationship between the variables. While a possibility of knowledge of key money concepts influencing borrowing behaviour is demonstrated, specific studies on the role of key money concepts on borrowing behaviour of small-scale business owners in Homa Bay town is unknown.

According to economic theory, credit access is expected to have several influences on savings: impatient consumers will be tempted to borrow and consume more in the present, hence save less; some current savers will reduce their saving since future needs can be financed more easily through credit; no change in saving will occur for the very patient and highly risk-averse savers (Rogg, 2000). Studies relating knowledge of financial institutions and borrowing behaviour has also indicated mixed results. (Moore, 2003), while using a correlational design found that the relationship between knowledge of financial institutions and borrowing behaviour was not significant. In Europe, Miles (2004) showed that United Kingdom borrowers display a weak understanding of mortgages and interest rates. In his study on the relationship between knowledge of financial institutions and borrowing of mortgage loans, there was found a positive significant association between financial knowledge of financial markets and household financial decision making concerning mortgages.

Olima (2013) on the effects of financial literacy on personal financial management on Kenya Revenue Authority employees in Nairobi using a descriptive research design concluded that the participants were "to a great extent" aware that financial literacy aspects such as knowledge of financial institutions indeed affects personal financial management practices such as borrowing among the Kenya Revenue Authority employees. However, these findings were purely descriptive. Kempson *et al.* (2008) carried out a study on measuring and improving financial capability in Kenya with the objectives of establishing the levels of financial capability in Kenya;

to understand the potential approaches that could be taken to measure financial capability in a less developed nation where the vast majority of the population does not use formal banking services and to explore levels of financial inclusion in Kenya. The study which utilized a sample of 78 medium-sized businesses using a correlational research design established that financial capability has a significant positive relationship with the use of formal banking services. Onyango (2014) in his study on the effect of financial literacy on management of personal financial management among employees of commercial banks in Kenya using descriptive research deign found that financial literacy has a positive influence on personal financial practices such as borrowing and saving. Knowledge of financial institutions was found to be insignificant in terms of influencing personal financial management practices.

Reviewed studies indicate that there are mixed results concerning the relationship between knowledge of financial institutions and borrowing behaviour of different groups of people. Whereas Miles (2004), Olima (2013) and Kempson *et al.* (2008) find a significant positive relationship between knowledge of financial institutions and borrowing behaviour, studies by Moore (2003) and Onyango (2014) find that knowledge of financial institutions does influence borrowing behaviour. The studies have been carried out in different countries, of which some are development and some developing. This might have led to different results. Furthermore, the samples used in the studies are different for each study. While a possibility of the borrowers' knowledge of financial institutions influencing borrowing behaviour is demonstrated, specific studies relating knowledge of financial institutions and borrowing behaviour among small-scale business owners in Homa Bay town are scanty indicating that the relationship is unknown.

As suggested by Briggs and Singh (2000), a tight cash budgeting policy leads to a fall in the financial transaction costs of the firm. The relationship between knowledge of cash budgeting and borrowing behaviour of individuals is also contentious since scholars have not agreed upon the relationship with some indicating a positive significant relationship and others indicating that there is no relationship between the variables. Raghumandan *et al.*, (2012) examined the behavioural aspects of budgeting with particular emphasis on public sector in India and results from the study showed that knowledge of cash budgeting has an important significant bearing on the borrowing behaviour on the entrepreneurs in India. In a study by Qi (2010), it was established that by cash budgeting has a positive significant effect on a number of financial

behaviour of entrepreneurs including their borrowing behaviour. Kytonen (2004) carried out a study on cash management behaviour of firms and its structural change in an emerging money market in Finland. The results of the survey part of the study revealed that cash management practices changed significantly during the research period. Findings indicate that cash budgeting has no relationship with borrowing behaviour of the companies. Locally, Atieno (2014) conducted a research on assessment of financial education and its implication on individual investment in Kenya. Results indicated that cash budgeting has no relationship with investment by the respondents. The variable was also found to have no relationship with borrowing behaviour of the respondents.

The review of literature above indicates that the relationship between knowledge of cash budgeting and borrowing behaviour of individuals is also contentious since scholars have not agreed upon the relationship with some indicating a positive significant relationship (Raghumandan *et al.*, 2012; Qi, 2010) and others indicating that there is no relationship between the variables (Qi, 2010; Atieno, 2014). Studies by Raghumandan *et al.*, 2012; Qi, 2010 were carried out in India and their results cannot be generalised to the Kenyan context since India is a developed economy. Of the reviewed studies, none has attempted to establish the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town indicating that the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town is unknown.

In a study on small-scale businesses in Homa Bay County, Ombachi (2014) noted that the greatest challenge facing these small-scale businesses was repayment of loans advanced to them. The study noted that concerns with providing accessible and appropriate credit systems for small-scale businesses in developing countries have been growing for many decades. This is because appropriate credit systems could cater for the financing needs of the small scale enterprises in the rural areas. Onyango (2011) in his study of the effect of working capital management practices on the financial performance of small scale enterprises in Homa Bay district using a sample of 113 small scale enterprises and using a survey design established that majority of the small business owners or managers had just basic education and over 57% of these business operators hardly attend any business training programmes despite the establishment that over 60% of them had little or no knowledge in business management hence

were void of management skills vital in the running of their enterprises. The study also established that the performance of small scale enterprises was on average low.

In another study by Oyier (2012) on determinants of non-performing loans among commercial banks operating in Homa Bay town, it was revealed that loans to small-scale businesses formed the greatest portfolio of non-performing loans. Findings from the study indicated that up to 60% of small-scale businesses in Homa Bay town who borrowed loans from the commercial banks operating in Homa Bay town were not able to service the loans that they had borrowed leading to non-performing loans making up to 70% of them to fail within the first five years of their start-up. The research however did not link the borrowers' financial literacy and their borrowing behaviour.

1.2 Statement of the Problem

Statistics have indicated that up to 60% of small-scale businesses in Homa Bay town who borrowed loans from the commercial banks operating in Homa Bay town were not able to service the loans that they had borrowed leading to non-performing loans which leads to about 70% of them to fail during the first five years of their start up. Reviewed studies on the relationship between knowledge of key money concepts and borrowing behaviour have demonstrated that there is no agreement on the relationship between the variables. While a possibility of knowledge of key money concepts influencing borrowing behaviour is demonstrated, specific studies on the role of key money concepts on borrowing behaviour of small-scale business owners in Homa Bay town is unknown. Similarly, while a possibility of the borrowers' knowledge of financial institutions influencing borrowing behaviour is demonstrated, specific studies relating knowledge of financial institutions and borrowing behaviour among small-scale business owners in Homa Bay town are scanty indicating that the relationship is unknown. No prior study attempts to establish the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town indicating that the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town is unknown. A relevant issue for empirical investigation is therefore that of establishing the relationship between financial literacy and borrowing behaviour of the small-scale business owners in Homa Bay town.

1.3 Objectives of the Study

The main objective of the study was to establish the relationship between financial literacy and borrowing behaviour of small-scale business owners in Homa Bay town.

The specific objectives were to;

(i) Find out the relationship between knowledge of key money concepts and borrowing behavior of small-scale business owners in Homa Bay town.

(ii) Determine the relationship between knowledge of financial institutions and borrowing behaviour of small-scale business owners in Homa Bay town;

(iii) Find out the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town.

1.4 Research Hypotheses``

H_{01}: There is no relationship between knowledge of key money concepts and borrowing behaviour of small-scale business owners in Homa Bay town.

H_{02}: There is no relationship between knowledge of financial institutions and borrowing behaviour of small-scale business owners in Homa Bay town

H_{03}: There is no relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town.

1.5 Justification of the Study

It is expected that findings and recommendations from this study may be useful to the management of banks in making rational decision on whether to enhance changes in loan lending practices to small-scale businesses. The findings may also be useful to the small-scale business owners since they will enable them to evaluate the effectiveness of their loan borrowing behaviour. The research finding will also provide valuable information to the relevant government agencies that may be useful in policy formulation on bank loan lending practices. Future researchers will also find the findings and recommendations of the study useful in that they will offer a basis for further studies in the area of loans borrowing behaviour in relation to financial literacy.

1.6 Scope of the Study

This research was on financial literacy and its relationship with borrowing behaviour among small-scale business owners in Homa Bay town. The subject scope of the research is in the discipline of Finance and the sub-discipline of capital structure. This study was carried out among small-scale businesses in Homa Bay town. The town was chosen since small-scale businesses in it face the same problems that other small-scale businesses in other parts of the country face in repaying their loans. It was also chosen because of the researcher's knowledge of the town helped make the research more comprehensive since data collection was easier. The data that was collected was for the period 2013 to 2015 since this is the period that has seen high rates of non-performing loans among the small-scale business owners in Homa Bay town.

1.7 Conceptual Framework

The conceptual framework of this study is borrowed from that of Agnew et al., (2007) and is based on the hypothesis that the aspects of financial literacy will lead to informed borrowing behavior by ensuring planned borrowing, timely repayment of loans and successful repayment of loans. Agnew (2005) studied household financial management and the connection between knowledge and behavior. In their study, the independent variable was household financial management which was modified to financial literacy in the present study. In the present study, the independent variable of financial literacy was measured by the respondents' knowledge of understanding of key concepts central to money management, a working knowledge of financial institutions, systems and services, knowledge of cash budgeting. According to the Theory of Reasoned Action (Fishbein and Ajzen, 1967) which provides the intervening variables and processes in the relationship between attitudes and behavior, an individual's intention is determined by the attitude of the individual. Based on this, the dependent variable in the study was borrowing behavior which was measured by effective planning to borrow, timely repayment of loans and lack of non-performing loans. Previous studies have indicated that government regulations, size of the business and type of business may influence borrowing behaviour. The present study therefore used them as intervening variables. The conceptual framework is shown in figure 1.1 below.

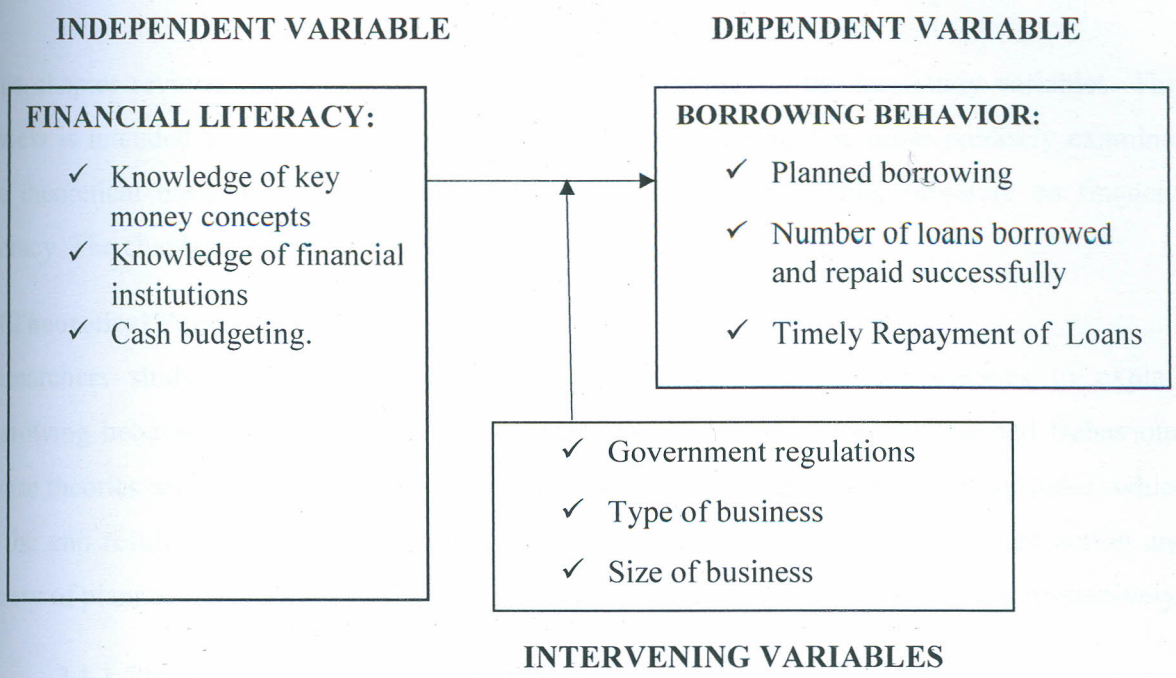


Fig.1.1 Relationships between Financial Literacy and Borrowing Behavior.

Source: (Adapted from Agnew, *et al.* (2003)

CHAPTER TWO: LITERATURE REVIEW

This chapter reviews the theoretical and empirical literature on the key study variables. This review is intended to identify the research gap. The literature review more precisely examines the theoretical basis upon which the research was based and existing literature on financial literacy. The chapter also reviews literature on borrowing behaviour.

2.1Theoretical Perspectives

Researchers studying financial behaviour have basically applied two theories to explain borrowing behaviour; the Theory of Reasoned Action and the Theory of Planned Behaviour. These theories are relevant to the present study since they take about individual attitudes, which in the end results determine the behavior of an individual. The theory of reasoned action and theory of planned behavior informs about borrowing behavior and financial literacy respectively.

2.1.1 The Theory of Reasoned Action

The Theory of Reasoned Action was proposed by Fishbein and Ajzen (1967). This theory provides the intervening variables and processes in the relationship between attitudes and behavior. Fishbein and Ajzen (1967) argue that individual behavior is influenced by one's intentions to engage in the said behavior. Intentions refer to an individual's decisions to act in a particular way. The attitudes of an individual influence his intentions and thereby behavior. Fishbein focused on volitional or voluntary behaviors. This is indeed important because other types of behavior may be subject to external influences. Also Fishbein (1967) aimed at excluding impulsive behaviors and habitual actions. He also confined himself to attitudes toward behavior rather than toward some target. He argued that an individual's intentions are also influenced by his significant others.

Therefore, the theory of by reasoned action can be summarized by stating that an individual's behavior is determined by intentions to engage in a particular behavior, (Mandel and Klein, 2009). The individual's intention is determined by the attitude the individual has toward the behavior and the subjective norm. The individual's attitude is determined by behavioral beliefs and evaluation of expected consequences. The subjective norm is determined by normative beliefs and the urge to be in agreement with his significant others. This theory is relevant in the present study because borrowers of credit borrow credit from different financial institutions depending on behavioural attitudes and evaluation of expected consequences. The evaluation of

the expected consequences on the other hand is determined by among others the financial literacy of the borrower. This is because the Theory of Reasoned Action is only relevant where behavior under investigation is voluntary, (Mandel and Klein, 2009).

2.1.2 Theory of Planned Behavior

In order to improve upon the Theory of Reasoned Action, Ajzen (1985) developed the theory of planned behavior in which he incorporated non-volitional behaviors. He argued that individual's behavior could be viewed as a goal or an outcome. The extent to which an individual's intentions to act in a specific way can be executed is determined by the amount of control one wields over one's behavior. According to the Theory of Planned Behaviour, an individual's behavior lies on a continuum of behaviors ranging from those that can be easily done at one extreme to those that are difficult to execute at the other extreme. The most challenging behaviors to execute are those requiring the skills, resources, opportunities and cooperation of others (Ajzen, 1991). Therefore in the theory of planned behavior the individual's perceived control over the behavior to be executed is included as one of the predictors in the model The individual's perception of being in control in turn depends on the control beliefs, which are the beliefs about the probability that one has what it takes to perform the intended behavior or achieve the set goal (Ajzen, 1991).

Therefore, perceived control affects behavior in at least two ways: First, through its influence on the intention to perform the behavior concerned and second, through its direct impact on behavior concerned (Ajzen, 1991). This implies that people engage in those behaviors they have confidence to perform successfully and have control over. Ajzen (1991) argued that it is actual control that is most relevant to the Theory of Planned Behaviour. By actual control he meant a situation where an individual possesses the requisite skills and resources to perform a particular act and there are abundant opportunities to do so. Since perceptions can be inaccurate or wrong, Ajzen contends that perceived control could only act as a proxy for actual control (Ajzen, 1991).

2.2 Empirical Literature

2.2.1 Knowledge of Key Money Concepts and Borrowing Behaviour

A number of studies have been carried out to investigate the relationship between knowledge of key money concepts and borrowing behaviour of individuals. Bruhn and Zia (2011) in their study on the impact on business of financial literacy for young entrepreneurs in Bosnia and Herzegovina using a descriptive design found that training individuals on key money concepts

such as interest rates improved their business performance significantly. The study also found that both entrepreneurs with below and above median financial literacy changed some of their business practices, such as separating personal accounts from business, and making investments in their business; however, only entrepreneurs with above median financial literacy at baseline reported increases in sales and profits as a result of the training. These findings suggest that baseline knowledge and information conveyed in the financial training act as complements in increasing the productivity and sales of a business. They also found that entrepreneurs with relatively high ex-ante financial literacy exhibit improvements in sales due to the training program.

French and Mackillop (2005) used a correlational research design to study the relationship between financial literacy and over-indebtedness in low-income households in Northern Ireland. The study was based on the hypothesis that financial literacy explained a significant proportion of wealth inequality and that among the key components of financial literacy are numeracy and money management skills. The study examined the relative importance of these components in the determination of consumer debt and household net worth among credit union members in socially disadvantaged areas. The main finding from the analysis was that money management skills are important determinants of consumer debt behaviour and household net worth but that numeracy has almost no role to play. These findings were found to be robust when the sample is reduced to only those who have a clear role in household financial decision-making and also when controlling for potential endogeneity. These results indicate that financial literacy knowledge of key money concepts had mixed results in terms of influencing debt levels among the low-income households on the Northern Ireland.

Mandel and Klein (2009) conducted a research on the impact of financial literacy on subsequent financial behaviour of young entrepreneurs in the United Kingdom using a survey research design. The study utilized a sample of 314 high school students who received a financial education in the four-year period of their schooling. The students were followed after high school in order to evaluate their efficacy in terms of debt, savings and making prudent financial decisions in their entrepreneurship abilities. The financial literacy knowledge was divided into two main classes; numeracy which was measured by knowledge of interest rate, inflation and time value of money; and literary skills such as knowledge of financial institutions. Results from

the survey indicated that there was no significant relationship between numeracy skills and entrepreneurial skills of the students after school.

Njoroge (2013) carried out a research on the relationship between financial literacy and entrepreneurial success in Nairobi County. The objective of the research was to find out whether there is a relationship between entrepreneurial success and SMEs success by interviewing a sample of seventy nine entrepreneurs who are registered and operates in Nairobi County. The samples were randomly picked from a population of 27,485 SMEs where questions in both financial literacy and SMEs success are asked. The data collected was then analyzed to establish relationship between financial literacy and SMEs success. From the research findings, all the SMEs interviewed were found to have some level of financial literacy and on average most entrepreneurs scored well above average in financial literacy and especially on knowledge of key money concepts. Highly successful entrepreneurs scored highly in financial literacy and demonstrated high understanding of key money concepts. In contrast, less successful entrepreneurs exhibited stagnant growth, and low level of financial literacy majority of whom were found to be in informal sector. This study concluded that there is a positive relationship between financial literacy and entrepreneurial success in Nairobi County. It further suggested that financial literacy plays a key role in SMEs success both in formal and informal sectors. Knowledge of key money concepts was found to have the highest positive significance on entrepreneurial success.

Mwangi and Kihiu (2012) studied the impact of financial literacy on access to financial services in Kenya. The main thrust of this study was to establish the impact of financial literacy on access to financial services in Kenya using the 2009 National Financial Access (FinAccess) survey data. Using a multinomial logit approach to explain access the four major financial service access strands, the study found that financial literacy remains low in Kenya. Besides, regression results indicate that households' access to financial services is not based on levels of financial literacy but rather on factors such as income levels, distance from banks, age, marital status, gender, household size and level of education. However, the study established that the probability of a financially illiterate person remaining financial excluded is significantly high calling for increased investment in financial literacy programs to reverse the trend. The study recommends

the development of a curriculum on financial education and administer it in local, middle level and higher learning institutions.

It is clear that of the studies reviewed above, the relationship between knowledge of key money concepts and borrowing behaviour has not been agreed upon. Furthermore, specific studies relating knowledge of key money concepts and borrowing behaviour among small-scale business owners in Homa Bay town are missing. Bruhn and Zia (2011) and Njoroge (2013) found a significant positive relationship between knowledge of key money concepts and various measures of financial success. These findings are in contradiction with those of Mandel and Klein (2009) and Mwangi and Kihiu (2012) who found no significant relationship between knowledge of key money concepts and various financial performance measures. Bruhn and Zia (2011) and Njoroge (2013) have used descriptive research design while Mandel and Klein (2009) used survey research design. These research are weaker in the sense that they may not provide confirmatory results, (Mugenda and Mugenda, 2003). It is also clear that the studies have not focused on borrowing behaviour specifically but have concentrated on aspects such as access to financial services and management of financial services which are closely related to borrowing behaviour, (Njoroge, 2013). The reviewed literature presents studies that have been done in different economies and business environments in developed and developing countries that may have different income levels among the respondents It is therefore clear that no study has been conducted to establish the relationship between small-scale business owners' knowledge of key money concepts in Homa Bay town and their borrowing behaviour.

Reviewed studies on the relationship between knowledge of key money concepts and borrowing behaviour have demonstrated that there is no agreement on the relationship between the variables. While a possibility of knowledge of key money concepts influencing borrowing behaviour is demonstrated, specific studies on the role of key money concepts on borrowing behaviour of small-scale business owners in Homa Bay town is unknown.

2.2.2 Knowledge of Financial Institutions and Borrowing Behaviour

There have been studies that have been carried out to establish the relationship between knowledge of financial institutions and borrowing behaviour or aspects which are closely connected to borrowing. A study sponsored by the State of Washington sponsored that surveyed smaller and more limited samples to assess financial literacy among its residents (Moore, 2003)

concluded that people know the least about financial instruments. The study whose objectives were to establish the relationship between knowledge of financial markets and financial behaviour among 398 selected small-scale business owners in the State of Washington found that most respondents did not know the inverse relationship between bonds prices and interest rates. Using a correlational design, it was further found that the small-scale business owners were also uninformed about mutual funds, as many did not know what a no-load mutual fund was, or that mutual funds do not pay a guaranteed rate of return. More than one-third did not know that stocks had returned more than bonds over the last forty years, and many did not know about risk diversification. Finally, a large fraction of these respondents did not understand interest rates, which was especially troublesome since a subset of the respondents had applied for loans. Generally, the study found that the relationship between knowledge of financial institutions and borrowing behaviour was not significant.

In Europe, Miles (2004) showed that United Kingdom borrowers display a weak understanding of mortgages and interest rates. In his study on the relationship between knowledge of financial institutions and borrowing of mortgage loans, the study concluded that younger people, those in low social classes, and those with low incomes, were the least sophisticated financial consumers in as much as they also had less knowledge of financial institutions. The study documented that respondents in several European nations scored low on financial numeracy and literacy scales and more so on knowledge of financial markets. The study found a positive significant association between financial knowledge of financial markets and household financial decision making concerning mortgages.

Locally, a study done by Olima (2013) on the effects of financial literacy on personal financial management on Kenya Revenue Authority employees in Nairobi using a descriptive research design concluded that on the aspects of financial literacy, the respondents were "to a great extent" literate and aware that they affect personal financial management. However, on the issue of retirement plans, estate planning and credit and other liabilities most respondents were "to a less extent" literate and consider them less important. The study concluded that the participants were "to a great extent" aware that financial literacy aspects such as knowledge of financial institutions indeed affects personal financial management practices such as borrowing among the Kenya Revenue Authority employees. However, these findings were purely descriptive.

Kempson *et al.* (2008) carried out a study on Measuring and improving financial capability in Kenya with the objectives of establishing the levels of financial capability in Kenya; to understand the potential approaches that could be taken to measure financial capability in a less developed nation where the vast majority of the population does not use formal banking services and to explore levels of financial inclusion in Kenya. The study which relied on the ways in which financial capability has been measured in various countries, reviewed evidence from Kenya on the most appropriate objectives of financial education and consider how financial capability education could be prioritized in Kenya to ensure the largest gains. The study which utilized a sample of 78 medium-sized businesses using a correlational research design established that financial capability has a significant positive relationship with the use of formal banking services.

Onyango (2014) in his study on the effect of financial literacy on management of personal financial management among employees of commercial banks in Kenya using descriptive research deign found that This research sought to determine whether financial literacy had any effect on personal financial management practices among employees of commercial banks in Kenya. The population of the study comprised all employees perceived to have training in finance matters or gained financial literacy through working experience. These employees were assumed to be financially literate by virtue of their training and nature of work. Purposive sampling was used to select the major banks in Nairobi while simple random sampling technique was used to select 100 respondents from five commercial banks in Nairobi. A self-administered questionnaire was delivered to the respondents and collected after completion. The student's t-test was used to examine the data with the objective of determining whether there is a significant relationship between financial literacy and personal financial management practices. The findings shows that most respondents had financial literacy acquired through training or work experience and that it positively affects personal financial management among the respondents. The results further indicate that majority of the respondents save less proportion of their salaries. In conclusion, the results indicate that financial literacy has a positive influence on personal financial practices such as borrowing and saving. Knowledge of financial institutions was found to be insignificant in terms of influencing personal financial management practices.

Reviewed studies indicate that there are mixed results concerning the relationship between knowledge of financial institutions and borrowing behaviour of different groups of people. Whereas Miles (2004), Olima (2013) and Kempson *et al.* (2008) find a significant positive relationship between knowledge of financial institutions and borrowing behaviour, studies by Moore (2003) and Onyango find that knowledge of financial institutions does influence borrowing behaviour. Of the reviewed studies, none has attempted to establish the relationship between knowledge of financial institutions and borrowing behaviour of small-business owners in Homa Bay town indicating that this relationship is unknown.

2.2.3 Knowledge of Cash Budgeting and Borrowing Behaviour

The relationship between knowledge of cash budgeting and borrowing behaviour of individuals is also contentious since scholars have not agreed upon the relationship with some indicating a positive significant relationship and others indicating that there is no relationship between the variables. Raghumandan *et al.*, (2012) examined the behavioural aspects of budgeting with particular emphasis on public sector in India. The main objective of the study was to establish whether knowledge of cash budgeting has an effect on the psychology of entrepreneurs in respect to their borrowing behaviour. The study was descriptive in nature and it focused on the crucial role of the behavioural aspects of budgeting by studying a selected sample of 340 entrepreneurs in India. The data was collected using telephone interview and results showed that knowledge of cash budgeting has an important significant bearing on the borrowing behaviour on the entrepreneurs in India.

In a study by Qi (2010), it was established that by cash budgeting has a positive significant effect on a number of financial behaviour of entrepreneurs including their borrowing behaviour. The main objective for this empirical study was whether the cash budgeting process significantly and positively impacts the performance of Chinese SMEs with reference to their borrowing behaviour. The study used a sample of 124 entrepreneurs. A correlational research design was used to establish the relationship between the variables. Firstly, it is found that more formalized cash budgeting planning leads to higher sales revenues. Secondly, budget goal characteristics strongly affect the budgetary performance of Chinese SMEs. Specifically, this conclusion tells us that clear budget goals lead to higher goal achievement starting from borrowing behaviour. Furthermore, results also reveal that the more formalized budgetary control tends to lead to a

higher growth of profit of a firm. The underlying reason can be that due to management control, the total expense of a firm will be at most minimized, which thus results into the growth of profit of the firm.

Kytonen (2004) carried out a study on cash management behaviour of firms and its structural change in an emerging money market in Finland. The main purpose of this study was to examine if evidence of a structural change can be detected from the decision-making practices of cash management and from the financial statement data. Through survey evidence an attempt was made to identify the best practices followed by Finnish listed manufacturing and service companies and their developments during the research period. The factors assumed to change were the organizational and technological arrangements in cash budgeting and how these were influencing their borrowing decisions. In addition, the behavioral changes in cash management were examined by testing both static and dynamic cash management models and their potential structural change before and after the deregulation years of the money market. The results of the survey part of the study revealed that cash management practices changed significantly during the research period. Findings indicate that cash budgeting has no relationship with borrowing behaviour of the companies.

Locally, Atieno (2014) conducted a research on assessment of financial education and its implication on individual investment in Kenya. The specific objectives of the study were to determine the effect of cash budgeting on individual investment of employees in Kisii University, to access the effect of savings on individual investment of employees in Kisii University, to evaluate the effect of debt management on individual investment of employees in Kisii University and to find out the effect of retirement planning on individual investment on employees in Kisii University. The study adopted descriptive research design. The study was carried out at Kisii University in Kisii County. The target population for this study was the academic and non-academic staff in Kisii University, which is 829 members. A sample of 106 employees was selected using stratified random sampling. Both qualitative and quantitative data was collected using a questionnaire that consisted of both open ended and close-ended questions. Data were analyzed using descriptive statistics and inferential statistics. The findings of the study revealed that the desire to be financially dependent was perceived to be the major influence in budgeting. This indicated that the employees have better budgetary controls of their resources

and ensure that they utilize their resources optimally. The saving culture for the respondents was low due to lack of enough money to enable them save. Generally, results indicated that cash budgeting has no relationship with investment by the respondents. The variable was also found to have no relationship with borrowing behaviour of the respondents.

The review of literature above indicates that the relationship between knowledge of cash budgeting and borrowing behaviour of individuals is also contentious since scholars have not agreed upon the relationship with some indicating a positive significant relationship (Raghumandan *et al.*, (2012); Qi (2010)) and others indicating that there is no relationship between the variables (Qi (2010); Atieno (2014). Of the reviewed studies, none has attempted to establish the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town. This is the gap which the present study sought to fill.

The empirical review of literature was meant to expose gaps relating to the relationship between financial literacy of small-scale business owners and their borrowing behaviour. The review of literature relating to the first objective of establishing the relationship between knowledge of key money concepts and borrowing behaviour of the small-scale business owners revealed that specific studies relating knowledge of key money concepts and borrowing behaviour among small-scale business owners in Homa Bay town are missing. Furthermore studies on the subject are contradictory since Bruhn and Zia (2011) and Njoroge (2013) find a significant positive relationship between knowledge of key money concepts and various measures of financial success while Mandel and Klein (2009) and Mwangi and Kihiu (2012) who found no significant relationship between knowledge of key money concepts and various financial performance measures. Reviewed studies on the second objective indicate that there are mixed results concerning the relationship between knowledge of financial institutions and borrowing behaviour of different groups of people. Whereas Miles (2004), Olima (2013) and Kempson *et al.* (2008) find a significant positive relationship between knowledge of financial institutions and borrowing behaviour, studies by Moore (2003) and Onyango find that knowledge of financial institutions does influence borrowing behaviour, furthermore, there was found no study that attempted to establish the relationship between knowledge of financial institutions and borrowing behaviour. Similarly, there was no study that attempted to establish the relationship

between knowledge of cash budgeting and borrowing behaviour of the small-scale business owners in Homa Bay town. Since financial literacy was measured by using the small-scale business owners' knowledge of key money concepts, their knowledge of financial institutions and their knowledge of cash budgeting, it implies that no study has attempted to establish the relationship between financial literacy and borrowing behaviour of small-scale business owners in Homa Bay town. This is the gap that this study sought to fill.

CHAPTER THREE: RESEARCH METHODOLOGY

This section explains the methodology that was followed adopted in carrying out this study.

3.1 Research Design

Kombo and Tromp (2006) referred to research design as the structure of research. Thus, it is the structure and outline of the research which is used to generate the answers to a research problem. Research is usually categorized based on the data collection methods, analysis and purpose. According to Pilot and Hungler (1995) research designs vary with regard to how much structure the researcher imposes on the research situation and how much flexibility is allowed once the study is under way. The research designs of most quantitative studies are highly structured, while research designs in qualitative studies are more fluid. This study employed a correlational research design. This is because the main purpose of the study was to establish how borrowing behaviour correlates with financial literacy.

3.2 Study Area

The study area was Homa Bay town. Homa Bay town is a lake-side town which is situated along the shores of Lake Victoria in the western part of Kenya, approximately 34^0 E and 0^0, 15' S. The population of the town was approximately 1 million according to the 2009 population census (KNBS, 2010).

3.2 Target Population

Mugenda and Mugenda (2003) define population as an entire group of individuals, events or objects having common observable characteristics. The target population was all the small-scale business owners in Homa Bay town. Statistics available at the Homa Bay County Government's Ministry of Finance office show that there are 1220 registered small-scale businesses in Homa Bay town. These are businesses with less than five employees. For purposes of this research, the businesses were stratified into three main strata; retail, service and manufacturing. The distribution of the population is as shown in table 3.1 below.

Table 3.1: Population of Study

Category	Number of Businesses
Retail	578
Service	402
Manufacturing	240
Total	**1220**

Source: Department of Finance and Economic Planning, Homa Bay County

3.3 Sample Size and Sampling Technique

A sample was selected from the 1220 small scale businesses using a formula suggested by Yamane (1967) to determine the sample size. The formula is:

$$n = \frac{N}{\left[1 + N(e)^2\right]} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3.1)$$

Where: n = the desired sample size

N = is the population, 1,220 for the present study.

e = is the level of precision set at 0.05

This translates to:

$$n = \frac{1220}{\left[1 + 1220(0.05)^2\right]} = 301 \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3.2)$$

The sample of 301 was distributed proportionately among the three categories of businesses as shown in the table 3.2 below.

Table 3.2: Sample Distribution

Category	Number of Businesses	Sample
Retail	578	143
Service	402	99
Manufacturing	240	59
Total	**1220**	**301**

Source:

Department of Finance and Economic Planning, Homa Bay County

The sample was randomly selected from the sub-groups using stratified random distribution method.

3.4 Data Collection

3.4.1 Sources of Data

Both primary and secondary data were collected for this study. The sources of data were the 301 owners of the small-scale businesses who were randomly selected. The data that was gathered was about the relationship between financial literacy and borrowing behaviour of the owners. Where the business is held as a partnership, one of the partners was interviewed for the study.

3.4.2 Data Collection Procedure

A questionnaire was used as the main research tool to collect data from the respondents. The questionnaire comprised of both closed and open-ended questions which were drawn in accordance with the set objectives of the study. The research questions adopted a five-point Likert scale in which scores were awarded weights of 5 for the most positive to 1 for the most negative variable. Content analysis was employed to gather secondary data on the level of financial literacy of the owners.

3.4.3 Reliability and Validity Test

According to Mugenda and Mugenda, (2003), a research instrument is reliable when it has the consistency of measurement. Reliability gives the internal consistency of data collected. This ensures that the data has certain internal consistent pattern. When no pattern is found in the responses, this indicates that probably the test is too difficult and as a result the respondents just guess the answers randomly. Creswell, (2009) asserts this by noting that reliability means that the findings would be consistently the same if the study were done over again. It ensures that the degree of consistency or stability is high. To achieve this, a test-retest study was done in twenty small-scale businesses located in neighbouring Kendu Bay town so as to detect any major challenges likely to result from the questionnaires. The test-retest coefficient of 0.815 against a threshold of 0.7 showed that the research questionnaire was reliable.

Content Validity Index (CVI) was used to ensure validity of the questionnaires. To achieve this, the relevant items in relation to the research objectives in the questionnaire were divided by the total number of items (Fisher, 2004). The validity was described as follows:

$$CVI = \frac{\text{Relevant items}}{\text{Total number of items}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3.3)$$

Fisher (2004) indicates that for a research instrument to be valid, the CVI should be more than 0.7. For the present study, the index obtained was 0.723 which was considered valid.

3.5 Data Analysis Method and Procedures

To facilitate quantitative analysis, raw data on respondents' responses about the relationship between financial literacy and borrowing behaviour was converted into numerical code after editing raw data to detect any omissions and errors. The coded data representing the response frequencies was analyzed using the Likert-scale weighted average frequency analysis method. The relationship between financial literacy and borrowing behaviour was established using the multiple regression method based on the following regression model which was adapted from Agnew *et al.*, 2007):

$BH_i = a_0 + a_1 KM_i + a_2 SFI_i + a_3 CB_i + \varepsilon$ .... (Adapted from Agnew *et al.*, 2007).

Where:

BH is Borrowing Behaviour that was measured in terms of number of loans borrowed and repaid or being repaid without defaulting

a_0 is the constant term

a_1 is the coefficient for Knowledge of Key Money Concepts (KM) for Small-scale business owner i ,

a_2 is the coefficient for Knowledge of Financial Institutions (FI) for Small-scale business owner i ,

a_3 is the coefficient for Knowledge of Cash Budgeting (CB) for Small-scale business owner i ,

ε is the error term which was assumed to be normally distributed with zero mean and constant variance.

3.6 Data Presentation

Tables, figures and charts were used to present the analysed data.

CHAPTER FOUR: RESULTS AND DISCUSSION

This presents findings and discussion about the study after analysis of the data collected from the field on the relationship between financial literacy and borrowing behaviour among small business owners in Homa Bay town.

4.1 General Information

4.1.1 Response Rate

Both primary and secondary data were collected for this study. The sources of data were the 301 owners of the small-scale businesses who were randomly selected. The data that was gathered was about the relationship between financial literacy and borrowing behaviour of the owners. A total of 301 questionnaires were given out. The responded were asked to fill the questionnaires as the researcher waited and where that was no possible, the respondents were given two weeks to fill the questionnaires. Out of the 301 questionnaires that were given out, 233 (77%) were returned. Gay (1992) postulates that any sample consisting 60% or more of the sample population is representative enough. The questionnaires that were received were cleaned and coded for clarity. The cleaning involved dropping those questionnaires that were not fully filled. These were dropped from the final analysis. This cleaning resulted into a final 204 (67% of the sample population); 105 (51%) from retailers; 63 (31%) from service providers; and 36 (18%) from manufacturers.

It was also found that most of the small businesses (63%) were located in town centre; while 17% were located in the Peri-urban areas and the rest (20%) in the outskirts of Homa Bay town. This information is summarized in Figure 4.1. It was further established that 80% of the small businesses were established below five years ago; 12% were established between six and ten years ago; while only 8% were established over ten years. This confirms that most small businesses don't exist for long. This information is presented in Table 4.1.

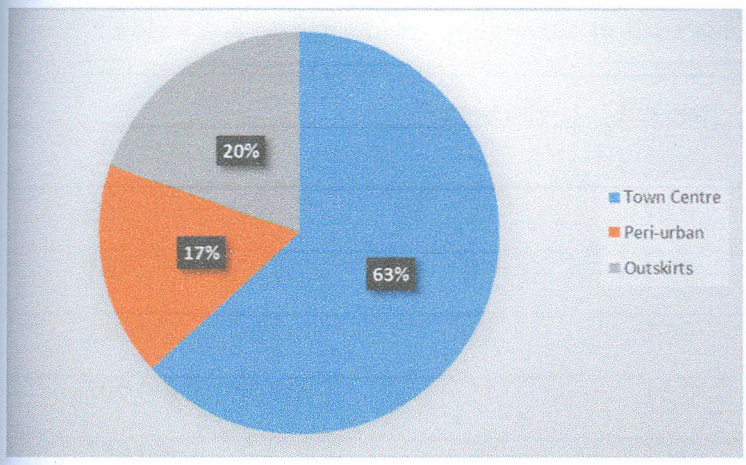


Fig 4.1: Location of Business

Source: Field Data, 2016

Table 4.1: Length of Business Operation

	Frequency	Percent	Valid Percent	Cumulative Percent
0 -5 yrs	163	80.0	80.0	80.0
5-10 yrs	24	12.0	12.0	92.0
Over 10 yrs	17	8.0	8.0	100.0
Total	**204**	**100.0**	**100.0**	

Source: Field Data, 2016

4.1 .2 Success of Operations

Before determining the relationship between financial literacy and borrowing behaviour, it was necessary to establish the level operation of the small business in Homa Bay town. To establish this, one of the questions that the research sought to answer was to find the average monthly revenue for the past five years. The respondents were asked to indicate this rate based on closed-ended questions and the responses are shown in Figure 4.2.

Table 4.2 Average Monthly Revenue in the Past Five years (KES)

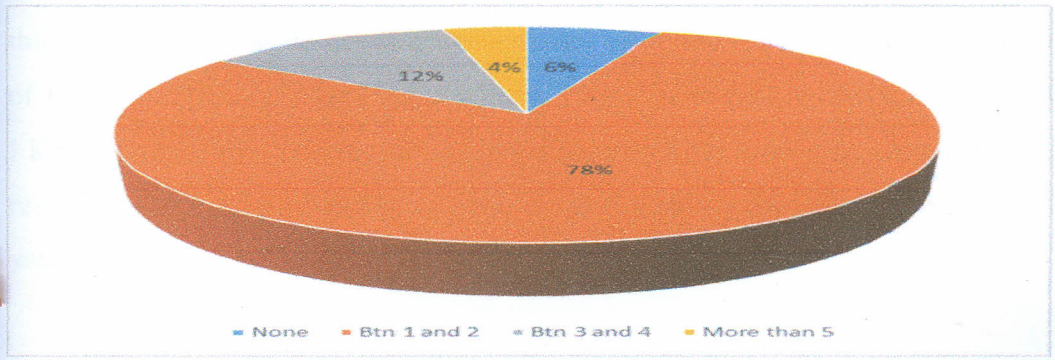
	Frequency	Percent	Valid Percent	Cumulative Percent
Below 100,000	39	19.0	19.0	19.0
100,000 – 250,000	47	23.0	23.0	42.0
250,000 – 500,000	65	32.0	32.0	74.0
500,000 – 750,000	23	11.0	11.0	85.0
750,000 – 1,000,000	20	10.0	10.0	95.0
Over 1,000,000	10	5.0	5.0	100.0
Total	**204**	**100.0**	**100.0**	

Source: Field Data, 2016

Information in Table 4.2 shows that most of the small businesses have an average annual income of between KES 250,000 and 500,000. This represents by 32% of the sample population which is followed by the small businesses whose average monthly income was between KES 100,000 and 250,000 representing 23% of the sample population. A sample comprising 19% were earning an annual average monthly revenue of below KES 100,000, while only 5% of the sample population had an average monthly revenue of over KES 1,000,000. This indicates that most of the small businesses have an average monthly revenue of below KES 500,000.

4.1.3 Commercial Loans Serviced since Inception

Since the research sought to establish the borrowing behaviour of small businesses, there was need to establish the number loans serviced or still being serviced. The information is summarized in Figure 4.2.



4.1.4 Effectiveness of Servicing Commercial Loans

The effectiveness in servicing of commercial loans was established on a Likert scale. This was to measure the ease with which small scale business owners paid their loans in order to ascertain the level of payment of commercial loans. This was summarized in Table 4.3.

Table 4.3 Effectiveness of Servicing Commercial Loans

Level of Effectiveness	Frequency	Percentage
Highly Ineffective	32	16.0
Ineffective	74	36.0
Neither effective nor ineffective	56	27.0
Effective	32	16.0
Highly effective	10	5.0
Total	**204**	**100**

Source: Field Data, 2016

Results in Table 4.3 indicate that most (52%) of the respondents have either highly ineffective or ineffective trends in repayment of loans which confirms earlier studies that found that small businesses form the greatest percentage of non-performing loans portfolio among banks in Homa Bay town.

4.2 Level of Financial Literacy

This study sought to establish the relationship between financial literacy and borrowing behaviour among small business owners in Homa Bay town. The specific objectives were to establish the relationship between knowledge of key money concepts, knowledge of financial institutions and knowledge of cash budgeting and borrowing behaviour among the small business owners. Before establishing this relationships, the level of financial literacy based on these parameters was descriptively established using the weighted average method using a scale of 1for I don't Know; 2 for I know a little; 3 for I know well; 4 for I know Very Well and 5 for I Know Excellently. Correlation and regression analysis were also employed in the study. The results are shown in following sections. Table 4.4 shows the descriptive statistics for the study variables.

Table 4. 4 Descriptive statistics for the study variables

		KM	SFI	CB	BBH
N	Valid	204	204	204	204
	Missing	12	12	12	12
Mean		2.462	2.141	2.010	1.981
Median		2.301	1.901	2.508	1.604
Std. Deviation		.9826	1.041	1.871	1.006
Skewness		-.055	-.096	-.012	1.216
Std. Error of Skewness		.314	.314	.314	.314
Kurtosis		-.779	-1.189	-1.791	1.458
Std. Error of Kurtosis		.533	.533	.533	.533
Minimum		1.00	1.00	1.00	1.00
Maximum		3.70	2.70	2.70	3.33

Table 4.4 shows that the level of financial literacy among the small-scale business owners is small as shown by the means of 2.462 for knowledge of key money concepts, 2.141 for knowledge of financial institutions and 2.010 for knowledge of cash budgets. This indicates that the small-scale business owners know little about financial literacy based on the three measures. The deviation of responses for each measure of financial literacy from their mean responses were 0.9826, 1.041, 1.871 and 1.006 for knowledge of key money concepts, knowledge of financial institutions and knowledge of cash budgets respectively. Since the deviations were more than the threshold of 0.5, it then implies that there were major deviations of the individual views from their mean responses.

According to Creswell (2009), skewness shows the extent to which a distribution differs from a normal distribution. Since a normal distribution normally revolves around zero, a positive skew means that the mean is greater than the mode while a negative skew means that the mean is less than the mode. Results in Table 4.4 indicate that responses on knowledge of key money concepts, knowledge of financial institutions and knowledge of cash budgets were negatively

skewed while borrowing behaviour was positively skewed. This suggests that the responses were generally normally distributed. Kurtosis is a measure of the thickness or the thinness of the distribution's tail (Creswell, 2009). It also measures normality of the distribution. As a rule of thumb, kurtosis for a normal distribution is 3. If it is greater than 3, then the distribution has a thick tail but if it is less than 3, the distribution has a thin tail. From Table 4.4, kurtosis for all the variables is less than three, thus the distributions had a thin tail.

A correlation was also run for the study variables. Sekaran (2010) observes that correlation analysis is conducted to show the direction, strength and significance of the relationships among the variables under study. If a positive correlation is found, then it indicates that as one variable rises, the other variable also rises. Results of the correlation are shown in Table 4.5.

Table 4.5: Correlation between Financial Literacy and Borrowing Behaviour

	BH	KM	SFI	CB
BH	1			
KM	.650***	1		
SFI	.498***	.098	1	
CB	.302***	.034	.091	1

Note: *** $p < 0.01$

Source: Field Data, 2016

Results in Table 4.5 indicate that all the measures of financial literacy are significantly and positively correlated with borrowing behaviour. Of the three measures of financial literacy, knowledge of key money concepts was found to be highly significantly correlated ($r = 0.650$; $p = .002$) with borrowing behaviour. Knowledge of financial institutions was also found to be significantly positively correlated with borrowing behaviour ($r = 0.498$; $p = .001$) while knowledge of cash budgeting was also found to be positively and significantly correlated with borrowing behaviour ($r = 0.302$; $p = .000$). This show that a unit change in knowledge of key money concepts, knowledge of financial institutions and cash budgeting leads to a 0.650, 0.498

and 0.302 change in borrowing behaviour respectively. These results agree with those of Bruhn and Zia (2011) and Njoroge (2013) who found a positive correlation between financial literacy and borrowing behaviour. The results are in contradiction to those of Mandel and Klein (2009) and Mwangi and Kihiu (2012) who found no significant correlation between financial literacy an !d borrowing behaviour.

Table 4. 5 Correlation matrix for the study variables

		KM	SFI	CB	BBH
KM	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	204			
SFI	Pearson Correlation	.098	1		
	Sig. (2-tailed)	.085			
	N	204	204		
CB	Pearson Correlation	.034	.098	1	
	Sig. (2-tailed)	.116	.052		
	N	204	204	204	
BBH	Pearson Correlation	.650**	.498**	.302**	1
	Sig. (2-tailed)	.002	.001	.000	
	N	204	204	204	204

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

Multiple regression analysis was used to answer the objectives of the study based on the model 3.1. Results for the regression are presented below.

Table 4. 6 Summary of the regression model on the relationship between financial literacy and borrowing behaviour

			Change Statistics					
R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
.596	.581	.7312	.596	4.888	3	200	.000	1.871

a. Predictors: (Constant), KM, SFI, CB

b. Dependent Variable: BBH

Table 4.6 shows that the predicted model is a good predictor of borrowing behaviour. It is shown that the financial literacy and borrowing behaviour have a strong correlation between them. This is shown by the correlation coefficient of 0.772. From the model regression relationship, it can therefore be inferred that the general relationship between the variables is strong. It is shown that the coefficient of determination is 0.596, which means that 59.6% of changes in borrowing behaviour is explained by the three independent variables of knowledge of key money concepts, knowledge of financial institutions and knowledge of cash budgeting. This indicates a good significant influence of financial literacy on borrowing behaviour in line with previous studies such as those of Miles (2004), Olima (2013) and Kempson *et al.* (2008). The value of Durbin-Watson was found to be 1.871, which is close to 2, an indication of the absence of auto-correlation (Odondo, Mukras and Momanyi, 2014).

To establish the effectiveness of the regression model, an analysis of variance was conducted. The results are shown in Table 4.7 below.

Table 4. 7 ANOVA Results on the Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.117	3	0.4234	4.888	.001[a]
Residual	1.213	200	.866		
Total	5.240	203			

a. Predictors: (Constant), KM, SFI, CB

b. Dependent Variable: BBH

The ANOVA Table 4.7 was used to test the significance of the whole model. From the table, it can be confirmed that the model is significant. The p-value of 0.01 ($p<0.05$) indicates that the null hypothesis of no significant relationship between financial literacy and borrowing behaviour is rejected. It therefore implies that there is a significant relationship between financial literacy and borrowing behaviour of small-scale business owners in line with findings by Miles (2003), Olima (2013) and Kempson *et al.* (2008).

Table 4.8 show how each measure of financial literacy is related to borrowing behaviour. The table shows how each of the three measures of financial literacy, knowledge of key money concepts is related to borrowing behaviour.

Table 4.8: Relationship between Financial Literacy and Borrowing Behavior

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	.449	.201		2.2338	.000		
KM	.581	.281	.572	2.0676	.000	.828	1.2077
SFI	.338	.131	.329	2.5801	.003	.391	2.5575
CB	.299	.153	.192	1.9542	.052	.608	1.6447

a. Dependent Variable: BBH

Table 4.8 shows that knowledge of key money concepts has the greatest significant influence on borrowing behaviour as shown by a beta coefficient of 0.581 ($p = 0.00$). This implies that knowledge of key money concepts such as time value of money significantly influence the way small business owners borrow commercial loans. Since the null hypothesis that there is no relationship between knowledge of key money concepts and borrowing behaviour, we reject the null hypothesis and conclude that there is a significant relationship between knowledge of key money concepts and borrowing behaviour. Bruhn and Zia (2011) and Njoroge (2013) also

found a significant positive relationship between knowledge of key money concepts and various measures of financial success. These findings are in contradiction with those of Mandel and Klein (2009) and Mwangi and Kihiu (2012) who found no significant relationship between knowledge of key money concepts and various financial performance measures.

The regression coefficient for knowledge of financial institutions was shown to be positive and significant with a beta value of 0.338 (p = 0.000). This indicates that small-scale business owners' knowledge of matters such as how different banks lend have a positive significant influence on how they borrow. The null hypothesis is rejected as thus and therefore it is concluded that there is a positive significant relationship between knowledge of financial institutions and borrowing behaviour of the small business owners. These findings are in line with those of Miles (2004), Olima (2013) and Kempson *et al.* (2008) who found a significant positive relationship between knowledge of financial institutions and borrowing behaviour and in contradiction with studies by Moore (2003) and Onyango find that knowledge of financial institutions does influence borrowing behaviour.

Knowledge of cash budgets and budgeting was shown to have an insignificant relationship with borrowing behaviour. The null hypotheses was rejected (p = 0.052) since it had been stated as there is no significant relationship between knowledge of cash budgets and borrowing behaviour. Findings by Raghumandan *et al.*, (2012); Qi (2010) contradict these findings since they found that knowledge of cash budgets influences borrowing behaviour.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summarizes the study. It shows a summary of the findings, conclusions, recommendations and suggestions for further studies.

5.2 Summary of Findings

The main purpose of this study was to investigate the relationship between financial literacy and borrowing behaviour of small business owners with the specific objectives being to; establish the relationship between knowledge of key money concepts and borrowing behaviour of small-scale business owners; determine the relationship between knowledge of financial institutions and borrowing behaviour of small-scale business owners; and to establish the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town. After the analysis of the data, the following is a summary of findings.

Preliminary findings indicated that financial literacy is highly correlated with borrowing behaviour. The first objective was to evaluate the relationship between knowledge of key money concepts and borrowing behaviour of small-scale business owner in Homa Bay town. The analysis of data shows that knowledge of key money concepts is positively and significantly related to borrowing behaviour.

The second objective was to determine the relationship between knowledge of financial institutions and borrowing behaviour among small-scale business owners in Homa Bay town. The analysis of data from the field indicated that knowledge of financial institutions is positively and significantly related to borrowing behaviour.

The third objective was to establish the relationship between knowledge of cash budgeting and borrowing behaviour of small-scale business owners in Homa Bay town. Regression analysis of the data collected indicated that knowledge of cash budgeting has no significant relationship with the borrowing behaviour of the small-scale business owners.

5.3 Conclusion

In line with the objectives of the study, the data collected and analysed, the following conclusions can be drawn. For the first objective, whose finding was that knowledge of key money concepts is positively and significantly related to borrowing behaviour, it is concluded that if the small-scale business owners in Homa Bay town are given more education on key money concepts such as interest rates and time value of money, they will have better borrowing behaviour and hence reduce the incidences of non-performing loans among commercial banks.

The conclusion that can be made based on the second objective which was that knowledge of financial institutions is positively and significantly related to borrowing behaviour is that the small-scale business owners need more knowledge on financial institutions for them to be able to make more prudent borrowing decisions. Information such as knowledge of different interest rates charged by the different banks, how banks charge interest on the money lent out and knowledge of how banks differ from SACCOs will help the small-scale business owners borrow more prudently.

The findings from the analysed data based on the third objective which was to establish the relationship between knowledge of cash budgeting and borrowing behaviour showed an insignificant relationship between the two variables. The conclusion that can be drawn from this is that the small-scale business owners don't use knowledge of cash budgeting to make borrowing decisions.

5.4 Recommendations

Based on the data collected for the first objective, analysed and the conclusions made, it is recommended that commercial lenders to the small-scale business owners impart knowledge on key money concepts to the small-scale business owners so that they reduce cases of non-performing loans. This is because the study descriptively found that the level of knowledge of key money concepts among the small-scale business owners was low which indicates that it contributes to poor borrowing behaviour which eventually may lead to non-performing loans

Based on the conclusion from the second objective, it is recommended that small-scale business owners are sensitized on the different loan products available so that they choose what suits them. The finding that the knowledge of the small-scale business owners concerning financial

institutions was generally low indicates that most of them make imprudent borrowing decisions since they don't have knowledge on the loan products available. It is therefore recommended that they are educated on the type of products available.

The findings for objective three was that knowledge of cash budgeting was not significantly related to borrowing behaviour of the small-scale business owners. It is therefore recommended that while educating the business owners on the financial matters, the commercial lenders should not pay so much emphasis on cash budgeting.

5.5 Limitations of the Study

Based on study limitations, the findings from the present study may not be generalised to other areas because of several limitations. The study covered only banks and small-scale businesses owners who borrowered from banks operating in Homa bay town. The definition of small-scale businesses is shallow. This may have limited the study's depth.

5.6 Suggestions for Further Research

Based on the study findings, conclusions and limitations, it is proposed that the following studies be conducted to supplement this one.

The relationship between borrowing behaviour and performance of commercial banks.

The role of business size on borrowing behavior.

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