HOW FINANCIAL SELF-EFFICACY AND FINANCIAL ATTITUDES AFFECT SAVING BEHAVIOR AMONG SACCO MEMBERS: AN EMPIRICAL STUDY IN KERICHO COUNTY

CHEPNGETICH MICHELLE

096783

A research project submitted in partial fulfillment for the award of Bachelor of Business Science Financial Economics

STRATHMORE INSTITUTE OF MATHEMATICAL SCIENCES
STRATHMORE UNIVERSITY
NAIROBI, KENYA

February 2021

This Research Project is available for Library use on the understanding that it is copyright material and that no quotation from the Research Project may be published without proper acknowledgement.
Declaration

I declare that this is my original research work carried out during the period of my study at Strathmore University and has not presented for the award of a degree in any university. To the best of my knowledge and belief, the Research Project contains no material previously published or written by another person except where due reference is made in the Research Project itself.

Student’s signature

Date 10/2/21

This research project has been submitted for examination with my approval as the supervisor.

Supervisor’s signature

Mr. Josphat Manani

Date 10/2/21
# Table of Contents

Declaration........................................................................................................................................ i

CHAPTER ONE...................................................................................................................................... 1

1 Introduction..................................................................................................................................... 1
  1.1 Background of Study....................................................................................................................... 1
  1.2 Problem Statement........................................................................................................................... 3
  1.3 Research Objectives......................................................................................................................... 4
  1.4 Scope of the Study............................................................................................................................ 4
  1.5 Significance of the Study.................................................................................................................. 4

CHAPTER TWO..................................................................................................................................... 6

2 Literature Review............................................................................................................................... 6
  2.1 Empirical Review............................................................................................................................. 6
  2.2 Theoretical Review.......................................................................................................................... 9

CHAPTER THREE............................................................................................................................... 12

3 Methodology..................................................................................................................................... 12
  3.1 Research Design............................................................................................................................. 12
  3.2 Population and Sampling............................................................................................................... 12
  3.3 Data and Data Collection.............................................................................................................. 13
  3.4 Data Analysis.................................................................................................................................. 13

4 FINDINGS......................................................................................................................................... 15
  4.1 Introduction..................................................................................................................................... 15
  4.2 Objective 1...................................................................................................................................... 22
  4.3 Objective 2...................................................................................................................................... 23
  4.4 Objective 3...................................................................................................................................... 24
5 DISCUSSIONS ............................................................................................................. 26

5.1 Introduction and Overview ................................................................................. 26

5.2 Objective 1 ........................................................................................................... 26

5.3 Objective 2 ........................................................................................................... 26

5.4 Objective 3 ........................................................................................................... 26

5.5 Conclusions ........................................................................................................... 27

5.6 Areas for Further Studies .................................................................................... 28

6 List of References .................................................................................................... 29

Appendices .................................................................................................................. 32
Abstract

This paper seeks to examine the impact of financial attitudes and financial self-efficacy on saving behavior. It investigates how financial attitudes affect the saving behavior, the relationship between financial self-efficacy and saving behavior of Sacco members in Kericho county, and the moderating effect of financial self-efficacy on the relationship between financial attitudes and saving behavior according to Sacco members. The study was conducted in Kericho county in November and December 2020, with a focus on Imarisha Sacco and Ndege Chai Sacco. The data was collected by issuing questionnaires. Ordinal logistic regression was employed to derive the results. The findings from the study are as follows: financial attitudes and financial self-efficacy have a positive significant impact on saving behavior among Sacco members in Kericho county and financial self-efficacy has a positive significant moderating effect on the relationship between financial attitudes and saving behavior. The results showed that 7.64% of saving behavior is explained by financial attitudes and 12.90% is explained by financial self-efficacy. The findings justify the relevance of financial attitude and financial self-efficacy in the explication of saving behavior as it opens further discussions on the intricacies of financial behavior which helps individuals check their financial management effectively and intellectually.
Table of Figures

Figure 1: The relationship between financial attitudes, financial self-efficacy, and saving behavior. .......................................................................................................................... 10
Figure 2: Pie chart showing the breakdown of the Sacco membership of the respondents ......... 15
Figure 3: Pie chart of the gender distribution of the respondents .................................................. 16
Figure 4: Pie chart of the age distribution of the respondents ......................................................... 16
Figure 5: Pie chart of the education levels of the respondents ....................................................... 17
Figure 6: Pie chart showing whether the respondents saved often ................................................ 18
Figure 7: Pie chart showing the frequency of saving by the respondents ....................................... 18
Figure 8: Bar graph showing the medium of channeling savings .................................................. 19
Figure 9: Pie chart of the average percentage of the respondents’ salary that they saved .......... 19
Figure 10: Pie chart showing the borrowing frequency of the respondents .............................. 20
Figure 11: Pie chart showing the average aggregate amount the respondents had in savings .... 20
Table of Tables

Table 1: Means, standard deviations, Cronbach's alpha, and correlations of the variables .......... 21
Table 2: Regression of financial attitudes on saving behavior .................................................. 22
Table 3: Regression of financial self-efficacy on saving behavior ............................................ 23
Table 4 Regression analysis showing the moderating effect of financial self-efficacy ................. 24
Table 5: Decision of hypothesis .................................................................................................... 25
CHAPTER ONE

1 Introduction

Financial self-efficacy is one's belief in their capability on organizing and executing one's ultimate financial goals (Forbes & Kara, 2010). A person with high financial self-efficacy is associated with the consumption of investment and saving products whereas an individual with low financial self-efficacy is associated with debt products. It is a sense of self-belief that determines a lot of the financial decisions people make.

Financial attitudes are a person's opinion or judgment of their finances. One is either a financial optimist or a financial pessimist. Furnham (1984) found that financial attitudes mold the way people spend, save, and waste money.

While self-efficacy is the belief a person has in their financial capabilities to fulfill their financial goals, financial attitudes are an individual’s perception towards finances. Nevertheless, a person with high self-efficacy is optimistic in life and thus we can derive that one with high financial self-efficacy also has positive financial attitudes and both affect a person’s financial behavior.

Saving behavior is simply the choice to either spend or keep your money. People’s saving behavior among other financial inclinations is mainly formed from a young age (from how they observed their parents handle their finances), or from knowledge gained from financial courses undertaken.

Subject terms: Financial self-efficacy (FSE), financial attitudes, and saving behavior.

1.1 Background of Study

1964 saw the commencement of Sacco operations as thrift co-operative societies with their main objective being mobilization of savings from members to lend them for purposes of production and welfare (Auka & Mwangi, 2013). The FinAccess Survey Report of 2019 shows that the gap between credit and savings has decreased from the period 2016 to 2019 with a steady rise in credit uptake while the savings rate remains steady. In both 2016 and 2019, the main reasons for saving
were to meet emergency expenditure, household consumer needs, and education while the main
drivers influencing the choice of saving instrument was security and convenience.

Savings play a huge role in the economic growth of a country. They are channeled into investments
and increased investments translate into increased GDP. A Sacco's main objective is to pool
savings to offer affordable credit to its members. They highly depend on their members’ trust in
their ability to manage their funds, that is, the more comfortable and confident an individual is in
a financial institution, the higher the chances of engagement with them through deposits,
investments, and consultations.

Ameliawati and Setiyani (2015), study financial attitudes using three indicators, which are,
attitudes towards daily financial behavior, toward austerity plans, and future financial capability.
This study adopts Lawn’s financial self-efficacy scale to decipher the financial self-efficacy of the
Sacco members and develops unique indicators to deduce saving behavior and financial attitudes
to construct the questions in the questionnaire.

Main Developments in The Study Area

Madison (2013) shows that there are two types of consumers as regards finances: financial
pessimists and financial optimists. However, there has been little research on how the difference
in attitudes relates to the saving behaviors of the two groups.

More demands have been placed on maintaining higher capital, asset quality, earnings, and
liquidity because of the introduction of IFRS 9 in Sacco regulations. The Sacco Societies Act 2010
allows the regulator (SASRA) the authority to restrict the license of a Sacco that falls short of the
new demands including prohibiting the entity from accepting further deposits or other lines of
credit (Irungu, 2020).

Brief Conceptualization of The Study

Saving is recognized as one of the most desirable financial behaviors, which is also why many
companies and social organizations dealing with consumer financial well-being are trying to gain
greater insight into the factors determining this behavior (Maison et al., 2019). Savings provide
security to an individual psychologically and gives a sense of well-being.
Bialowas and Olejnik (2016) state that the latest research then had led to somewhat contradictory findings of a contrary relationship. Economic optimists are more willing to save than pessimists. Non-economic optimists who believe they will live longer than the statistical average are more eager to save than the pessimists. Differences in optimistic sentiment also affect the choice of personal saving instruments. Optimists often tend to opt for real estate, valuables, shares, and investment funds. On the other hand, pessimists opt for savings accounts, deposits, and bonds. Moreover, optimists are more active; having used or are going to use a wider portfolio of assets. (Bialowas & Olejnik, 2016, p.89).

1.2 Problem Statement

Scholars have shown that financial attitudes and financial self-efficacy affect the financial management behavior of individuals. Financial self-efficacy has been proven as a mediating variable between financial knowledge/literacy and actual behavioral action in one’s financial management (Lap, 2010). The importance of self-efficacy is divulged through the fact that knowledge is of little use if it is not executed in real life (Lown et al., 2015; Danes et al., 1999). Researchers have argued that attitudes constitute the sense of self-efficacy in that, people with high levels of self-efficacy are optimistic about their future while those with low levels of self-efficacy have negative attitudes towards their future including their financial goals (Bandura, 1977, 1986, 2010; (Farrell, Risse, & Fry, 2016).

Saving behavior is an important aspect of financial behavior. It is a desirable behavior that portrays an individual’s ability to plan and manage their finances. Savings contribute largely to the survival of a Sacco right from its conception. This study will be beneficial to the Sacco management as it gives insights on the psychology behind their members’ saving behavior thus enabling them to adjust their education schemes to target specific attitudes and perceptions of the members hence encouraging more savings and deposits.

This study focuses on the saving behavior of Sacco members in Kericho county as there has been hardly any research on saving behavior among this population. This paper seeks to analyze further the relationship between financial attitudes and self-efficacy and hence, how these two variables affect saving behavior specifically among Sacco members within Kericho county.
1.3 Research Objectives

The main objectives of the study are to:

I. Investigate how financial attitudes affect the saving behavior of Sacco members in Kericho county.

II. Evaluate the relationship between financial self-efficacy and saving behavior of Sacco members in Kericho county.

III. Analyze the moderating effect of financial self-efficacy on the relationship between financial attitudes and saving behavior according to Sacco members in Kericho county.

1.4 Scope of the Study

The paper seeks to study how Sacco members’ saving behavior is affected by individual self-efficacy and financial attitudes. The members will be selected by stratified random sampling across two Saccos, namely: Ndege Chai Sacco, and Imarisha Sacco. The data will be collected using questionnaires. I selected the Saccos under study to get representation from various industries since they have specific areas of operation/jurisdiction which constitutes most of the members. For instance, most of the members at Imarisha Sacco are teachers hence in the education industry, the members at Ndege Chai Sacco are majorly employees of Finlays thus in the agricultural industry.

1.5 Significance of the Study

A lot of Sacco operations are based on members’ savings and deposits; from determining the loan amount a member is eligible for, to leveraging borrowing thus avoiding the need to provide collateral as security, to determining the amount of dividend payable to a member. The more a member saves, the more flexible and in control they are over their financial decisions in their Sacco.

On the other hand, Saccos make more profit when members increase their deposits placing themselves in a good position to meet their wealth maximization goals. This is because it increases the amount they can disburse through loans and hence earn more from interests accrued from the loan. Deposits made by members also enable Saccos to meet their prudential requirements of liquidity and capital adequacy.
Studying the saving behavior of members will be useful to Sacco management in their planning regarding member education and terms of products. It will allow them to fine-tune their products and member training programs and education schemes to increase their pool of savings. Scholars have proven that the performance of cooperative enterprises can be boosted by leveraging on cooperative education (Kinyuira, 2017).
CHAPTER TWO

2 Literature Review

2.1 Empirical Review

Saccos face challenges while advancing practices in financial management in Kenya such as limited capital and sources of funds, credit risk management, negative cash liquidity, poor governance, and very low credit accessibility (Karanja, Wachira, & Lyria, 2015). However, as of 11th March 2019, the savings, and deposits in Saccos totaled Sh732bn which accounted for 30 percent of the national savings. There has been consistent growth in Sacco deposits reaching Sh766bn in the financial year 2018/19 from Sh690bn in the previous year “raising the profile of Saccos in the financial sector”. This could be associated with the payment of high dividends and more members leveraging on their savings as collateral for their borrowing (Irungu, 2020). Tight supervision by SASRA has seen better compliance with the prudential requirements of capital adequacy and liquidity by Saccos.

According to Dwistanti (2017), the thoughts, opinions, and judgments that an individual identifies with regarding their financial situation dictate their actions. A person with the opinion and thought that savings are irrelevant will not save. Scholars such as Ameliawati and Setiyani, (2018) have shown that there exists a significant and positive influence of financial attitudes towards financial management behavior. Financial literacy has also been proven as a mediating variable between financial attitudes and financial management. Good financial management application in one’s finances shows a high likelihood of having savings due to expected high responsibility.

Madison (2013) shows that there are two types of consumers in relation to their finances: financial pessimists and financial optimists. Optimism is highly related to the readiness to save and may be treated as a causal element, or even as much as just a part of the attitude towards saving. Despite that, the influence of optimism on savings is ambiguous (Katona, 1975) bringing forth the duality of optimism that is, economic optimism and non-economic optimism. Non-economic optimism decreases the prospect of saving because if people feel optimistic about the future, they might consume more today to satisfy new needs thus leading to a lower savings rate. In the same way, a non-economic pessimistic bias lowers the possession of current new needs hence leading to a
higher savings rate (Bialowas & Olejnik, 2016). This paper recognizes positive financial attitudes as economic optimism and negative financial attitudes as economic pessimism.

Financial self-efficacy is the sense of confidence of an individual in their ability to manage their finances successfully (Farrell, Risse, & Fry, 2016). Self-efficacy has been proven by researchers to be a valuable indicator in deducing individuals’ behavior and that positive behavioral change can be induced by improving one’s self-efficacy. People that have high financial self-efficacy levels are positively progressive and manage their money wisely. On the contrary, people with low financial self-efficacy are pessimistic and barely manage their finances. In countless areas of human endeavors, gender, and age group, be that as it may, self-efficacy being a psychological notion has revealed to be among the best predictors of successful performance.

Lown (2011) in the creation of his 6-item financial self-efficacy scale, breaks down the financial self-efficacy construct map into three sections: highly confident, moderately confident, and low confident. The highly confident believe they can perform all easier aspects of financial management, debt, and cash flow management as well as harder aspects such as the building of credit, savings, tax, and financial goals development. Moderately confident people believe they can perform some of the main aspects of financial management areas such as savings, debt management, credit building, and cash flow management. The lowly confident individuals have little confidence in their abilities regarding higher aspects of financial management and low to moderate confidence in the basic aspects. The scale shows individuals’ level of financial self-efficacy based on the following aspects:

i. Their ability to stick to a spending plan when unexpected expenses arise.

ii. Whether they find making progress towards their financial goals challenging.

iii. If they resort to the use of credit when unexpected expenses occur.

iv. Ease of finding a solution when faced with financial challenges.

v. Confidence in their ability to manage finances.

vi. Worry of running out of money in retirement.

Financial self-efficacy has also been presented to play a critical role in financial capability and as the missing link between financial knowledge and effective action in eARN’s survey (Lap, 2010).
They argue that financial self-efficacy can be seen where people are aware that they can utilize their financial knowledge to access and benefit from high-quality financial products. Lown et al. (2015) explain that knowledge and skills from intervention programs are of little use if they are not executed in real life. Nevertheless, Danes et al. (1999) proclaims that it takes more than financial literacy and knowledge to reach a financial goal, rather, by confidence in one’s capability and knowledge, actions proceed, hence proving that financial self-efficacy matters as well. Financial self-efficacy can be created or enhanced through financial education, financial counseling, and financial skills development programs (Danes et al., 1999).

Shim et al., (2012) in their study of psychological benefits of savings and future-oriented financial behaviors, discovered that there exists a positive relationship between the two factors. The research shows that financial attitudes beget behavioral intention which begets actual behavior resulting in well-being. The most important predictor of behavioral intention is positive attitudes. Other important predictors for behavioral intention include perceived behavioral control and planning horizon. Perceived behavioral control is linked to the construct of financial self-efficacy.

The impact of money attitudes on personal financial management behavior has been proven to be positive and significant (Qamar, Khemta, & Jamil, 2016). The research found that 20.9% of personal financial management behavior was explained by money attitudes. Moreover, financial self-efficacy and financial knowledge had a positive effect on financial management behavior and a positive moderating effect on the relationship between money attitudes and personal financial management behavior.

Kariri and Kavinda (2019) argue that savings among Sacco members are positively and significantly affected by loan policies, member training, and customer relationship management strategies. Kinyuira (2017) also shows a positive and significant relationship between member training and member savings. His research shows a positive relationship between cooperative education and performance as indicated by the total income, assets, and member equity. With this, he advises the management of Saccos to leverage cooperative education to enhance their performance (Kinyuira, 2017).
2.2 Theoretical Review

This paper is founded on the Theory of Planned Behavior (Ajzen, 1991). This is an extension of the Theory of Reasoned Action proposed by Fishbein and Ajzen which advances that intention is what determines whether action will be taken or not (Ajzen & Fishbein, 1975). Furthermore, that intention is a function of an individual's attitude towards the behavior and their subjective norms.

The Theory of Planned Behavior complements the Theory of Reasoned Action by adding the aspect of perceived control. Ajzen (1991) shows that attitudes, subjective norms, and perceived control over certain behavior are normally found to predict behavioral intentions with a high degree of accuracy. The theory concludes that the combination of these intentions and perceptions of behavioral control considerably account for variation in real behavior. These models have demonstrated applicability in understanding human behavior.

Other theories such as the Keynesian Theory and Life Cycle Hypothesis explain how saving and spending behavior change in different phases of life. In the Keynesian theory, savings are believed to increase proportionally with the increase in income since savings were treated as a good. In the Life-Cycle Hypothesis, savings are regarded as simply a transfer of wealth from one phase of life to another. People save for different motives; to hedge against unexpected contingencies in the future (pre-cautionary motive), to meet anticipated expenses such as for retirement (life-cycle motive), to enjoy returns from interest earned on savings (inter-temporal substitution), to have the power to do things independently and to be self-reliant (independence motive), to better oneself by having more to spend in the future (improvement motive), to build capacity to engage in speculative projects such as businesses (enterprise motive), to enable the intergenerational transfer of wealth (bequest motive), to avoid expenditure to fulfill one's desire to hoard what they already own (avarice motive) or to build deposits to purchase big assets such as houses or cars (down payment motive) (Browning & Lusardi, 1996).
A diagrammatic representation of the proposed conceptual framework of the variables.

Figure 1: The relationship between financial attitudes, financial self-efficacy, and saving behavior.
Research Hypotheses

H1: Financial attitudes have a positive and significant relationship with the saving behavior of Sacco members in Kericho county.

H2: There is a significant relationship between financial self-efficacy and saving behavior of Sacco members in Kericho county.

H3: Financial self-efficacy has a significant moderating effect on the relationship between financial attitudes and saving behavior of Sacco members in Kericho county.
3.3 Data and Data Collection

This study applied quantitative research and the type of data used was primary data since understanding real behavior requires primary research into the individuals under study. The method employed in this research was a survey and the data collected through questionnaires that were dispatched by hand and online through google forms. The questionnaire was broken down into four categories which comprised questions on the demographics, financial attitudes, level of financial self-efficacy, and saving behavior of the respondents.

The demographics section exhibited how the population of the respondents was structured. Saving behavior was coded using multiple choices of Yes, No and Sometimes to show whether the respondent would put aside money for the future. Financial attitudes were coded using choice questions where the respondents would record their sentiments on the given five-point Likert-type scale from 1="not important at all" to 5="extremely important". Financial self-efficacy was measured by application of Lown’s Financial Self Efficacy Scale with a five-point Likert scale with 1="exactly true" to 5="not at all true". The total score on each section would reveal the financial attitude (section 3) and the financial self-efficacy level (section 4) of the respondents.

3.4 Data Analysis

The first step in the analysis process was to check for missing variables. Stata software was used to analyze the data. The data was loaded into excel then imported into Stata. The statistical methods applied include the Cronbach alpha test and ordinal logistic regression analysis.

Cronbach alpha test was used to measure the consistency of the questionnaire hence checking the validity and reliability of the scale. Descriptive statistics revealed the data distribution. The study uses ordinal logistic regression analysis to check the relationship between the independent variables (Financial Attitudes, Financial Self-Efficacy) on the dependent variable (Saving behavior). This is because the data making up the variables follows a natural order and the variables are categorial such that, the values in the dependent variable can be put into countable distinct groups. The moderation aspect of financial self-efficacy on the relationship between financial attitudes and saving behavior was also run through the regression analysis. The control variables are age, gender, and education. The regression analysis included 3 linear regression models shown below:
Equation 1

\[ S_b = \beta_0 + \beta_1 FA + \epsilon \]

Equation 2

\[ S_b = \beta_0 + \beta_1 FSE + \epsilon \]

Equation 3

\[ S_b = \beta_0 + \beta_1 FA \times FSE + \epsilon \]

Where:

- \( S_b \) is the saving behavior dependent variable
- \( FA \) is the level of financial attitudes
- \( FSE \) is the level of financial self-efficacy

Primary data was used because studying real behavior and attitudes of individuals calls for primary research. The stratified sampling method was used to select the participants since the Saccos have varied membership sizes which means having an equal number of participants from all of them would result in over-representation of the Sacco with the lowest membership. The numbers were chosen proportionally for more accuracy in the estimation. Moreover, stratified sampling evades some of the limitations of simple random sampling such as sampling bias hence improving accuracy and representativeness.

Limitations

The limitation faced with the method used for data collection was that proving the validity of the information given in the questionnaires was difficult. Illiteracy of some members was also another challenge that slowed down the collection processes as most of these respondents needed step by step explanation of each item on the questionnaire while others gave up without any attempt.

Ethical Consideration

Response to questionnaires was consensual and voluntary. The respondents’ information was provided anonymously, and confidentiality was maintained throughout the process.
4 FINDINGS

4.1 Introduction

The questionnaires sent out were 399 and 346 members responded giving a response rate of 86.72%.

![Pie chart showing the breakdown of the Sacco membership of the respondents](image)

Some of them selected none since the online form of the questionnaire was shared with groups that had most of the participants as Sacco members, but the same groups included a few who were not members of any Sacco. This also explains why there is a representation of more Saccos other than the two under focus in the study.

Demographic Characteristics of The Respondents

It is important to establish the demographic distributions of the respondent to deduce their background information hence enabling interpretations of the data collected.

Distribution of the Respondents by Gender

Most of the respondents were male at 59.8% compared with 40.2% being female. This shows that the Sacco membership in Imarisha Sacco and Ndege Chai Sacco is male dominated.
What is your gender?
346 responses

Male: 40.2%
Female: 59.8%

Figure 3: Pie chart of the gender distribution of the respondents

Distribution of the Respondents by Age

The respondents were required to indicate their age bracket. This item is important for policymakers to know which age group they should focus on to channel in more savings. The ranges given started from 18 to 30 years as membership registration in a Sacco requires the presentation of a copy of one's national identification card. Approximately 50% of the respondents were between 31 to 45 years thus comprising the largest group among the respondents followed by those between 46 to 60 at about 31%. Those over 60 were the smallest group as most of the older members in this group had little patience to sit and fill the questionnaire.

What is your age?
346 responses

- 18-30: 30.9%
- 31-45: 43.7%
- 46-60: 16.5%
- Over 60: 9.0%

Figure 4: Pie chart of the age distribution of the respondents
Distribution of the Respondents by Level of Education

The highest level of education generally being a bachelor's degree in Imarisha Sacco and Primary level in Ndege Chai. This is because most of the members of Imarisha, being teachers, require at least a degree qualification while in Ndege Chai, the members who frequented the Sacco were mostly the tea pickers who generally had low levels of education. The level of education of the members had a positive and significant relationship with the saving behavior (including financial attitudes and their financial self-efficacy) of the respondents.

What is the highest level of education you have completed?
346 responses

Figure 5: Pie chart of the education levels of the respondents

Saving Behavior of The Sacco Members

93% of the respondents from both Saccos saved often with a general monthly frequency as most of the members saved with the Saccos monthly since their contributions were directly deducted from their payslips. The members who are employed in the informal sector or are self-employed, where their income is not received on a defined basis, save whenever they get a huge sum of money rather than monthly.
I set aside money for savings often
346 responses

Figure 6: Pie chart showing whether the respondents saved often

How often do you save with your Sacco
346 responses

Figure 7: Pie chart showing the frequency of saving by the respondents

Most of the members had more than one saving plan of Sacco deposits and Retirement scheme, or Sacco deposits and an emergency fund, or Sacco deposits and another saving plan specified in the 'other’ option on the questionnaire. Most of the members (86.1%) saved through Sacco deposits, 40.2% had a retirement/pension scheme as well, with (11%) having a separate emergency fund and 4% with other means of contributing to their savings plan which included: merry-go-rounds, farming, purchasing easily disposable assets, investing in real estate, planting trees, among others specified in the bar graph below.
I contribute to my savings plan through
346 responses

<table>
<thead>
<tr>
<th>Channel</th>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirement/pension scheme</td>
<td>139</td>
<td>40.2%</td>
</tr>
<tr>
<td>Emergency savings fund</td>
<td>38</td>
<td>11%</td>
</tr>
<tr>
<td>Sacco deposits</td>
<td>298</td>
<td>86.1%</td>
</tr>
<tr>
<td>I do not have a savings plan</td>
<td>15</td>
<td>4.3%</td>
</tr>
<tr>
<td>Voluntary retirement account</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Buying plots</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Farm proceeds</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Monthly Income</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Chama</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Holidays</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Agriculture - Trees planting</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Money Market Fund</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>I Invest in properties</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Farming</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Group savings account</td>
<td>1</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Figure 8: Bar graph showing the medium of channeling savings

NB: The percentages here add to more than 100% since the respondents could choose more than one option in this question as one can have different saving channels.

The responses showed the respondents mostly saved less than 25% of their income. Those who saved more than 25% were younger and this could be explained by the fewer dependents these respondents have (possibly because they might not have children yet or are still partially dependent on their parents or guardians) thus enabling them to save a higher percentage of their income.

I save an average of this percent of my income monthly
346 responses

Figure 9: Pie chart of the average percentage of the respondents’ salary that they saved
Given your savings, how often do you borrow against those savings

346 responses

![Pie chart showing the borrowing frequency of the respondents](image)

**Figure 10: Pie chart showing the borrowing frequency of the respondents**

The aggregate average amount in savings was another question the respondents were required to answer given in ranges as shown below. Majority of the members had between 100,000 to 499,999 in savings. Since most of the respondents were between 31 and 45 years, they had not accumulated the maximum range among the options given possibly because they had not been members of the Sacco for very long in addition to the fact that they save a considerably low percentage of their income (less than 25%).

I have saved an average of this amount

346 responses

![Pie chart showing the average aggregate amount the respondents had in savings](image)

**Figure 11: Pie chart showing the average aggregate amount the respondents had in savings**
Financial Attitudes

Most members showed high levels of financial attitudes at an average of 20 out of 25 which was calculated from the scores the respondents attained based on the financial attitudes scale that had five items on a five-point Likert-type scale.

Financial Self-efficacy

The data showed that the members had moderate levels of financial self-efficacy with an average score of 17 out of 30. This was calculated as an average of the scores obtained by the respondents from the financial self-efficacy scale which had six items on a five-point Likert-type scale.

Relationship Between The Variables

The relationship between the dependent variable and the independent variables (focusing on Financial attitudes and Financial Self-efficacy) is analyzed below.

The reliability of the research instrument is analyzed using Cronbach’s alpha by measuring the internal consistency of the scales used in the questionnaire. The alphas were above 0.7 which shows that the scales were acceptable and valid to measure the variables.

Means, Standard deviations, Cronbach’s Alpha, and Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach’s Alpha</th>
<th>SB</th>
<th>FA</th>
<th>FSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB</td>
<td>5.79</td>
<td>1.45</td>
<td>0.7191</td>
<td>1.0000</td>
<td>0.1304</td>
<td>0.3325</td>
</tr>
<tr>
<td>FA</td>
<td>19.90</td>
<td>3.57</td>
<td>0.7629</td>
<td>0.1304</td>
<td>1.0000</td>
<td>0.1671</td>
</tr>
<tr>
<td>FSE</td>
<td>16.57</td>
<td>5.12</td>
<td>0.8029</td>
<td>0.3325</td>
<td>0.1671</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Table 1: Means, standard deviations, Cronbach’s alpha, and correlations of the variables.

*SB=Saving Behavior        *FA= Financial Attitudes        *FSE= Financial Self-efficacy
4.2 Objective 1

Investigating how financial attitudes affect saving behavior of Sacco members in Kericho county

**H1: Financial attitudes have a positive and significant relationship with the saving behavior of Sacco members in Kericho county.**

The results from the regression showed that the overall model is significant and financial attitudes have a significant positive effect on saving behavior. An increase in financial attitudes by one unit is associated with a 7.64% increase in saving behavior in the ordered log-odds scale. The effect of financial attitudes on saving behavior is seen to be significant as it has a p-value <0.05 at the 95% confidence interval as illustrated in Table 2 hence, we fail to reject the null hypothesis.

### Ordered logistic regression

<table>
<thead>
<tr>
<th>SB</th>
<th>Coef.</th>
<th>St.Err.</th>
<th>t-value</th>
<th>p-value</th>
<th>[95% Conf Interval]</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA</td>
<td>0.076</td>
<td>0.03</td>
<td>2.59</td>
<td>0.01</td>
<td>0.019 - 0.134</td>
<td>***</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.714</td>
<td>0.723</td>
<td>.b</td>
<td>.b</td>
<td>-4.132 -1.296</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.08</td>
<td>0.608</td>
<td>.b</td>
<td>.b</td>
<td>-2.271 .111</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.109</td>
<td>0.593</td>
<td>.b</td>
<td>.b</td>
<td>-1.054 1.271</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.012</td>
<td>0.595</td>
<td>.b</td>
<td>.b</td>
<td>-1.154 2.177</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.188</td>
<td>0.604</td>
<td>.b</td>
<td>.b</td>
<td>1.005 3.371</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.801</td>
<td>0.63</td>
<td>.b</td>
<td>.b</td>
<td>2.566 5.036</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.978</td>
<td>0.788</td>
<td>.b</td>
<td>.b</td>
<td>4.433 7.523</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>7.375</td>
<td>1.171</td>
<td>.b</td>
<td>.b</td>
<td>5.079 9.671</td>
<td></td>
</tr>
</tbody>
</table>

Mean dependent var 5.789 SD dependent var 1.450
Pseudo r-squared 0.006 Number of obs 337.000
Chi-square 6.795 Prob > chi2 0.009
Akaike crit. (AIC) 1199.214 Bayesian crit. (BIC) 1233.595

*** p<.01, ** p<.05, * p<.1

Table 2: Regression of financial attitudes on saving behavior
4.3 Objective 2
Evaluating the relationship between financial self-efficacy and saving behavior of Sacco members in Kericho county.

H2: There is a significant relationship between financial self-efficacy and saving behavior of Sacco members in Kericho county.

Regression of financial self-efficacy on saving behavior shows a significant positive relationship as well such that a one unit increase in the level of financial self-efficacy leads to a 12.90% increase in saving behavior in the ordered log-odds scale. The p-value of financial self-efficacy is less than 0.05 at the 95% confidence interval as seen in Table 3 below, hence showing that the relationship is significant and thus we fail to reject the null hypothesis.

<table>
<thead>
<tr>
<th>Ordered logistic regression</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB Coef. St.Err. t-value p-value [95% Conf Interval] Sig</td>
</tr>
<tr>
<td>FSE .129 .02 6.46 0 .09 .168 ***</td>
</tr>
<tr>
<td>Constant -2.263 .535 .b .b -3.312 -1.214</td>
</tr>
<tr>
<td>Constant -.614 .362 .b .b -1.323 .095</td>
</tr>
<tr>
<td>Constant .616 .334 .b .b .039 1.27</td>
</tr>
<tr>
<td>Constant 1.586 .34 .b .b 919 2.253</td>
</tr>
<tr>
<td>Constant 2.862 .364 .b .b 2.148 3.576</td>
</tr>
<tr>
<td>Constant 4.565 .415 .b .b 3.752 5.378</td>
</tr>
<tr>
<td>Constant 6.784 .632 .b .b 5.545 8.023</td>
</tr>
<tr>
<td>Constant 8.182 1.072 .b .b 6.08 10.284</td>
</tr>
</tbody>
</table>

Mean dependent var: 5.789 SD dependent var: 1.450
Pseudo r-squared: 0.036 Number of obs: 337.000
Chi-square: 42.959 Prob > chi2: 0.000
Akaike crit. (AIC): 1163.050 Bayesian crit. (BIC): 1197.431

*** p<.01, ** p<.05, * p<.1

Table 3: Regression of financial self-efficacy on saving behavior
4.4 Objective 3

Analyzing the moderating effect of financial self-efficacy on the relationship between financial attitudes and saving behavior according to Sacco members in Kericho county.

**H3:** Financial self-efficacy has a significant moderating effect on the relationship between financial attitudes and saving behavior of Sacco members in Kericho county.

The moderating effect is shown through the creation of an interaction term between financial attitudes and financial self-efficacy which is then regressed on saving behavior. The results showed that financial self-efficacy has a significant and positive moderating effect between financial attitudes and saving behavior in the ordered log-odds scale as the p-value is less than 0.05 significance level at the 95% confidence interval and the beta coefficient is positive. A one unit increase in the interaction term would increase saving behavior by 0.6%. This supports the hypothesis hence we fail to reject the null.

**Ordered logistic regression**

<table>
<thead>
<tr>
<th>SB</th>
<th>Coef.</th>
<th>St.Err.</th>
<th>t-value</th>
<th>p-value</th>
<th>[95% Conf Interval]</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>comb</td>
<td>0.006</td>
<td>0.001</td>
<td>6.74</td>
<td>0</td>
<td>0.004</td>
<td>.007***</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.571</td>
<td>-0.507</td>
<td>.b</td>
<td>.b</td>
<td>-3.563</td>
<td>-1.578</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.918</td>
<td>-0.318</td>
<td>.b</td>
<td>.b</td>
<td>-1.54</td>
<td>-2.95</td>
</tr>
<tr>
<td>Constant</td>
<td>0.318</td>
<td>0.284</td>
<td>.b</td>
<td>.b</td>
<td>-2.39</td>
<td>.874</td>
</tr>
<tr>
<td>Constant</td>
<td>1.29</td>
<td>0.288</td>
<td>.b</td>
<td>.b</td>
<td>0.726</td>
<td>1.854</td>
</tr>
<tr>
<td>Constant</td>
<td>2.572</td>
<td>0.312</td>
<td>.b</td>
<td>.b</td>
<td>1.961</td>
<td>3.184</td>
</tr>
<tr>
<td>Constant</td>
<td>4.307</td>
<td>0.373</td>
<td>.b</td>
<td>.b</td>
<td>3.576</td>
<td>5.038</td>
</tr>
<tr>
<td>Constant</td>
<td>6.553</td>
<td>0.609</td>
<td>.b</td>
<td>.b</td>
<td>5.36</td>
<td>7.746</td>
</tr>
<tr>
<td>Constant</td>
<td>7.953</td>
<td>1.059</td>
<td>.b</td>
<td>.b</td>
<td>5.878</td>
<td>10.028</td>
</tr>
</tbody>
</table>

Mean dependent var 5.789 SD dependent var 1.450
Pseudo r-squared 0.039 Number of obs 337.000
Chi-square 46.766 Prob > chi2 0.000
Akaike crit. (AIC) 1159.243 Bayesian crit. (BIC) 1193.624

*** p<.01, ** p<.05, * p<.1

*comb=interaction term between financial self-efficacy and financial attitudes.

The regression results show that the models were significant, that financial attitudes had a positive significant impact on saving behavior. Nevertheless, that financial self-efficacy had a significant and positive effect on saving behavior. Moreover, the financial self-efficacy variable significantly moderates the relationship between financial attitudes and saving behavior. Table 5 below illustrates the results generated from the hypothesis.
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Independent variable</th>
<th>Moderating variable</th>
<th>Dependent variable</th>
<th>Significant Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FA</td>
<td>-</td>
<td>SB</td>
<td>0.010</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>2</td>
<td>FSE</td>
<td>-</td>
<td>SB</td>
<td>0.000</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>3</td>
<td>FA</td>
<td>FSE</td>
<td>SB</td>
<td>0.000</td>
<td>Fail to reject</td>
</tr>
</tbody>
</table>

*SB=Saving Behavior  *FA= Financial Attitudes  *FSE= Financial Self-efficacy

**Table 5: Decision of hypotheses**
5 DISCUSSIONS

5.1 Introduction and Overview
The study revealed that the Sacco members in Kericho generally had relatively high levels of financial attitudes and moderate levels of financial self-efficacy. This could be attributed to the sense of what should be ideal as their sense of self-efficacy was not consistent with what they believed to be positive financial attitudes showing a gap between awareness and execution of desirable financial behavior. This study concludes that financial attitudes and financial self-efficacy have a positive and significant impact on saving behavior among Sacco members in Kericho county and financial self-efficacy has a significant moderating effect on the relationship between financial attitudes and saving behavior.

5.2 Objective 1
The results showed that 7.64% of saving behavior is explained by financial attitudes. This is consistent with findings from other scholars who found the presence of a significant and positive influence of financial attitudes on financial management behavior which constitutes saving behavior (Ameliawati & Setiyani, 2018), (Qamar, Khemta, & Jamil, 2016).

5.3 Objective 2
The presence of a significant relationship between financial self-efficacy and saving behavior has also been confirmed regarding Sacco members in Kericho County congruous with earlier observations (Farrell, Risse, & Fry, 2016) (Lown, Kim, Gutter, & Hunt, 2015). The findings show that 12.90% of saving behavior is explained by financial self-efficacy.

5.4 Objective 3
The moderating effect of self-efficacy on the impact of financial attitudes on saving behavior is positive and significant. This is in line with past findings by other researchers where financial self-efficacy was found to have a positive moderating effect on the relationship of money attitudes and personal finance behavior (Qamar, Khemta, & Jamil, 2016).
5.5 Conclusions

A person's saving behavior critically affects their financial well-being. The ability to manage expenses and set money aside in line with the different saving motives shows financial maturity and enables one to live a more fulfilling life. Financial attitudes and financial self-efficacy can be influenced through education since with more education one gains more financial knowledge and exposure hence enabling better decision-making regarding their finances.

The study gives a unique way of analyzing the relationship between one's financial attitudes and saving behavior. Studying the variables that impact saving behavior and the extent of their impact on financial well-being gives greater insight into how one can enhance their sense of financial security both in the short and long run.

These findings justify the relevance of financial attitudes and financial self-efficacy among the Sacco members and this can be generalized to adults of all ages. It will help them to acknowledge the intricacies of their financial behaviors; their budgeting, spending, saving, and borrowing habits to enable them to control their finances effectively and intellectually.

Therefore, applying specific educational strategies for the different groups of members targeting their different needs is the most effective way of influencing the members' sense of financial self-efficacy and financial attitudes positively hence improving their saving behavior. The Saccos could also fine-tune their products to suit their members' different needs based on the perceptions and opinions held by different socio-demographic groups. This will result in increased savings which is advantageous and desirable by both the members and the Saccos.

Limitations

Even though objectivity and precision were sought throughout this study, there were still some limitations faced in the research. These include the fact that other socio-demographic attributes could have affected the saving behavior of the Sacco members and the study could have extended to members of Saccos from other counties to reduce geographical bias.
5.6 Areas for Further Studies

Future studies could analyze how each aspect of financial self-efficacy directly affects saving behavior. Information on transaction patterns could be used to further explore the impact of money opinions and beliefs on other aspects of financial management other than saving behavior. Moreover, this information can also be helpful in advising the Sacco members to avoid losses from taking unnecessary financial risks specifically based on their reasons for borrowing loans and seeking credit to finance expenditure.

Further exploration of related topics could use a different scale to measure financial attitudes. Additionally, other variables can be analyzed as moderators on the relationship between financial attitudes and saving behavior as well as in the relationship between financial self-efficacy and saving behavior.
6 List of References


Appendices

Appendix 1: Letter of Introduction

The Chief Executive Officer
(Imarisha/Ndege Chai) Sacco Society Ltd
P.O. Box (682/857) – 20200
Kericho.

Dear Sir,

RE: REQUEST FOR DATA COLLECTION

I write this letter to request permission to collect data from your Sacco members within the Sacco premises. I am a fourth-year student at Strathmore University pursuing a Bachelor of Business Science in Financial Economics Science degree.

In fulfillment of my degree, I am carrying out a research project evaluating 'How Financial Attitudes and Financial Self-efficacy Affect Saving Behavior Among Sacco Members in Kericho County'. My goal is to get about (250/150) responses.

The form is anonymous and completely confidential. The information gathered cannot be traced back to any respondent. The data collected will not be used for any purpose other than this research.

Thank you.

Yours Sincerely,

Michelle Chepngetich
Student BBSFE
Strathmore University
Tel no. 0728436288
Appendix 2: SAVING BEHAVIOR QUESTIONNAIRE

Thank you for taking the time to fill in this form. The objective of this survey is to gain insights on how saving behavior is affected by individual financial attitudes and perceptions among Sacco members in Kericho county for an undergraduate degree thesis. Please answer all questions honestly. This form is anonymous, and the information gathered cannot be traced back to you in any way. The data collected will not be used for any purpose other than this research. Thank you!

**Section 1 (Demographics)**

**Directions:** Select the choice that represents the group in which you belong.

a) What is your gender?
   - Male
   - Female

b) What is your age?
   - 18-30
   - 31-45
   - 46-60
   - Over 60

c) What is the highest level of education you have completed?
   - Primary level
   - Secondary level
   - Bachelor's degree
   - Master's degree
   - PhD/ Professional degree

**Section 2 (Saving behavior)**

**Directions:** Select the choice with the option you identify with.

a) I set aside money for savings often
   - Yes
b) I contribute to my savings plan through a:
   - Retirement/pension scheme
   - Emergency savings fund
   - Sacco deposits
   - Other:

(continued)


c) I save an average of this percent of my income monthly
   - Less than 25%
   - 25%-49%
   - 50%-74%
   - 75% and above

Section 3 (Financial attitudes)

**Direction:** Using the scale below please rank the importance of the following items (1=not important at all, 2=somewhat important, 3=important, 4=very important, 5=extremely important).

a) Increasing one’s financial knowledge.

1 2 3 4 5

b) Spending less than income regularly.

1 2 3 4 5

c) Avoid borrowing to balance a personal budget.

1 2 3 4 5

d) Investing rather than spending.

1 2 3 4 5

34
Section 4 (Financial self-efficacy)

**Direction**: Please respond to the following statements by circling on the numbers using the response categories; 1 = exactly true, 2 = moderately true, 3 = not sure, 4 = hardly true, and 5 = not at all true.

a) It is hard to stick to my spending plan when unexpected expenses arise

1 2 3 4 5

b) It is challenging to make progress toward my financial goals

1 2 3 4 5

c) When unexpected expenses occur, I usually have to use credit/loans

1 2 3 4 5

d) When faced with a financial challenge, I have a hard time figuring out a solution.

1 2 3 4 5

e) I lack confidence in my ability to manage my finances

1 2 3 4 5

f) I worry about running out of money in retirement

1 2 3 4 5