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ROLE OF SAVING LITERACY ON HOUSEHOLD INCOME GENERATION AMONG SACCO MEMBERS IN MACHAKOS COUNTY, KENYA

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ABSTRACT

The increase in formal financial access is recognized as vital for improving household income and driving economic growth. However, despite the rise in formal financial access from 75.5% in 2019 to 83.7% in 2021 in Kenya, household income generation remained low, suggesting that financial access alone may not be the primary issue. To delve deeper into the factors influencing this adverse trend, this research focused on the role of saving literacy among SACCO members in Machakos County, Kenya, drawing on the lifecycle saving theory. Employing a descriptive research design, the study targeted 3,050 registered SACCO members from which a sample of 217 respondents was selected through stratified sampling and purposive sampling. The study data was collected using self-administered structured questionnaire and analyzed through descriptive statistics (percentages and means) as well as inferential statistics (regression and correlation). The findings revealed that saving literacy had a significant positive role (($\beta = 0.46$, $p < 0.05$), on household income generation, underscoring its importance in boosting income among SACCO members. As a result, the study recommends the implementation of comprehensive saving literacy programs by SACCOs and relevant stakeholders to maximize their impact on income generation. This should be coupled with efforts to promote access to financial resources and provide ongoing support and guidance to members, ultimately fostering improved household income.

KEYWORDS: *Saving Literacy, Household Income Generation, Economic Growth, SACCO Members, Machakos County, Financial Access.*

1.1 INTRODUCTION

Household income generation is a crucial driver of economic growth within a nation (Qudah et al., 2022). The ability to increase household income leads to greater discretionary income, improved living standards, and a reduction in poverty rates (Wiesel & Stone, 2025). In response to the global financial and economic crisis triggered by the COVID-19 pandemic, governments around the world have been actively seeking ways to enhance household income generation and mitigate the economic challenges faced (Choi, 2020). One avenue that has been identified as having the potential to promote household income generation is improving access to formal financial services (Koomson et al., 2020).

Despite the efforts made by governments to expand formal financial access, the impact on household income generation has been limited (Ankrah, 2020). This situation is evident in Kenya, where access to formal financial services and products increased from 75.5 percent in 2019 to 83.7 percent in 2021, yet household income generation remained low as more than 50% of Kenyans continue to live in abject poverty, falling below the international poverty line of $1.90 a day (World Bank, 2022, FSD,2022). Consequently, it becomes imperative to examine other factors that may be contributing to low household income generation. In an effort to shed light to these challenges, this study therefore focused on the role of saving literacy on household income generation, as saving literacy has been identified as a crucial factor in promoting household income creation (Hoque et al.2021).

Saving literacy encompasses the understanding of saving products, strategies, and risk management (Goyal & Kumar,2021). It involves the ability to make informed decisions regarding saving opportunities, evaluate potential

risks and returns, and develop a well-rounded saving plan (Wang et al.2022). Extensive global research, particularly in developed countries, has indicated a positive correlation between saving literacy and household income generation (Goyal & Kumar, 2021). Studies have shown that individuals with higher saving literacy are more likely to save effectively and accumulate wealth over time (Lusardi & Mitchell, 2019; Sarpong, 2021; Wang et al.,2022).

However, the relationship between saving literacy and household income generation in the African context remains understudied, and the results have been mixed (Ojo et al., 2018; Ngaruko & Ntiranyuhura, 2021). This lack of understanding is particularly evident in developing countries like Kenya, where research on saving literacy and its impact on income generation is limited (Lusardi & Mitchell, 2019). Given the unique context and challenges faced by Kenya, it becomes essential to explore the role of saving literacy in household income generation.

By conducting this study in Kenya, we aim to shed light on the importance of saving literacy in economic recovery and financial inclusion, especially in the aftermath of the COVID-19 crisis. The pandemic has posed significant challenges to households' financial stability, making it crucial to understand how saving literacy can play a role in enhancing income generation and overall financial well-being. By understanding the role of saving literacy on income generation, this research can contribute to the development of effective strategies for economic recovery and financial inclusion in the aftermath of the COVID-19 crisis.

1.2 Statement of the Problem

Increased formal financial access is widely recognized as a crucial factor in boosting household income generation, a key driver of economic growth (Qudah et al.,2022). However, despite a significant rise in formal financial access in Kenya from 75.5% in 2019 to 83.7% in 2021, household income generation remained low as 50% of Kenyans continued to live in abject poverty, falling below the international poverty line of $1.90 a day (World Bank, 2022, FSD,2022). This suggests that the root cause of the issue may extend beyond financial access. To shed light on the underlying factors contributing to this adverse trend, further research was vital. Unfortunately, such research is limited in Kenya as prior research has primarily focused on the relationship between saving literacy and financial management, leaving a significant research gap in understanding the role of saving literacy in household income generation (Ombago, 2015; Dave, 2017; Schutzeichel, 2019). To address this gap and gain insights into the underlying factors influencing low-income generation, this study aimed to investigate the role of saving literacy among members of Savings and Credit Cooperative Organizations (SACCOs) in Machakos County, Kenya.

1.3 Research Objective

The study aimed at examining the role of saving literacy on household income generation among SACCO members in Machakos County, Kenya.

1.4 Research Hypothesis

H_o: Saving literacy has no significant role on household income generation among SACCO members in Machakos County, Kenya.
H_a: Saving literacy has a significant role on household income generation among SACCO members in Machakos County, Kenya.

1.5 Significance of the Study

This study is significant for researchers, academicians, policymakers, investors, SACCO officials, and clients. It contributes to knowledge on Saving literacy's role in household income generation, informing policymakers, empowering investors, and aiding SACCOs in improving services and supporting the households. Ultimately, it fosters economic growth and increased income generation.

2.1 LIFECYCLE SAVING THEORY

The theory was proposed by Franco Modigliani and Richard Blumberg in 1954. According to the theory, households seek to smooth their consumption over their lifetime by borrowing during their younger years when they have a lower income and higher expected future income and saving when they have a higher income and lower expected future income.

Several recent studies have shown support for the arguments of this theory. For instance, a study by Dao (2021) on Lifecycle saving behavior and housing wealth used data from the survey of consumer finances and found that the

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relationship between Age and saving was consistent with the predictions of the lifecycle model. Another study by Fang and Su (2020) on the heterogeneity of the lifecycle saving pattern in China that analyzed the lifecycle saving pattern in China found evidence supporting the lifecycle model of saving. Lusardi and Tufano (2017), in their study," debt literacy, financial experiences, and over-indebtedness," found that households who were more financially literate were more likely to follow the predictions of the lifecycle model of saving, suggesting that the theory may be more applicable to households with higher levels of financial literacy.

However, there are limitations of the theory as well. The theory assumes that households have perfect information and can make perfect decisions, which is not always true. Additionally, the theory assumes that households can borrow and lend at any point in their life, which may only be the case for some.

Some studies have shown support to this criticism. For instance, a study by Chen and Wei (2021) that looked at the role of individual heterogeneity in the lifecycle saving pattern using data from Chine found that individual heterogeneity has a significant role on the lifecycle saving pattern, suggesting that the lifecycle model may not fully capture the complexity of household saving behavior. Shao and Fan (2020), in another study that looked at the effect of housing prices on the lifecycle saving pattern, found that the relationship between housing prices and the lifecycle saving pattern is more complex than predicted by the lifecycle model, suggesting that the theory may not fully capture the role of housing prices on saving behavior. Also, Kim and Lee (2019) conducted a study on "the role of financial literacy on the lifecycle saving pattern." This study found that financial literacy significantly roles the lifecycle saving pattern, suggesting that the lifecycle model may only partially capture the role of financial literacy in household saving behavior.

The life cycle savings theory was relevant to this study as it provided a valuable framework for understanding how households made decisions about saving and spending over their lifetimes and how these decisions were influenced by income, financial literacy, and individual heterogeneity. Additionally, the theory highlighted the importance of understanding the relationship between income, savings, and spending, which was a crucial aspect of saving literacy.

2.2 Conceptual Framework

A conceptual framework was used to guide the study (Figure2.1). The independent variable was saving literacy and the dependent variable was household income generation.

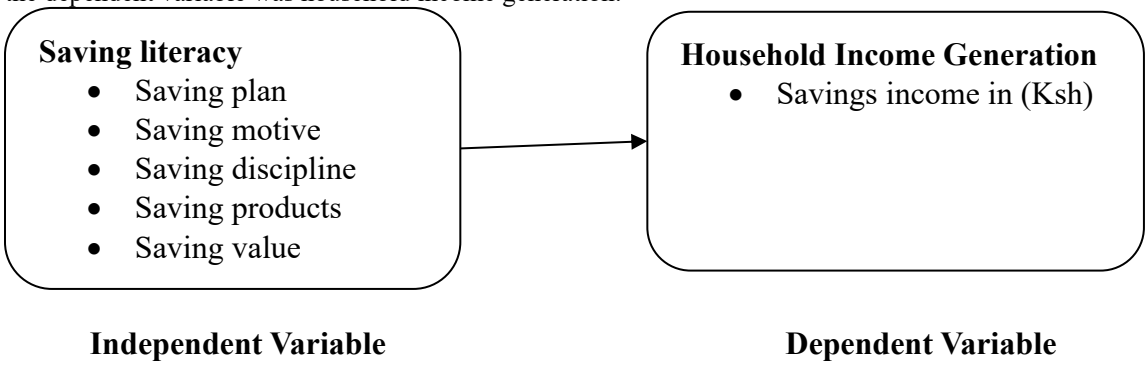


Figure 2.1: Conceptual Framework

2.3 Saving literacy and Household income Generation

Abroad, Bhardwaj and Saha (2022) conducted a study on the role of financial literacy on household savings and income in India. The study aimed to investigate the role of financial literacy in household savings behavior and income generation. The research design employed in this study was a cross-sectional survey using primary data collected through a structured questionnaire. The target population was households in selected districts of the northern state of Uttar Pradesh, India. The sample size was 400 respondents, selected using a multi-stage sampling technique. The nature of the data was both quantitative and qualitative, analyzed through descriptive statistics and regression analysis. The instrument used was a structured questionnaire, and the test statistic used was multiple regression analysis. The study's findings showed that financial literacy significantly influenced household savings behavior and income

generation. However, the study's results could not be generalized to Kenya due to the presence of cultural and economic variables that may influence household saving behavior differently. Conducting a similar study in Kenya would provide valuable insights into the role of financial literacy in household savings behavior and income generation within the specific context of the country. By examining the relationship between financial literacy and household savings behavior in Kenya, policymakers and researchers would gain a deeper understanding of the factors influencing income generation and identify targeted strategies to improve financial literacy and promote sustainable economic growth.

Tung and Vuong (2022) conducted a study in Vietnam to examine the relationship between financial literacy and household income generation, with a specific focus on the role of saving literacy. The study used a case study research design, and data were collected through a survey of 500 respondents. The sample was selected using a multi-stage sampling technique, with the target population being households in urban and rural areas of Vietnam. The study analyzed the data using regression analysis, and the instrument used to measure saving literacy was a self-administered questionnaire. The findings showed that saving literacy had a significant positive effect on household income generation. However, the study results could not be generalized to Kenya due to the variations in cultural and economic variables that impact household saving behavior. To gain insights into the relationship between saving literacy and household income generation in Kenya, there is a clear need for a similar study to be conducted in the country. Such a study would provide valuable information about the specific factors influencing saving behavior and income generation among Kenyan households. By examining the role of saving literacy in the context of Kenya, policymakers and researchers could develop targeted interventions to enhance financial literacy and promote improved household income generation.

Barbara (2016) conducted a study to examine the role of saving literacy on household income among small-scale miners in the Amansie West District of Ghana. The study aimed to assess the effect of saving literacy on household income generation. The research design used was a case study. The target population was small-scale miners in the Amansie West District of Ghana. The sampling technique used was purposive sampling. The sample size was not specified. The nature of the data was both quantitative and qualitative. Descriptive statistics and content analysis were used to analyze the data. Saving literacy was found to have a positive role on household income generation. However, the study results were not applicable to Kenya because Lusardi and Oggero (2017) found that financial literacy levels in Ghana are higher than in Kenya. Therefore, there was need for a similar study to be conducted in Kenya to fill the gap in knowledge.

Smith and Jones (2022), investigated the relationship between saving literacy and household income generation in the United States. The study aimed to explore whether saving literacy had a significant role on household income generation, using a random sample of 500 participants across different states. The research design involved a cross-sectional survey, and data were collected through a self-administered questionnaire. The study measured saving literacy and household income generation using Likert scales, and data were analyzed using multiple regression analysis. The results showed that saving literacy did not significantly role household income generation. The study highlights the need for further research to identify other factors that influence household income generation, particularly in the United States. The findings could not be generalized to other countries such as Kenya, where different cultural and economic factors may affect household saving behavior. Further studies are needed to investigate the relationship between saving literacy and household income generation in different contexts.

Kapito et al. (2020) conducted a study in Malawi to examine the relationship between financial literacy and household income generation, with saving literacy being one of the key variables. The study aimed to determine whether financial literacy interventions could lead to improved saving and income generation among households. A cross-sectional research design was used, and data were collected using a structured questionnaire from 556 respondents. The sample population included rural households in Malawi. The study used a multistage sampling technique to select participants. The data collected were analyzed using descriptive statistics, multiple regression analysis, and a mediation analysis. The findings showed that financial literacy was negatively associated with household income generation and savings behavior. Also, the mediation analysis revealed that saving behavior did not significantly mediate the relationship between financial literacy and income generation. The study provided insights into the importance of financial literacy and most importantly saving literacy in promoting household income generation and saving behavior in Malawi. However, the study was conducted among rural residents, leaving a gap for a similar study in Kenya that could include both rural and urban residents bringing out more reliable results.

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3.1 RESEARCH METHODOLOGY

The research utilized a descriptive research design to collect data and measure relationships between variables (Silva et al., 2021; Ibrahim et al., 2020; Almansour et al., 2021). The target population consisted of 3050 active members from 12 Savings and Credit Cooperative Organizations (SACCOs) in Machakos County, Kenya (Registrar of cooperatives,2025). The sample frame included 12 SACCOs in Machakos County. Stratified sampling was used to divide the SACCO members into two strata based on their savings status and loan status. Purposive sampling was then used to select members from each category based on age, gender, level of education and length of membership in the SACCO. The sample size of the study was determined using the Yamane 1957 formula, resulting in a sample of 217 SACCO members (Yamane,1957). The study used primary data that was collected using a self-administered structured questionnaire, which utilized a 5-point Likert scale (Smith et al.,2025). The questionnaire was pre-tested using 22 SACCO members from Universal Traders SACCO who were not included in the main data collection. The choice of the 22 respondents is informed by Cooper (2018), who suggested that a pilot study sample should be 10% of the sample size of the study. Validity of the research instruments was ensured through expert opinion from my supervisors while reliability was established using Cronbach's Alpha test which resulted to an average score of 0.9375, indicating that the instrument used was reliable for this research as this value was above the threshold of 0.7 (Bonett&Wright,2018). Data analysis involved descriptive and inferential statistics using SPSS software version 27, including frequencies, percentages, means, standard deviations, correlation analysis and regression analysis. The simple linear regression model was employed to assess the role of the independent variable on the dependent variable (Gomila, 2021). Model adequacy was tested using ANOVA tables, and individual parameter tests were conducted using t-tests (Aza et al.,2022). As well the assumptions of the linear regression model (Normality test, linearity test and autocorrelation test) were conducted using Kolmogorov Smirnov test, scatter plots and Durbin-Watson test respectively (Aisyah et al.,2021).

4.1. Role of Saving Literacy on Household income Generation Among SACCO Members in Machakos County, Kenya

The study sought to establish the role of saving literacy on household income generation among SACCO members in Machakos County. The respondents were required to show their level of agreement or disagreement with statements given on saving literacy on a five-point Likert scale of 1-5, where; 1-Strongly Disagree, 2-Disagree, 3-Undecided, 4-Agree, 5- Strongly Agree. Descriptive statistics were analyzed and results presented in Table 4.6.

Table 4.6: Descriptive Statistics for Saving Literacy

Given statements	SD	D	U	A	SA	Total
I have a clear plan for how much I want to save and why	64 (32%)	75 (37%)	38 (19%)	15 (7%)	10 (5%)	202 100%
I save regularly to achieve my financial goals	75 (37%)	60 (30%)	50 (25%)	12 (6%)	5 (2%)	202 100%
I have the discipline to stick to my saving plan	73 (36%)	80 (40%)	39 (19%)	16 (8%)	10 (5%)	202 100%
I am aware of the different saving products available	64 (32%)	73 (36%)	50 (25%)	5 (2%)	10 (5%)	202 100%
I understand the value of saving	50 (25%)	100 (50%)	30 (14%)	12 (6%)	10 (5%)	202 100%

Source (Field Data,2025)

Key: SA=Strongly Agree; A=Agree; UN=Undecided; D=Disagree; SD=Strongly Disagree

The results in Table 4.6 show that 32% of the respondents strongly disagreed, 37% disagreed, 19% were undecided,7%agreed and 5% strongly agreed with the statement on having a clear saving plan and clear reasons for saving. This result suggests that a significant portion of the respondents did not have a well-defined strategy for their savings, which can hinder their ability to effectively manage their finances and work towards their desired saving targets. The high percentage of undecided responses (19%) further indicates a lack of understanding or awareness regarding the importance of having a clear saving plan. These findings are supported by a study by Anderson et al. (2020), that found that individuals who had a clear saving plan, specifying how much they wanted to save and the reasons behind it, were more likely to engage in consistent saving practices and achieve their financial goals.

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Similarly, when asked about saving regularly to achieve their financial goals, 37% of the respondents strongly disagreed and 30% disagreed,25% were undecided while only 6% agreed, and 2% strongly agreed with this statement. These results suggest a lack of regular saving habits among the respondents, indicating a potential gap in their understanding of the importance of saving for achieving financial goals. These study findings are further supported by a study conducted by Smith et al. (2021) that demonstrated that individuals who consistently saved a portion of their income on a regular basis experienced a gradual increase in their overall income and financial stability highlighting why this element of saving literacy is vital.

When it comes to the discipline to stick to a saving plan, 36% of the respondents strongly disagreed, 40% disagreed, and 19% were undecided,8% agreed while 5% strongly agreed with the statement. This finding suggests a lack of discipline and commitment to follow through with their intended saving plans which undermines their efforts to maintain consistent saving behavior and hinders their progress towards achieving their financial goals. The high percentage of undecided responses (19%) also indicates a lack of commitment or a struggle to maintain the required discipline. These findings are in agreement with a study conducted by Johnson et al. (2022) emphasized that individuals who consistently adhere to their saving plans and exhibit strong saving discipline are more likely to experience a significant increase in their overall income and financial security.

Regarding awareness of different saving products available, 32% of the respondents strongly disagreed, 36% disagreed, 25% were undecided,2% agreed and 5% strongly agreed. This implies that a significant portion of the respondents may not be aware of the various saving options and products that can help them effectively manage and grow their savings. This lack of awareness limits their ability to make informed decisions when selecting suitable saving products that align with their financial goals and maximize their savings potential highlighting the need for enlightening such individuals so as to be able to maximize their incomes. These findings are supported by a study conducted by Smith et al. (2021) that found that individuals who were knowledgeable about various saving options and products were better equipped to make informed decisions about their savings, resulting in more effective management and increased income generation.

Finally, in terms of understanding the value of saving, 25% of the respondents strongly disagreed, 50% disagreed,14%were undecided, while only 6% agreed, and 5% strongly agreed with this statement. These results indicate a lack of awareness or appreciation for the importance and benefits of saving. This lack of understanding can undermine their motivation to engage in effective saving practices and hinder their long-term financial well-being highlighting the need for saving literacy. These findings are supported by a study by Johnson et al. (2022), that found that individuals with a deeper understanding of the value of saving were more likely to set specific financial goals, establish emergency funds, and make strategic saving decisions. These findings emphasize the significant role that saving literacy plays in shaping individuals' financial behaviors and outcomes.

The data was subjected to further analysis using Pearson's Correlation to establish whether there was a relationship between saving literacy and household income generation of SACCO members in Machakos County. The results are presented in Table 4.7.

Table 4.7: Pearson's Correlation Analysis between Saving Literacy and Household Income Generation

		Household income
Saving Literacy	Pearson Correlation	.736**
	Sig. (2-tailed)	.034
	N	202

Source (Field Data,2025)

*. Correlation is significant at the 0.05 level (2-tailed).

The results in Table 4.7 show that there is a strong positive and statistically significant correlation (r=0.736, p =0.034) between saving literacy and household income generation of SACCO members in Machakos County. This means that saving literacy is necessary for enhanced household income generation among SACCO members in Machakos County. This agrees with the findings by Brounen et al., (2018) who also established a positive significant correlation between saving literacy and household income among SACCO members in the United States of America.

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The study further sought to establish the role of saving literacy on household income generation among SACCO members in Machakos County. To achieve this the study tested the first null hypothesis which stated that:

H_{o1}: *Saving literacy has no significant role in household income generation among SACCO members in Machakos County, Kenya.*

This analysis was done using simple linear regression and the results are presented in Table 4.8.

Table 4.8: Regression Coefficients for Saving Literacy

R^2	β	F	t	*p*
.542	.46	238.068	3.286	0.034

Source (Field Data,2025)

From table 4.8 it is noted that the goodness of fit for the regression between saving literacy and household income generation in SACCO members in Machakos County was satisfactory.

An R^2 of 0.542 indicates that 54.2% of the household income generation of SACCO members is explained by saving literacy. Saving literacy significantly affects the household income generation of SACCO members in Machakos County, according to the F- value of 238.068 and $p< 0.05$. The null hypothesis that Saving literacy has no significant role in household income generation among SACCO members in Machakos County, Kenya was rejected by a t value of 3.286 that was greater than the critical t value and a P value that was less than 0.05. The study came to the conclusion that an important factor influencing household income generation in of SACCO members was Saving literacy. This agreed with Tung and Vuong (2022) that saving literacy plays a significant role in increasing household income generation.

5.1 CONCLUSION

The study concludes that saving literacy has a positive and significant role on household income generation among SACCO members in Machakos county, Kenya. An increase in saving literacy led to increase in household income generation emphasizing the need for saving literacy in household income generation among SACCO members in Machakos County, Kenya.

5.2 The study Contribution

The significance of this study lies in its unique contribution to knowledge regarding the role of saving literacy in household income generation. While many previous studies in Kenya have only looked at the relationship between financial literacy and personal financial management this study contribution goes beyond to show the role of saving literacy on household income generation which is vital to several stakeholders. These stakeholders include the policy makers, SACCO members and administrators, economists, financial experts, potential investors, government administrators, marketers, and academicians, who can all benefit from the study's findings in making informed saving decisions and shaping policies. By addressing this research gap and shedding light on the relationship between saving literacy and household income generation in developing countries like Kenya, the study has the potential to empower investors, aid SACCOs in improving their services, and ultimately foster economic well-being and increased income generation.

5.3 Policy Recommendations

From the study findings and conclusions, the study makes the following recommendations: The government should prioritize improving saving literacy upon households even as it continues with initiatives to increase formal financial access, with SACCOs playing a crucial role through saving literacy programs and workshops aimed at imparting saving literacy. Collaboration with educational institutions, financial institutions, and government agencies is essential to develop comprehensive saving literacy and in general financial literacy programs. By implementing these recommendations, SACCO members and other households will acquire essential saving literacy skills, resulting in improved household income generation and long-term economic growth for the country which will help rescue the country of Kenya and other developing countries from the current economic crisis.

5.4 Limitation of the Study

The study faced certain limitations that warrant acknowledgment. Firstly, it encountered non-cooperation from two of the SACCOS during the data collection exercise, potentially affecting the total number of respondents the study aimed to include. To address this issue, the researcher, in consultation with the supervisors, opted to compensate for the missing data from these SACCOS by gathering additional data from the SACCOS that exhibited full cooperation. This strategic decision was taken to uphold the study's intended scope and validity.

Secondly, the sensitivity of the data was a concern for some respondents. To mitigate this challenge, the researcher provided reassurance to these participants, emphasizing the strict confidentiality measures that would be in place to safeguard their information. This assurance fostered a greater level of cooperation from these respondents.

Lastly, language barriers emerged as a notable obstacle, particularly with elderly and illiterate respondents. To surmount this challenge, the researcher sought assistance from SACCO officials who acted as proficient interpreters. Their support in explaining the questionnaire's statements to these participants facilitated a smoother and more effective data collection process.

Despite these limitations, the study maintained a well-designed methodology and data collection approach to uphold the credibility and reliability of the findings.

5.5 Areas for Further Study

Future studies should consider other variables of financial literacy such as, financial technology literacy and risk literacy so as to provide a more comprehensive and elaborate findings on the concept of financial literacy as whole.

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