

**AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND
ENTREPRENEURIAL DEVELOPMENT**

**WOMEN ACCESS TO CREDIT AND ITS IMPLICATIONS ON HOUSEHOLD
WELFARE IN GHANA: THE CASE OF VSLA MODEL IN GUSHIEGU**

ABDULAI ABDUL RAZAK

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**A THESIS SUBMITTED TO THE DEPARTMENT OF ACCOUNTING STUDIES
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PHILOSOPHY (ACCOUNTING)**

OCTOBER 2023

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree at this university or elsewhere.

Candidate's Name: **ABDULAI ABDUL RAZAK**

Signature: Date:

Supervisors' Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development.

Supervisor's Name: **DR. LISTOWEL OWUSU APPIAH**

Signature: Date:

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DEDICATION

I gladly dedicate this thesis to my family and lovely wife.

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ABBREVIATIONS

| | |
|--------|--|
| VSLA | Village savings and loans associations |
| UN | United nation |
| NBFIs | non-banking financial institutions |
| GOG | Government of Ghana |
| FNSSP | Financial sector strategic plan |
| UNDP | United Nations Development Program |
| SIF | The Social Investment Fund |
| CBRDP | Community Based Development Program |
| ASSIP | Agricultural Services Investment Project |
| MASLOC | Microfinance and Small Loans Centre |
| BOG | Bank of Ghana |
| LEAP | Livelihood Empowerment Against Poverty |
| NGOs | Non-Governmental Organizations |
| ROSCAs | Rotating Savings and Credit Associations |
| SDGs | Sustainable Development Goals |
| FNGOs | Financial nongovernmental organizations |
| MIF | Micro Finance Institutions |
| ESPs | Endogenous switching regressions |
| CARE | Cooperative for Assistance and Relief Everywhere |
| BAC | Business advisory center |
| CCP | Community contact person |
| CBOs | Community based organization |

| | |
|------|--------------------------------|
| IPA | Innovation for poverty actions |
| IGA | Income generating activities |
| SHGs | Self-help group |
| FSW | Female sex workers |
| CCU | Consistent condom use |

ABSTRACT

This thesis examines the impact of women's access to credit on household welfare, focusing on the Village Savings and Loans Association model in Gusheigu, Northern Region of Ghana. Primary data from 280 Village Savings and Loans Association members and 200 non-members were collected through structured questionnaires and analyzed using correlation and regression techniques in SPSS. The findings reveal a positive correlation between Village Savings and Loans Association participation and household income, challenging the null hypothesis that there is no significant link between Village Savings and Loans Association participation and increased household income. The rejection of this hypothesis, supported by a noteworthy p-value of .010, underscores the positive effect of Village Savings and Loans Association participation on household income. Contrastingly, the study did not find support for a relationship between Village Savings and Loans Association participation and household health status or the educational outcomes of children in participant households. Despite these limitations, the research suggests that Village Savings and Loans Association programs hold transformative potential for practitioners aiming to enhance household welfare through tailored financial inclusion initiatives. Policymakers are encouraged to integrate Village Savings and Loans Association models into broader financial inclusion strategies, leveraging their demonstrated impact on household income and healthcare access. While the study did not directly link Village Savings and Loans Association participation to educational outcomes, policymakers should explore complementary interventions to comprehensively address this aspect of empowerment. Overall, these findings position VSLA programs as a viable strategy for promoting healthcare access and improving household income in marginalized communities.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The problem of limited financial access is widespread and has serious repercussions, especially for women. This inequality impedes women's advancement toward economic parity and sustains gender-based inequality (Bardasi, Sabarwal & Terrel, 2011; Marlow & Patton, 2005). Compared to their male counterparts, female entrepreneurs have more difficulty securing financial support, which has a negative impact on their company's performance and upholds economic and social inequality. When financial resources are scarce, access to essential reproductive health care can be hampered. Having control over one's assets and improving general well-being empowers women while also fostering wider economic and social inclusion (Alomair, Alageel, Davies & Bailey, 2020).

Despite the great progress that microfinance has made in reaching the unbanked, an estimated two billion adults worldwide still lack access to a transaction account and remain excluded from the financial system (World Bank, 2014). The majority of poor women still have no access to financial services from both conventional banks and formal microfinance institutions because of a lack of collateral and other requirements such as identity papers (Annim & Alnaa, 2013). Poor road quality, low population density, and small transactions are the major factors that constrain formal microfinance institutions from reaching the remaining unbanked, especially poor women in rural areas (VSL Associates, 2015). As a result, the welfare, defined in terms of access to quality healthcare, better education, political and economic empowerment, higher income among others, of majority of women

is still low compared to men. For example, globally, 70% percent of the poor are women (World Bank, 2014). According to the State of the Microcredit Summit Campaign (2012) Report, the number of the poorest women in the world increased from 10.3 to 113.1 million from 1999 to 2010. Also, in Ghana, about 65% percent of women live in absolute poverty, while women are still excluded from decision making in most households due to lack of financial empowerment, among others (Boateng, Boateng & Bampoe, 2014; World Bank, 2014). Moreover, access to financial services is heterogeneous across regions. In terms of regions, the five poorest regions (Upper West, Northern, Volta, Upper East, and Brong Ahafo) remain the most financially excluded, despite the largest gains in financial inclusion taking place in these areas. Similarly, rural residents and women have less access to banks than do their urban and male counterparts. Rural residents, women, and the poor rely more heavily on non-bank financial institutions (NBFIs) and informal financial services than do urban residents, men, and the non-poor (World Bank, 2018).

Putnam (1993) underscores the importance of community relationships and networks in yielding tangible benefits for their members, particularly through trust, reciprocity, and shared norms that facilitate economic cooperation and resource sharing. In the context of women's involvement in Village Savings and Loans Associations (VSLA), the social capital engendered by these groups can significantly contribute to the overall well-being of households by providing increased access to credit and financial resources, thereby influencing household economic activities and welfare (Woolcock, 1998). Additionally, Olson (1965) highlights the potency of collective endeavors in achieving common objectives. In the context of VSLA, the collective action of women pooling financial

resources, engaging in joint decision-making, and making investments can lead to improvements in income-generating activities and enhance the overall welfare of participating households (Olson, 1965).

Studies conducted in Ghana have delved into factors influencing women farmers' access to credit, revealing a range of socio-economic, technical, and institutional elements (Akudugu, Egyir & Mensah-Bonsu, 2009). These include education level, loan application procedures, access to land, income level, and more, significantly affecting access to credit for women farmers. Similar research in Nigeria highlighted that fewer women compared to men access credit, shedding light on the gender disparity in credit availability (Silong & Gadanakis, 2019). Market imperfections and intrahousehold dynamics, including limited information and gender-based power dynamics, further obstruct rural women's access to credit (Niyonkuru & Barrett, 2021).

The adoption of information and communication technology (ICT) has demonstrated significant potential for improving credit access for women in rural areas, enabling them to purchase productive assets and attain economic empowerment (Kevane & Wydick, 2001). Access to microfinance, particularly for female participants, has been found to contribute to poverty reduction at the village level (Khan, Fahad, Ali, Khan & Luo, 2021). Micro-credit programs have been identified as a critical strategy for addressing gender poverty relations within households, leading to increased household income (Idris & Agbim, 2015; Badri, 2013). However, it is essential to adopt a balanced approach to credit allocation, considering both gender equality and economic growth (Kevane & Wydick, 2001).

Microfinance has emerged as a prominent force in development economics, reaching over 100 million underprivileged families worldwide by 2007 (Daley-Harris, 2009; Brannen, 2010). The United Nations recognized the pivotal role of microcredit in improving household welfare and reducing poverty in 2005, while Mohammed Yunus and the Grameen Bank received the Nobel. Nevertheless, despite progress in financial inclusion, regional disparities persist, with rural inhabitants and women facing greater barriers to accessing banks compared to their urban and male counterparts (World Bank, 2018). The Government of Ghana (GoG) has implemented several policies and programs with the aim of alleviating poverty, especially among vulnerable populations. These policies also aim to empower women and improve their wellbeing. Some of those projects include: financial sector improvement projects; financial sector strategic plan (FNSSP); rural financial services projects; the United Nations Development Programme (UNDP); the Social Investment Fund (SIF); community-based development programs (CBRDP); rural enterprise projects; agricultural services investment projects (ASSIP); and recently, the Microfinance and Small Loans Centre (MASLOC) (Bank of Ghana (BOG), 2007). Social intervention policies such as Livelihood Empowerment Against Poverty (LEAP), the Capitation Grant, the School Feeding Programme, and now the Free Senior High School Programme are being implemented to alleviate poverty and improve the welfare of the population.

1.2 Problem Statement

The empirical evidence regarding the impact of VSLAs on household welfare and poverty reduction is both limited and conflicting (Ksoll, Lillor, Lonborg & Ramussen, 2015; Chidimbah Munthali, Wu, Nambiro, Wolesson, Dzimbiri, Zolo, Mushan & Banda, 2022).

Some studies suggest that VSLAs contribute to improved household and individual welfare through increased spending on assets, the creation of income-generating activities, higher investments in health and education services, better nutrition, and the empowerment of women (Brannen & Connor, 2016; Harelimana, 2018; Salia, 2018). However, other researchers (Beaman, Thuybaert & Karlan, 2014; Okurut, Kagiso, Ama, & Okurut, 2014; Mtamakaya, Kessy, Jeremia, Msuya & Stray-Pedersen, 2018) have found no significant connection between VSLA membership and self-reported health status, access to healthcare, or knowledge of health indicators relevant to health promotion. Kumuur, Kwadwo, and Alexander, (2015) argue that women's access to credit through microfinance can lead to increased instances of domestic violence, as the economic and political empowerment of women within the household may challenge male dominance, potentially resulting in abuse from husbands and other male household members. In developing countries, the limited access to finance for women-owned small and medium enterprises exacerbates the problem, hindering the advancement of women's entrepreneurship and their economic prospects (Ahmad & Arif, 2015). This restriction stifles women's capacity to initiate and expand businesses, curbing their economic potential and inhibiting innovation. Research emphasizes the pivotal role of women's entrepreneurship in propelling economic growth and generating employment opportunities, underscoring the missed societal benefits of not addressing this crucial issue (Bardasi, Sabarwal & Terrell, 2011). Discrimination in the small-business credit market, influenced by factors like gender bias and stereotypes, is a significant contributor to the credit availability disparity for women (Chaudhuri, Sasidharan & Raj, 2020).

According to the findings from earlier research mentioned above, there is still no agreement among academics on the relationship between VSLA involvement and household welfare. Therefore, more research is required to determine how VSLA affects household wellbeing, particularly for rural women in Ghana's Northern Region. The processes, experiences, and impacts of the VSLAs have also been the subject of numerous studies since they were first implemented in Ghana. There is still little knowledge on how VSLAs affect household wellbeing in rural areas, despite several studies. This is primarily because many studies only consider the VSLA's role in reducing poverty in Ghana. For instance, studies by Stuart and Ananga (2015) and Abukari, Sadik and Keisan (2014) are only two of many that have a sole focus on household welfare. Therefore, it is still necessary to evaluate and record the VSLA's contribution to household welfare in Ghana's rural areas. By performing empirical research on the impact of VSLAs on household welfare among women and their families in Gushegu Municipality, Northern Ghana, this study aims to close the gap.

1.3 Research Objectives

1.3.1 Main objective

The main objective is to investigate women's access to credit through the Village Savings and Loans Association (VSLA) model and its impact on household welfare in Gushegu.

1.3.2 Specific objectives

1. To examine women's contribution of village savings and loans association (VSLA) on household income.
2. To evaluate women's contribution of village savings and loans association (VSLA) on household health.

3. To determine women's contribution of village savings and loans association (VSLA) on children education.

1.4 Research Questions

1. What is the women's contribution of village savings and loans association VSLA to household income?
2. What is the women's contribution of village savings and loans association VSLA to household health?
3. What is the women's contribution of village savings and loans association VSLA on children education?

1.5 Significance of the Study

The association between VSLA and household well-being has not been extensively studied in the Gushiegu Municipality. Even previous studies (Nanor, 2008; Abor & Quartey, 2010; Annim & Alnaa, 2013; Sekyi, 2017) tended to focus on poverty alleviation and microfinance in general, with less focus on other rural communities (Alatinga & Alatinga, 2016). The findings of this study may therefore advance our understanding of how savings groups enhance rural households' welfare and women's access to credit. Many stakeholders and practitioners will find the study useful, especially those who organize and implement poverty interventions.

Additionally, this study will help advance the financial inclusion of women by increasing our understanding of the requirements, preferences, and behaviors of women and their households in rural Northern Ghana. The study's results may also help improve financial

services and products for women and their homes, which is even more significant. The study will also offer policy and research recommendations to the Ghanaian government on how to enhance household welfare, with a special emphasis on women in rural Northern Ghana. This study will also add to the body of knowledge on women's financial access and how it affects household welfare, particularly in Ghana. The study intends to add to the corpus of knowledge in the field of microfinance, with a focus on community-managed strategies for eradicating poverty. The findings of this thesis will be communicated to municipal authorities and non-governmental organizations (NGOs), such as RING, so that they can be directed to places where they are most required in terms of reducing poverty and addressing welfare issues relevant to their goal. Last but not least, this study will make recommendations for future studies on women's access to credit and its impacts on household welfare.

1.6 Scope of the Study

The goal of the study is to learn more about how the VSLA intervention has impacted household wellbeing in Gushiegu Municipality. The impact on household income and welfare indicators like health, education, and women's empowerment are the study's key areas of attention. Rural populations in Ghana's northern region have access to a number of loans and savings options, yet VSLA is still distinct and of interest to this study. The home will be the unit of analysis so that we may fairly comprehend how it functions.

1.7 Limitations of the Study

These studies have several methodological limitations. The reliance on self-reported surveys introduces a potential for social desirability bias, potentially leading respondents to overstate their household income for a more favorable presentation. This could result in an overestimation of the positive effects of credit access on income. The study's ability to gather accurate data has been affected by factors like recall bias or misinterpretation of survey questions, potentially impacting the validity of the findings. Moreover, the research model has limited capacity to account for external variables or confounding factors that could influence household income, potentially leading to an incomplete understanding of the complex dynamics involved.

1.8 Organization of the Study

This report is structured into Six chapters. The initial chapter includes a problem statement, the study's objectives, research questions, and a contextual background on women's access to credit and its implications for household welfare in Ghana. The second chapter includes an introduction, theoretical review, review of concepts, review of empirical studies, lessons learned, conceptual framework, and summary of the chapter. Chapter three covers the research methodology. This chapter includes an introduction, information about the study area, study population, research design, sampling technique, sampling size, an explanation of the sampling and data collection methods, methods of data analysis, validity and reliability, ethical considerations, and an outline of the questionnaire and interview formats utilized. The fourth chapter presents the introduction of the chapter and the results of the study. The next chapter, which is chapter five, presents the discussion of findings, and the last chapter presents the conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section of the report reviews relevant literature on the subject matter. The chapter outlines the theoretical, conceptual, and empirical frameworks of the study. The theoretical framework focuses on relevant theories associated with VSLA and welfare, while the conceptual review explores the relevant concepts associated with the study. The empirical framework, on the other hand, looks at some of the studies that have been conducted on the subject matter.

2.2 Theoretical Framework

A theory, in the words of Kerlinger (1964), is a grouping of related ideas, definitions, and claims that offers a systematic view of phenomena by laying out the interrelationships between variables with the intention of understanding and predicting the occurrences. This section discusses theories relating to voluntary associations. The objective is to pinpoint the elements responsible for the forces supporting the growth of savings organizations like the VSLA. The two concepts that guided the investigation were examples of social capital theory and collective action theory, including the following:

2.2.1 Collective Action Theory

Collective action theory, as defined by Davis, (1991), pertains to actions taken by a group, either directly or through an organization, in pursuit of shared interests among its members. McCarthy (2004) further elaborates on this, characterizing collective action as a collaborative effort by a group of individuals working towards a common goal, where the outcome hinges on the mutual reliance of participants. VSLAs, by virtue of their emphasis

on aiding marginalized groups, particularly women, in collective financial endeavors, exemplify such organizations (Oniang, 2004). They achieve this through regular meetings where members contribute shares, receive payments, and monitor each other's conduct. The funds received serve various purposes, including consumer goods, savings, support for supplementary businesses, travel, or migration (McCarthy, 2004).

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Furthermore, VSLAs employ mechanisms like group self-selection and mutual monitoring to discourage free-riding, a significant challenge in collective action. In informal credit markets, it is social consequences rather than economic ones that primarily deter defection (Ardener, 1964). VSLA members face public reprimands as a form of sanction to dissuade others from similar behavior (Allen & Staehle, 2007).

Collective action theory was chosen over alternative theories for two main reasons. Firstly, it offered a more profound insight into the elements that encourage organization and collaboration within the local context. Secondly, the beneficial impact of VSLAs on rural communities is likely linked to improved accessibility to financial services and an elevated standard of living for those in need. The structure and functioning of VSLAs exemplify successful instances of group effort and provide a positive resolution to challenges related to coordination and mutual reliance (Ostrom, 1990).

2.2.2 Social Capital Theory

In recent times, social capital has garnered significant attention from both scholars and development practitioners. While social capital encompasses various attributes, this study delves into its dimensions as expounded by Bourdieu (1986), Flora (2008), and Nam (1999). At the individual level, Bourdieu (1986) defines social capital as "the total of tangible or potential resources associated with the possession of a durable network of more or less institutionalized relationships characterized by mutual recognition and acquaintance." Bourdieu's perspective centers on the personal level and asserts that one's social capital hinges on the scale of their network and the resources they acquire through their involvement in it. Flora (2008) frames social capital at the community level,

identifying it as a "feature of communities that goes beyond merely aggregating individual social capital." Consequently, social capital is seen as an inherent characteristic of interactions within a collective or society.

Nam (1993) characterizes social capital as "resources acquired through social connections," emphasizing the individuals, affiliations, and access to relationships within the network or group to which they belong. In this context, Nam defines capital as a social asset, distinguishing between personal resources (such as material possessions and symbolic items like certificates) and social resources (which are accessed through interpersonal relationships). Impoverished individuals can leverage their social networks and engage in group endeavors, like establishing savings associations (such as VSLAs), to achieve shared objectives and fortify the norms of trust that foster collaboration. (Bourdieu, 1986; Flora, 2008; Nam, 1993) regard social capital as a resource embedded in social connections and interactions that facilitate collective action, despite differing conceptualizations and levels of analysis. In underdeveloped rural areas, participation in credit associations like VSLA is pivotal for enhancing other crucial capital and securing access to loans. Social networks play a pivotal role in obtaining loans in situations where financial services are not readily accessible (Benda, 2013).

2.3 Definition of Concepts of the Study

In the research process, it is imperative to establish a conceptual definition for a specific concept or construct, allowing for objective assessment (McKinney, 2008). The next section thoroughly explores key concepts in the study, encompassing welfare, households, microfinance, and VSLA.

2.3.1 Welfare

There is a vast amount of literature on the concept of welfare and its measurement, especially at the household level. While some studies focused on the monetary dimension of welfare, specifically household income as a measure of household welfare (Quach, 2005; Baye, 2013), others (Mwansakilwa, Tembo, Zulu & Wamulume, 2017; Seng, 2017) used consumption expenditure instead. Consumption is preferred over income as a welfare indicator, in the opinion of those who support the idea (Lekobane & Seleka, 2014). They also claim that consumption fluctuates less than income, making it possible to measure an individual's long-term permanent income with greater accuracy and less volatility. Additionally, respondents are more ready to discuss their consuming habits than their income while completing surveys (Shivaram & Azevedo, 2023).

Additionally, income has come under fire for allegedly underestimating genuine welfare because people have a tendency to underreport their income or struggle to quantify it when it comes from capital gains and self-employment (Singh, Peres & Watt, 2019). Last but not least, people who engage in various revenue-generating activities in a year may find it challenging to remember and aggregate their income, which could lead to measurement inaccuracies (Lekobane & Seleka, 2014).

However, others, such as the UNDP, saw that wellbeing or welfare is a multidimensional concept and may involve multiple aspects, including income per person, as well as other indicators like education, health, and political empowerment (UNDP, 2015). This study therefore adopts the UNDP multidimensional concept to measure household welfare.

Therefore, household income, household health, children's educational access, and women's participation in decision-making were used as indicators to measure household welfare.

2.3.2 Microfinance

According to Khimesra (2018), microfinance can be broadly classified into three primary categories: formal, semi-formal, and informal. The formal sector encompasses various financial institutions, including postal savings, commercial, cooperative, development, and regional rural banks, as well as insurance companies, social security and pension funds, and in some nations, capital markets. This sector is subject to regulation and supervision by the governing authority. In Ghana, the Bank of Ghana serves as the main regulator for all commercial banks. In the semi-formal sector, there are community development financial institutions such as credit cooperatives, credit unions, village banks, farmers' associations, self-help groups, integrated rural development initiatives, and financial initiatives conducted by non-governmental organizations. Although this sector lacks licensing and often operates without stringent oversight, some entities may adhere to specific laws and regulations. While certain groups, like NGOs, may provide microcredit, they are often not authorized to actively promote public savings. Certain semi-formal credit cooperatives, credit unions, and similar credit societies may extend both savings and loan services to their members (Kumuur et al., 2015).

In various economic and geographic contexts, the unorganized sector offers financial support to households and small businesses. Informal financial markets are commonly observed and are characterized by individual operators, close interpersonal relationships,

straightforward procedures, swift transactions, and flexible loan terms. As highlighted by Kumuur et al. (2015), notable entities in the informal sector encompass Rotating Savings and Credit Associations (ROSCAs), Accumulating Savings and Credit Schemes (ASCAs), and Village Savings and Loans Associations (VSLAs).

Mayo and Mullineux (1998) classified development financial institutions into five distinct categories: credit unions, community lending funds, microfinance funds, mutual guarantee societies, and social banks (in the UK). The informal sector typically includes: (i) Rotating Savings and Credit Associations (ROSCAs), where members have the ability to save and borrow; (ii) Individual Money Lenders and Savings Collectors who function as pawnbrokers; (iii) Professional Moneylenders, including commodity wholesalers, shopkeepers, traders, employers, and landlords; and (iv) Relatives, friends, and neighbors from whom individuals in need can borrow, typically for short-term loans.

As stated by the Bank of Ghana (2007), Ghana hosts three of the aforementioned categories of microfinance institutions, namely:

Formal providers of microfinance, such as commercial banks, savings and loan organizations, and rural and community banks. Semi-formal providers of microloans, such as cooperatives, credit unions, and financial nongovernmental organizations (FNGOs); Informal providers of microloans include traders, moneylenders, and other people (such as Susu collectors' clubs, rotating and accumulating savings and credit associations (ROSCAs, ASCAs, VSLAs), and clubs and traders.

To reach their clientele, microfinance institutions (MFI) use a wide range of implementation techniques. Models of MFI are the names of these techniques. There are fourteen main microfinance models, of which three are primarily used in Ghana, according to the Grameen Bank. According to Grameen Bank (2000), they include formal microfinance, rotating savings and credit associations (ROSCAs), and village savings and loan associations (VSLAs). However, Village Savings and Loan Associations (VSLAs) are the subject of the investigation.

2.3.3 VSLA Methodology

The VSLA model was introduced by CARE International in Niger in 1991 and has since garnered the global participation of over 12 million active members. This innovative approach has now been adopted in at least 73 countries spanning Latin America, Asia, and Africa. The genesis of VSLAs was influenced by the practice of rotating savings and credit associations (ROSCAs) (Ksoll, Lillor, Lonborg, & Ramussen, 2015; Mwansakilwa, Tembo, Zulu & Wamulume, 2017). According to the VSLA methodology, the conventional delivery of microfinance services in Africa is often considered economically unviable due to factors such as vast and sparsely populated regions, higher levels of illiteracy, and a widespread lack of identity documentation, all of which contribute to increased credit risk and transaction costs (VSL Associates, 2015). The VSLA model has the potential to reach economically disadvantaged and remote populations more effectively compared to traditional, centralized microfinance institutions. Through VSLAs, individuals with fewer privileges have the opportunity to effectively manage their own finances (Allen, 2006).

Most loans within the group carry an interest rate set by the members, typically at 5% per month. This rate is slightly higher than what money lenders typically charge, which can go up to 30% per month (Mutesasira, 1999), but it is lower than the rates of NGO-MFIs, which usually charge less than 4% per month. Each group has the autonomy to determine its own repayment schedule. However, in a VSLA, missing a loan installment is not met with penalties, as this could worsen any existing challenges the household may be experiencing. According to Allen & Staehle (2007) and Ksoll et al. (2015), the embarrassment of defaulting on a loan payment is considered sufficient as a form of consequence.

Village Savings and Loan Associations (VSLAs) operate a welfare fund, functioning as an internal, straightforward insurance pool designed to provide support to members during challenging situations. Each member contributes a fixed, regular amount to this fund. Typically, the actual weekly savings contributions of members to the common pool are much smaller than those to the welfare fund. The welfare fund can be utilized for various purposes, including funeral expenses, immediate aid, and school expenses for orphans. The VSLA approach is commended for its inclusivity and openness towards individuals with varying literacy levels.

All financial activities, including deposits, withdrawals, loans, and loan repayments, occur during weekly meetings with all members present, ensuring complete transparency. Additionally, record-keeping is kept as simple and transparent as possible. Each week, a stamp equivalent to one share is placed in the passbook of every member (Allen & Staehle, 2007).

Unlike ROSCAs, which can operate independently, VSLAs can only partially expand without external assistance (Ksoll et al., 2015). This difference may stem from the relatively complex accountability features of VSLAs. After conducting awareness meetings in each targeted village, the promoting organization (Gushiegu Municipal Assembly through its Business Advisory Centre (BAC)) facilitates the formation of groups and offers comprehensive training on group dynamics, governance, and money management (Mwanskilwa et al., 2017). The VSLA training program is divided into four phases. During the initial three-month phase, a BAC field officer makes weekly visits to the group, leading training sessions on group dynamics. The field officer also selects and trains a Community Contact Person (CCP) or village trainer who resides in the target community and is compensated by the VSLA rather than the BAC (Mwanskilwa et al., 2017). As the groups begin to rely more on the CCP in the second phase, the field officer reduces visits to once or twice a month. If the CCP passes a certification exam in the third phase, usually after a year of supervision, the field officer will transition to another site and start anew. In the fourth phase, as per the original VSLA model, a group can operate independently with no external support once it is mature (Safaa, 2015).

Various researchers have described VSLAs in different ways. For example, Jain (1996) defined VSLAs as community-based organizations (CBOs) that encourage individuals to pool their resources and save money in order to eventually borrow. Allen (2006) emphasized that a VSLA framework is characterized by a group system focused on financial services, specifically savings without taking on external debt. This framework also involves self-discipline, transparent and uncomplicated procedures, flexibility in loan

sizes, earnings retention within the group, and management costs covered by group earnings. Innovations for Poverty Action (IPA, 2012) included a summary of the numerous characteristics of VSLAs in its definition. According to this, a group qualifies as a village savings and loan association if it meets the following criteria: it accumulates money over time; its members meet once a week; they are allowed to borrow money from the group; they have received or anticipate receiving a share-out; its members were formed with the help of a trainer; and its members deposit money in a box. This definition by IPA was employed in this study. Therefore, a Village Savings and Loan Association (VSLA) is described as "a group of 15 to 25 self-selected individuals who save jointly and obtain small loans from those savings.

2.4 Empirical Review of Studies on VSLA and Household Welfare

2.4.1 Contribution of VSLA to household income

Numerous studies have explored the various impacts of VSLAs and savings clubs, particularly on the income levels of female participants and their households. For instance, Beyene and Dinbabo (2019) investigated the effect of women's participation in the Village Savings and Loans Association (VSLA) on reducing poverty in Hawassa, Ethiopia. Brannen and Connor, (2016) used established VSLA members as the treatment group and new members as the control group in Tanzania. Their findings revealed that current members engage in more income-generating activities (IGA) and allocate a greater portion of their earnings to family well-being compared to new members, who comprised only 31% of the control group in the study. Similarly, Matthews, Musoke and Green (2010) determined that VSLAs are effectively aiding members in achieving their intended

objectives, as demonstrated by their influence on livelihoods and market potential in Kenya.

Participants who obtained loans from VSLAs were able to invest in various income-generating ventures. Furthermore, Ding (2018) discovered that involvement in microcredit significantly raises per capita income and consumption, even after accounting for selection bias and treatment effects. This was deduced from cross-sectional survey data from China, utilizing a multinomial endogenous switching regression model. A study by Kumar (2009) uncovered that rural households can augment their income through participation in self-help group activities. The increase in income for participating households amounted to 19.34% over non-participating control households. These findings indicate a substantial and positive influence on household income.

Adams, Mohammed and Kwakye (2014) adopted a similar cross-sectional design to assess the impact of VSLAs on rural livelihoods in the Bole District of Northern Ghana. Their study indicated that a higher percentage of respondents—up to 74.2%—invest a greater portion of their loans and savings in income-generating activities (IGAs).

Ampah, Ambrose, Omangwa and Frimpong's, (2017) study identified a weak connection between access to credit and income growth, women's access to credit and increased consumption, and access to credit and the acquisition of business assets. However, they did find a significant positive correlation between women's access to finance and welfare measures, including their ability to support children. In a randomized analysis of savings

groups in Mali, Beaman et al. (2014) found no significant effect. Similarly, Karlana, Savonitto, Thuysbaert and Udrya (2017) conducted a randomized control trial involving 561 clusters, of which 282 were randomly assigned to the treatment group and the rest to the control group of saving groups across the country. However, they found limited evidence of increased small business activities or income-generating activities among participants.

2.4.2 Contribution of VSLA to Household Health

Access to microcredit, such as through initiatives like VSLAs, is widely acknowledged to have various positive effects on household health. One of these impacts is its role as a conduit for disseminating health-related information to participants (Littlefield, Morduch & Hashemi, 2003). Moreover, it is believed that access to microcredit contributes to the realization of SDG 4, which seeks to "ensure a healthy life and promote wellbeing for all." Participating in a microcredit program can, as noted by Peprah (2018), enhance health by preserving, repairing, and restoring the health of participants and their households. In order to assess the long-term effects of VSLAs, Brannen (2010) specifically included only the most established VSLA groups and participants (those existing for over a year) in the study's sample. The control group consisted of new VSLA members (participants) in recently formed VSLA groups that had not yet begun saving or borrowing. The treatment group, on the other hand, comprised mature VSLA members with significantly more years of participation in VSLA compared to the control group. According to the findings, VSLA participants had greater access to healthcare services (23%). The study also revealed that a higher percentage (96%) of non-participants occasionally faced difficulties in accessing

healthcare services compared to 69% of participants. Additionally, households affiliated with VSLA allocated more of their budget to healthcare compared to non-participant households. Moreover, more children in VSLA households slept under mosquito nets compared to those in non-VSLA households (Brannen, 2010).

Similar results were observed by Brannen and Sheehan-Connor (2012), who found that individuals with longstanding involvement in VSLAs exhibited better nutritional and health outcomes than a control group of recently enrolled households. Furthermore, Mantsios, Galai, Mbwambo, Likindikoki, Shembilu, Mwampashi and Kerrigan (2018) conducted an assessment on the association between participation in community savings groups and consistent condom usage (CCU) among female sex workers (FSW) in Iringa, Tanzania, using a cross-sectional survey. Their research suggested that community savings groups could play a crucial role in comprehensive, locally driven HIV prevention programs for FSW by significantly reducing the sexual risk behaviors of FSW. The establishment of village savings and loan associations, according to Abukari et al. (2014), has positively impacted the nutrition and health of children residing in beneficiary households.

2.4.3 Contribution of VSLA to Children's Education

Fostering human capital development is crucial for elevating living standards and diminishing poverty. The knowledge and skills individuals acquire through formal education, training, and experience are instrumental in shaping personal, social, and economic wellbeing (Becker, 1993). Research has illustrated the influence of savings networks like VSLA, particularly in rural settings, on the education of children.

For example, Solange and Mulyungi (2018) explored the role of VSLAs in assisting families in the SOS children's village in Rwanda in establishing sustainable rural livelihoods. The findings reveal that long-standing VSLA members allocated a significantly higher average of their income toward education compared to those who were not involved or were new to VSLAs. Moreover, participation in VSLAs notably reduces the likelihood of children dropping out of school within the family. Similarly, Salia (2018) investigated the impact of microcredit on the wellbeing of households with female borrowers in Tanzania. Utilizing survey data from 400 respondents, including 217 borrowers and 183 non-borrowers, the study revealed that borrowers utilize a portion of their loans to support their children's education, including purchasing books and uniforms as well as covering school fees.

Adjei, Arun and Hossain, (2009) discovered that engaging in a micro-credit program like VSLA leads to an increase in households' spending on children's education. Additionally, Cameron and Ananga (2015) conducted a case study and literature review to explore if access to credit through VSLA enhances educational outcomes in Ghana. The results demonstrated that programs involving savings groups, such as VSLAs, aid impoverished rural households in meeting the educational needs of their children. Furthermore, households use loans not only to directly cover school expenses but also to invest in income-generating activities that allow for sustained educational expenditures. Habte (2016). observed that participating in microfinance serves as a form of insurance to mitigate adverse income shocks and consumption fluctuations, ultimately safeguarding the educational achievements of household members. You and Annim (2013) investigated the

causal impact of gaining access to formal microcredit on school attendance in rural Ghana, finding a positive influence on child attendance. The study also revealed that microfinance clients may receive additional non-financial services, including guidance on the importance of educating children. Such guidance could potentially alter clients' perspectives, ensuring regular school attendance and retention.

However, Bannor, Oppong-Kyeremeh, Derkyi, Adombila and Amrago (2020), in a study conducted in rural Tanzania, found that among VSLA participants, investing in children's education ranked lower in priority compared to other needs such as household expenses, repaying loans, boosting business income, and covering healthcare costs. Moreover, some scholars (Hazarika & Serangi, 2008) contend that increased production and investment resulting from microcredit usage might lead to children dropping out of school, potentially reducing attendance. Batinge (2018) arrived at similar conclusions, suggesting that continuous access to microloans may compel female beneficiaries to withdraw their daughters from school to assist with household chores or engage in hawking, facilitating the repayment of the microloans.

2.4.4 Contribution of VSLA to Women participation in decision-making

The proposed Sustainable Development Goal (SDG) 5, which aims to "Achieve gender equality and empower all women and girls" (Linde & Spencer, 2015), underscores the global importance of women's empowerment. Savings organizations like VSLA are believed to significantly enhance women's economic autonomy. These groups not only provide financial services but also empower marginalized individuals, especially women,

by boosting their confidence, enabling independent decision-making, increasing awareness levels, and integrating them into both society and the economy (Ab-Rahim, Shah & Raki, 2018).

As per Karlana et al. (2017), the promotion of community-based microfinance entities like VSLA leads to improved outcomes for home-based businesses and the empowerment of women. In an exploratory study on the role of VSLAs in empowering women in West Harergie, Ethiopia, Wosene (2014) observed that VSLAs enhance social connections, augment women's decision-making capacities, economically empower underprivileged women, foster family harmony, cultivate a savings culture, ensure security, elevate social status, boost social interactions, enhance self-assurance, and still hope for a brighter future. These factors collectively contribute to an advancement in women's status.

Similarly, Kesanta and Andre (2015) delved into the impacts of women's empowerment through community savings groups on family wellbeing and found that participation in such groups, symbolizing economic empowerment, positively affects household welfare for both women and men who were VSLA members. Despite widespread agreement among scholars that VSLAs and similar microcredit and savings initiatives effectively empower women and enhance their wellbeing, some research has uncovered evidence suggesting that microcredit can have adverse effects on women's welfare.

For instance, Kumuur et al. (2015) disclosed instances of domestic abuse by spouses and occasionally other male household members resulting from women who had received credit, largely due to disputes over the utilization or control of the loan. The study also

highlighted that the impact of accessing loans on women, be it advantageous or disadvantageous, hinges on the socioeconomic and cultural context in which it is implemented. Some women experience empowerment through loan access, while others find themselves in a disadvantaged position due to limited control over loan utilization and harassment in cases of delayed repayments. Furthermore, Awiti (2013) examined the interplay between VSLA and women's emancipation in rural Malawi and found that membership was significantly associated with heightened community involvement and financial empowerment of women but not with increased decision-making power within households. This suggests that while women gain financial empowerment through VSLA membership, they may not necessarily have a commensurate increase in influence over household decisions. Beaman et al. (2014) observed no significant shifts in women's decision-making authority within households during their random assessment of savings clubs in Mali.

2.5 Microfinance and Women's Empowerment

Microfinance, which encompasses services like microcredit, micro savings, microinsurance, and money transfers, has been acknowledged as a crucial tool for stimulating economic growth and reducing poverty (Baruah, Bora & Deka, 2022). It is perceived to improve the overall economic well-being of disadvantaged individuals by assisting micro-entrepreneurs in establishing businesses and increasing their income (Baruah et al., 2022). Additionally, microfinance has been associated with various positive non-financial outcomes, including enhancements in health, food security, nutrition, education, women's empowerment, housing, and social cohesion (Baruah et al., 2022).

These benefits include improvements in health, food security, nutrition, education, housing, and social unity. Several research studies have delved into the impact of microfinance on women's empowerment. A study examining Bangladeshi women's access to microfinance discovered conflicting information regarding its effect on women's empowerment, exposure to intimate partner abuse, and mental health (Yount, Cheong, Khan, Miedema & Naved, 2021). Similar findings were observed in a study conducted in Northern Vietnam, suggesting that providing women with access to microfinance services such as microcredit and savings could enhance their empowerment.

However, it is essential to acknowledge that microfinance does not uniformly lead to women's empowerment. Our comprehensive analysis of data concerning the effects of microfinance in sub-Saharan Africa revealed that it can influence the livelihoods of the poor, both positively and negatively (Baruah et al., 2022). This highlights the intricacy of the relationship between microfinance and women's empowerment, which is contingent on specific contexts.

2.5.1 Gender Disparities in Access to Financial Services

In a study conducted by Ndoya and Tsala (2021), the study addresses the disparity between genders in the utilization of financial services among firms and individuals in Sub-Saharan Africa. The findings indicate an apparent gender gap, with men demonstrating a higher frequency of using financial services compared to women. However, this gender difference diminishes when considering the fundamental observable attributes of organizations or individuals. The disparity in financial service utilization is attributed to variations in crucial factors such as firm size, age, and type (Ndoya & Tsala, 2021).

Ndoya and Tsala (2021) contend that these gender disparities extend to other aspects related to the utilization of financial services, alongside distinctions in enterprise characteristics. These factors, along with disparities in income and education, contribute to the reduced use of formal financial services by women.

A key element in growing firm investment, particularly among female entrepreneurs, is access to savings services. According to Ndoya and Tsala (2021), having widespread access to financial services is crucial for both people and the economy as a whole. Credit restrictions have been shown to worsen income inequality and reduce the effectiveness of capital allocation (Ndoya & Tsala, 2021).

According to the literature, while there may be an unconditional gender disparity in access to financial services, this gap narrows when taking important observable traits and other aspects of financial service use into account. Disparities in access to financial services are a result of differences between men and women in terms of earnings, education, and business traits. For both people and the economy as a whole, closing these gaps and increasing widespread access to financial services can be beneficial.

2.5.2 Impact of Credit Access on Household Welfare

Bocher, Alemu and Kelbore (2017) utilized data from the Ethiopian Rural Household Survey to investigate the determinants of credit uptake and the effects of credit accessibility on household welfare. Their research revealed that family and individual factors such as age, gender, education, asset ownership, food security, and consumption significantly influenced the decision to obtain a loan. Furthermore, the study indicated that having access

to credit improved the ability of individuals who were already utilizing credit to maintain a nutritious diet. Similarly, Quach (2017) delved into the enduring effects of loan accessibility on household well-being. The study identified a positive and substantial correlation between the availability of credit and per capita expenditure, per capita spending on food, and per capita spending on non-food items. Moreover, the research demonstrated that formal credit had a greater impact on household well-being compared to informal credit.

These researchers' findings highlight how important credit access is for improving household welfare. It is important to note, though, that the impact of microcredit on household welfare and the variables affecting credit service participation are only lightly touched upon. Many institutions that offer credit have a propensity to favor households with more liquidity and asset endowments, which may prevent the poor from obtaining credit or taking advantage of its benefits.

Policymakers can learn a lot from the studies on how credit access affects household welfare in Ethiopia. The fact that credit access and household wellbeing are positively correlated points to the potential value of policies aimed at expanding credit availability for households. The results also show that formal credit institutions ought to be supported and encouraged because they have a bigger influence on household welfare than informal lending sources do.

Furthermore, the identification of household and individual characteristics that influence the decision to take credit can inform targeted interventions. For example, policies that promote non-farm activities, increase landholding, and encourage participation in saving associations can enhance credit access for households.

The literature study emphasizes the benefits of credit access for Ethiopian households' welfare. According to the studies we analyzed, access to credit significantly affects a number of household welfare measures, such as spending and food security. The findings also highlight how crucial it is to take into account family and individual traits in order to comprehend loan access and its effects on welfare. These findings can be used by policymakers to create policies that support loan availability for households, especially those with minimal resources. Policymakers can help improve household welfare and lower levels of poverty by removing obstacles to credit access and boosting formal credit institutions.

2.5.3 Empirical Studies on VSLAs in Ghana

Women's participation in VSLAs and saving habits have been found to be significantly influenced by their marital status. Married women are more likely to join VSLAs and actively save money to support their families, according to Bannor et al. (2020). Married women who are responsible for supporting their families are encouraged to join VSLAs and make significant savings. Contrarily, single women might not have as many financial responsibilities and might be less likely to join VSLAs (Bannor et al., 2020).

Chandio, Jiang, Rehman, Twumasi, Pathan and Mohsin (2020), did a study in the Upper-Many Krobo District in the Eastern region of Ghana to look at the factors influencing agricultural loan allocation and the challenges faced by maize producers. The study found that farmers had limited access to finance since they were granted far less of it than what they had asked for. This highlights the importance of nontraditional financial tools like VSLAs in assisting farmers who struggle to obtain loans from conventional lenders.

Abu and Haruna (2017) investigated the relationship between financial inclusion and the commercialization of agriculture in Ghana. They conducted their study using a random sample of 2,230 maize farmers from all ten regions of the country. The results demonstrated that households with financial inclusion sold 13.25 percent more produce compared to their financially excluded counterparts, thereby facilitating the commercialization of agriculture. This highlights the pivotal role that VSLAs can play in elevating farmers' quality of life and advancing agricultural commercialization.

To address potential biases in their study, Abu and Haruna (2017) applied endogenous switching regressions (ESRs) to examine differences in commercialization behavior between financially included and excluded maize farming households in Ghana. The finding that financial inclusion promotes commercialization lends support to the idea that VSLAs can be instrumental in boosting agricultural productivity and generating revenue. This research underscores how effective VSLAs can be in addressing challenges faced by Ghanaian farmers. Given the limited financial inclusion in the country, alternative financial tools like VSLAs are essential to provide farmers with access to loans and other financial

services. Through the utilization of VSLAs as platforms for knowledge exchange, capacity building, and collaborative decision-making, the well-being of rural communities can be significantly improved.

Based on empirical research on VSLAs in Ghana, it is evident that they positively impact financial inclusion, alleviate constraints faced by farmers, and promote agricultural commercialization. The findings indicate that VSLAs have the potential to substantially enhance the livelihoods, agricultural output, and sustainable development of rural populations. Policymakers and development experts should take into account the potential of VSLAs in advancing financial inclusion and supporting the growth of Ghana's agricultural sector. By providing farmers with access to loans, savings, and other financial services, VSLAs can empower them, contribute to poverty reduction, and foster economic progress.

2.5.4 Savings and Credit Behavior of Women in VSLAs

Many individuals are keen on utilizing Village Savings and Loan Associations (VSLAs) as a means to enhance the financial stability and empowerment of women. Through VSLAs, women gain access to a platform where they can save money, secure credit, and engage in income-generating activities.

In a study conducted by Bannor et al. (2020) on the influence of VSLA membership on off-farm income among rural women in West Africa, specifically Ghana, it was found that participation in VSLAs significantly increased off-farm earnings. Women involved in VSLAs were presented with various business opportunities to augment their income. This

discovery underscores the pivotal role of VSLAs in enabling women to diversify their income sources and enhance their financial circumstances (Bannor et al., 2020).

Women's participation in VSLAs and saving habits have been found to be significantly influenced by their marital status. Married women are more likely to join VSLAs and actively save money to support their families, according to Bannor et al. (2020). Married women who are responsible for supporting their families are encouraged to join VSLAs and make significant savings. Contrarily, single women might not have as many financial responsibilities and might be less likely to join VSLAs (Bannor et al., 2020). Explore the simultaneous borrowing and saving behavior observed in households. They propose the concept of quasi-hyperbolic time preferences to explain this behavior. According to this theory, individuals exhibit a preference for immediate consumption (borrowing) over long-term savings. This behavior may be driven by the anticipation of future financial needs or the desire to avoid requests for financial help from others. Additionally, maintaining credit card debt may serve as a commitment device to discourage overconsumption (Sussman & O'Brien, 2016).

While saving money is a crucial financial goal, there are instances when it is beneficial to spend savings. Spending savings can be advantageous when individuals face unavoidable costs and can avoid high-interest-rate debt by using their savings. This perspective challenges the traditional notion of saving as the ultimate financial objective and emphasizes the importance of strategic spending. (Sussman & O'Brien, 2016)

2.5.5 Savings Groups

In various regions, savings and loan associations are known by different names. In Africa, they are commonly referred to as accumulative savings and credit associations (ASCA) or savings clubs. In South Asia, they are also often recognized as "self-help groups" (SHG) (Zambrano, Giraldo, Perdomo, Hernández & Godoy, 2023). However, the approach to savings and loan associations can vary based on different perspectives and practices. VSLAs and SHG VSLAs represent a "minimalist approach with a primary focus on financial tools," which constitutes a crucial distinction. On the other hand, SHG embodies an "integrated approach" that combines financial tools with other components like literacy education, organizational management, and empowerment through rights-based training. This approach can be enriched with additional elements and is frequently done so, placing emphasis on holistic empowerment while utilizing financial tools as a foundation (Zambrano et al., 2023). Hence, the investigation in question specifically centered on the VSLA approach.

2.6 Rotating Credit Savings Associations ROSCAs

A common financial practice known as Rotating Savings and Credit Association (ROSCA), often referred to as "merry-go-rounds" in several African nations and as "susu" in Ghana, is described by Zambrano et al. (2023), as a highly efficient, straightforward, and transparent form of financial intermediation. It involves a self-selected group of individuals making regular and equal contributions to a shared fund. At each meeting, members receive a portion of the total contributions based on a lottery, predetermined schedule, or individual need. While ROSCAs do not necessitate complex institutional

frameworks or written records, they do not have the capacity to offer credit tailored to investment opportunities, business or emergency loans as required, or a return on invested savings.

ROSCAs offer the benefit of providing members with a useful lump sum payment slightly before the halfway point in the cycle, allowing them to take advantage of the time value of money (Radke, Kutlaca, Siem, Wright & Becker, (2020). Furthermore, ROSCAs are established when a group of individuals pool their resources to make regular, cyclical contributions to a shared fund, which is then given as a lump sum to one member of the group each cycle. According to Abebe, Eck, Christian, and Taggart, (2022), this model is a particularly popular form of credit and savings, especially among women. Members, who often consist of neighbors and friends, also provide a platform for social interaction.

However, while ROSCAs may encourage financial discipline and offer various social benefits, they may not be well-suited for making profitable investments due to the lack of interest generation (O, Ben-Caleb, Adegboyegun, Eluyela, Falaye & Abiodun, 2020). Additionally, ROSCAs are inflexible and may be susceptible to participant conflicts. Consequently, the Village Savings and Loans Association serves as an alternative to ROSCAs.

2.6.1 Village Savings and Loans Associations

Village Savings and Loan Associations (VSLAs) have drawn a lot of attention as a community-based strategy for eradicating poverty and promoting financial inclusion in low-income nations. Self-managed organizations called VSLAs offer savings and credit services to their members, mostly in rural areas with a dearth of official financial

institutions. The goal of this review of the literature is to investigate how VSLAs affect a variety of outcomes, such as economic empowerment, social cohesion, and mental health. Numerous studies have shown how VSLAs have a positive effect on economic empowerment. In the Democratic Republic of the Congo, a randomized controlled trial indicated that involvement in the VSLA raised savings, facilitated access to credit, and improved income-generating activities among female sexual violence survivors. Similar to this, research conducted in Uganda showed that VSLAs improved livelihoods, boosted household income, and increased asset accumulation. These results imply that VSLAs can have a significant impact on economic growth and poverty alleviation.

Additionally, it has been discovered that VSLAs foster community social cohesion. According to a study conducted in Malawi, VSLA membership improved social networks, trust, and teamwork among group members. Additionally, according to Bass, Murray, Cole, Bolton, Poulton, Robinette and Annan (2016), VSLAs offer a forum for group decision-making and problem-solving, promoting a sense of community empowerment. The general health and resilience of communities can benefit from these social processes. Even though there hasn't been much research, particularly looking at how VSLAs affect mental health, several studies have indirectly looked at the connection between economic empowerment and mental health. For instance, a study conducted in Rwanda discovered that women who participated in VSLAs had fewer symptoms of anxiety and despair (Bapolisi, Ferrari, Blampain, Makelele, Kono-Tange, Bisimwa & Merten, 2020). Additionally, it has been demonstrated that economic interventions with a focus on social development, like VSLAs, enhance the mental health of people living in conflict-affected

areas. These results imply that economic empowerment brought about by VSLAs may have a favorable indirect effect on mental health.

Despite the potential advantages of VSLAs, their implementation and sustainability face a number of difficulties. The discrepancies in gender within the groups, insufficient training and capacity building, and limited access to financial services are some of these issues (Bapolisi et al., 2020). Comprehensive assistance, such as continuing mentoring, training in financial literacy, and gender-sensitive methods, must be offered in order to address these issues. In addition, policymakers and practitioners should adjust interventions based on the contextual elements that affect VSLA effectiveness.

A promising strategy for promoting financial inclusion and reducing poverty is the use of village savings and loan associations (VSLAs). According to the literature, VSLAs may promote social harmony, economic empowerment, and even better mental health results. To address the difficulties in implementing VSLAs and to better understand the mechanisms by which they affect these outcomes, more study is necessary. Policymakers and practitioners may make the most of VSLAs as a tool for sustainable development and poverty reduction by filling in these gaps.

2.6.2 Access to Credit in Ghana

For Ghana's economy to flourish and its agriculture to become more commercialized, access to credit is essential. However, there is evidence to imply that the country has low levels of financial inclusion and loan availability (Abu & Haruna, 2017). Farmers' inability

to invest in their operations and increase productivity is severely hampered by their lack of access to loans.

The factors influencing farmers' involvement in loan schemes in Ghana have been the subject of several studies. According to research done using survey data in 2017, farmers' participation in credit programs is influenced by a variety of variables, including age, the value of farm output, non-farm income, and the quantity of microcredit programs in the region (Asante-Addo, Mockshell, Zeller, Siddig & Egyir, 2017). Similarly, another study by Asante-Addo et al. (2017) in Malawi found that wealthier households are less likely to face credit constraints.

Farmers with better incomes and those who belong to organizations had a lower chance of having credit rationed, which means they are either denied or get a lower quantity of credit (Asante-Addo et al., 2017). Asante-Addo et al. (2017) argue that legislative initiatives to increase access to finance should concentrate on empowering farmer-based groups to serve as points of entry for lenders.

Farmers frequently choose not to participate in credit programs out of fear of loan default and a lack of savings (Asante-Addo et al., 2017). However, participating in credit programs gives farm households better access to loans for farming needs and helps them mobilize savings (Asante-Addo et al., 2017). Additionally, Asante-Addo et al. (2017) found that farmers' engagement in credit programs is positively correlated with membership in farmer-based organizations and the formal education of the household head.

Access to loans for smallholder farmers in Ghana is significantly influenced by the mobilization of savings as well. Twumasi, Jiang, Danquah, Chandio and Agbenyo, (2019), discovered that parameters such as land ownership, association membership, household size, number of years of agricultural experience, and education have a favorable impact on access to loans. Contrarily, transaction fees and farm size have a detrimental effect on financing availability (Twumasi et al., 2019).

Farmers in Ghana still struggle to access loans due to low financial inclusion and low participation in lending schemes. Farmers' access to finance is significantly influenced by variables like income level, participation in farmer-based groups, and mobilization of savings. To increase access to finance and encourage agricultural commercialization in Ghana, policy solutions should concentrate on developing farmer-based organizations, educating farmers, and improving financial inclusion.

2.6.3 Social Capital and Community Development

Social capital has emerged as a significant concept in the field of community development, highlighting the importance of social relationships, networks, and trust in fostering community well-being. A well-known sociologist named Nan Lin presents a thorough analysis of social capital in his book (Barozet, 2002). According to his definition, social capital is an investment made in interpersonal connections with the hope of reaping rewards in the marketplace. It is viewed as a set of resources that are ingrained in social systems and that can be accessed or mobilized by deliberate effort. According to Barozet (2002), social capital refers to the resources that people and groups have access to through social relationships and can use to influence possibilities and limitations.

According to Barozet (2002), social capital can be divided into three categories: structural, relational, and cognitive. The patterns of social connections and networks found within a community are referred to as structural social capital. It takes into account the quantity, quality, and variety of connections. The strength of relationships, trust, and reciprocity among community members is the emphasis of relational social capital. In a society, cooperation and social interactions are governed by common rules, values, and beliefs, which are referred to as cognitive social capital.

Numerous facets of community development have been discovered to be significantly impacted by social capital. In one study, Barozet (2002) highlights how social capital influences civic engagement and the development of social structures. According to the author, social structures are created by deliberate action and the mobilization of social capital. This demonstrates how social capital is dynamic and how it affects processes for community development.

Research has shown that communities with higher levels of social capital tend to experience better outcomes in terms of health, education, crime prevention, and economic development (Barozet, 2002). Social capital facilitates collective action, cooperation, and the sharing of resources and information within a community. It enhances social cohesion, trust, and social support networks, which contribute to improved community well-being. While social capital has gained recognition as a valuable concept in community development, it is not without its challenges and critiques. Some argue that social capital can perpetuate inequalities and exclusion if certain groups have limited access to social

networks and resources (Barozet, 2002). Additionally, there are debates regarding the measurement and operationalization of social capital, making it challenging to compare findings across studies.

Best practices and lessons learned play a crucial role in various fields, including education, healthcare, business, and development. They provide valuable insights and guidance for improving processes, decision-making, and outcomes.

The goal of lesson study, a cooperative professional development strategy, is to enhance teaching techniques through a cycle of lesson planning, observation, and reflection. According to research, lesson study can be a useful framework for student instructors to get professional experience and benefit from their classroom experiences (Bjuland & Mosvold, 2015). To ensure the effectiveness of lesson study implementation in teacher education, specific elements are needed, such as collaborative planning, observation, and reflection.

2.6.4 Lessons Learned

The introduction of HPV vaccines in low- and middle-income countries presents unique challenges and opportunities. A systematic review of country experiences highlights the lessons learned from successful HPV vaccine introduction programs. These lessons include the importance of political commitment, community engagement, strong immunization systems, and effective communication strategies (Howard, Gallagher, Mounier-Jack, Burchett, Kabakama, LaMontagne & Watson-Jones, 2017). Understanding and implementing these best practices can contribute to the successful introduction and uptake of HPV vaccines in similar settings.

Agile project management is a flexible and iterative process that emphasizes collaboration, flexibility, and continuous improvement. It has become more well-liked in various areas, including software development. Regular communication, stakeholder involvement, work prioritization, and frequent feedback loops are among the best practices in agile project management (David, Johnstone, Churchman, Aveyard, Murphy & Munafò, 2011; Augner & Schermuly, 2023). These techniques can improve project results and boost team productivity.

Quality improvement initiatives aim to enhance patient outcomes, safety, and efficiency in healthcare settings. Lessons learned from successful quality improvement projects emphasize the importance of leadership support, data-driven decision-making, interdisciplinary collaboration, and continuous learning (Savoia, Agboola & Biddinger, 2012). Implementing these best practices can lead to improved healthcare delivery and patient satisfaction.

Initiatives for sustainable development have shown us the value of combining social, economic, and environmental factors. Best practices include resource efficiency, innovation, and the involvement of stakeholders (Rodríguez-Espíndola, Cuevas-Romo, Chowdhury, Díaz-Acevedo, Albores, Despoudi & Dey, 2022). Applying these strategies can help achieve sustainable development objectives and tackle global issues like poverty and climate change.

2.6.5 Challenges and Limitations of VSLAs

In many developing nations, village savings and loan associations (VSLAs) have grown in popularity as a community-based strategy for financial inclusion and poverty reduction. Individuals can use VSLAs as a platform to save money, get credit, and carry out income-producing activities. In spite of their potential advantages, VSLAs are confronted with a number of difficulties and constraints that may restrict their viability. Access to formal financial services is one of the biggest problems VSLAs encounter. VSLAs are a desirable alternative since smallholder farmers and people in rural regions frequently find it difficult to meet the strict requirements of official financial institutions (Dawuni, Mabe & Tahidu, 2021). The extent and impact of VSLAs' activities may be constrained by their inability to offer formal institutions the same level of financial services and support. External shocks, like the COVID-19 pandemic, can endanger the viability of VSLAs. According to a study done in Malawi, the COVID-19 pandemic, which significantly affected household income levels, raised concerns about the viability of VSLAs (Munthali, Wu & Dzimbiri, 2022). For VSLAs to remain viable over the long run, they must be able to function and assist their members in times of need.

VSLAs often have a community focus and work on a small scale. The scalability and reach of VSLAs are constrained by this method, even if it fosters close-knit connections and trust among members. It can be difficult to coordinate the necessary resources and scale up VSLAs to reach a broader population (Dawuni et al., 2021).

VSLAs may unintentionally maintain current disparities and bar some groups from obtaining financial services. Age, family size, and distance to output markets are just a few examples of the variables that have been found to affect VSLA participation (Dawuni et

al., 2021). No matter their socioeconomic status, it is crucial to make sure that VSLAs are inclusive and open to all community members.

VSLAs depend on the ability and knowledge of their members to handle their savings and loans wisely. To fully benefit from VSLAs, however, many people in rural regions may lack sufficient financial literacy and may need further assistance and training (Bannor et al., 2020). This limitation can be overcome, and the efficiency of VSLAs can increase by offering financial education and capacity-building programs.

2.7 Conceptual Framework

A conceptual framework demonstrates how a researcher conceptualizes the connection between the study's research variables and provides evidence of that connection (KIM, 2009). The conceptual plan for the investigation is shown in Figure 2.1.

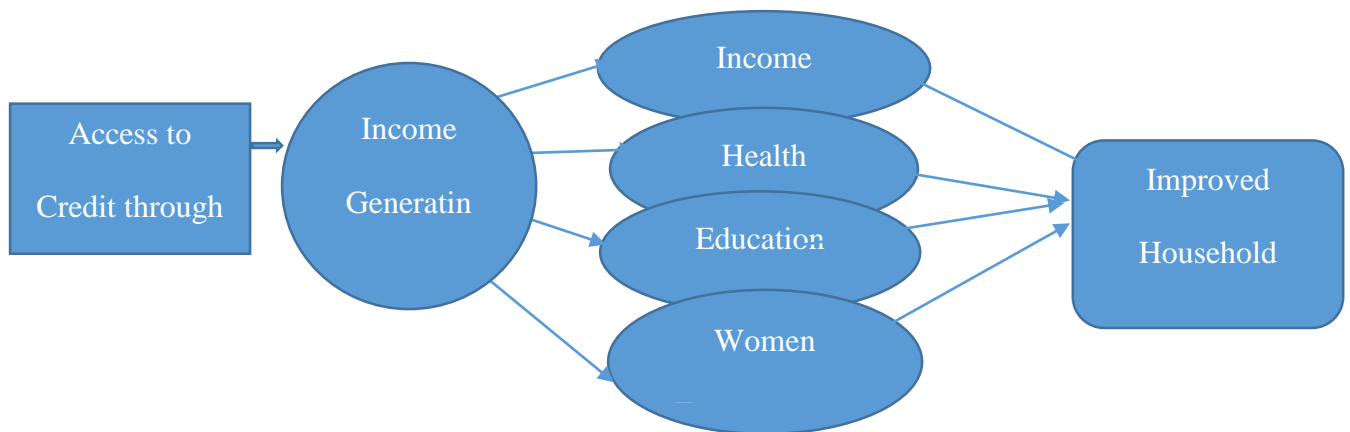


Figure 1: Conceptual model (Source: Author's construct, 2023)

The conceptual framework that guided this study suggests that VSLAs have socioeconomic effects on the participants and their households. In the figure above, as women (participants of the VSLA) have access to credit from the VSLA, they start income-generating activities.

With creditworthiness, such women can afford to pay children's school fees, afford better meals (nutritional) for their families, and afford healthcare services. This goes a long way toward affecting the welfare of the household. This study posits that, as a woman engages in VSLA, it helps improve household welfare as compared to her counterpart, who is not a member of VSLA. The figure also answers the research questions: what is the contribution of VSLA to household income, what is the contribution of VSLA to household health and education, and what is the effect of VSLA on women's participation in household decision-making? This framework guided the research design, data collection and analysis, conclusions, and recommendations.

2.8 Chapter Summary

In addition to the aforementioned elements, the effects of VSLAs were evaluated using a set of explanatory and control variables. In the study, two groups were largely assessed for further research. The first group consists of women who have been actively involved in VSLA for more than a year and who routinely borrow money and save it. These groups are referred to as participants and are thought of as treatment groups throughout this investigation. In this study, women who share similar characteristics, live in the same neighborhood, and do not take part in the VSLA program are referred to as non-participants and are viewed as the control group.

Again, the review demonstrates that impact studies have made use of the methodological design of conducting analysis using treatment and control groups. A few examples of such studies are those by Karlan et al. (2016); Solange and Mulyuingi (2018) and Brannen (2010). In that sense, this study used a similar design to the ones in the studies listed above,

in which participants with old VSLA were compared to participants without VSLA as the therapy group.

Additionally, the majority of research examines the influence of VSLA on poverty in general without focusing explicitly on household welfare in rural areas. By examining how the VSLA has an impact on the wellbeing of women participants' households, this study will help close the gender gap. The project will specifically track important variables like household income, household health, access to education in the home, particularly for kids, and women's participation in household decision-making in rural areas. The chapter's final section examines the study's variables and how they were measured to determine home welfare.

The next chapter presents the methodology used for the study, including the research design, target population, sample size, data collection, and data analysis.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The methodology utilized to collect and analyze the necessary data for the study is covered in this section, along with the research setting, research design, target population, sampling strategy, sample size calculation, research equipment, piloting of data collection instruments, and data collection processes. The part also discusses the analysis and interpretation of the data that was gathered.

3.2 Research Design

Research has been defined as the pursuit of truth with the help of study, observation, comparison and experiment that is a systematic method of finding solutions to a research problem identified (Kapur, 2018.). It is the search for knowledge through objective and systematic methods of finding solutions to a problem. According to Bryman (2005), the research process consists of series of actions or steps necessary to effectively carry out research. The process consists of closely related activities; such activities overlap continuously rather than following a strictly prescribed sequence.

A technique of mixed research methods was adopted in this study. Specifically, an explanatory sequential design was adopted in this investigation. A sequential explanatory design comprises two distinct phases: the quantitative phase and the qualitative phase (Ivankova, Creswell & Stick, 2006). In the first stage, a questionnaire was developed and distributed to both VSLA participants (the treatment group) and non-participants (the control group) as part of a social science study conducted in comparable areas.

For the qualitative component, focus group discussions (FGDs), with 6–8 participants in each group, were held. Participants in separate conversations between VSLA recipients and non-beneficiaries in addition, four important informants were interviewed. This tactic is supported by the fact that the quantitative data and the subsequent analysis provide a comprehensive understanding of the research topic. The qualitative data and their interpretation expand and clarify those statistical findings by diving further into participants' perceptions (Tashakkori & Teddlie, 1998; Tracy, 2019). In Figure 3, the research methodology is shown.

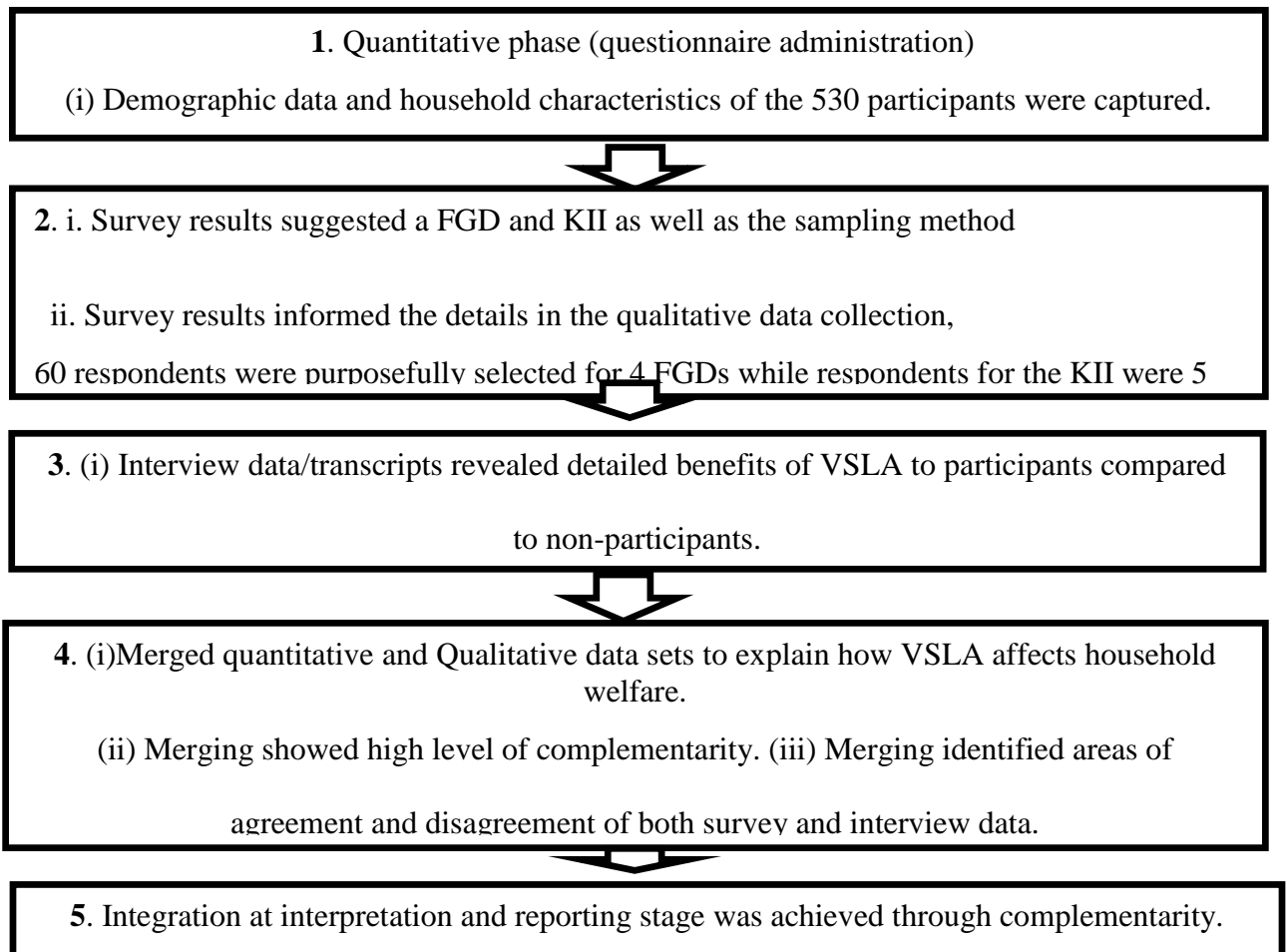


Figure 2: Research process (Source: Adopted from Alatinga & Williams, 2016)

3.3 Target Population

The Gushegu Municipal Assembly's official records indicate that there were 7,890 registered VSLA members in the study area, making them the target population. The control group consisted of non-beneficiaries with similar traits as VSLA participants.

3.4 Study Area

Gushiegu Municipal Area is one of the fifteen administrative districts of the Northern Region of Ghana. The municipality was created by an Act of Parliament (Act 18, 1959) and by a Legislative Instrument (LI) 1783, and was upgraded to a municipality in 2017 by another legislative instrument (LI) 178. Originally, as a district, it was inaugurated and commenced on March 20, 1993, and its capital is Gushiegu in the north-eastern corridor of the Northern Region, which lies between latitudes 9°30' and 10°30' North and longitudes 0° and 45' West. It shares boundaries with East Mamprusi and Yunyuo Districts to the north, Yendi Municipal Area to the south, Saboba and Chereponi Districts to the east, and Karaga and Nanton Districts to the west. Its total size is roughly 3,864 square kilometers, and the capital is located 14 kilometers to the northeast of Tamale, the regional hub. In the Gushiegu Municipal area, there are 111,259 people, with 51.3% of women and 48.7% of men, residing in 395 villages, according to the 2010 Census. The Dagomba make up about 80% of the population, with the Konkomba and other ethnic groups making up the remaining 20%. Most of these people are settler farmers who are concentrated in the municipality's northeast. The municipality is made up of about 362 settlements, the majority of which are smaller and more dispersed.

About thirty percent (30%) of people reside in settlements that can be classified as towns. Among these, Gushiegu and Kpatinga stand out with populations of 13,693 and 3,855, respectively. This implies that almost 70% of the population resides in rural areas, according to the 2010 Population Census. Furthermore, 79.7% of young people aged 11 and older are illiterate, compared to only 20.3% of them who are literate. The literacy rate for men is greater (25.7%) than that for women (15.4%). Additionally, almost 72% (72%) of the population who can read and write in both Ghanaian and English is multilingual. In the municipality, 71 percent of people aged 3 and older have never attended school, 23.4% are currently enrolled, and 5.7 percent have in the past, according to the 2010 Population and Housing Census. Agriculture, agroprocessing, and food trade are the municipality's three main economic activities. The primary economic activity and source of income for the municipality's residents is farming. Rice, yams, beans, groundnuts, and maize are the main crops grown. Some farmers raise livestock, including cattle, pigs, chickens, sheep, and goats. The ladies occasionally work in the manufacturing of shea butter. According to the 2010 Population Census, the municipality hosts a bustling weekly market that is frequented by vendors from the nearby towns of Karaga, Kpatinga, Yendi, Bolga, Bawku, and Tamale. The top medical facility in the municipality is the Gushiegu Municipal Hospital. The municipality's remaining rural residents are served by smaller medical facilities at Kpatinga, Nabuli, Zinindo, and Zamashegu. The provision of health services to the populace is also assisted by other persons, including trained traditional birth attendants (TBAs), village health workers, and Guinea-worm volunteers (2010, Population Census).

The municipality is home to a small number of organizations and financial middlemen. Input distributors, Susu collectors, mobile money vendors, private moneylenders, rotating savings and credit associations (ROSCAs), village savings and loan organizations, and friends and family members are a few of these. All of these serve as credit sources for rural residents, particularly for women in the municipality (GMA, 2018). The district map for Gushegu Municipality, which depicts the research region, is shown in Figure 1 below.

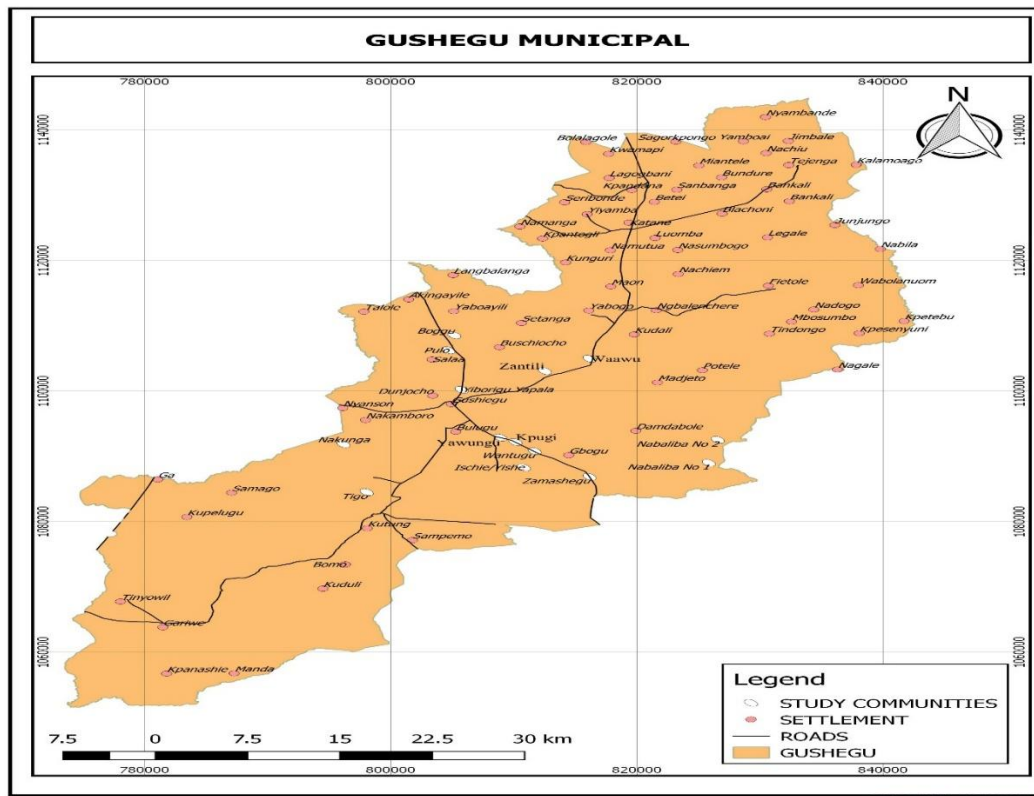


Figure 3: District Map of Gushegu (Source: Ghana Statistical Service, 2021)

3.5 Sampling

A sample is a finite part of a statistical population whose properties are studied to gain information about the whole (Ghosh, 2021). When dealing with people, it can be defined as a set of respondents (people) selected from a larger population for the purpose of a survey.

3.5.1 Sampling Size

The study used Yemane (1967) formula for determining sample size.

It states that:

Where N = sample frame

n = sample size

α = margin of error = 0.05

Frame = 7890 total VSLA participants

$= \frac{7,890}{1 + 7,890(0.05)^2}$

$= \frac{7,890}{1 + 7,890(0.0025)}$

$= \frac{7,890}{20.725}$

= 380 respondents

3.5.2 Sampling Technique

Eight area councils, or zones, make up the Gushiegu Municipality. Women make up roughly 90% of VSLA participants, and the organization runs in six zones. Given that multistage sampling may accommodate a range of responses, it was used to create a representative sample for the study. Due to study limitations like accessibility, time, and related risk, four area councils were chosen in the first stage, creating four clusters from which the sample was recruited. The area councils from Zantili, Kpugi-Yaungu, Bogu, and Zamashegu were among them. In the second phase, each cluster used the simple random sampling method to choose 380 respondents overall for the VSLA participant group, and the non-VSLA participant group chose 200 respondents from a comprehensive list of non-VSLA participants in all four clusters. Due to the survey being conducted during the

farming season, which made it challenging to contact respondents, only 330 of the VSLA participants had available responders. To account for population density in each cluster, proportionate sampling was used across all of the clusters. A probability sampling approach called simple random sampling was employed to ensure that each respondent had an equal chance of being a part of the study.

Details of the sample procedure is presented in Table 1

Table 1: Survey-Sampling structure

| Clusters | Participants of VSLA | Non- VSLA participants |
|-----------------|-----------------------------|-------------------------------|
| Zantili | 111 | 75 |
| Bogu | 145 | 60 |
| Zamashegu | 92 | 45 |
| Kpugu-Yaungu | 32 | 20 |
| Total | 380 | 200 |

Source: Author’s Construct, 2023.

In order to choose key informants from the municipal assembly for the qualitative portion, a non-probability sampling technique, especially a purposive sampling technique, was utilized. These key informants included one VSLA supervisor, two community contact workers, and one gender desk officer. These individuals were chosen due to their involvement in the study area's VSLA implementation on a hands-on basis. In order to get detailed information from respondents, focus group talks were held in each of the four clusters in some localities that had been purposefully chosen. Additionally, the objective was to confirm and evaluate the findings of the quantitative data analysis and learn from the expertise and experiences of the participants about the difficulties, benefits, and challenges that lay ahead. The FGDs included 6–8 randomly chosen participants from

various groups, which improved group interactions, produced a range of viewpoints, and encouraged active involvement (Mutua, Arimi, Ogara, Dewey & Schelling, 2010).

Table 2: Presents the structure of FGD in the study

| CLUTERS COMMUNITIES | VSLA PARTICIPANTS | VSLA NON- PARTICIPANTS |
|--------------------------------|------------------------------|-----------------------------------|
| Zantile | 8 | 6 |
| Bogu | 8 | 8 |
| Zamashegu | 8 | 8 |
| Kpugu yaungu | 8 | 6 |
| Total | 32 | 28 |

Source: Author’s construct, 2023

3.6 Sources of Data

That was done. In order to produce primary quantitative data that will be suitable and valuable for the study, data from primary sources are collected. In order to gather first-hand information about the VSLA without having to try to customize secondary data with a significant risk of corrupting the data and losing crucial data elements, focus group interviews were conducted with selected research participants for the qualitative data as well, first with VSLA officers and administrators and then with key informants.

3.7 Research Instruments

The study used three different sets of data gathering tools, including focus groups and key informant interview guides, as well as a survey on a 5-point Likert scale. Because they are very simple to use and affordable to administer, closed-ended questionnaires were chosen for the cross-sectional survey (Kothari, 2004). The literature on loan access, women's

empowerment, and household welfare served as a guide for the statements in the questionnaire that functioned as indicators of the research variables, measured as constructs. The study used three different sets of data gathering tools, including focus groups and key informant interview guides, as well as a survey on a 5-point Likert scale. Because they are very simple to use and affordable to administer, closed-ended questionnaires were chosen for the cross-sectional survey (Kothari, 2004). The literature on loan access, women's empowerment, and household welfare served as a guide for the statements in the questionnaire that functioned as indicators of the research variables, measured as constructs. Key informants and focus group participants' responses were gathered for the study's qualitative phase using semi-structured interview and discussion guidelines. The focus group discussion included topics including specific advantages and difficulties as well as suggestions for how to make the VSLA program better for women in the study area. In addition, the key informant interview guide was necessary to get the program designers and practitioners' in-depth opinions on how VSLA functions. In order to help the researcher elicit more information on specific responses provided during the focus group discussion, the key informant interview guide also included questions like, "Compare the decision-making role of VSLA participants and non-participants."

3.8 Data Collection Methods

Four enumerators with at least a diploma level of education were hired and trained prior to data collection to ensure simple and effective data collection as well as validity and dependability. Due to their familiarity with the locals' language and culture, these enumerators were able to properly explain the questions and protocols to the participants.

The VSLA participants were reached at their weekly meetings, which made it simpler to collect a high number of respondents. The researcher and the four enumerators began the process by distributing the questionnaire to respondents at their doorsteps. However, non-participants who made up the control group were contacted at the household level and given questionnaires. Focus groups with VSLA participants and non-participants were convened separately after the administration of the questionnaires and subsequent analysis to gather qualitative data. Four different FGDs were held in total in four different cities. Finally, key informant interviews with chosen members of the Gushiegu Municipal Assembly personnel and community contacts who work closely with the VSLA program were also done. Key issues of interest were selected in accordance with the study questions from both the FGDs and the KII, which were both recorded and transcribed.

3.9 Operationalization/Measurement of Key Variables

A variable is operationalized by "finding a measurable, quantifiable, and valid index for your variable (independent and dependent variables) and (sometimes) finding a way to manipulate that variable in such a way to have two or more levels" (Macmillan, 2011). The impact of the VSLA on the welfare of urban households will be evaluated using variables that are consistent with the conceptual and theoretical framework. Welfare definition and measurement are hotly debated topics (Beyene & Dinbabo, 2019). The two main dependent and independent variables in this study are household welfare and women's participation in VSLA. In the study, a number of proxy variables are used to gauge home welfare. They consist of household income, household health status, children's education, and the involvement of women in home decision-making (Khandker, 1998). The

operationalization, associated indicators, and proxy variables are covered in the paragraphs that follow.

Impact of VSLA on household welfare. The proxies used to measure them include household income, household health, children's education, and participation in household decision-making.

Household income: - This proxy measures the income situation of the household. The study mainly asked respondents their monthly income for the past 12 months and made an average of it.

Household Health: measured by asking respondents their perception of whether their household members' health situation has improved or not in the past 12 months. Besides, the level of their expenditure on treatment and drugs is also taken into consideration. Again, the respondent's financial contribution to household health needs was also factored in.

Children Education: - This is measured by respondents' perceptions towards their children's education, whether improved or not, since women joined VSLA. The number of children in school and dropout rates are also taken into consideration.

Participation in household decision-making: This proxy measures the level of women's participation in their household decisions. This is measured by asking respondents whether their spouses are involved in household decisions, their level of participation, and whether women are satisfied with their level of participation in decision-making.

In addition to the factors stated above, a set of explanatory and control variables was used to measure the impact of VSLAs. Two groups were primarily evaluated in the study for additional investigation. Women who have been actively engaged in VSLA for more than a year and who frequently borrow money and save it make up the first group. Throughout

this investigation, these groups are referred to as participants and are regarded as treatment groups. Women who share similar traits, reside in the same community, and do not participate in the VSLA program are referred to as non-participants throughout this study and are regarded as the control group. In addition to the factors stated above, a set of explanatory and control variables was used to measure the impact of VSLAs.

Two groups were primarily evaluated in the study for additional investigation. Women who have been actively engaged in VSLA for more than a year and who frequently borrow money and save it make up the first group. Throughout this investigation, these groups are referred to as participants and are regarded as treatment groups. Women who share similar traits, reside in the same community, and do not participate in the VSLA program are referred to as non-participants throughout this study and are regarded as the control group.

3.10 Methods of Data Analysis

Both quantitative and qualitative data analysis techniques were used to examine the survey data. For the quantitative analysis, frequency and contingency tables were used to analyze data on the relationship between VSLA participation and welfare indicators such as income, women's financial empowerment at the household level, women's satisfaction levels with welfare indicators, children's health and education, as well as the socio-demographic characteristics of respondents. Descriptive statistics such as the mean, median, and standard deviation were also used to analyze data on the socio-demographic characteristics of respondents. Both quantitative and qualitative data analysis techniques were used to examine the survey data. For the quantitative analysis, frequency and contingency tables were used to analyze data on the relationship between VSLA

participation and welfare indicators such as income, women's financial empowerment at the household level, women's satisfaction levels with welfare indicators, children's health and education, as well as the socio-demographic characteristics of respondents. Descriptive statistics such as the mean, median, and standard deviation were also used to analyze data on the socio-demographic characteristics of respondents. The statistical significance of the numerous associations between VSLA involvement and women welfare indicators was further assessed using the mean-comparison t-test and the Pearson chi-square test. In particular, the Pearson chi-square test was used to examine the independence of two qualitative variables, such as VSLA participation on the one hand and the various qualitative welfare variables, such as satisfaction with income, financial support for household maintenance, support for the health and education of children, and so on. The mean-comparison t-test was also used to examine the statistically significant difference in mean annual incomes between VSLA participants and non-participants.

However, in order to avoid losing data and the respondents' interpretation of concepts, the digitally recorded qualitative data was translated directly into English. A respondent identifier was given to each interview that was transcribed. Numbers and the type of data collection tool employed (e.g., KIII1, FGD2, etc.) are used to identify respondents. A qualitative data management program called NVivo 11 was used to upload the transcribed data, which was then processed and organized into themes (Attride-Sterling, 2001). Themes were created by inductively and deductively coding the uploaded transcribed material. While inductive coding was based on participant replies, deductive coding was informed by findings from earlier studies about the main research issues of this study.

3.11 Validity and Reliability

The instruments were pretested in two distinct communities, Limo and Zinindo, which are not included in the sample research locations, to obtain validity and reliability. Cronbach Alpha values for all constructs were over 0.7, suggesting construct reliability. Additionally, the pretesting was done to help enhance the instruments in terms of question wording clarity, incorporating local vocabulary, connecting concepts with local knowledge, rephrasing questions deemed sensitive, and offering more instructions, among other things. As a result, the reliability and validity of the instruments have improved as a result of the pre-testing.

3.12 Ethical Considerations

Along with knowledge and diligence, the researcher showed honesty and integrity. This was carried out in order to acknowledge and defend the rights of the study's human subjects. The rights to self-determination, anonymity, secrecy, and informed consent were also upheld during data collection in order to make the study ethical. Additionally, in accordance with university and social research ethical criteria for using human subjects in research, licenses were obtained from the Gushiegu Municipal Assembly.

CHAPTER FOUR

RESULTS OF THE STUDY

4.1 Introduction

This chapter provides a comprehensive examination and presentation of the findings derived from the analyses conducted on the thematic domains on the objectives of the study. The present chapter engages in a comprehensive examination of the effects of the Village Savings and Loan Association (VSLA) scheme on its beneficiaries. This analysis involves a comparison of various study variables between individuals who have benefited from the VSLA scheme and those who have not. Specifically, the results focus on the disparities in household income levels of the women, as well as the effect of their participation in VSLA groups on their households' income, health, and education.

4.2 Demographic Characteristics of the Study Participants

The socio-demographic characteristics of the women who participated in the study were analyzed by differentiating between Village Savings and Loan Association (VSLA) members and non-VSLA members. The age distribution of participants reveals interesting trends. The majority of both VSLA and non-VSLA members fall into the 25–34 age group, accounting for 32.9% and 16.5%, respectively. However, there are differences in the older age groups. VSLA members appear to have a larger representation in the 35-44 (32.9%) and 44-54 age groups (23.9%), whereas non-VSLA members have a higher percentage of individuals aged >54. It's worth noting that the majority of respondents were still active and productive because a significant majority were between the ages of 25 and 54, which is the age range for meaningful economic activity. This suggests that VSLA programs may

attract a broader age range among female participants. The majority of both VSLA and non-VSLA members follow Islam, with 85.0% and 82.5%, respectively. Christianity was the second most common religious affiliation among both groups (10.5% and 11.5%), while a smaller proportion (4.5% and 6%) said they believed in the African Traditional Religion (ATR). Marital status shows a notable difference between the two groups. Among VSLA members, 70.8% are married, while only 6.5% are single. In contrast, non-VSLA members have a significantly higher percentage of married individuals (86.5%) and a lower percentage of single individuals (6.5%). This distinction may reflect varying marital statuses among those drawn to VSLA programs.

As expected, Dagomba was the dominant ethnicity in both VSLA (97.4%) and non-VSLA (95.5%) groups of respondents. On their level of education, there was a noticeable difference between the two groups. VSLA members tend to have higher levels of education, with fewer individuals having no education (28.7% vs. 49% among non-VSLA members) and more individuals having reached tertiary education (4.2% vs. 18% among non-VSLA members). Occupational demographics indicate that trading and farming are the main occupations among both groups, although VSLA members have a slightly higher proportion engaged in trading (37.1% vs. 30.5% among non-VSLA members). Notably, civil servant occupations are more common among non-VSLA members. With regards to their primary source of income, monthly salary/wages and personal business income appear to be more common among non-VSLA members, while farming is the predominant income source for VSLA members.

Table 3: Socio-demographic Characteristics of Respondents

| Demographic Variables | Categories | VSLA Members | Non VSLA |
|------------------------------|-------------------|---------------------|----------------------|
| | | (380) | Members (200) |
| | | N (%) | N (%) |
| Age group (yrs) | 18-24 | 50 (13.2) | 29(14.5) |
| | 25-34 | 74 (19.5) | 33(16.5) |
| | 35-44 | 125 (32.9) | 38(19) |
| | 44-54 | 91 (23.9) | 70(35) |
| | >54 | 40 (10.5) | 30 (15) |
| Religion | Islam | 323 (85.0) | 165(82.5) |
| | Christianity | 40 (10.5) | 23 (11.5) |
| | ATR | 17 (4.5) | 12 (6) |
| Marital status | Single | 67(17.3) | 13 (6.5) |
| | Married | 269(70.8) | 173 (86.5) |
| | Divorced | 26(6.8) | 11(5.5) |
| | Widowed | 18(4.7) | 3(1.5) |
| Ethnicity | Dagomba | 370 (97.4) | 191 (95.5) |
| | Akan | 4 (1.1) | 0(0) |
| | Frafra | 6 (1.6) | 9(4.5) |
| Level of education | None | 109 (28.7) | 98 (49) |
| | Basic | 49 (12.9) | 56(28) |
| | Middle/JHS | 85 (22.4) | 10 (5) |
| | SHS | 121 (31.8) | 17 (15.3) |
| | Tertiary | 16(4.2) | 36(18) |
| Occupation | Trading | 141(37.1) | 61(30.5) |
| | Farming | 129(33.9) | 103(51.5) |
| | Civil servant | 41(10.8) | 31(11.7) |
| | Artisan | 69(18.2) | 5(2.5) |

| | | | |
|-------------------------|-------------------|------------|----------|
| Household size | 1-3 | 107(28.2) | 35(17.5) |
| | 4-6 | 74(19.5) | 36(39.6) |
| | 7-10 | 58(15.3) | 43(21.5) |
| | >10 | 141(37.1) | 86(43) |
| Average No. of children | Monthly | 25(6.6) | 31(15.5) |
| main source of income | salary/wages | | |
| | Farming | 175(46.1) | 114(57) |
| | Personal business | 180 (47.4) | 55(27.5) |
| | | | |

Source: Author's construct, 2023

4.3 Contribution of VSLA participation to the household income of Gushegu women

This aspect of the study sought to examine the impact of participation in VSLA groups on the household income of the respondents. Therefore, members and non-members of VSLAs were asked to first indicate the main source of income for their household. The results indicate that both groups of participants relied heavily on farming or related agricultural activities as the main source of income-earning adventures, although a larger proportion was reported among non-VSLA members (52.5%) than VSLA members (45.5%). However, more members of VSLA groups (23.4%) earned income from savings or other financial investments than nonmembers (11.3%). Again, a larger chunk of VSLA group members (22.4%) said they earned more income from trading and personal business ventures than their other counterparts (20.5%). On the other hand, more non-VSLA members (14.5%) depended on salaries as their main source of livelihood compared to VSLA members (8.7%).

In terms of changes in household income over the past year, it was evident that VSLA membership had a pronounced impact on the incomes of participants. As much as 42.4% of VSLA members report a significant increase in their household income, whereas only 14.5% of non-VSLA members report the same. Additionally, 19.5% of VSLA members and 21% of non-VSLA members report a moderate increase. On the other hand, a significant majority of non-VSLA members (56.5%) report no change in household income, whereas only 31.1% of VSLA members share this sentiment. It's also worth noting that VSLA members, at 7.1%, report a slightly higher proportion of moderate decreases in income compared to 5.5% among non-VSLA members. Importantly, none of the VSLA members reported a significant decrease, while 2.5% of non-VSLA members did. The results further revealed a striking difference in the average monthly household incomes of respondents, as VSLA members reported a considerably higher average income of GH2 1,151.16 compared to GH¢ 761.20 for non-VSLA members. This variation in income levels shows that participation in VSLA schemes positively correlates with higher household income levels. Therefore, the findings indicate that VSLA membership may lead to higher income levels and a greater likelihood of experiencing significant increases in household income over time.

Table 4: Contribution of VSLA participation to the improvements in household income

| Variables | VSLA Members (380) | Non VSLA Members (200) |
|--|-----------------------|---------------------------|
| Sources of household income | | |
| Farming | 173(45.5) | 105(52.5) |
| Savings or investments | 89(23.4) | 23(11.5) |
| Monthly salary/wages | 33 (8.7) | 29(14.5) |
| Trading | 85(22.4) | 43 (20.5) |
| How has your household income changed in the last one year? | | |
| Increased significantly | 161 (42.4) | 29 (14.5) |
| Increased moderately | 74 (19.5) | 42 (21) |
| No change | 118 (31.1) | 113 (56.5) |
| Decreased moderately | 27(7.1) | 11 (5.5) |
| Decreased significantly | 0(0) | 5(2.5) |
| Average household income per month | GH¢ 1,151.16 | GH¢ 761.20 |

Source: Author's construct, 2023

4.4 Contribution of VSLA Participation to Improvements in Household Health

The first component of household health indicators measured was food security. Respondents in both groups were asked if their households' suffered food shortages in the last six (6) months. The results show that more non-VSLA members (77.8%) experienced food shortages in their homes than VSLA members (54.6%).

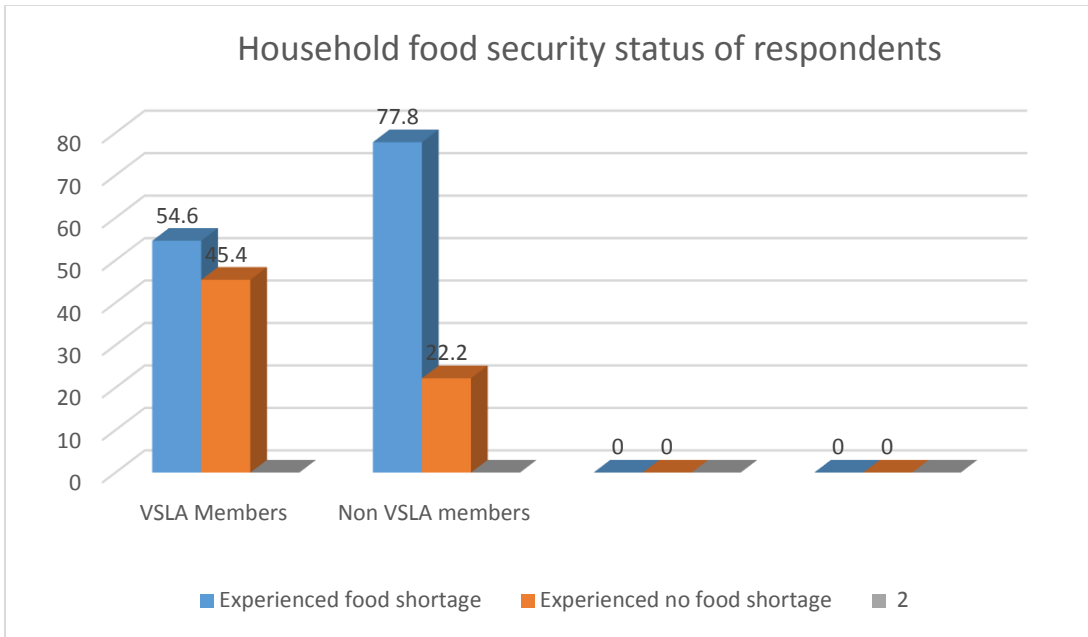


Figure 4: Household food security status of respondents

In terms of access to healthcare, VSLA members had improved access, as 53.8% of them responded in the affirmative when asked if all members of their households could afford quality healthcare, compared to 46.8% among nonmembers.

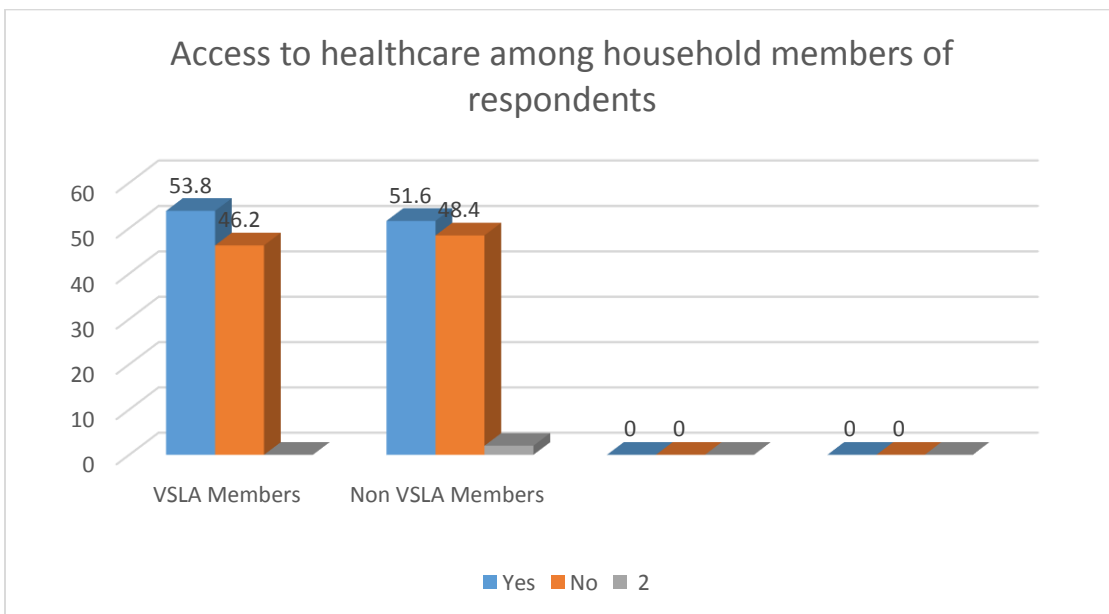


Figure 5: Access to healthcare among household members

Qualitative responses from participants in the VSLA group point to improvements in access to quality healthcare, nutritional intake, and overall health status as a result of the growth in income they got from their savings:

I have seen significant changes in my health since joining the VSLA here because, through that, I am able to get enough money for my medical checkups (p. 132).

This was corroborated by a number of other women who benefited from the VSLA.

I think now, we [my family] are able to afford more food than the situation was in the house before I joined the group [VSLA] (p. 49); the type of food we used to eat in the house has improved (p. 107); we can afford quality food than before [joining VSLA] (p. 02).

One other participant indicated that through the proceeds from her business, which she started with a soft loan from her savings and loans group, she is able to purchase enough food to feed her children.

I am able to feed my children a variety of foods thanks to the VSLA loans I took to start a business a year ago (p. 71).

4.5 Impact of VSLA Participation on Educational Outcomes among Beneficiaries'

Children

The study assessed how VSLA membership influenced women's ability to invest in the education of their children and the subsequent impacts on the attainment of higher education. Participants were first asked whether VSLA participation translated into increased investments in the education of their children. The response was resoundingly affirmative, with 90.2% of respondents indicating that VSLA participation had enabled

them to invest more in their children's education. This statistic suggests that VSLA schemes are not only vehicles for financial empowerment but also play a pivotal role in fostering educational advancement within beneficiary households.

The women were then asked to rate how their involvement in VSLA contributed to enhancing their children's education, and 42.4% reported a significant improvement and 33.4% reported moderate improvements. But a minority (18.7%) said they had not seen any improvements in their children's education since joining, and 5.5% also indicated a moderate decline.

To measure the overall educational achievement of the VSLA participants' children, the study then assessed the highest level of education achieved by the children of beneficiaries. The results revealed that a majority (66.8%) of the children were still at the basic level, while only 11.4% were at the senior high school (SHS) level, and a minority (4%) had attained tertiary education. The results demonstrate that, contrary to the earlier assertions of the women, their VSLA participation did have much effect on their children's attainment of higher education, given that only 4% of their children made it to the tertiary level in their educational pursuits.

Table 5: Contribution of VSLA Participation to the Improvements in Education of Beneficiaries' Children

| Question | Frequency (n) | Percentage (%) |
|---|----------------------|-----------------------|
| Has the VSLA participation enabled you to invest more in your children's education? | | |
| Yes | 343 | 90.2 |
| No | 37 | 9.8 |
| What is the highest level of education achieved by your children? | | |
| None | 70 | 18.4 |
| Primary | 165 | 43.4 |
| JHS | 89 | 23.4 |
| SHS | 43 | 11.4 |
| Tertiary | 13 | 3.4 |
| How has your involvement in VSLA contributed to enhancing your children's education? | | |
| Improved significantly | 161 | 42.4 |
| Improved moderately | 127 | 33.4 |
| No change | 71 | 18.7 |
| Declined moderately | 21 | 5.5 |
| Declined significantly | 0(0) | 5(2.5) |

Source: Author's construct, 2023

4.6 Regression Analysis

This section of the study presents a regression analysis of the effects of VSLA participation on the three key independent variables used to measure women's household welfare (income, health, and educational outcomes in children), as well as assessing the relationship between variables. The multiple regression analysis presented in Table 4.5

examines the influence of VSLA participation on several independent variables, including household income, health, and educational outcomes.

The model summary shows a correlation coefficient (R) of 0.669, indicating a strong relationship between the observed values and the values predicted by the independent variables. Furthermore, the R square value of 0.413 signifies that approximately 41.3% of the variation in the independent variables can be explained by their VSLA participation status, which demonstrates a significant level of explanatory power. The adjusted R square value of 0.605 accounts for the model's complexity and improves the accuracy of the goodness-of-fit measurement. The small standard error of the estimate suggests that the model is effective at predicting the dependent variable. Finally, the low p-value of 0.000 confirms the statistical significance of the model.

Moving on to the model coefficients, the intercept (constant) is -0.191, representing the expected value of the effect of VSLA participation when all independent variables are zero. Household income, with a coefficient of 0.186, has a statistically significant positive correlation with VSLA participation, implying that VSLA participation contributes to higher household incomes. Similarly, VSLA participation was found to be a good predictor of household health status, with a coefficient of 0.276, which is a significant predictor. This means VSLA participation had a stronger positive effect on improved health within households. However, the coefficient for educational outcomes is 0.328, indicating a positive but statistically non-significant relationship between educational outcomes and the effect of VSLA participation, as indicated by the relatively high p-value of 0.710.

In summary, this multiple regression analysis underscores the significant positive influence of VSLA participation on household income and health status. These findings are statistically robust and demonstrate the importance of VSLA programs in improving these aspects of participants' lives. However, the relationship between VSLA participation and educational outcomes appears to be less significant in this particular model. Overall, the model provides valuable insights into the dynamics between VSLA participation and various key factors affecting participants' well-being.

Table 6: Multiple Regression Analysis of the Effect of VSLA Participation on Key Independent Variables

| Model | R | R ² | Adjusted R Square | Standard Error | Sig. | |
|---------------------|-------------------------|-----------------------------|-------------------|---------------------------|--------|-------|
| summary | .669 ^a | .413 | .605 | .669 | .000 | |
| Coefficients | Model | Unstandardized Coefficients | | Standardized Coefficients | T | |
| | Variables | B | Standard Error | Beta | Sig. | |
| | Constant | -.191 | .325 | | 14.433 | 0.605 |
| | Household income | .186 | .082 | .150 | 1.453 | 0.010 |
| | Household health status | .276 | .068 | .385 | 4.343 | 0.014 |
| Educational outcome | .328 | .105 | .396 | -4.728 | 0.710 | |

***P< .05 considered statically significant**

The One-Way ANOVA Test Results

The ANOVA statistics were utilized to assess the significance of the regression model. A high F statistic value indicates a statistically significant positive association between the dependent variable (VSLA participation) and the independent variables (household income, household health, and educational outcomes in children). The F-significance score

of $p = 0.000$ indicates that the regression model is very significant, with a very low likelihood of delivering incorrect information. This implies that the variation accounted for by the model was not due to random chance and that the entire model was statistically significant.

Table 7: The One-Way ANOVA Test Results (ANOVA^a)

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|------------|-----------------------|-----------|--------------------|----------|-------------------|
| 1 | Regression | 11.322 | 3 | 3.774 | 19.101 | .000 ^b |
| | Residual | 73.302 | 371 | .198 | | |
| | Total | 84.624 | 374 | | | |

a. Dependent Variable: 14. Are you a member of a Village Savings and Loans Association (VSLA)?

b. Predictors: (constant), highest educational achievement of children, 15. average monthly household income, access to food and healthcare services among household members.

Hypotheses

Hypothesis I: Influence of VSLA on the household incomes of participants the null hypothesis (H₀) posits that there is no statistically significant association between VSLA participation and an increase in household income. Based on the results of the regression ($p = .010$), I reject the null hypothesis because VSLA participation was shown to have an effect on the level of household income of the study participants.

Hypothesis II: Influence of VSLA participation on household health status

Again, I reject the null hypothesis that VSLA participation has no effect on the health status of participants' households, as the regression results show that there was a significant

correlation between VSLA participation and improvements in healthcare access for household members ($p = .014$).

Hypothesis III: Influence of VSLA on educational outcomes in children of VSLA participants The results indicate that there is no statistically significant relationship between VSLA participation and the educational achievement of the women's children ($p = .710$). Therefore, I fail to reject the null hypothesis that VSLA participation has no effect on education.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introductions

This chapter discusses the findings from the results presented in chapter four. The findings are linked to the existing literature to ascertain the level of disparities. The chapter is so relevant that it presents the new knowledge gained from the analysis and presentation section in the previous chapter.

5.2 Contribution of VSLA participation to improvements in household income

Since their rollout, village savings and loan schemes have shown promise in empowering individuals and communities to enhance their financial well-being and address pressing socioeconomic challenges that affect the poorest in society (Ksoll et al., 2016). In the present study, both VSLA members and non-members heavily relied on farming or related agricultural activities as their primary source of income, but VSLA members had a more diverse income portfolio than nonmembers, as most of them leveraged their savings to invest their incomes in financial investments and small-scale businesses. This led to higher average household incomes and overall growth in household incomes compared to the women in the communities surveyed who were not part of village savings and loan groups. This indicates that VSLA members actively engage in a wider range of income-generating activities, showcasing more comprehensive economic diversification. These findings are consistent with those of Adams et al. (2014), who, in a related cross-sectional survey, evaluated the impact of VSLA on rural livelihoods in the Bole District and observed that as much as 74.2% of VSLA members invested their loans and savings from their

involvement in the VSLAs in various income-generating ventures, which made them three times more financially capable than other women in the same communities who were not involved in VSLA groups.

Women in this study had a higher mean household income of GH2 1,151.16 compared to GH2 761.20 for non-VSLA members, which underscores the potential of VSLA programs as potent tools for women's financial empowerment and poverty alleviation and a critical need to expand such an initiative to more communities in the north. These findings are comparable to what was reported in Beyene and Dinbabo (2019), who investigated the link between women's participation in the Village Savings and Loans Association (VSLA) and poverty reduction using a mixed research methodology and propensity score matching and found that women's participation in VSLA has a significant and positive impact on increasing the average monthly household income of participating women. In that study, women's VSLA participation was also found to be associated with improvements in household diet, health, children's education, and women's involvement in household decisions. Similarly, Brannen and Connor (2016), in their assessment of the impact of Village Savings and Loan Associations (VSLAs) as an informal mechanism for saving and borrowing in comparison to formal microfinance institutions, revealed that long-term VSLA members experienced significant improvements in various economic, nutritional, and health aspects compared to a control group of recent joiners. In a similar vein, Aidoo-Mensah (2018) discovered that VSLAs have a positive effect on household income, which enables members to diversify income and achieve increased financial stability within shorter periods.

(Alesane, Yussif & Tetteh Anang, 2019) in the Awutu Senya Constituency found that VSL schemes were fostering financial inclusion through positive impacts on the saving behaviors of members. VSLA membership positively influenced participants' savings habits and their ability to access credit from formal financial institutions. The study also found that VSLAs played a significant role in helping members accumulate savings for emergencies and investment purposes (Alesane et al., 2019). The findings in this study, however, contradict those of Ampah et al. (2017), Ksoll et al. (2015), and Karlana et al. (2017), which reported that VSLA participation did not have any strong positive influence on the household incomes of beneficiaries, although improvements were observed in other welfare indicators such as improved access to credit, access to food, and improvements in financial literacy.

5.3 Contribution of VSLA to improvements in household health of beneficiaries

Financial well-being is a major determinant of food security, nutrition security, and the general well-being of all individuals (Agbadi, & Mittelmark, 2017). Poverty is one of the most serious threats to human well-being and lifelong potential and thus affects children's educational and developmental outcomes later in life, both directly and indirectly (Faught, Williams, Willows, Asbridge & Veugelers, 2017; Evans & Kim, 2007). In this study, households of women who participated in VSLAs were more food secure and were able to access basic healthcare services than non-VSLA beneficiaries. Hardi (2019) investigated the impact of Village Savings and Loans Associations (VSLAs) on the nutritional status of under-five children in the Sissala West District and concluded that the introduction of VSLAs had a positive influence on the nutrition and health of children in beneficiary

households. Previous research conducted in the northern region reported that VSLA participation contributed to a 38.2% increase in agricultural production among women (Dawuni et al., 2021). Similarly, Amponsah, Awunyo-Vitor, Wongnaa, Prah, Sunday, and Acheampong (2023) examined the impact of women groundnut farmers' participation in VSLA on their agricultural productivity and personal income and found that VSLA program participation significantly increased farm productivity and income for the participants. Participation in the VSLA has also been shown to have a significant impact on both meal quantity and quality in the households of women, in terms of an increase in the amount of meat and fish added to meals as compared to non-VSLA women's households (Brannen & Sheehan-Connor, 2016).

Even though this study did not examine the link between the increased incomes of the women and their agricultural productivity, responses from the open group discussion indicate that VSLA helped them improve their farm outputs, which translated to improvements in access to food for their households. These findings confirm the findings of a recent study by Akapule (2020), which assessed the effects of VSLAs on maternal and child nutrition in the Gusheigu district and found that the VSLA participation of the women contributed to improvements in household nutrition security, with a resultant 25.8% cumulative reduction in various forms of malnutrition between the periods of 2014 and 2017.

Livelihood empowerment of women, making them active participants in decision-making both at the household level and in their communities (Hardi, 2019).

5.4 Impact of VSLA Participation on educational Outcomes

As a result of the growth in income experienced, the women were able to enroll more of their children in school because they could afford the basic necessities they needed for their children's education. Subject responses indicated there were improvements in the educational outcomes of children, but a critical analysis of their levels of education did not reveal or identify any marked improvements in the educational attainment of their children since most of them were still at the basic level. The insufficient impact of VSLA participation on educational outcomes is somewhat surprising given that studies point to a correlation between savings among low-income earners and attainment of higher education among their wards and the existing literature on the impact of savings on education (Dupas & Robinson, 2013; Jamison, Karlan & Zinman, 2014). Brannen and Sheehan-Connor (2016) discovered similar findings in Tanzania and came to the conclusion that educational expenses of the women were not directly correlated with educational outcomes in their children because access to education and adequate learning materials may be confounded by poor learning habits, translating into average examination scores of the children.

The weak impact of VSLA participation on education in the present study may also be explained by the fact that the government of Ghana has made basic education free, and so parents do not have to pay tuition fees for their wards' education at the basic level. These findings are, however, inconsistent with those of Ampah et al. (2017), who found a strong positive correlation between women's access to credit through VSLAs and household welfare indicators such as the ability to educate children.

To measure the overall educational achievement of the VSLA participants' children, the study then assessed the highest level of education achieved by the children of beneficiaries. The results revealed that a majority (66.8%) of the children were still at the basic level, while only 11.4% were at the senior high school (SHS) level, and a minority (4%) had attained tertiary education. The results demonstrate that, contrary to the earlier assertions of the women, their VSLA participation did have much effect on their children's attainment of higher education, given that only 4% of their children made it to the tertiary level in their educational pursuits.

CHAPTER SIX

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

6.0 Introduction

This section of the report summarizes the entire research findings, having gone through analysis and discussion of the data obtained in the previous chapters. The section which happens to be the final chapter throws more light on the major issues that are worth recognizing in the study. The various ways in the form of recommendations by which these issues can be tackled are also suggested to make the study useful.

6.1 Summary of Major Findings

6.1.1 Socio-Demographic Features

Majority of both VSLA and non-VSLA members fall into the 25–34 age group, accounting for 32.9% and 16.5%, respectively. However, there are differences in the older age groups. VSLA members appear to have a larger representation in the 35-44 (32.9%) and 44-54 age groups (23.9%), whereas non-VSLA members have a higher percentage of individuals aged >54. Among VSLA members, 70.8% are married, while only 6.5% are single. In contrast, non-VSLA members have a significantly higher percentage of married individuals (86.5%) and a lower percentage of single individuals (6.5%). This distinction may reflect varying marital statuses among those drawn to VSLA programs.

Ethnicity wise, the Dagomba ethnic group was the dominant in both VSLA (97.4%) and non-VSLA (95.5%) groups of respondents. On their level of education, there was a noticeable difference between the two groups. VSLA members tend to have higher levels

of education, with fewer individuals having no education (28.7% vs. 49% among non-VSLA members) and more individuals having reached tertiary education (4.2% vs. 18% among non-VSLA members). Trading and farming were the main occupations in both groups.

6.1.2 Contribution of VSLA participation to improvements in household income

The results indicate that both groups of participants relied heavily on farming or related agricultural activities as the main source of income-earning adventures, although a larger proportion was reported among non-VSLA members (52.5%) than VSLA members (45.5%). However, more members of VSLA groups (23.4%) earned income from savings or other financial investments than non-members (11.3%). Again, chunk of VSLA group members (22.4%) said they earned more income from trading and personal business ventures than their other counterparts (20.5%). On the other hand, more non-VSLA members (14.5%) depended on salaries as their main source of livelihood compared to VSLA members (8.7%). A significant majority of non-VSLA members (56.5%) report no change in household income, whereas only 31.1% of VSLA members share this sentiment. The findings indicate that VSLA membership may lead to higher income levels and a greater likelihood of experiencing significant increases in household income over time.

6.1.3 Contribution of VSLA to improvements in household health of beneficiaries

The results show that more non-VSLA members (77.8%) experienced food shortages in their homes than VSLA members (54.6%).

In terms of access to healthcare, VSLA members had improved access, as 53.8% of them responded in the affirmative when asked if all members of their households could afford quality healthcare, compared to 46.8% among nonmembers.

6.1.4 Impact of VSLA participation on educational outcomes

Majority of respondents (90.2%) indicated that VSLA participation had enabled them to invest more in their children's education. This suggests VSLA schemes are not only vehicles for financial empowerment but also play a pivotal role in fostering educational advancement within beneficiary households.

The results also revealed that majority (66.8%) of the children were still at the basic level, while only 11.4% were at the senior high school (SHS) level, and a minority (4%) had attained tertiary education. The results demonstrate that, contrary to the earlier assertions of the women, their VSLA participation did have much effect on their children's attainment of higher education, given that only 4% of their children made it to the tertiary level in their educational pursuits.

From the regression conducted, the relationship between VSLA participation and educational outcomes appears to be less significant in the model. The coefficient for educational outcomes is 0.328, indicating a positive but statistically non-significant relationship between educational outcomes and the effect of VSLA participation, as indicated by the relatively high p-value of 0.710.

6.2 Recommendation

Based on the study findings, the following recommendations are proposed.

1. Rural communities often face economic vulnerabilities and limited access to formal financial services. Expanding VSLA programs to these areas can empower more women and uplift entire communities.
2. Prioritize communities with limited financial resources and limited access to formal banking services. Collaborate with local community organizations and leaders for effective program implementation and sustainability. Tailor VSLA programs to cater to the specific economic activities and needs of each community, maximizing their relevance and impact.
3. Equip VSLA participants with the necessary skills and knowledge to effectively manage their savings and investments, ensuring sustainable growth. Implement a robust monitoring and evaluation framework to track progress and impact, enabling timely adjustments and improvements. Although the study did not find a significant direct impact on educational outcomes, emphasizing the importance of education within VSLA programs is crucial. Encouraging members to prioritize education for their children can have far-reaching benefits for future generation
4. Offer specialized training within VSLA programs to enhance participants' financial literacy skills, enabling effective allocation of resources for education-related expenses. Establish partnerships with educational institutions, NGOs, and government agencies to provide VSLA members with information on available scholarships and educational support programs. Highlight the long-term benefits of education through awareness campaigns, encouraging families to invest in their children's future.

5. Foster a sense of community among VSLA members, allowing them to share experiences and best practices related to supporting their children's education. To further enhance the sustainability and impact of VSLA programs, it is crucial to provide robust support from both government and non-governmental organizations. This involves capacity-building training for VSLA participants and facilitating their connection with formal microfinance institutions.
6. Provide participants with training on financial management, entrepreneurship, and other relevant skills to empower them to make informed financial decisions.
7. Establish partnerships with banks and microfinance institutions to create avenues for VSLA participants to access a broader range of financial services, including loans and savings accounts. Connect VSLA members with resources and mentorship programs that can help them grow their businesses and increase their economic resilience.
8. Work towards policies that create an enabling environment for VSLA programs, including legal frameworks that recognize and support their operations.

6.3 Future Research Directions

Comparative studies across different regions within Ghana or other countries with similar VSLA models could provide a broader perspective, considering regional socio-economic differences and their influence on outcomes.

A more in-depth analysis of education outcomes could involve exploring factors such as enrollment rates, academic performance, and access to educational resources. Investigating the empowerment dimensions linked to financial inclusion through VSLA, such as decision-making power within the household and community engagement, could provide a holistic understanding of the transformative potential of these programs.

Focusing on the role of VSLA in fostering women's entrepreneurship and job creation within Gusheigu could shed light on economic impacts at the individual and community levels. Additionally, research into the integration of technology within VSLA models, such as digital platforms or mobile banking, can offer insights into the evolving landscape of microfinance initiatives and their potential to enhance accessibility and efficiency.

Considering policy implications and recommendations, future studies could guide policymakers and development practitioners in refining or expanding existing financial inclusion strategies based on the specific challenges identified in Gusheigu. Community-based participatory research (CBPR) approaches could foster collaboration between researchers and the local community, ensuring culturally sensitive interventions and sustainable impacts.

Furthermore, examining the environmental sustainability implications of women's participation in VSLA could be a novel direction. This involves assessing the environmental impact of income-generating activities initiated through VSLA and exploring opportunities for sustainable practices within the community.

6.4 Conclusion

Participation in Village Savings and Loan Associations (VSLAs) has emerged as a powerful tool for empowering women in various developing communities across the globe. These grassroots financial initiatives have demonstrated a remarkable capacity to uplift women by providing them with the means to diversify their income sources, thereby enhancing their financial stability. This study delves into the multifaceted impacts of VSLA

participation, not only on the economic dimensions of women's lives but also on their overall household well-being, encompassing health and education.

One of the pivotal findings of this study underscores the significant enhancement of financial well-being among women who actively engage in VSLAs. By pooling their resources, these women unlock a gateway to a diversified income portfolio, utilizing their savings effectively, and even venturing into entrepreneurial endeavors. This dynamic shift from a singular income source to a multifaceted financial approach not only empowers these women but also reinforces their economic agency within their communities.

The diversification of income streams is an instrumental factor in ensuring sustained economic growth and stability for these women. Through their active participation in VSLAs, they are exposed to a variety of investment opportunities that range from microenterprises to agricultural ventures. This newfound financial prowess equips them with the means to weather economic uncertainties, thereby providing a cushion against unforeseen financial setbacks. The impact of VSLA participation reverberates beyond individual empowerment, resonating within the broader context of household well-being. The study reveals that VSLA members consistently report higher average household incomes compared to nonmembers. This noteworthy disparity in income levels indicates the transformative potential that VSLAs hold for breaking the cycle of poverty for women and their families.

This surge in household income can be attributed to the synergistic effects of diversified income sources. With women actively participating in income-generating activities, the overall economic productivity of the household experiences a substantial upswing. This

not only translates into improved living standards but also paves the way for greater investments in education, healthcare, and other essential services.

The positive influence of VSLA participation is not confined to economic domains alone. It extends its reach into the realm of health, effectively bolstering the overall well-being of respondents' household members. This is primarily achieved through marked improvements in food security and enhanced access to basic healthcare services.

With increased financial stability, VSLA participants are better equipped to ensure a consistent and nutritious food supply for their families. This nutritional security plays a pivotal role in fortifying the health status of household members, especially children and vulnerable individuals. Additionally, the heightened income levels afford families the means to seek timely medical attention, reducing the prevalence of preventable illnesses and promoting overall health and well-being.

While the impacts of VSLA participation on economic and health dimensions are unequivocal, the study reveals a nuanced perspective when it comes to educational outcomes. Contrary to expectations, the research did not find a significant correlation between VSLA participation and improvements in educational outcomes for the children of beneficiary women. This finding prompts a deeper exploration into the complex interplay between economic empowerment and educational access. It suggests that while VSLAs undeniably contribute to financial stability, other contextual factors may be at play in influencing educational trajectories. Factors such as systemic barriers, the quality of educational institutions, and social support networks may all intersect to shape the educational outcomes of children in these communities.

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APPENDIX
INDIVIDUAL QUESTIONNAIRE

Statement to be read before the interview begins:

Hello, my name is Abdulai Abdul Razak. I am a student from the Akenten Appiah University of Skill Training and Entrepreneurial Development (AAMUSTED). I am conducting a survey on Women Access to Credit through Village Savings and Loans Associations (VSLA) and its implication on Household Welfare in the Gushiegu Municipality. Despite the recording of the interview responses, the information you give will be kept strictly confidential and is collected for research purpose only. You are under no obligation to answer any question that you feel uncomfortable to answer and I would plead that you provide as honest answers as possible without fearing any persecution or disclosure. Thank you.

1. What is your age?

- 18-24
- 25-34
- 35-44
- 45-54
- 55 and above

2. What is your gender?

- Female
- Male
- Other (please specify)

3. What is your marital status?
 - Single
 - Married
 - Divorced
 - Widowed
4. What is your highest level of education completed?
 - No formal education
 - Primary education
 - Secondary education
 - Tertiary education
 - Postgraduate education
5. What is your occupation?
 - Employed (full-time)
 - Employed (part-time)
 - Self-employed
 - Unemployed
 - Student
 - Homemaker
 - Retired
6. What is your household size (including yourself)?
 - 1-3 members
 - 4-6 members
 - 7-9 members
 - 10 or more members
7. How many adults (18 years and above) are there in your household?
 - 1
 - 2
 - 3
 - 4 or more
8. How many children (below 18 years) are there in your household?
 - None

- 1
- 2
- 3 or more

9. What is the main source of income for your household?

- Salary/Wages
- Self-employment/Business
- Agriculture/Farming
- Remittances
- Social welfare/government support
- Others (please specify)

10. What is your religion?

- Christianity
- Islam
- Traditional African religion
- Other (please specify)

11. What is your ethnic background?

- Akan
- Mole-Dagbon
- Ewe
- Ga-Dangme
- Other (please specify)

12. How many years have you lived in the Gushiegu community?

- Less than 1 year
- 1-5 years
- 6-10 years
- More than 10 years

13. Village name.....

Objective 1: To examine women's contribution of Village Savings and Loans Association (VSLA) on household income.

1. Are you a member of a Village Savings and Loans Association (VSLA)?
 - Yes
 - No
2. What is your total household income in [currency] per [month]?
3. How has your household income changed since becoming a VSLA member?
 - Increased significantly
 - Increased moderately
 - Stayed the same
 - Decreased moderately
 - Decreased significantly
 - Not applicable (for non-participants)
4. What are the main sources of your household income?
5. How do you use the funds received from the VSLA?
 - Business investment
 - Education expenses
 - Healthcare expenses
 - Savings
 - Other (specify)

Objective 2: To examine women's contribution of Village Savings and Loans Association (VSLA) on household health.

6. How would you rate the overall health status of your household members?
 - Excellent
 - Good
 - Fair
 - Poor

7. Do you have access to healthcare services for all household members?
- Yes
 - No
8. If yes, how has VSLA participation affected your access to healthcare services?
- Improved access
 - No change
 - Worsened access
 - Not applicable (for non-participants)
9. Have you noticed any changes in the nutritional status of your household members since joining the VSLA?
- Yes
 - No
10. If yes, please describe the changes you have observed:

Objective 3: To determine women's contribution of Village Savings and Loans Association (VSLA) on children's education

11. What is the highest level of education achieved by your children?
- No formal education
 - Primary school
 - Secondary school
 - Tertiary education
12. VSLA participants, has the VSLA enabled you to invest more in your children's education?
- Yes
 - No
 - Not applicable (for non-participants)
13. How do you prioritize the use of funds from the VSLA for your children's education?
- School fees
 - Books and supplies

- Private tutoring
- Other (specify)

14. How has your child's educational attainment changed since your involvement in the VSLA?

- Improved significantly
- Improved moderately
- No change
- Declined moderately
- Declined significantly
- Not applicable (for non-participants)