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**EFFECT OF SELF-HELP GROUP PRACTICES ON POVERTY LEVELS OF  
WOMEN IN MACHAKOS COUNTY**

**MARY KIOKO**

**MDF 077764**

**A RESEARCH DISSERTATION SUBMITTED IN FULFILMENT OF THE  
REQUIREMENTS OF THE AWARD OF MASTER'S DEGREE IN DEVELOPMENT  
FINANCE OF STRATHMORE UNIVERSITY BUSINESS SCHOOL**

**AUGUST 2022**

## DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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## ABSTRACT

Self-help groups are becoming increasingly important as a means of organizing women to take action and transform their situations, and they are believed to be the driving force towards the goal of economic independence. There has, however, been inconclusive evidence on the role they have played in stimulating poverty levels of women, which has been a challenge in both developed and developing economies. Thus, this study evaluated and examined the effect of self-help group practices on poverty levels of women in Machakos County, Kenya. The study sought to establish the effect of entrepreneurial training, self-help group financial accessibility, self-help group marketing collaboration practices that self-help groups facilitate, and the influence of socio-economic factors on poverty levels of women. The study was grounded on the empowerment theory and the theory of group cohesion. The research used a descriptive correlational research design to examine the relationship in the study variables. According to the Machakos County Social Works office, there are 408 women-self-help groups within the county. These self-help groups targeted the population of the study, with the chairpersons in the groups being the unit of observation. Through applying the Yamane formula, the sample size for this study was 201 self-help group leaders. The research applied a structured questionnaire in the data collection with collected research data analyzed using descriptive, correlation, and regression analysis. The findings were presented using bar graphs, tables, and charts. The study was able to obtain a 69% response rate which is accepted as a representative of the population. Correlation tests established that there exists a positive relationship between the study variables comprising entrepreneurial training, financial accessibility, marketing collaboration and poverty levels of women. The study determined that self-help group entrepreneurial training predicted 23.8 percent of changes in poverty levels of women, self-help group financial accessibility predicted 19.1 percent of changes in poverty levels of women and that self-help group market collaboration predicted 11.6 percent of changes in poverty levels of women. Together, these practices accounted for 54 percent of the changes in poverty levels of women. The study thus concludes that there is a positive and significant effect of SHG practices on poverty levels of women in Machakos County. Conclusions were that engaging in training practices, facilitating financial accessibility, and promoting collaboration led to improved economic empowerment of group members. The study recommends strategic periodic training on leadership and income-generating activities as this has been associated with improved managerial decision-making. The study recommends that SHGs increase financial training of their members as this would increase awareness about various credit facilities, financial incentives, and subsidies that would increase members' independence. The study also recommends that SHG leaders work to establish concrete partnerships with government officials and associate stakeholders as these promote market access and knowledge.

Keywords: Poverty levels of women, Entrepreneurial Training, Financial Accessibility, Marketing Collaboration

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## LIST OF ABBREVIATIONS

<b>OECD</b>	Organization for Economic Co-operation and Development
<b>SHG</b>	Self-Help Group
<b>SME</b>	Small and Medium Enterprises



## DEFINITION OF TERMS

<b>Poverty levels of women</b>	Poverty levels of women is the creation of wealth with the aim of realizing benefits to a community. It involves the programs, policies, or activities that are undertaken to improve the economic well-being and quality of life for a community (Feldman, Hadjimichael, Lanahan, & Kemeny, 2016).
<b>Entrepreneurial training</b>	Bhatti, Mat Saat, Juhari, and Alshagawi (2021) reports that entrepreneurial training and education play an important role in improving the psychological orientation of female entrepreneurs.
<b>Financial accessibility</b>	Financial accessibility has been defined as the ability of businesses and people to access financial resources and services, including deposits, credit, insurance, and payment (Yuan, Azam, & Tham, 2020).
<b>Market collaboration</b>	Marketing collaboration refers to the process of uniting multiple team members, teams, or brands to achieve marketing goals (Spriggs, et al., 2017).
<b>Self-help groups</b>	Nithyanandhan and Mansor (2017) define a self-help group as an informal association whose members utilize pooled resources to advance the economic goals of individual members.
<b>Self-sustainability</b>	Self-sustainability entails the maintenance of an individual by independent efforts (Hameed, Hisham, & Shahar, 2018).

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

Historically, women have been disadvantaged economically due to various reasons, including bearing the responsibility for domestic work and childcare, higher instances of suffering from violence and abuse, higher illiteracy rates, and social norms which discourage women from working, among others (Tandon, 2016). Presently, there is an increasing global consensus that women's entrepreneurial development is paramount for the development of society, and this has been reflected in literature (Agarwal, Lenka, Singh, Agrawal, & Agrawal, 2020; Aburaida, 2021). On the administrative level, the poverty levels of women have become a focal point for many governments and development institutions because it directly contributes to the achievement of sustainable development goals, specifically Goal 5 on achieving gender equality and Goal 10 on reducing inequalities. Welsh, Kaciak, and Thongpapanl (2016) reported that the inclusion of women in socio-economic activities contributes to a country's well-being, asserting that there is a bi-directional relationship between poverty levels of women and women's empowerment.

EEA Grants (2020) report affirms that while women represent half of the world's population potential, less than 30% are involved in poverty levels of women, with global indicators showing that women still earn 20% less than men. Further, in most of the biggest companies in the world, women make up only 17% of board member representation. Avalos (2016) reports that traditional roles for men and women in Papua New Guinea and much of the world have significantly hampered women's integration into society, with women around the world being denied the possibility to participate in the development of almost every indicator of human development. According to Siddeswari and Gopal (2021), women around the world in countries such as Canada, China, Egypt, Morocco, Poland, South Korea, and Turkey venture into business due to two main reasons; family support and personal problems. The study ascertained that financial and organizational support is essential for the development of women's business start-ups.

According to the OECD- Organisation for Economic Co-operation and Development (2018), women in Sub-Saharan Africa have the highest poverty rate of women in the world due to the major challenges they face. Poverty manifests as hunger, lack of safe shelter, and no access to

healthcare and education, among other things for African women. This is equally true in Kenya, where vast economic inequalities due to gender are present. Women in slums and rural areas in Kenya are among the most vulnerable to poverty due to social norms, which place women at a disadvantage to men with limited access to credit, education, and quality health care. Discriminatory social norms and practices that limit the participation of women in the economy play a grave role in defining gender relations and subsequently negatively influence rural women's economic and social prospects (Mathur & Agarwal, 2017).

Agarwal et al. (2020) argue that women's development aims to equip women with relevant proficiencies, skills, and capabilities, including the ability to identify opportunities, the capacity to take risks, to develop their innovative and creative orientation, self and social awareness, leadership qualities, and the ability to commercialize resources and create goods and services that can meet the present market needs. While Tripathi and Singh (2018) argue that access to finances might be the biggest factor holding back women's entrepreneurship, Agarwal et al. (2020) are adamant that lack of proficient skills and requisite business acumen hinder business development among women. Although governments around the world have used various approaches to promote the development of women, self-help groups have emerged as the most significant tools for encouraging women's empowerment and participation (Kondal, 2014).

### **1.1.1 Self-Help Groups Practices**

Self-sustainability entails the maintenance of an individual by independent efforts (Hameed, Hisham, & Shahar, 2018). A self-help group (SHG) is a voluntary association of individuals who are in need of minimal capital to set up or to re-invest in their small enterprises. Its main objective is to provide economic opportunities to the group to improve their socioeconomic status by bringing together the individually small group of funds into a large pool (Mathur & Agarwal, 2017). Nithyanandhan and Mansor (2017) define a self-help group as an informal association whose members utilize pooled resources to advance the economic goals of individual members. Kondal (2014) asserts that self-help groups exist to provide a platform for members to support each other's efforts and comprise a mixture of members with and without access to formal financial institutions. Various studies have sought the importance of self-help groups to women's empowerment (Jyothi & Nath, 2015; Mohapatra & Sahoo, 2016; Alemu, Van Kempen, & Ruben, 2018), reporting improved participation in economic activities among members of self-help groups through enabling savings and credit access.

Despite self-help groups exerting a positive influence, Songa (2016) reports that farmers have raised concerns regarding the competence and leadership skills of farmers' SHGs in the county. Extensive research has been carried out on self help groups and their success factors. In India, Banerjee (2020) study in enmpowering women in rural India during the COVID-19 pandemic determined that the groups' communication and meeting strategies, the level of training afforded to members and leadership style significantly influences empowerment outcomes. Roy and Biswas (2016) investigated SHGs in West Bengal and asserts that financial training is key to successful women empowerment as it provides the technical and managerial skills that are lacking within the population. This study investigated empowerment through financial inclusion while the current will address social in addition to financial empowerment. Alrefaei (2021) avers that successful SHGs have extensive partners such as NGOs who provide training and professional expertise, and bankers and microfinancers who provide financial support.

In India, women's self-help groups have enhanced the equality status of women as participants, decision-makers, and beneficiaries in the democratic, economic, social, and cultural spheres of life (Mathur & Agarwal, 2017). Another study by Nithyanandhan and Mansor (2017) established that participation in self-help groups improved members' decision-making skills and improved their status in society. Members reported higher levels of knowledge development and self-confidence. In Palestine, women's self-help groups have been used as effective tools in the struggle against violence (Bensky, 2016). Nayak and Panigrahi (2020) ascertained that increased participation in self-help groups results in higher income, improved entrepreneurial abilities, decision-making capabilities, access to healthcare and other government services, heightened self-esteem, and political involvement. In Ethiopia, self-help groups have been effective in empowering women apple farmers in the Chenchu district located in the south of Ethiopia (Alemu, Van Kempen, & Ruben, 2018). The self-help groups facilitated the transfer of useful practical and financial skills, which improved profit gains and business management.

Women's self-help groups have become increasingly popular in Kenya due to the large population of women who have no access to other forms of financing. Self-help groups have provided a breakthrough in improving women's lives through alleviating poverty and facilitating women's involvement in social affairs that enhance their livelihoods (Oware, 2020). Kithinji (2017) determined that self-help groups facilitate rural women populations' participation in nation-building through the provision of capacity-building training, promotion

of group cohesion towards similar goals, and increasing access to business credit. Muriithi (2020) determined that the knowledge-sharing aspect of SHGs is key to promoting improved performance among women entrepreneurs. Mbuuri (2020) determined that SHGs empower members through connecting them to financial institutions, providing market information, and transferring technical and managerial knowledge, thus determining success among businesses led by women.

The above studies show that SHGs play a key role in women's empowerment and reduction of poverty levels for women. The studies show that SHGs influence poverty levels of women through facilitation of skills transfer, campaigning for women's rights, facilitation of credit access, and improving access to the marketplace where women entrepreneurs can trade their goods. Greaney, Kaboski, and Van Leemput (2016) ascertained that member of self-help groups seek more than financial success. Mulwa (2020) argues that SHGs have to mobilize savings, share ideas, and train members on various development aspects. This study investigated self-help groups' influence on women's development by assessing their role in providing entrepreneurial training, financial accessibility, and market collaboration.

Bhatti, Mat Saat, Juhari, and Alshagawi (2021) report that entrepreneurial training and education play an important role in improving the psychological orientation of female entrepreneurs. These psychological attributes include innovativeness, self-confidence, tolerance of the unknown, training retention, and achievement motivation and they were all determined to improve entrepreneurial intention among women. Khalid, Ahmed, Tundikbayeva, and Ahmed (2019), in another study on entrepreneurial training, determined that entrepreneurial training is critical to improving organizational performance and cultivating an entrepreneurial culture within a population. Hendriks (2019) provides evidence that increasing financial access through digital technologies enables women to practice greater control needed for successful enterprises. Kisubi and Korir (2021) established that entrepreneurship training facilitates the development and growth of core business knowledge through changing attitudes and transferring skills to people with entrepreneurial traits. Kamau (2016) study concluded that business training programs are key to sustaining business growth for youth-driven initiatives. Locally, Nyaoro (2019) determined that the group leaders' project identification skills, stakeholder's identification skills, project implementation skills and conflict resolution skills all have a positive influence on SHG performance in Kiambu County.

This study analyzed the influence of group entrepreneurship training on poverty levels of women in Machakos County.

Financial accessibility has been defined as the ability of businesses and people to access financial resources and services, including deposits, credit, insurance, and payment (Yuan, Azam, & Tham, 2020). Chamani, Kulathunga, and Amarawansa (2017) assert that access to finances is among the top obstacles faced by women entrepreneurs, determining their intention to get involved in businesses and how much the business will grow. Another study carried out by Hanh and Xu (2021) in Vietnam associated financial accessibility with an increased ability to exploit growth opportunities, greater firm innovation and dynamism, and more efficiency of asset allocation. It was determined that access to finance has a significant impact on innovation among businesses. In Nigeria, Umejiaku (2020) asserts that access to credit has had a significant impact on the growth of women's enterprises. Koko, Maishanu, and Hassan (2017) also reported that the development of women's businesses was significantly impacted by a lack of access to formal financial services due to collateral requirements and a high preponderance of semi-illiteracy. This study evaluated to determine exactly how groups facilitate women's access to financial services and how these impacts poverty levels of women.

Marketing collaboration refers to the process of uniting multiple team members, teams, or brands to achieve marketing goals (Spriggs, et al., 2017). Market collaborations use different ideas, tools, networks, and distribution channels to increase product awareness (Kumar, 2020). Zafar, Toor, and Hussain (2019) determined that market access was a significant driver of success among women entrepreneurs, highlighting the role of social media in facilitating market access at affordable rates to women entrepreneurs who cannot transact effectively through traditional mediums. Hoque, Awang, and Ghani (2016) established a strong relationship between market collaboration and competitive advantage among members of self-help groups. In Limpopo province, South Africa, Murugani (2016) asserts that increasing women's initiatives' access to markets and other outlets is key to bridging the inequality gap that exists between men and women-led businesses. The study was adamant that empowerment initiatives have to address women's access to resources and the market where they can sell their produce.

The above studies show that while market access can improve members' empowerment, the discrepancy shows that there are other factors that can influence the effectiveness of market links. Further, none of these studies have explored the relationship between market

collaboration among groups and the economic empowerment of women in underdeveloped economies. Thus, this study evaluated the influence of self-help groups' marketing collaborations on poverty levels of women in Machakos County.

### **1.1.2 Poverty levels of women**

Poverty levels of women is the creation of wealth with the aim of realizing benefits to a community. It involves the programs, policies, or activities that are undertaken to improve the economic well-being and quality of life for a community (Feldman, Hadjimichael, Lanahan, & Kemeny, 2016). Poverty levels of women strategies have a variety of goals, such as the creation of jobs, keeping businesses operational and inspiring new ones, improving the quality of life, increasing the volume of businesses paying taxes, marketing, and selling products, and transmitting critical skills and competencies to members of the community (Nayak & Panigrahi, 2020). Measuring poverty levels of women can be difficult, and several frameworks have been developed, with the International Development Research Centre (2018) grouping these measures into labour market outcomes, control over household resources, marriage, fertility, and child-rearing. This research examined these variables to measure the economic empowerment of women in Machakos county.

Eradication of poverty and promotion of gender equality have gained high interest in recent years, and women empowerment is one of the sustainable development goals set by many countries in the world (Nithyanandhan & Mansor, 2017). Economic empowerment among marginalized populations has been identified as the key to meeting sustainable development goals, and self-help groups have emerged as effective tools for promoting this agenda (Maina, 2020). Women development activities are those activities that are geared to eradicate poverty, increase economic growth and foster improved standards of living among women, both young and old (Saravanan, 2016). It involves increasing an individual's economic freedom to make important choices affecting their lives and the transformation of these choices to achieve superior economic gains (Muriithi, 2020).

As asserted by Falk and Hermle (2018), poverty levels of women are a key determinant of societal progression towards gender equality. The success of poverty levels of women projects is dependent on community support, partnerships and preparedness. Poverty levels of women can also be referred to as poverty levels of women since it involves increasing the degree of freedom of an individual's economic matters. Women's developmental movements in the past were engaged in activities to promote income generation, welfare concerns, and home-making

skills. Further, Orisadare (2019) reports that currently, these groups have shifted their focus to include lobbying for women in decision-making positions in politics, pressing for legislative and constitutional changes, and conducting civic education. Further, women's development efforts have transformed their strategies to facilitate sustainability of the acquired independence. This study analyzed poverty levels of women as the ability and freedom of women to make financial decisions and choices for their own benefit. This was indicated by their income, poverty rate, and social and health indicators.

### **1.1.3 Machakos County**

Machakos County is one of the 47 counties in Kenya, with a population of around 1.5 million people. The county borders Embu, Murang'a, Kiambu, Nairobi, Kajiado, Makueni, and Kitui counties and is located in Kenya's Arid and Semi-Arid Lands (ASALs), meaning little income can be realized from commercial agriculture, which remains the country's main economic activity. The Machakos County Integrated Development Plan 2013-2017 affirms that 59.6% of the county's 1.4 million people live below the poverty line, and only 58% and 27% of the population have attained primary and secondary levels of education. The high poverty level is reflected by the low percentage of households connected to electricity and clean drinking water, 17 and 32 percent, respectively. Poverty eradication has been problematic, and gender inequality has exacerbated the problem, with women and disabled members of the society finding it difficult to access education and finances, essentials for a sustainable business.

The Machakos county report (2020) affirms that the county's main economic activity includes livestock and fruits farming, and sand harvesting, and access to credit is impacted by various socio-economic and cultural barriers (Mbuva 2014). According to Kyalo (2017), despite a national women empowerment and development fund being allocated to the county to help facilitate financial access, the fund's coverage and capacity are still very low. Odira (2017) also argues that the allocated funds are not reaching the targeted beneficiaries due to unsustainable demand. Songa (2016) avers that farmers in the county have low education levels and this limits their access to formal financial lines of credit and their choice of funding. With formal financial institutions reducing investment in small-scale entrepreneurs, collectivization and working within groups is considered a sustainable means of empowering the counties' poor.

Songa (2016) is assertive that despite increased use of self-help groups, farmers in the county have raised concerns that some of the officials running some of the groups have not been trained

on proper governance and accounting, limiting their effectiveness in meeting organizational goals. Odira (2017) are affirmative that representatives from the World Economic Forum encourage women to join groups as a means of facilitating access to financial information and entrepreneurial training. This study will examine the practices undertaken by these groups to determine whether they have any influence of the economic and social development of women in the county.

## **1.2 Statement of the Problem**

Alleviating poverty and providing social services is the core goal of all governments and self help groups are considered to be suitable vehicles through which issues of wealth inequality and lack of access to financial and technical resources. This is the case in Machakos County where only about 29% of the total population works for pay and more than 23% lack formal education. This falls disproportionately on women, with 70% of female households lacking access to clean water and 7% lacking sustainable sources of income (KNBS, 2018). The County government aims to reduce the poverty level from 42.6% to 30% in 10 years and has since embarked on a variety of strategies to empower women and the youth (Machakos County, 2018). The Kenyan government disburses finances to farmers through funds such as the Commodities Development Fund which is the primary source of financing for coffee farmers (Cheruiyot, 2015). However, Mutuku (2016) reports that although the county has made several attempts to increase the effectiveness of SHGs such as providing registration, training and policy guidelines, the development index in the county is still low and much is yet to be understood regarding how these groups are managed. Huho and Muriuki (2021) are assertive that the food insecurity threat posed by inequality in the county will increase unless such drivers of change are well managed and adhere to best practices.

Jagtap (2021) focused on training and its impact on member skills, the current analyzed other drivers of successful group impact on the poverty levels of women. On the other hand, Reddy and Manjunatha (2018) carried out a literature review; the current study expounded on this by collecting primary data and determining the relationship between the SHG and poverty levels of women. Further, Alemu, Van Kempen, and Ruben (2018) research was based in Ethiopia; its findings may not be reflective of Kenyan women's empowerment. Nyasulu (2021) study was on small-scale potato farmer group associations' structure and market choices. This study analysed this by examining the economic empowerment among women groups. Lastly, Khaki

(2017) research is not focused locally, which represented a study gap that was solved by conducting a localized analysis of SHG and poverty levels of women. The empirical evidence points to different findings on the success factors for self-help groups. Some call for increased training, others increased cohesiveness and others better management qualities. Clearly, there is a lack of consensus on the practices that SHGs should engage in to remain sustainable and operational over a long time period. This study will address the success factors for SHGs and to propose a list of best practices that they can engage in to ensure successful empowerment of its members.

### **1.3 Objective of the Study**

The main objective of this study was to examine the effect of self-help group practices on poverty levels of women in Machakos County, Kenya.

#### **1.3.1 Specific Objectives**

- i. To examine the influence of self-help group entrepreneurial training on poverty levels of women in Machakos County, Kenya.
- ii. To determine the effect of self-help group financial accessibility on poverty levels of women in Machakos County, Kenya.
- iii. To evaluate the effect of self-help group marketing collaborations on poverty levels of women in Machakos County, Kenya.
- iv. To determine the effect of socio-economic factors on poverty levels of women in Machakos County, Kenya.

#### **1.4 Research Questions**

- i. What is the influence of self-help group entrepreneurial training on poverty levels of women in Machakos County, Kenya?
- ii. What is the effect of self-help group financial accessibility on poverty levels of women in Machakos County, Kenya?
- iii. What is the effect of self-help group marketing collaborations on poverty levels of women in Machakos County, Kenya?
- iv. What is the effect of socio-economic factors on poverty levels of women in Machakos County, Kenya?

### **1.5 Scope of the Study**

The study scope contextually focused on the various roles that self-help groups play in the community, such as financial accessibility, marketing collaborations, entrepreneurial training, and how they impact poverty levels of women. The study's contextual scope assessed how socio-economic factors impact poverty levels of women. The study's geographical scope was the women's self-help groups in Machakos County. The theoretical scope was limited to the empowerment theory and the theory of group cohesion. The time scope for this study was April 2022 to June 2022.

### **1.6 Significance of the Study**

This study will be significant to policymakers and non-governmental organizations charged with promoting gender equality and poverty eradication. The findings of this study will form a basis for policymaking on issues regarding women's empowerment as well as improve already existing policies. Its findings will be region-specific and will specifically benefit regional directors in charge of promoting poverty levels of women in Machakos County. The study will also help the self-help group leaders in identifying challenges to poverty levels of women within the county.

The findings will be beneficial in providing information on the best practical solutions the self-help groups can apply to improve poverty levels of women. The results can also be utilized by microfinance institutions and Saccos in identifying strategies that they can deploy to help in the sustainability and growth of women's self-help groups in the country. This study will also be important to future scholars looking into poverty levels of women strategies for women.

### **1.7 Limitations of the Study**

The researcher faced significant limitations during the data collection period. It was difficult to get into contact with the respective self-help groups under investigation due to the remoteness of their locality and lack of adequate information on the location of their members. This was addressed by using online data collection methods using google forms which was possible as the researcher was able to contact the respondents through telephone contacts. To ensure that the respondents are truthful in their responses, the researcher assured them that the research would adhere to strict confidentiality stipulations. The respondents were also assured that their participation would be anonymous and that they would not be required to produce personal data. The study faced adverse language barriers when engaging with some of the

participants hence where not possible for respondents to understand the questions, the researcher guided the participants in responding using the local dialect.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter is composed of the theoretical and empirical sections, which discuss the theories underpinning the research and the studies supporting the interactions between the study variables. It also presented a summary of the literature gaps and the conceptual framework, which depicts the interactions between the study variables.

#### 2.2 Theoretical Review

The study was premised on both the empowerment theory and the theory of group cohesion. Empowerment theory was used to anchor the dependent variable, while the theory of group cohesion was used to interrogate the role of the self-help groups in achieving poverty levels of women. By combining the empowerment theory and the theory of group cohesion, this study was able to connect empowerment efforts in the context of groups. The multi-theory approach enabled the study to develop a framework that can accurately portray the relationship between empowerment variables and self-help groups' success factors. This link was in the form of the variable, socio-economic factors, which moderate the relationship between empowerment efforts, group cohesion, and economic empowerment of women in Kenya.

##### 2.2.1 Empowerment Theory

This study borrowed from Marc Zimmerman's (1995) empowerment theory model, which asserts that a framework can be developed to identify supportive activities, structures, and actions that can empower people to advance their skills, acquire resources, and employ them to advance their lifestyles. According to this theory, different approaches to interventions can be affected to create social change. An example would involve individuals participating in community organizations to learn skills or organization managers choosing to adopt certain practices which can enhance their competitive position (Brody et al., 2017). Zimmerman (1995) explained that empowerment consists of the measurable levels of increased capacity to achieve a goal due to interventions designed to provide these competencies (Nayak & Panigrahi, 2020). The result is that individuals have increased feelings of perceived control and develop new skills. Thus, the theory identifies essential processes that must be engaged to realize the desired outcome, which is improved capacity building. According to Okoth (2017), the process and outcome work at different environmental levels, individual, organization, and community levels, and may show in different situations with different people.

This theory is applied to this study since it suggests that intervention strategies can be implemented to elevate women's lives. For instance, the provision of training services can equip women with the practical skills and competencies that are essential for business management. Additionally, Singh (2016) reports that women and communities can be informed about existing business opportunities, their rights, and their importance to societal development and be enlightened on how to change perspectives and pursue justice and equal rights. In most parts of the world, women are unable to own some essential resources to develop their lives, such as land and property, and empowerment asserts that women can be equipped with skills to improve their independence (Moran, Gibbs, & Mernin, 2017). Eisman et al. (2016) assert that the empowerment theory can be applied to develop a framework for liberating people who are oppressed by enabling them to regain power and control over their lives since it recognizes that people require power and control to improve their lives and operate freely.

According to Madore (2017), the empowerment theory is a strength-based approach that focuses on improving people's attributes and building on their strengths rather than negatives, recognizing that people can be differently abled to become resourceful, especially when faced with adverse conditions. However, Hamlin and Cheng (2020) argue that although empowerment may increase an individual's ability to become more productive when the training is ineffective and the guiding principles under-developed, empowerment can become chaotic, especially when the empowered people follow their own set of values and goals. Furthermore, a lack of proper organization and coordination may make individuals make biased decisions, thus increasing the risks exposed to their lives. However, Annan, Donald, Goldstein, Martinez, and Koolwal (2021) assert that the empowerment theory is best suited to exploring women's empowerment since its principles can influence women to take charge of their lives positively. Providing training services, essential support services, and market links can guide women on their vision, mission, and values to ensure that their decisions are in line with their life goals and poverty levels of women.

### **2.2.2 The Theory of Group Cohesion**

This theory traces its roots to the works of Tuckman (1965), and it holds that groups can be more than the sum of their parts and that people are more productive when they work together in groups that work towards specific goals (Elliott, 2021). The term cohesion has synonyms such as unity, solidarity, linkage, togetherness, and bond and according to Holle (2021) teams lacking in cohesion will be sloppy and ultimately fail to realize their goals. In group studies, Love (2018) asserts that the concept refers to the total actions, whether physical or mental, that

hold people together for long periods of time. The theory is based on the principle that when people with complementary character traits, skills, and needs are put together, there is the creation of synergy (Choi & Yoon, 2018). On the other hand, people with conflicting traits cannot work well together to realize a common goal (Bakar, 2017). Situational explanations examine groups as entities with lives of their own, separate from the people who form them, implying that there are significant developments that occur throughout a group's lifespan, regardless of the personalities and objectives of the people involved (Munro, 2019).

According to Borek and Abraham (2018), group cohesion is high when members share similar characteristics such as age, gender, feelings, needs, interest, and backgrounds. Low group cohesion affects strategic goal realization for the groups since it results in conflicts that affect resource allocation and skills and competencies transfer. Tuckman (1965), through this theory, posits that groups succeed in realizing their core goals when they focus on improving members' cohesiveness. A high level of cohesion within groups increases unity in seeking common goals. The reverse is true (Han, Lee, Beyerlein, & Kolb). According to Kanwar and Arrawatia (2018), the theory of group cohesion asserts that empowerment can be achieved through cohesive groups which are united through related factors such as similar goals, norms, interaction patterns, location, and shared understanding.

In the study by Kithinji (2017), group cohesion was examined by investigating the group's trust levels, shared interests, cooperation, focus, expressed caring, and rate of withdrawal. Ezhumalai, Muralidhar, Dhanasekarapandian, and Nikketha (2018) used a group cohesiveness scale to measure the level of group cohesiveness among SHGs, which includes aspects of member attendance, contribution, relationship with others, contracting, and cooperativeness with other group members. Similarly, personal abilities, equality, level of internal acceptance, cooperativeness, volunteerism, and background similarities can be used in understanding the level of group cohesion (Were & Kimaru-Muchai, 2021). Accordingly, Dobrijević et al., (2020) assert that smaller groups are more effective than larger groups.

This theory was essential in this study since it provides a basis for understanding the success factors for goal realization within groups (Gugerty, Biscaye, & Leigh Anderson, 2019). By paying attention to these factors, groups can increase their cohesiveness and hence their effectiveness in coming together towards the realization of common goals. Mbuuri (2020) opines that by ensuring members are satisfied, feel secure and supported, share the expected benefits, and facilitate internal democracy, group members are empowered. Further, it asserted that groups are more attractive when they are more cohesive, hence can attract competent

partners who can assist in the realization of group goals (Gombe, et al., 2018). The theory also asserts that high group cohesiveness increases members' feelings or self-esteem, self-confidence, and personal adjustment, increasing their willingness to partake in group activities (Kumar, Suar, & Mishra, 2018). This theory aided in the identification of the factors that promote women's group cohesion and enable SHGs to work together to improve women's lives.

## **2.3 Empirical Review**

### **2.3.1 Self-Help Group Entrepreneurial Training and Poverty levels of women**

Jagtap (2021) carried out case study research into the influence of training program participation requirements on the performance of PMC's social welfare groups (Samaj Vikas Vibhag). All self-help groups were required to participate in this program to be registered. The data was collected from group leaders and assessed using descriptive analysis, determining that the training program improved members' managerial capacity, accounts' maintenance, leadership building, teambuilding, saving sensitization, and employment generation ability. Trainees reported an improved attitude, increased awareness of standards, a higher sense of self-confidence, improved communication skills among members, and a higher rate of collaboration among different groups. The study only addressed training practices while this study addresses more practices engaged by SHGs.

However, although the above studies establish a positive association between group training and women empowerment, Ul-Hameed, Mohammad, and Kadir Shahar (2018) determined that skills training/ development has to be accompanied by social capital provision offered through entrepreneurial networks to give the women more independence. In the study by Brody et al. (2017), it was determined that SHGs were ineffective in addressing domestic-related issues, which are significant inhibitors to women's development. These studies show that entrepreneurial training in itself does not guarantee economic empowerment since it has to be supplemented by other empowerment practices. Further, Rai and Shrivastava's (2021) study asserted that psychological empowerment is key to improving entrepreneurs' resilience. Although these studies establish a relationship between entrepreneurial training and involvement in financial activities, they do not focus on the relationship within the Kenyan context, especially in relation to Machakos county self-help groups.

Ethiopia's Alene (2020) researched on SHG critical success factors and found that SHG success is highly reliant on the group's on social and economic homogeneity, membership

requirements, exclusive management approaches, training and knowledge sharing practices. In a similar study, Khalid et al. (2021) determined that leadership training programs significantly improve members' self-perception of society. The study sampled 82 women from three groups. The Kirkpatrick model was employed, while the Wilcoxon signed-rank test compared pre-and post-training quantitative data. The study revealed that after undertaking the training programs, members acknowledged increased knowledge and leadership skills. The women were more confident in their financial management capabilities and had a belief that they could make significant contributions to transforming society. These studies did not establish a positive association between training and entrepreneurial involvement, hence no economic empowerment benefits.

Sah (2020) examined eighty fishing women groups in the Jashpur district to investigate the impact of training services on women's empowerment. The study used an ex post facto research design with the analysis revealing that group training such as fish breeding, pre-stocking management, grow-out aquaculture management, post-stocking management, harvesting as well as post-harvest management have significantly improved their members' business skills. The study recommended that SHGs partner with professionals to develop their members' competencies through skill sharing. It was also suggested that standards be established to ensure groups offer their members different kinds of training services for good skill development. This study focused on women fishing groups while the current didn't specify by profession.

The study by Nyadida and Otuya (2021) investigated the relationship between business support services and women SMEs' performance in Mathare slums. The study specified the effect of women's enterprise development funds table banking and entrepreneurial education and training and adopted a descriptive design using correlation analysis. The analysis determined that business support systems foster entrepreneurship development by providing valuable information that facilitates funds access. The study also determined a positive correlation between government support services, table banking support services, and group members' economic contributions. The study asserts that capacity building and implementation of supporting policies and programs would improve goal realization among women groups. This study specified women SMEs; the current analyzed women entrepreneurs who belong to self-help groups.

Murria (2020) carried out a literature review on the role of financial access through SHGs on women's empowerment. The study determined that groups which had access to adequate

finances were more effective at empowering their members. The study asserts that micro-finance services have been used as instruments that groups have capitalized on to improve women's businesses, improve their risk-taking attitude, and raise their awareness and confidence. The study also reported that SHGs raise the leadership potential of their members through management training, improve members' social status, and support the delineation of harmful cultural practices. Although establishing a positive relationship, the study did not utilize primary data.

### **2.3.2 Self-Help Group Financial Accessibility and Poverty levels of women**

Reddy and Manjunatha (2018) carried out a literature review aimed at determining the effect of bank linkage on the productivity of women's self-help groups in Indonesia. The review determined that self-help groups had emerged as effective vehicles of change that the government had employed to promote financial inclusion among women, the youth, and marginalized peoples. The study asserts that SHGs had empowered women by facilitating access to finances, the development of essential skills and competencies, and providing a unified approach to problem-solving. Bank-groups links were established to significantly improve group capacity, self-bargaining power, and increased members' independence. The current study supplemented the study's findings by using primary data.

In Malaysia, Al-Shami, Majid, Mohamad, and Rashid (2017) noted the limited influence of microcredit financing as a tool for women's development, noting that while the borrowers' household income and personal asset acquisition improved, it has no effect on minor financial decisions. Eton, Picho, Mary, and Benard (2019), in their study, assert that financial accessibility significantly reduces poverty among rural women in Uganda. However, this study also showed that although financial training equipped women with money management skills, the lack of policies designed to elevate women's status in the community and the traditional culture of women's household roles impacted women's ability to engage in business, questioning their effectiveness without the development of complementary policies. From the above, financial training does impact the financial productivity of beneficiaries. However, none of the studies have explored this relationship in the Kenyan context.

Poongavanam and Jayaraman (2018) also determined increased independence as an influence of SHG financial access in India. The study specified the influence of the development of formal SHG Federations and their relationship with SHG Bank Linkage and microfinance institutions (MFI) linkage. The study revealed that ensuring SHGs had a sustainable link with

financial organs is key to ensuring SHGs' effectiveness in ensuring women empowerment. The study asserts that financial access increases individuals' self-decision making and that governments have to play a key role in facilitating the development of policies that would encourage further collaboration between financial institutions and development groups.

A study by Ravichandran (2019) investigated the effect of the provision of finances to Primary Agricultural Cooperative Credit Societies (PACCS) in Tamil Nadu on the institutional development of rural women. A survey design using the multi-stage random sampling method was employed. The analysis shows that financial power was key to SHG's primary goal realization. Besides making significant contributions to women's empowerment in rural areas, the establishment of the PACCS-SHG link resulted in a drastic reduction in the role of money lenders in the informal rural credit market. The study called for the scaling up of the cooperation to further women's developmental efforts in urban centres and slums around the world. These studies were focused on investigating bank-link on group effectiveness; the current study did not focus on groups linked with banks.

Khaki (2017) carried out a study examining the effect of financial access on poverty eradication in the Kashmir Valley. The study specified investigating the development of participants/beneficiaries of the National Rural Livelihood Mission Scheme across various dimensions of poverty, and the Multidimensional Poverty Index (MPI) was utilized. A pre-post methodology was employed, with an intuitive quasi-experimental design guiding the study in the collection of information from the beneficiaries. The analysis revealed that participants had witnessed improved lifestyles and living standards. However, no association was established with poverty levels of women among women. This study did not assess how training and socio-economic factors impact SHG performance.

Rai and Shrivastava (2021) aimed to develop a model for assessing the role of microfinance activities on women's empowerment and to evaluate whether the size of the family and membership in self-help groups plays any moderating role in women's empowerment. A mixture of factor analysis and partial least square structural equation modeling was employed in the analysis. Multigroup analysis was used to assess the moderating role of SHG membership and family size. Analysis revealed that SHG membership resulted in social empowerment while non-SHG members benefited through economic and psychological empowerment. For family sizes with less than four children, SHG membership resulted in socio-economic empowerment, while those with larger families reported improved psychological empowerment. Conclusions were for increased sensitization and promotion of women's socio-

economic and psychological development through SHG membership. The study used mixed methods in analysis; the current study applied descriptive analysis.

Legis (2020) sought to examine the effect of social entrepreneurship on women's empowerment in Kajiado County, Kenya. The descriptive study specified the effect of mentorship, training, financial access, and networking on women's empowerment. The analysis of data collected from 370 women social entrepreneurs determined that while mentorship positively impacted women empowerment, training did not. Financial access had the most significant influence on women's empowerment. The analysis showed that social groups and networks. Groups relied on these networks to gain financial information, which improved their access to finances. The study called for the development of innovative financial instruments with terms geared to meet the nature, riskiness, and types of women enterprises.

### **2.3.3 Self-Help Group Marketing Collaborations and Poverty levels of women**

Salam and Hoque (2021) carried out an empirical study into the effects of relationship marketing and the use of social media on the performance of group SMEs in Bangladesh. The study adopted a structured survey and sampled 384 SMEs selected through random cluster sampling. Hypothesis testing was done with the use of SEM-AMOS package 22.0, guided by the configuration theory. The study analysis showed that groups that had adopted RM were more successful and that social media as a low-cost communication tool displayed significant moderate effects on the relationship between relationship management and group SMEs' performance. Dossou, Aoudji, Vissoh, and Zannou (2021) also examined the relationship between social networks and the performance of young agribusiness women. The multiple regression analysis revealed that in Benin, the size of the network, the direction of its centrality, and its level of competitiveness and support all have varying levels of impact on performance, but the effect was mediated by the environment. The size of the network and its centrality were beneficial in low-barrier environments. Relationships have to be developed with family members, friends, raw material suppliers, and customers, among others, and business discussions must be emphasized to make optimum use of these networks. This study assessed the networks developed in groups and did not investigate the other drivers of group success.

Alemu, Van Kempen, and Ruben (2018) carried out an Ethiopian study that aimed to examine the impact of self-help groups (SHGs) in apple production and marketing on empowering rural women. The study used a cross-sectional survey that selected participants using propensity score matching. The study also involved men in examining whether SHG groups had an

influence on men's attitudes toward women's empowerment status. The analysis determined that participation in SHGs had a significant impact on women's empowerment through facilitating information exchange and raising awareness regarding women's rights and roles in community development. This study focused on women apple farmer groups.

Alene (2020) determined that while actors such as previous work experience, access to finance and business information, government support, and individual characteristics influence the performance of women entrepreneurs, marital status, age, physical infrastructure, and access to markets had no significant relationship with women entrepreneurs' performance. In the study by Abrar-ul-Haq, Jali, and Islam (2018), it was ascertained that while the women-led projects and NGOs strive to improve women's personal, social, managerial, and entrepreneurial competencies, the study highlighted political empowerment and policy development as the main drivers of women empowerment. The study highlighted the need for economic, social, and political empowerment to ensure the effectiveness and sustainability of women-led initiatives. According to findings from Mulwa (2020) determined that success among SHGs is contingent on the type of group, the characteristics of the members (education, age, professional background), and the level of participation in decision making.

Simon, Margaret, and Bett (2015) also focused on farmers' marketing organizations. 300 indigenous chicken farmers in Kakamega County, Kenya, were contacted in an investigation into the socio-economic and institutional drivers of collective marketing. The analysis involved the Heckman two-stage regression model, with the findings showing that participation in collective marketing stimulated agricultural and rural transformation, asserting that farmers with smaller lands were more inclined to participate in group marketing. The study recommended increased awareness of collective marketing to encourage more participation of young farmers and increased diversification of products. Further recommendations were for increased collective agreements with marketing groups and other financial instruments to facilitate reduced transaction costs. This study assessed farmers' associations.

Omotesho, Ogunlade, Olabanji, Olabode, and Adu (2021) carried out a study whose goal was to determine the effect of innovation adoption through joint asset acquisition. The survey style research specified the drivers of women's willingness to own and manage designer rice in SHGs. Respondents were contacted using a two-stage random sampling technique and interviewed. Descriptive analysis revealed that a high number of respondents had taken part in group training which increased their level of rice farming, access to extension services, the market, and credit. The study also determined that the burden of joint management, poor level

of accountability, and group structure were the main challenges impeding the adoption of collective asset ownership and product marketing. The study recommended women groups receive effective training on how to jointly acquire and exploit assets, credit, and market links to improve their lifestyle.

Nyasulu (2021) was involved in a study that sought after the influence of group rules and the choice of market outlets on the participation of small-scale potato farmers in collective marketing. Concurrent triangulation mixed research design was employed. The analysis determined that only a small percentage of the farmers were involved in collective marketing, with those with a high level of education being more involved. Further, group rules directing the choice of market outlets such as brokers, urban markets, and export markets all improved the farmers' collective marketing capacity. They were able to identify partners who are untrustworthy and generally engaged in better business deals. These studies focused on joint market and asset acquisition, and this study also investigated relationship marketing to expound on this.

#### **2.3.4 Socio-economic Factor's effect on Self-Help Group Participation and Poverty levels of women**

Mohapatra and Sahoo (2016) examined the availability of education and microfinance programs on women's empowerment. Primary data was collected with the goal of gaining insight into the individual, household, and environmental factors that influence women's participation in a self-help group (SHG)–Bank linkage program in Odisha. Stratified random sampling was employed on a sample of 300 homes, and data was collected through door-to-door interviews and focus group discussions. The analysis determined that the level of education, level of autonomy, gender relationships, and religious factors all had significant influences on women's participation in microfinance programs. Participants of the program reported increased empowerment and financial freedom, with the women becoming more involved in household financial decision-making. This study assessed SHG bank linkage and access to microfinance services, and this study did not focus on SHG-bank linkage.

Kumari, Malik, and Ghalawat (2019) carried out a study involving 120 respondents selected randomly from the Bhiwani and Bawani Khera blocks in the Bhiwani district of Haryana state. Data were analyzed using correlation analysis techniques, revealing that group members were revealed to be young women who had little educational qualifications and members of nuclear mid-sized families. The analysis determined a positive correlation between socio-economic

factors and women group empowerment. It was determined that the provision of training services significantly improved the performance of income-generating activities, followed by credit access and ownership of social and natural capital and resources such as land, electric motors, and market links. Members' age, education attainment level, type of family, annual income of households, and mass media exposure improved the effect of training received. Further, mass media exposure and members' information-seeking behavior influenced the performance of women enterprised in self-help groups.

Similar findings were reported in Komitu's (2019) study, which explored the factors that determine women's financial credit uptake in self-help groups (SHG) projects in Samburu County, Kenya. The study used a descriptive research survey design and sampled 345 respondents. Anova analysis revealed that members' education level, training, financial literacy skills, and awareness of financial products influenced the members' financial credit uptake among women. Further, socio-cultural norms such as women's roles in the family, patriarchy, and taboos determine women's intention to access credit. Community sensitization on the importance of women's empowerment to societal development was recommended to convince them to shun some of the practices which impede women's involvement in economic practices to effect cultural change at the household level.

Binti-Ani (2021) assessed the impact of groups' leadership structure, level of participation, social capital, and members' personal psychology on members' economic empowerment. The study sampled 433 members of women smallholder groups in four Peninsular states in Malaysia. Questionnaires were analyzed using the Pearson correlation analysis revealing that the study variables have a significant positive impact on poverty levels of women. Suggestions were for capacity development to enable women groups to have a clear and transparent, forward-thinking leadership structure, involve members in policy formulation, and provide adequate support and training to improve members' sense of ability to promote SGHs' goal realization. This study was based in Malaysia; its findings may not be reflective of Kenyan SHGs.

Zakari, Abdoulaye, Moussa, and Ibro (2021) sourced data from 1783 homes in rural Niger in an examination into the drivers of group participation and the impact of collective marketing on household income and food security. Matching techniques were employed to assess how collective marketing impacts household food security and income. Analysis revealed that the number of farmers participating in group marketing was low, with the size of the household, the quantity of livestock, the size of the farm, distance to extension services providers, and

market access positively determining farmers' decisions to get involved in farmer's groups. The study determined that collective sale efforts have negative impacts on household food security and income. Recommendations were for farmers' organizations to restructure their operations and design strategies to improve their influence on members' awareness and capacity for community development. This study involved men in its analysis.

Mutonyi (2019) reported mixed findings in his study, which examined the impact of farmer group membership on smallholder members' welfare and poverty. The study involved mango farmers' members and non-members in small farmer organizations in eastern Kenya. The study adopted a propensity score matching methodology in analysis, revealing that members enjoyed advantages such as increased total household income and asset holdings, thus reducing poverty. However, the analysis determined that medium-scale farmers realized more benefits of collectivization than small-scale and large-scale farmers. The study determined that socio-economic assets were key influences of collective marketing participation with age and household income, market access, land size, and the number of crops grown significantly determining participation. The study focused on mango farmers groups. This study applied these findings to determine the socio-economic factors that have to be considered during policy development.

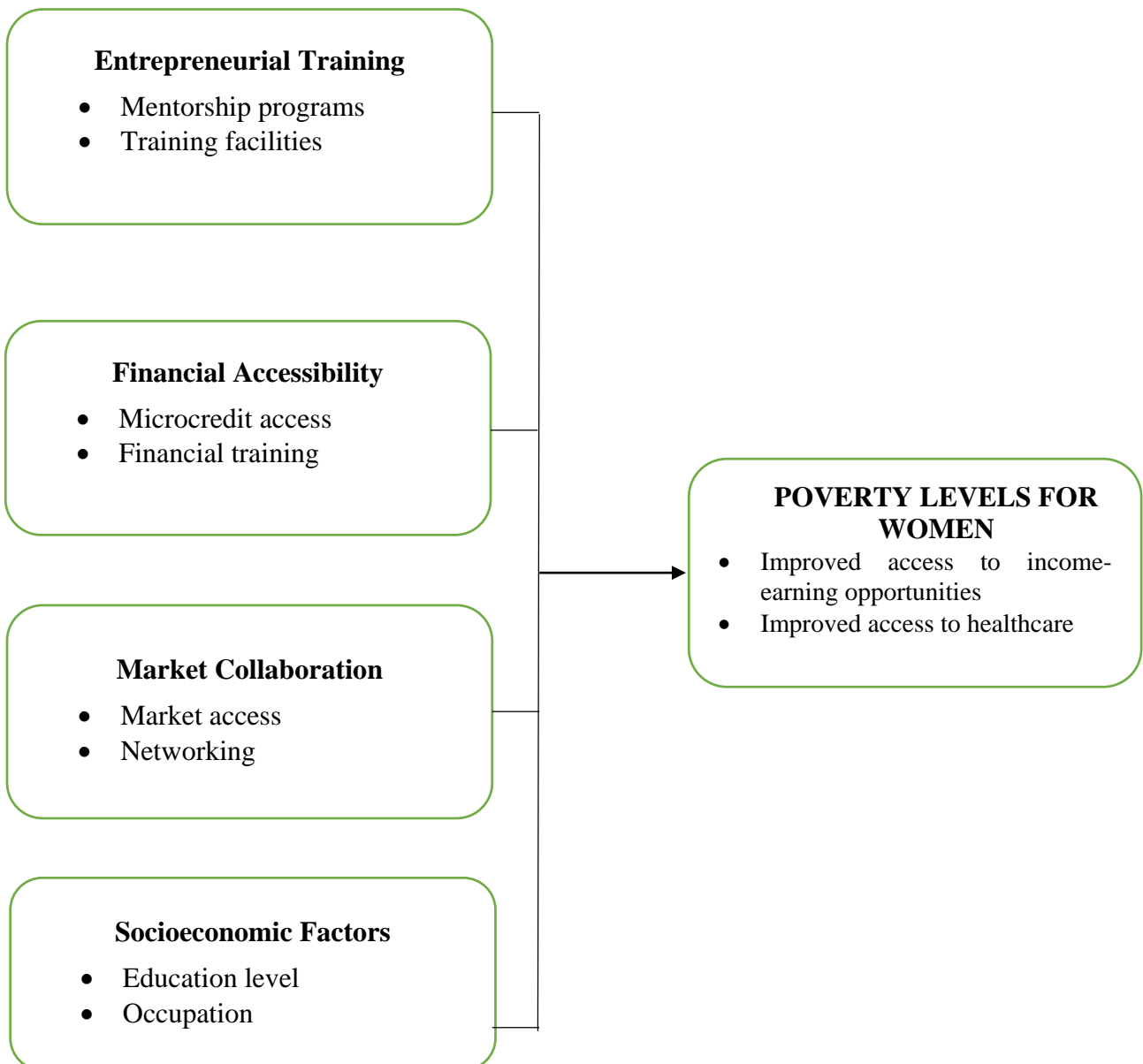
## **2.4 Conceptual Framework**

The study sought to determine if self-help groups play a role in empowering poverty levels of women. The following conceptualization of the variables is shown below in Figure 2.1.



**Independent Variable**

**Dependent Variable**



Source: Researcher (2022)

**Figure 2.1 Conceptual Framework**

The conceptualization above presented the interaction between the study variables and the poverty levels of women within the county. The research variables are operationalized below.

**Table 2.1 Operationalization of Study Variables**

Variable	Indicators	Supporting Literature	Measurement	Data analysis
Entrepreneurial Training	<ul style="list-style-type: none"> <li>• Mentorship programs</li> <li>• Training facilities</li> </ul>	Bhatti et al. (2021); Kisubi and Korir (2021); Ul-Hameed, et al. (2018)	Ordinal 5-pt Likert Scale	Descriptive analysis Correlation analysis Regression analysis
Financial Accessibility	<ul style="list-style-type: none"> <li>• Microcredit facilities</li> <li>• Financial training</li> </ul>	Chamani, Kulathunga, and Amarawansa (2017); Hanh and Xu (2021); Yuan, Azam and Tham, (2020).	Ordinal scale 5-pt Likert Scale	Descriptive analysis Correlation analysis Regression analysis
Market Collaboration	<ul style="list-style-type: none"> <li>• Market access</li> <li>• Networking</li> </ul>	Zafar, Toor, and Hussain (2019); Murugani (2016); Alene (2020)	Ordinal scale 5-pt Likert Scale	Descriptive analysis Correlation analysis Regression analysis
Socio-economic Factors	<ul style="list-style-type: none"> <li>• Education level</li> <li>• Occupation</li> </ul>	Alene (2020); Abrar-ul-Haq, Jali, and Islam (2018)	Ordinal scale 5-pt Likert Scale	Descriptive analysis Correlation analysis Regression analysis
Poverty levels of women	<ul style="list-style-type: none"> <li>• Access to income-earning opportunities</li> <li>• Access to healthcare</li> </ul>	Falk and Hermle (2018), Orisadare (2019);	Ordinal scale	Descriptive analysis

(Nithyanandhan & Mansor, 2017). 5-pt Likert Scale Correlation analysis Regression analysis

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Source: Researcher (2022)



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The third chapter is important in the study as it's used to present the methodological steps that were involved in undertaking the research. The chapter captured the philosophy, design, population, sampling, data collection, and analysis procedures.

#### **3.2 Research Philosophy**

A philosophy entails the researcher's guiding propositions regarding the nature of the worldview relating to the phenomenon to be studied and the approach to the discovery of the reality pertaining to the phenomenon (Haig, 2013). This study being quantitative in nature, employed a positivism philosophy. A positivist philosophy is ideal as it allows for the collection of quantifiable data through quantitative research methods. It also facilitated the description of the variables, namely the self-help group practices and the poverty levels of women within the county.

#### **3.3 Research Design**

The research design is the logical, procedural plan that a researcher takes on with the purpose of getting answers to the research question of their studies (Johnson, 2011). The main purpose of a research design, according to Haig (2013), was to ensure the validity, reliability, and accuracy of the study stays intact. The research design enabled the evidence gathered by the researcher to address the research problem logically and effectively (Savela, 2018). The current study used a quantitative descriptive correlational research design. In the descriptive correlation research design, information is collected without manipulation of the environment while generating information on natural occurrences, behaviour, and features of interest in respect to a population. It also captures the interrelation between the study variables (Avgousti, 2013). Further, the design allowed for the research problem to be investigated at a particular point in time, thus helping to establish the influence of self-help groups on poverty levels of women in Machakos County, Kenya.

#### **3.4 Target Population**

Haig (2013) defines a population as all people or items with the characteristics that one wishes to study. The unit of analysis may be a person, group, organization, country, object, or any other entity that you wish to draw scientific inferences about (Stockemer, Stockemer, &

Glaeser, 2019). The current research unit of analysis was the registered women-self-help groups within Machakos County. According to the Machakos County Social Works office, there are 408 women-self-help groups within the county. The study targeted the chairpersons of the groups as the respondents for this survey (Machakos County, 2018). The rationale behind targeting the chairpersons is they are assumed to have the knowledge of how their groups have impacted the poverty levels of women within the county. Thus, the target population was 408 women leaders.

### 3.5 Sampling Design and Sample Size

According to Haig (2013), sampling is the procedure of choosing a proportion from a population as representative of the features found in the whole population. The study used random sampling in the selection of the study respondents.

Random sampling was implemented through systematic random sampling that ensured each subcounty was represented. This ensured that all the respondents included in the study had an equal chance of being included in the final sample. Owing to the large geographical locations, the study used the Yamane formula to derive an appropriate sample that was included in the research.

$$n = \frac{N}{1 + N (e)^2}$$

Where, n is the sample size, N is the total population, and e is the level of precision.

$$\text{Thus; } n = \frac{408}{1+408 (.05 \times .05)} = 201 \text{ respondents}$$

The sample frame population of this study was 201 self-help group leaders, assuming a 95% confidence level and a 5% margin of error.

### 3.6 Data Collection Instruments

Data collection is the systematic method by which a researcher records data (Stockemer, Stockemer, & Glaeser, 2019). A questionnaire is a tool that contains a series of questions that respondents must answer (Avgousti, 2013). This study developed a structured research questionnaire to collect the data. The questionnaire is being selected since its' easy to collect research data from a large population, makes data collection more concise, and supports quantitative methodology (Johnson, 2011). The study questionnaire was formulated in line

with the objectives of the study employing a five-point Likert-scale format. The reviewed empirical literature will also support the development of the various statements that measured the study variables.

### **3.7 Data Collection Procedure**

Data collection is the manner of gathering information from respondents to be analyzed, and results used to prove certain facts (Little, 2014). The primary source was the main origin of the data for this study. Primary data is the information gathered directly from the respondents using a questionnaire. Due to inherent geographical constraints, the research applied Google forms in the data collection. Further, the research assumes that not all women group leaders may have access or technical know-how to use Google forms; hence physical questionnaires was used to supplement the online data collection process. The study ensured that all respondents are taken through the questionnaire to understand what the aims are, and support reliable responses being obtained in the survey.

### **3.8 Pilot Tests**

The study conducted a pilot test of the structured questionnaire to ensure that it's adequate in nature and meets the intended purposes of the research. The pilot tests were conducted among 20% (40) of the sample respondents that were not considered in the final research. The pilot tests enabled both validity and reliability testing to be conducted.

#### **3.8.1 Validity Tests**

The validity of an instrument answers the question of whether the instrument measures what it is supposed to measure (Roberts & Priest, 2006). To determine whether the instrument had content and construct validity, expert opinion was sought from the Supervisors. Further, the measure of the construct validity was underpinned by theory and empirical evidence from related studies, thus ensuring the accuracy of the instruments.

#### **3.8.2 Reliability Tests**

A reliable instrument gives consistent results upon repeated use. A structured questionnaire was used to collect data from the respondents. In order to guarantee the reliability of the instruments, the questionnaire was pretested and measures of each of the five variables adjusted to ensure that the threshold reliability coefficients are achieved from the reach variable/construct (Johnson, 2011). All the constructs measures that met the level of acceptable internal

consistence as measured by Cronbach’s alpha of at least 0.7 was retained in the study as shown in Table 3.1 below.

### 3.9 Data Analysis and Presentation

The study was purely quantitative; as such, the study will employ relevant analytical techniques that are adequate in this kind of research. The collected data was sorted and coded into SPSS 25, which is a powerful tool for analyzing quantitative research data. The coded data was summarized using descriptive analysis such as frequencies, percentages, means, and variance tests. The research employed correlation tests as the first inferential process to determine the relationship between the variables.

The research used diagnostic tests before conducting regression analysis; this entailed conducting autocorrelation, collinearity, linearity and normality tests. Lastly, the research data was subjected to a multiple linear regression to estimate the effect of self-help groups on poverty levels of women in the county. The analyzed data was mainly presented using charts, bar graphs, and tables. The following model was estimated in the study.

$$PLW = B_0 + B_1X_1 + e \dots\dots\dots(i)$$

$$PLW = B_0 + B_2X_2 + e \dots\dots\dots(ii)$$

$$PLW = B_0 + B_3X_3 + e \dots\dots\dots(iii)$$

$$PLW = B_0 + B_4X_4 + e \dots\dots\dots(iv)$$

X1 to X4 represents the independent variables while PLW represents the dependent variable

PLW is the poverty levels for women

**X<sub>1</sub>** is the SHG entrepreneurial training (mentorship programmes and training facilities)

**X<sub>2</sub>** is the SHG financial accessibility (microcredit access and financial training)

**X<sub>3</sub>** is the SHG marketing collaboration (market access and networking)

**X<sub>4</sub>** is the socio-economic factors (education level and occupation)

**ε** is the estimated error of the overall model (represents factors not included that have impact on the independent variable for example government policies or political stability)

### 3.10 Ethical Considerations

It is important that during a research survey, the study adheres to the various stipulated ethical and research guidelines (Davies & Hughes, 2014). One of the key steps ensures that all the participants are informed on why they are participating in the study and any risks and benefits that may occur. Secondly, the respondents were asked to confirm their willingness to be involved in the research. The third step involved enforcing the anonymity of the respondents was upheld by not asking any personally identifying questions and maintaining the confidentiality of the responses obtained. The study also stored the collected responses securely and maintenance checks on who can access the information. The last step included obtaining approvals from the University and NACOSTI before conducting the field work. This ensured necessary permits are obtained to support the legitimacy of this research work.



## CHAPTER FOUR

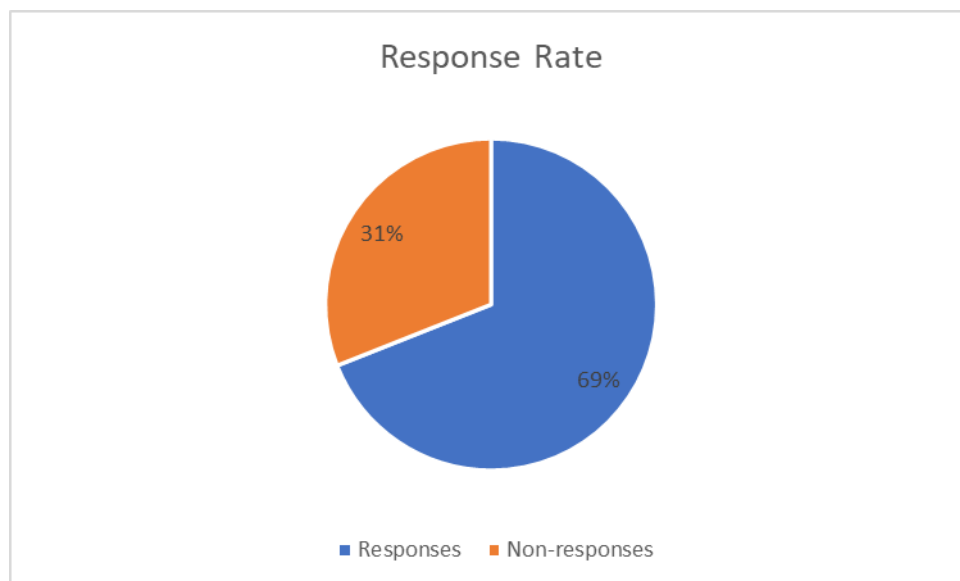
### PRESENTATION OF RESEARCH FINDINGS

#### 4.1 Introduction

This chapter sets out to detail and presents the findings of the research derived from the analysis of the collected field data from self-help groups in Machakos County. Specifically, the contents of the chapter include; the response rate, the background information of the respondents, the descriptive analysis, diagnostic checks and the findings of the inferential analysis. The results are presented in chronological order as per the research objectives.

#### 4.2 Response Rate

The research distributed questionnaires to 201 group leaders using physical questionnaires and Google forms. From the questionnaires given to the various participants, the study was able to obtain responses from 138 respondents. This represented a 69% response rate as shown in figure 4.1 below; and this response was deemed adequate for the analysis as it was consistent with the range provided by Haig (2013) who considers that responses above 60% can be relied on in conducting quantitative analysis.



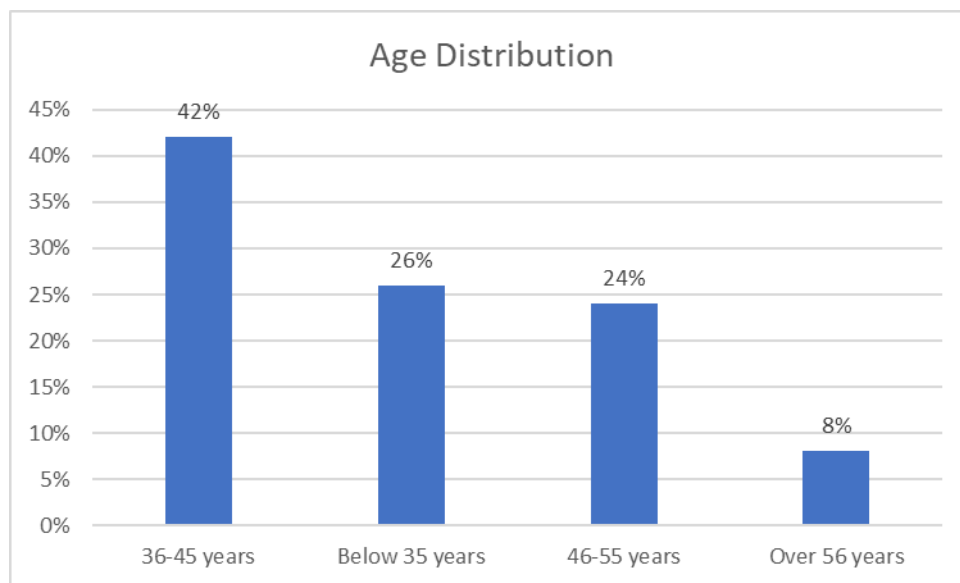
**Figure 4.1 Response Rate**

### 4.3 Background Information

The research sought to establish the general demographic information on the respondents in respect to their age, education level, marital status, occupation status and number of group members.

#### 4.3.1 Age of Respondents

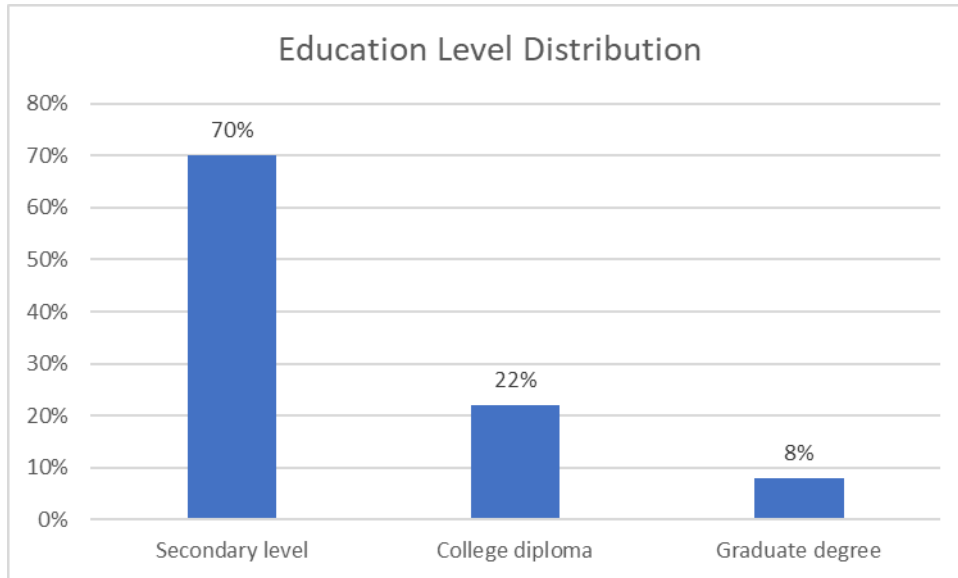
From the findings of the research, 42% (n=58) of the group leaders were between the age 36-45 years, 26% (n=36) below 35 years of age, 24% (n=33) 46-55 years and only 8% were above 56 years of age. The analysis showed there was age diversity in the leadership position within the women self-help groups within the county which can reinforce versatility in the groups.



**Figure 4.2 Age Distribution**

#### 4.3.2 Highest Education Level of Respondents

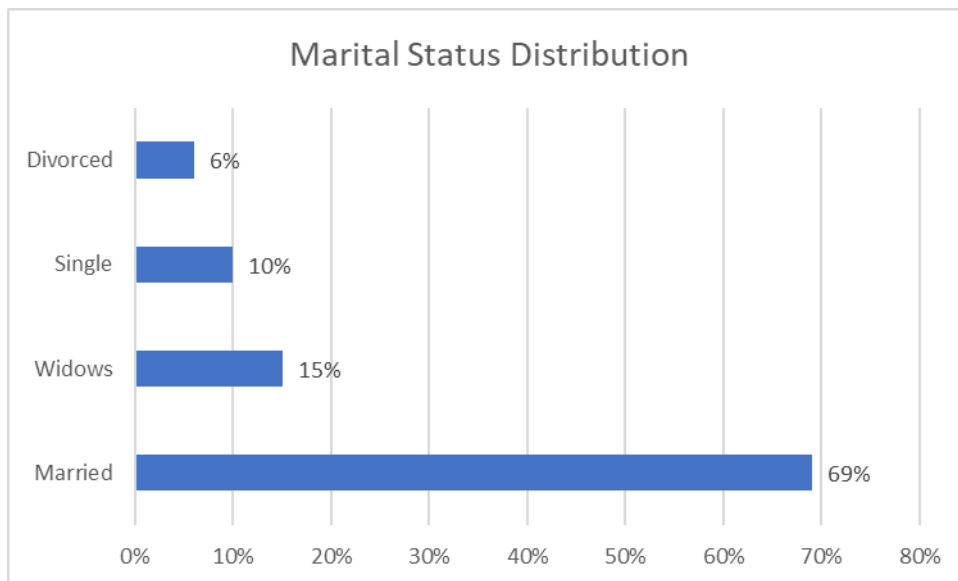
The study reviewed the education attainment among the respondents and per the results the majority of the respondents 70% had attained a secondary level education, 22% had a college diploma and 8% had attained a graduate degree. The implication of these findings is that the majority of the self-help group leaders have not attained higher education qualification which is reminiscent of the low accessibility of higher education within marginalized sub-counties in Machakos County.



**Figure 4.3 Education Level Distribution**

#### 4.3.3 Marital Status of Respondents

The study was interested in the current marital status of the women leaders in the self-help groups and the analysis revealed that 69% (n=95) were married, 15% (n=21) were widows, 10% were single and 6% (n=8) were divorced.

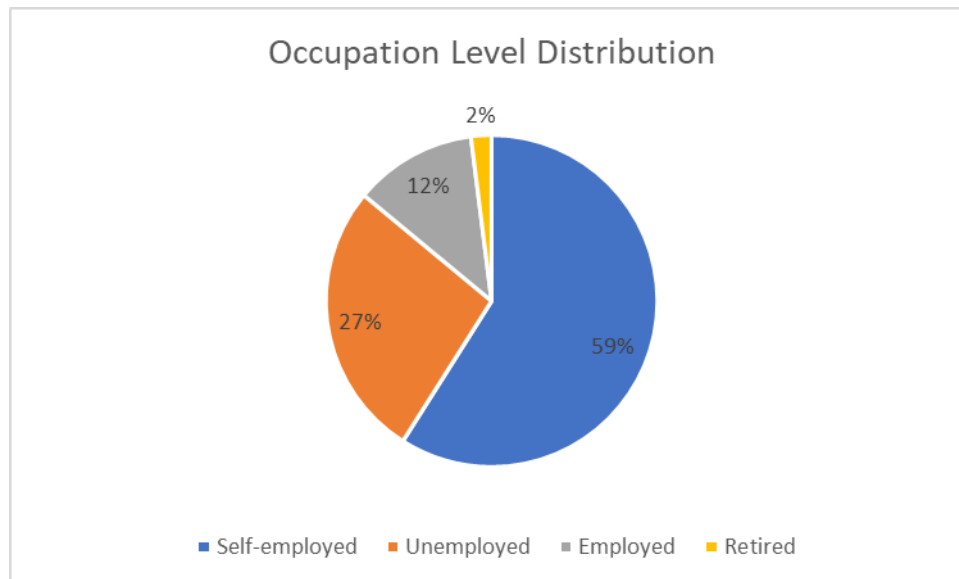


**Figure 4.4 Marital Status Distribution**

#### 4.3.4 Occupation Level of Respondents

From the analysis of the responses submitted, the results indicated that majority of respondents 59% (n=81) of participants were self-employed, 27% (n=37) were unemployed with only 12% (n=17) formally employed and 2% were retired. The results implied that the majority of the

respondents did not have any formal employment hence the need to be part of a self-help group to improve their poverty levels of women.



**Figure 4.5 Occupation Level Distribution**

#### 4.3.5 Number of Self-Help Group Members

The survey was interested in reviewing how many members were in the various self-help groups and the analysis is shown in Table 4.1 below.

**Table 4.1 Distribution of Number of Group Members**

		<b>Frequency</b>	<b>Percent</b>
Valid	Below 10 members	2	1.4
	11-20 members	50	36.2
	21-30 members	80	58.0
	Over 31 members	6	4.3
	<b>Total</b>	<b>138</b>	<b>100.0</b>

From the analysis, the majority of the groups, 58% had at least 21-30 members, 36% had 11-20 members with 4% having over 31 members. Based on these findings the research showed that the self-help groups having been able to reach more women which is imperative in ensuring they can play a role in improving the poverty levels of women of this marginalized group.

#### 4.4 Descriptive Analysis

The descriptive analysis for this research was carried out using two measures; means and standard deviation. This was selected as the most suitable method of summarizing the responses received from the Likert scale statements.

##### 4.4.1 Self-Help Group Entrepreneurial Training

The study analysed how self-help group entrepreneurial training was adopted in the women groups and the summary of result is shown in Table 4.2 below.

**Table 4.2 Summary Descriptives of Self-Help Group Entrepreneurial Training**

	N	Sum	Mean	Std. Deviation
The group routinely engages in mentorship programs with institutional partners in the county	138	429.00	3.1087	.88528
The group organizes regular training programs to expose the members to more economic opportunities	138	468.00	3.3913	.72931
The group conducts routine team building activities which improve the skills of the members	138	497.00	3.6014	.57363
The group collaborates with external stakeholders to introduce the members to new innovative opportunities	138	458.00	3.3188	.67256
The group engages in group activities that provide professional empowerment of our members	138	473.00	3.4275	.66054

The average mean (3.6014) with a minimal deviation (.57363) implied agreement that the group conducts routine team building activities which improve the skills of the members. The respondents moderately agreed that the group engages in group activities that provide professional empowerment of our members (mean = 3.4275, dev = .66054). The participants as shown by mean of 3.3913 indicated moderate agreement the group organizes regular training programs to expose the members to more economic opportunities. The analysis showed moderate agreement the group routinely engages in mentorship programs with institutional partners in the county as revealed by mean of 3.1087.

#### 4.4.2 Self-Help Group Financial Accessibility

The study analysed how self-help group financial accessibility has been felt in the women groups and the summary of result is shown in Table 4.3 below.

**Table 4.3 Summary Descriptives of Self-Help Group Financial Accessibility**

	N	Sum	Mean	Std. Deviation
The group conducts financial management training for our members, which improves financial savings culture	138	466.00	3.3768	.76610
The group is able to access microfinance lending, which improves our financial capacity to engage in more economic activities	138	485.00	3.5145	.71721
The group engages with financial institutions to create awareness among members on the available savings and investment opportunities	138	491.00	3.5580	.65086
The group has created awareness among the members on the accessibility of microfinance services such as insurance and credit	138	465.00	3.3696	.76489
The group regularly engages the county government to allocate financial resources to engage in more economic activities	138	373.00	2.7029	.71898

The descriptive result showed agreement (mean = 3.558, dev = .65086) the group engages with financial institutions to create awareness among members on the available savings and investment opportunities. The study results indicated agreement (mean = 3.5145, dev = .71721) the group is able to access microfinance lending, which improves our financial capacity to engage in more economic activities. Respondents moderately agreed (mean = 3.3696) the group has created awareness among the members on the accessibility of microfinance services such as insurance and credit. The findings revealed moderate agreement (mean = 2.7029) the group regularly engages the county government to allocate financial resources to engage in more economic activities.

#### 4.4.3 Self-Help Group Market Collaboration

The study analysed how self-help group market collaboration has been employed in the women groups and the summary of result is shown in Table 4.4 below.

**Table 4.4 Summary Descriptives of Self-Help Group Market Collaboration**

	N	Sum	Mean	Std. Deviation
The group creates opportunities for the members to network with marketing agencies.	138	394.00	2.8551	.92453
The group conducts regular expos to expand our market linkages and regional access markets	138	373.00	2.7029	.92341
The group engages with suppliers with the region to improve the efficiency in our distribution channels	138	389.00	2.8188	.91409
The group has been leveraging on emerging platforms such as WhatsApp and Facebook to conduct online marketing of our products	138	344.00	2.4928	1.13502
The group regularly participates in marketing seminars conducted by the county government to expand our knowledge on new production and pricing strategies	138	366.00	2.6522	1.05783

The respondents moderately agreed (mean = 2.8551, dev = .92453) the group creates opportunities for the members to network with marketing agencies. The results revealed moderate agreement the group engages with suppliers with the region to improve the efficiency in our distribution channels (mean = 2.8188, dev = .91409). The analysis showed moderate agreement the group regularly participates in marketing seminars conducted by the county government to expand our knowledge on new production and pricing strategies (mean = 2.6522, dev = 1.05783). The respondents disagreed (mean = 2.4928, dev = 1.13502) the group has been leveraging on emerging platforms such as WhatsApp and Facebook to conduct online marketing of our products.

#### 4.4.4 Poverty Levels of Women

The dependent variable analysed how the group officials viewed the role of the self-help group on the poverty levels of women and results are shown in Table 4.5 below.

**Table 4.5 Summary Descriptives of Poverty levels of women**

	N	Sum	Mean	Std. Deviation
The group members have been able to participate in more income-generating activities actively	138	589.00	4.2681	.59854
The group members are able to access quality healthcare services within the community	138	384.00	2.7826	.94937
The group members are able to engage in more social programs	138	547.00	3.9638	.63256
The group has witnessed an increased reduction in poverty levels among the group members	138	576.00	4.1739	.63835
There is a general improvement in the economic welfare of our group members	138	545.00	3.9493	.66533

The average mean computed indicated respondents strongly agreed (mean = 4.2681, dev = .59854) group members have been able to participate in more income-generating activities actively. The respondents agreed the group has witnessed an increased reduction in poverty levels among the group members (mean = 4.1739, dev = .63835). The participants agreed there is general improvement in the economic welfare of our group members (mean = 3.9493, dev = .66533). Lastly, respondents moderately agreed the group members are able to access quality healthcare services within the community (mean = 2.7826, dev = .94937).

#### 4.5 Diagnostic Checks

The research adopted the following regression assumption tests; collinearity, normality, linearity and autocorrelation.

#### 4.5.1 Collinearity Tests

The assumption of collinearity was tested by conducting variance inflation factor, and tolerance values test, and findings are presented in Table 4.6.

**Table 4.6 Collinearity Results**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Entrepreneurial Training	.699	1.431
	Financial Accessibility	.690	1.450
	Market Collaboration	.716	1.396

a. Dependent Variable: Poverty levels of women

The findings showed VIF output for entrepreneurial training (1.431), financial accessibility (1.450) and market collaboration (1.396) which signified there was no high correlation between the independent variable. This showed there was no violation of the collinearity assumption.

#### 4.5.2 Normality Tests

The research conducted tests to examine if the research had violated the normality assumption and Kurtosis and Skewness was applied.

**Table 4.7 Normality Test Result**

		Statistic	Std. Error
<b>Poverty levels of women</b>	Skewness	.150	.206
	Kurtosis	.004	.410
<b>Entrepreneurial training</b>	Skewness	.549	.206
	Kurtosis	1.116	.410
<b>Financial Accessibility</b>	Skewness	-.417	.206
	Kurtosis	.745	.410
<b>Market Collaboration</b>	Skewness	-.439	.206
	Kurtosis	-.522	.410

As a rule of thumb skewness value should be between -2 to 2 indicating that there would be no excessive skewness in that data, while the kurtosis value should be between -1 to +2. The findings above the findings show that all the variables of the research had Kurtosis and Skewness statistics that were within the stipulated range. This indicated there was no violation of the normality assumption.

#### 4.5.3 Linearity Tests

The study tested for linearity of data using univariate analysis to ascertain that there was some linear relationship between the variables prior to conducting regression analysis.

**Table 4.8 Linearity Test Result**

			<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Poverty levels of women * Entrepreneurial Training	Between Groups	(Combined)	440.608	12	36.717	11.656	.000
		Linearity	198.576	1	198.576	63.036	.000
		Deviation from Linearity	242.032	11	22.003	6.985	.070
	Within Groups		783.664	393.776	125	3.150	
	Total		1403.125	834.384	137		
				<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>
Poverty levels of women * Financial Accessibility	Between Groups	(Combined)	255.578	12	21.298	4.600	.000
		Linearity	159.180	1	159.180	34.377	.000
		Deviation from Linearity	96.398	11	8.763	1.893	.086
	Within Groups		716.400	578.806	125	4.630	
	Total		1403.125	834.384	137		
				<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>
Poverty levels of women * Market Collaboration	Between Groups	(Combined)	295.922	15	19.728	4.470	.000
		Linearity	97.036	1	97.036	21.986	.000
		Deviation from Linearity	198.886	14	14.206	3.219	.056
	Within Groups		812.907	538.462	122	4.414	
	Total		1403.125	834.384	137		

The findings of the significance values of the deviation from linearity in the research objectives were; entrepreneurial training Sig = .070; financial accessibility Sig = .086 and market collaboration Sig = .056. Based on these sig values in the deviation from linearity  $>.05$ , it implied that the selected independent variable and dependent variable are linearly dependent.

#### 4.5.4 Autocorrelation

The research tested for violation of autocorrelation assumption using the Durbin-Watson statistics, and the results is shown in Table 4.9.

**Table 4.9 Autocorrelation Test Result**

Model	Durbin-Watson
1	2.262

- a. Predictors: (Constant), Market Collaboration, Entrepreneurial Training, Financial Accessibility
- b. Dependent Variable: Poverty levels of women

The results in the table above show a Durbin-Watson value of 2.262, which falls within the stipulated standard value of 1.5-2.5. This signified the regression assumptions did not violate autocorrelation assumptions.



#### 4.6 Correlation Analysis

Spearman's correlation analysis test was conducted to determine the relationship between independent and dependent variables.

**Table 4.10 Correlation Results**

			Poverty levels of women	Entrepreneurial Training	Financial Accessibility	Market Collaboration
Spearman's rho	Poverty levels of women	Correlation Coefficient	1.000			
		Sig. (2-tailed)	.			
		N	138			
	Entrepreneurial Training	Correlation Coefficient	.532**	1.000		
		Sig. (2-tailed)	.000	.		
		N	138	138		
	Financial Accessibility	Correlation Coefficient	.479**	.551**	1.000	
		Sig. (2-tailed)	.000	.000	.	
		N	138	138	138	
	Market Collaboration	Correlation Coefficient	.387**	.492**	.578**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	138	138	138	138

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

The results of Spearman's correlation analysis test between entrepreneurial training and poverty levels of women are presented in Table 4.10 and indicate a moderate positive and significant relationship,  $r(138) = 0.532$ ,  $\text{sig} = .000 \leq .05$ . The correlation between financial accessibility and poverty levels of women established there is a moderate positive and significant relationship,  $r(138) = 0.479$ ,  $\text{sig} = .000 \leq .05$ . The Spearman analysis further for market collaboration and poverty levels of women showed a weak positive and significant relationship,  $r(138) = 0.387$ ,  $\text{sig} = .000 \leq .05$ .

## 4.7 Regression Analysis

The research utilized regression analysis which is a form of predictive modelling procedure that explores interactions between independent variables in predicting a dependent variable.

### 4.7.1 Effect of Self-Help Group Entrepreneurial Training on Poverty levels of women

The study conducted a simple linear regression to determine whether self-help group entrepreneurial training predicted poverty levels of women, and the results are shown in Table 4.11.

**Table 4.11 Regression Self-Help Group Entrepreneurial Training and Poverty levels of women**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.488 <sup>a</sup>	.238	.232	2.16219

a. Predictors: (Constant), Entrepreneurial Training

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	198.576	1	198.576	42.476	.000 <sup>b</sup>
	Residual	635.808	136	4.675		
	Total	834.384	137			

a. Dependent Variable: Poverty levels of women

b. Predictors: (Constant), Entrepreneurial Training

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.718	1.153		10.160	.000
	Entrepreneurial Training	.440	.068	.488	6.517	.000

a. Dependent Variable: Poverty levels of women

$$Y = 11.718 + .440X_1 + 1.153$$

From the results in Table 4.11,  $R^2$  for the regression model of entrepreneurial training and poverty levels of women resulted in 0.238 meaning that self-help group entrepreneurial training predicted 23.8% of changes in poverty levels of women in Machakos County. The ANOVA results indicated a *F-value of 42.476*, *Sig = .000*, denoting there existed a positive and significant relationship between self-help group entrepreneurial training and poverty levels of women in Machakos County.

The coefficient results revealed a beta of **.440** with corresponding **Sig = .000 < .05**, signifying that changing self-help group entrepreneurial training by a unit will lead to a positive .440 change in poverty levels of women in Machakos County.

#### 4.7.2 Effect of Self-Help Group Financial Accessibility on Poverty levels of women

The research conducted a simple linear regression to determine whether self-help group financial accessibility predicted poverty levels of women and the results are shown in Table 4.12.

**Table 4.12 Regression Self-Help Group Financial Accessibility and Poverty levels of women**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.437 <sup>a</sup>	.191	.185	2.22817

a. Predictors: (Constant), Financial Accessibility

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	159.180	1	159.180	32.062	.000 <sup>b</sup>
	Residual	675.204	136	4.965		
	Total	834.384	137			

a. Dependent Variable: Poverty levels of women

b. Predictors: (Constant), Financial Accessibility

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.031	1.269		9.479	.000
	Financial Accessibility	.430	.076	.437	5.662	.000

a. Dependent Variable: Poverty levels of women

$$Y = 12.031 + .430X_2 + 1.269$$

From the results in Table 4.12,  $R^2$  for the regression model of financial accessibility and poverty levels of women resulted in 0.191, meaning that self-help group financial accessibility predicted 19.1% of changes in poverty levels of women in Machakos County. The ANOVA results indicated a *F- value of 32.062*, *Sig = .000*, denoting there existed a positive and significant relationship between self-help group financial accessibility and poverty levels of women in Machakos County.

The coefficient results revealed a beta of **.430** with corresponding **Sig = .000<.05**, signifying that changing self-help group financial accessibility by a unit will lead to a positive .430 change in poverty levels of women in Machakos County.

#### 4.7.3 Effect of Self-Help Group Market Collaboration on Poverty levels of women

They conducted a simple linear regression to determine whether self-help group market collaboration predicted poverty levels of women, and the results are shown in Table 4.13.

**Table 4.13 Regression Self-Help Group Market Collaboration and Poverty levels of women**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.341 <sup>a</sup>	.116	.110	2.32845

a. Predictors: (Constant), Market Collaboration

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.036	1	97.036	17.898	.000 <sup>b</sup>
	Residual	737.348	136	5.422		
	Total	834.384	137			

a. Dependent Variable: Poverty levels of women

b. Predictors: (Constant), Market Collaboration

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.498	.655		25.201	.000
	Market Collaboration	.195	.046	.341	4.231	.000

a. Dependent Variable: Poverty levels of women

$$Y = 16.498 + .195X_3 + .655$$

From the results in Table 4.13,  $R^2$  for the regression model of market collaboration and poverty levels of women resulted in 0.116, meaning that self-help group market collaboration predicted 11.6% of changes in poverty levels of women in Machakos County. The ANOVA results indicated a *F- value of 17.898, Sig = .000*, denoting there existed a positive and significant relationship between self-help group market collaboration and poverty levels of women in Machakos County.

The coefficient results revealed a beta of **.195** with corresponding **Sig = .000<.05**, signifying that changing self-help group market collaboration by a unit will lead to a positive .195 change in poverty levels of women in Machakos County.

#### **4.7.4 Socioeconomic Factors on Poverty levels of women**

The research applied simple linear regression to determine whether socioeconomic factors predicted poverty levels of women, and the results are shown in Table 4.14.



**Table 4.14 Regression Socioeconomic Factors and Poverty levels of women**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.473 <sup>a</sup>	.224	.136	2.29421

a. Predictors: (Constant), Over 31 members, below 10 members, Retired, Divorced, Employed, 36-45 years, College diploma, 11-20 members, Single, Widow, Unemployed, 46-55 years, Undergraduate degree, Over 56years

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	186.985	14	13.356	2.538	.003 <sup>b</sup>
	Residual	647.399	123	5.263		
	Total	834.384	137			

a. Dependent Variable: Poverty levels of women

b. Predictors: (Constant), Over 31 members, below 10 members, Retired, Divorced, Employed, 36-45 years, College diploma, 11-20 members, Single, Widow, Unemployed, 46-55 years, Undergraduate degree, Over 56years

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.472	.636		30.638	.000
	36-45 years	-.054	.636	-.011	-.084	.933
	46-55 years	.077	.683	.013	.113	.910
	Over 56 years	3.543	1.402	.390	2.527	.013
	College diploma	.307	.577	.051	.532	.596
	Undergraduate degree	1.152	1.093	.127	1.054	.294
	Single	.292	.814	.036	.358	.721
	Widow	-2.756	.844	-.403	-3.266	.001
	Divorced	-.395	.886	-.038	-.446	.657
	Unemployed	-1.708	.616	-.308	-2.772	.006
	Employed	-.637	.790	-.085	-.807	.421
	Retired	-2.360	1.747	-.140	-1.351	.179
	Below 10 members	-3.056	1.811	-.149	-1.687	.094
	11-20 members	1.062	.539	.208	1.969	.051
	Over 31 members	-2.556	1.068	-.212	-2.394	.018

a. Dependent Variable: Poverty levels of women

From the results in Table 4.14,  $R^2$  for the regression model of socioeconomic factors and poverty levels of women resulted in 0.2224, meaning that socioeconomic factors predicted 22.4% of changes in poverty levels of women in Machakos County. The ANOVA results indicated a *F- value of 2.538*, *Sig = .003*, denoting there existed a positive and significant relationship between socioeconomic factors and poverty levels of women in Machakos County.

The coefficient results revealed a beta of **3.543** with corresponding **Sig = .013 < .05**, signifying those women above 56 years have a positive and significant effect on poverty levels of women in Machakos County. With a coefficient of -2.756, sig = .001 < .05 showed that widowed women had significantly negative/poor poverty levels of women. The findings showed a coefficient of -1.708 with a sig = .006, which implied that increases in unemployment would significantly lead to poor poverty levels of women. The results showed a coefficient of -2.556 with a sig = .018, indicating that with increase in the number of group members (over 31), there will be a negative effect on poverty levels of women. Findings showed that groups with 11-20 members ( $B = 1.062$ , sig = .051  $\geq$  .05) would significantly lead to an improvement in the poverty levels of women.

The study found out that education level did not have predictive power on the poverty levels of women, same as the ages below 56 years, single marital status, divorced, employed or retired as well as groups with less than ten members.

#### 4.8 Overall Regression Model

The research employed a summary regression analysis to determine the joint effect of entrepreneurial training, financial accessibility, market collaboration and socioeconomic factors on the poverty levels of women. The summary of the tests is shown in Table 4.15 below.

**Table 4.15 Overall Regression Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.652 <sup>a</sup>	.425	.343	1.99997

a. Predictors: (Constant), Over 31 members, below 10 members, Retired, Divorced, Employed, 36-45 years, College diploma, 11-20members, Entrepreneurial Training, Single, Widow, Unemployed, Financial Accessibility, Market Collaboration, 46-55years, Undergraduate degree, over 56 years

The findings from the overall regression model showed that,  $R^2 = .425$  which signified that the independent variables; entrepreneurial training, market collaboration, financial accessibility

and socioeconomic factors predicted 42.5% of changes in poverty levels of women in Machakos County.

**Table 4.16 Overall ANOVA Summary**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	354.397	17	20.847	5.212	.000 <sup>b</sup>
	Residual	479.987	120	4.000		
	Total	834.384	137			

a. Dependent Variable: Poverty levels of women

b. Predictors: (Constant), Over 31 members, below 10 members, Retired, Divorced, Employed, 36-45 years, College diploma, 11-20members, Entrepreneurial Training, Single, Widow, Unemployed, Financial Accessibility, Market Collaboration, 46-55years, Undergraduate degree, over 56 years

The ANOVA results indicated a *F- value of 5.212, Sig = .000*, denoting there existed a positive and significant relationship between entrepreneurial training, market collaboration, financial accessibility and socioeconomic factors and poverty levels of women in Machakos County.

**Table 4.17 Overall Regression Coefficient**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.284	1.676		6.136	.000
	Entrepreneurial Training	.202	.088	.224	2.313	.022
	Financial Accessibility	.211	.093	.215	2.271	.025
	Market Collaboration	.130	.055	.226	2.345	.021
	36-45 years	.303	.574	.061	.528	.599
	46-55years	.917	.645	.159	1.423	.157
	Over 56 years	4.080	1.239	.449	3.294	.001
	College diploma	-.031	.530	-.005	-.059	.953
	Undergraduate degree	.071	.970	.008	.073	.942
	Single	.940	.747	.115	1.259	.210
	Widow	-2.880	.756	-.421	-3.810	.000

Divorced	-.694	.785	-.066	-.883	.379
Unemployed	-1.717	.548	-.309	-3.133	.002
Employed	-1.128	.702	-.151	-1.607	.111
Retired	-2.293	1.552	-.136	-1.478	.142
Below 10 members	-.567	1.653	-.028	-.343	.732
11-20 members	1.626	.494	.318	3.292	.001
Over 31 members	-.489	1.002	-.041	-.488	.627

a. Dependent Variable: Poverty levels of women

$$PLW = 10.284 + .202X_1 + .211X_2 + .130X_3 + 4.080X_4 + -2.880X_5 + -1.717X_6 + 1.626X_7 +$$

**1.676 .....Equation 4.1**

The research showed that entrepreneurial training ( $\beta_1 = .202$ ) had a positive and significant effect on poverty levels of women in Machakos County, Kenya. The results showed changing entrepreneurial training will positively improve poverty levels of women by a factor of .202. The analysis revealed that financial accessibility ( $\beta_2 = .211$ ) had a positive and significant effect on poverty levels of women in Machakos County, Kenya. The findings implied that changing financial accessibility will positively improve poverty levels of women by a factor of .211. The regression coefficient for market collaboration ( $\beta_3 = .130$ ) had a positive and significant effect on poverty levels of women in Machakos County, Kenya. The results showed changing market collaboration will positively improve poverty levels of women by a factor of .130.

Analysis of the socioeconomic factors showed a coefficient for people over 56 years ( $\beta_4 = .4.080$ ) had a positive and significant effect on poverty levels of women in Machakos County, Kenya. This implied that older group members (over 56 years) were associated with a higher poverty level of women by a factor of 4.080. The findings revealed that widowed group members were significantly associated with poorer poverty levels of women ( $\beta_5 = -2.880$ , sig = .000<.05). The results indicated that unemployed group members were significantly associated with a decline in poverty levels of women in Machakos County, Kenya ( $\beta_6 = -1.717$ , sig = .002<.05). Findings further showed that groups of 11-20 members were significantly associated with positive improvement in poverty levels of women in Machakos County, Kenya ( $\beta_7 = 1.626$ , sig = .001<.05). The study did not find any significant effect of other socioeconomic factors considered in the model on the poverty levels of women in Machakos County, Kenya.



## CHAPTER FIVE

### DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

#### 5.1 Introduction

This is the last chapter of the study. It presents a summary of the study, a discussion of the findings, the conclusions that can be drawn from the findings, and the recommendations that emanate from our understanding of the study conclusions.

#### 5.2 Summary

The global fight against poverty campaign has identified poverty levels of women as the most sustainable strategy. Women empowerment calls for the provision of socio-economic and political skills to increase their participation in economic and political activities. Women empowerment has also been associated with gaining the ability to make independent choices, exercise bargaining power, and develop a sense of self-worth, self-belief, self-esteem, and the right to control one's life. The study is guided by Zimmerman's (2000) empowerment theory which considers empowerment to be a set of activities undertaken with the aim of developing the community, improving the quality of life, and providing opportunities for citizen participation. The theory calls for the participation of multiple individuals with similar motivations to achieve certain goals, gain access to resources and gain a critical understanding of the socio-political environment.

To examine the effect of SHG practices on poverty levels of women, the quantitative study adopted a positivism philosophy guided by a descriptive correlational research design. The study targeted the chairpersons from the various self-help groups registered in Machakos County. The study sample population was 201 self-help group leaders. The study developed questions drawn from the literature review and utilized google forms to collect data. This process was complemented by manual data collection involving the drop and pick method. The collected data was then put through correlational and regression analyses. Specifically, the study sought after the effect of self-help group entrepreneurial training, financial accessibility, and marketing collaborations and determined the effect of socio-economic factors on the relationship between self-help group practices and poverty levels of women in Machakos County.

The study was able to obtain responses from 108 target employees, representing a 69% response rate. It was determined that 58 of the group leaders, representing 42 percent of the

responses, were aged between the age 36 and 45 years, 36, representing 26 percent of the respondents, were below 35 years, 33 were between 46 and 55 years, representing 24 percent of the responses. Only eight percent of the respondents were above 56 years of age. This shows the representation and participation of members from multiple age groups. Further, there is a wide range of leadership diversity within the community development groups.

On evaluating the respondents' educational attainment, most of the respondents, 70 percent, had attained secondary level education, 22 percent had a college diploma, and only 8 percent had attained a graduate degree. This shows low educational levels among group leaders, signifying high rates of lack of skill development within the groups. On investigating the respondents' marital status, it was determined that 95 of the respondents, representing 69 percent, were married, 21, representing 15 percent were widows, and 10% were single. Only eight were divorced, representing six percent of the respondents. This shows that most of the respondents were from stable families.

The research then sought after the respondents' employment status and determined that 81 group leaders (59 percent) were self-employed, 37 (27 percent) were unemployed, 17 were formally employed, and 2 percent were retired. This shows that the group leaders lack stable sources of income. Regarding the number of group members, most of the groups, 58 percent, were composed of 21-31 members, 36 percent were composed of 11-20 members, while only 4 percent were composed of more than 31 members. Correlation analysis determined that jointly, activities involving entrepreneurial training, financial accessibility, and marketing collaborations had moderate positive and significant effects on the poverty levels of women in self-help groups.

## **5.3 Discussion**

### **5.3.1 Entrepreneurial Training and Poverty levels of women**

The study's first objective was to examine the effect of entrepreneurial training on the poverty levels of women in self-help groups in Machakos County. The analysis established that there exists a positive and significant relationship between self-help group entrepreneurial training and poverty levels of women in Machakos County. Self-help group entrepreneurial training predicted 23.8% of changes in the poverty levels of women in Machakos County. The study determined that changing one unit of self-help group entrepreneurial training will result in a .202 positive change in the poverty levels of women in Machakos County. Empowerment theory identifies various forms of training and mentorship to be essential to the development

of skills and capabilities that enhance poverty levels of women. The theory also considers training to be a precursor of entrepreneurial innovation, and this has a positive effect on improved economic outcomes.

These findings are in agreement with the findings from the studies by Jagtap (2021) and Khalid et al. (2021), which assert that training programs have a significant impact on the poverty levels of women of self-help group members. These studies showed that having members participate in training programs was positively associated with improved managerial capacity. These studies showed that the various kinds of systemic modular training programs offered to members were key in bringing out the hidden talents and capacity of group members. The study by Jagtap (2021) concluded that financial training programs improved members' financial management capabilities, saving attitude, and accounts' maintenance. The development of these skills resulted in improved financial management within the businesses opened by SHG members.

The analysis determined that the various self-help groups routinely provide mentorship programs with institutional partners in the county and that these programs have a significant impact on members' empowerment. In a similar fashion, the study by Khalid et al. (2021) provided evidence that SHGs provided members with mentorship training programs that had developed their knowledge and leadership skills. The study determined that mentorship programs improved participants' self-confidence and self-belief, which increased their entrepreneurial intent. However, this study failed to establish whether intention to participate in business ventures leads to economic empowerment.

There was also a general agreement that self-help groups were organizing regular training programs, which exposes members to more economic opportunities. These findings are collaborated in the study by Sah (2020), which focused on fish farmers. The research concluded that training services offered to women groups improved their business acumen and management skills. The study showed how exposure to new business practices exposed members to different types of skills and market knowledge that were helpful in enabling the members to establish and successfully run their business enterprises.

Regarding team-building skills and innovative opportunities, the respondents were in agreement that the self-help groups were offering their members effective business support services with associated stakeholders within the county. These findings are asserted by Nyadida and Otuya (2021), whose findings showed that collaborating with microfinance firms had

improved members' understanding of market opportunities and innovative business practices that increased their goal realization. According to the findings by Murria (2020), providing financial management training and access to women's self-help groups increases members' attitudes towards risks and improves their innovativeness. The study also determined that group training improved members' cooperation and leadership skills, which improved the realization of common goals.

### **5.3.2 Financial Accessibility and Poverty levels of women**

The study's second objective was to examine the effect of financial accessibility on the poverty levels of women in self-help groups in Machakos County. The analysis established there exists a positive and significant relationship between self-help group financial accessibility and poverty levels of women in Machakos County. The analysis showed that providing financial access to women SHGs predicts about 19.1% of changes in poverty levels of women. The analysis showed that providing financial access to self-help groups leads to a .211 change in the poverty levels of women in Machakos County. The empowerment theory considers it important to ensure that those targeted by empowerment programs are adequately financed and provided with adequate credit channels, as these channels are essential for the sustainability of business operations.

These findings are recollected in the studies by Reddy and Manjunatha (2018), Poongavanam and Jayaraman (2018), and Khaki (2017), which found a positive relationship between financial accessibility and economic empowerment of women. These studies show that providing alternative sources of finances to groups increases their effectiveness. The analysis showed that the various groups conduct regular financial management training for their members, which has resulted in improved their financial management and savings culture. Similar findings were reported in the study by Jagtap (2021), which reviewed the influence of training services on members' economic empowerment. The study determined that groups that were linked to financial institutions had members who were more conscious of the importance of saving behaviors. The study further determined that the groups can access microfinance lending, which improves members' capacity to engage in economic activities. Similarly, Poongavanam and Jayaraman (2018) determined that it is essential for SHG leaders to establish linkages with banks and microfinance institutions since establishing a sustainable link with financial organs is essential for the success of empowerment efforts.

The study further established that the various groups engage with financial institutions to create awareness among members on the available savings and investment opportunities. Linkages with financial instruments were determined to increase the exposure of members to sustainable credit sources resulting in increased empowerment of members. These findings resonate with those made by Ravichandran (2019), who showed that forming partnerships with credit cooperatives is key to improving members' economic welfare. The study determined that diversifying sources of income resulted in a drastic reduction in the role of informal money lenders and increased members' independence from unhealthy market competition. Khaki (2017) also concluded that financial access is key to poverty eradication through self-help groups.

The analysis also determined that the group regularly engages the county government to allocate financial resources, which increases their involvement in economic generating activities. These findings resonate with the findings in the study by Legis (2020), which determined that providing financial access to self-help groups has more positive effects on empowerment than providing training services. The study stressed the importance of establishing sustainable networks with various stakeholders as this creates awareness among the members on the essence of maintaining accessibility to microfinance services.

### **5.3.3 Market Collaboration and Poverty levels of women**

The study's third objective was to examine the effect of market collaboration on the poverty levels of women in self-help groups in Machakos County. The analysis established there exists a positive and significant relationship between self-help group market collaboration and poverty levels of women in Machakos County. The analysis showed that collaboration between self-help groups and market partners predicts 11.6 percent of the changes in the poverty levels of women in Machakos County. The study determined that changing self-help group market collaboration by a unit will lead to a .130 improvement in the empowerment of women in Machakos County. These findings resonate with those made by Salam and Hoque (2021), Nyasulu (2021), and Dossou, Aoudji, Vissoh, and Zannou (2021), who found positive effects of different forms of collaboration on the economic empowerment of women in self-help groups.

This variable is anchored by the theory of group cohesion, which asserts that the extent to which groups are attracted to realizing the group's goal has a significant impact on

empowerment outcomes. The theory asserts that the stronger the relationships between partners and collaborators, the greater the chance to meet collective goals. The analysis determined that the group creates opportunities for the members to network with marketing agencies, and this has a positive effect on improved access to income-earning opportunities. These findings are ascertained in the study by Alemu, Van Kempen, and Ruben (2018), which determined that apart from facilitating skills transfer, self-help groups provide their members with access to sustainable markets from which they can market their products and earn a sustainable income. Further, according to Ravichandran (2019), participating in self-help groups provides members with important bank linkages and networks that improve sustainable access to finances that members can utilize to start and run their businesses.

The analysis showed agreement that the groups conduct regular expos to expand members' market linkages and access to regional markets, which contributes to their empowerment. These findings resonate with the study by Dossou, Aoudji, Vissoh, and Zannou (2021), which found that young agribusiness women who belonged to self-help groups and were more knowledgeable about market opportunities and threats and improved their decision-making capacity. The study found a positive link between network size and the success of members' business ventures. Similarly, Sah (2020) provided evidence that group participation expanded members' market linkages which resulted in the improved financial performance of members' fishing businesses.

The study further established that the group has been leveraging emerging platforms such as WhatsApp and Facebook to conduct online marketing of members' products, and this has improved their sales performance. According to Dossou et al. (2021), establishing market networks through social channels is key to realizing desired outcomes among young agribusiness women. The study also determined that the groups engage with suppliers within the region to improve the efficiency of their distribution channels. Simon, Margaret, and Bett (2015) published similar findings and aver that participation in groups increases market knowledge and encourages diversification which improves the performance of members' businesses.

The analysis also determined that the groups regularly participate in marketing seminars conducted by the county government to expand members' knowledge of new production and pricing strategies, and these arguments are made in the study by Omotesho et al. (2021), who ascertained that partnering with larger institutions increases members' management capacity, accountability sensitivity, and group structure development. Nyasulu (2021) study reported that

collective marketing participation has a significant positive impact on the choice of market outlets such as brokers, urban markets, and export markets which impacts business outcomes.

#### **5.3.4 Socioeconomic Factors and Poverty levels of women**

The study's fourth objective was to determine whether socioeconomic factors predict poverty levels of women in Machakos County. The analysis established there exists a positive and significant relationship between socioeconomic factors and poverty levels of women in Machakos County. The analysis determined that socioeconomic factors predict 22.4 percent of the changes in the poverty levels of women in Machakos County. Similar observations are made by Kumari, Malik, and Ghalawat (2019), whose study established a strong relationship between socio-economic factors and women group empowerment. The study established that capital ownership and mass media exposure play a key role in determining the degree of members' empowerment. This study did not establish any relationship between age and empowerment success.

The study findings showed that participation in self-help groups has a positive impact on the economic empowerment of women above 56 years old. This might imply that having retirees as group members would improve groups' entrepreneurial outcomes. However, it had an insignificant impact on the economic empowerment of widowed women. Further, the study determined that higher instances of unemployment contribute to economic underdevelopment, which increases the need for membership in self-help groups. The analysis showed that groups with over 31 members are unlikely to have a positive impact on the economic well-being of their members, asserting that groups with 11-20 members were most effective at realizing their target goals. This showed that group membership has a significant impact on members' poverty levels of women. These findings contrast those findings made in the study by Binti-Ani (2021), which found that the group leaders' management capacity, social capital, and members' personal psychology have the most significant impact on group members' empowerment.

The study further determined that the education level of members, marital status, and employment status did not have a significant effect on members' poverty levels of women. These findings are echoed by Mutonyi (2019), who avers that factor relating to age, household income, market access, land size, and type of activity are the most influential determinants of SHG membership and the realization of its benefits. Zakari, Abdoulaye, Moussa, and Ibro (2021) made similar observations and ascertained that the size of the household, quality of

assets, and distance to extension services have the most significant impact on members' capacity for community development. According to the findings made in the study by Mohapatra and Sahoo (2016), the members' level of education, level of autonomy, gender relationships, and religious factors all had significant influences on women's empowerment. Women groups in highly traditional environments were less likely to deliver on the empowerment promise.

#### **5.4 Conclusions**

The study sought the effect of self-help group entrepreneurial training, financial accessibility, marketing collaborations, and socio-economic factors on poverty levels among women in Machakos County. The study concludes that the above self-help group practices have a significant and positive effect on poverty levels of women. The study thus concludes that using self-help groups is a successful strategy that can be utilized in the goal of eradicating poverty.

The first objective ascertained that entrepreneurial training has positive and significant effects on poverty levels of women in Machakos County, Kenya. The study concludes that participating in group training programs has positive effects on members' managerial capacity, which improves their business decisions and leads to improved outcomes of ventures initiated by members of self-help groups. The study also concludes that various forms of systemic modular training have positive effects on the skills development of group members, and this improves their knowledge of different business concepts. The study further concludes that self-help groups provided mentoring programs to their members, had positive effects on members' self-belief and self-confidence, and resulted in psychological empowerment.

Regarding the second objective, the study concludes that providing financial access options to groups has a significant positive effect on the realization of group goals. The study concludes that facilitating financial access to groups is accompanied by access to financial institutions that offer financial training and credit facilities that are essential to the members' economic empowerment. The study also concludes that providing financial accessibility to group members provides members with sustainable credit sources, which encourages business innovation and expansion.

On the third objective, the study concludes that participating in marketing collaborations has positive effects on the poverty levels of women in Machakos County, Kenya. The study concludes that the groups create opportunities for members to network with marketing agencies, and this improves access to income-earning opportunities. The study also concludes

that conducting regular seminars and enlisting members to various trade expos has a positive effect on members' exposure and increases their knowledge of better management skills and alternative income-generating streams. The study further concludes that groups were increasing the visibility of their members' products through leveraging emerging platforms such as business-to-business platforms and social media, which increased the demand for members' products. The study also came to the conclusion that participating in marketing seminars expands members' knowledge of new production, marketing, and pricing strategies which they then utilize to facilitate business sustainability.

Regarding the fourth objective, the study concludes that socio-economic factors have a significant effect on women's empowerment. The study concludes that membership rules have a significant impact on group success since smaller groups were more successful at empowering their members than larger groups. The study also concludes that factors such as culture and religion have an impact on the empowerment of women in self-help groups. The study also concludes that age, level of education, and members' marital status have no significant impact on group success, with the members' need to meet similar goals contributing significantly to members' poverty levels of women.

## **5.5 Recommendations**

The study provided evidence that self-help groups are important to the development of Kenya's economy, offering a platform for many women in low-income families to gain sustainable sources of income. However, they can make more significant contributions to the country's poverty levels of women. To increase the efficiency of self-help groups, the study recommends that policy be formulated to address membership requirements and policies since smaller groups were determined to be more effective at resources redistribution and realizing its members' empowerment. Establishing smaller groups was associated with greater efficiency and reduced management costs, allowing greater focus on meeting member goals.

The study recommends that the government works to develop effective channels to direct finances towards sustainable community empowerment. Further, the government is recommended to establish stringent measures that would ensure the government funds such as the women enterprise funds are availed to the correct members. The study also recommends that the government offers a market and builds infrastructure for products produced by

community development groups. This can be achieved by the provision of subsidized loans to self-help groups to enable them to conduct their projects and eradicate poverty.

The study also determined that the group members lack advanced educational qualifications, and the study recommends that associated stakeholders develop policies that would support a higher level of financial training and assistance for members of self-help groups. The study recommends that the government and associated stakeholders develop and require eligible members to participate in literacy programs as these would enhance members' ability to overcome cognitive constraints and enable them to develop a better understanding of government policies, and business skills. The study also associates financial training with increased awareness about various credit facilities, financial incentives, and subsidies and recommends training be designed to meet specific financial needs to enhance members' economic empowerment.

The study further recommends periodic training on leadership as this has been associated with improved managerial decision-making. The study calls for frequent and well-structured and documented training sessions to enhance regular learning, establish regular re-evaluation and instil a culture of continuous improvement. This training should be accompanied by mentoring achieved through team mentors and peer-group mentors as this was associated with stronger bonds with their peers.

The study also recommends that more women and the youth be educated on the importance of self-help groups and motivated to create and join self-help groups. Young women social entrepreneurs are recommended to engage in different forms of networking by joining business associations, attending expos and social events where they can meet experienced peers and experts. This would provide the much-needed business exposure. Attending such events would also complement the training received from the groups and add to their skills and knowledge. Furthermore, women entrepreneurs are recommended to join professional associations that would provide them with an opportunity to network with other entrepreneurs and share resources and information.

## **5.6 Suggestions for Further Studies**

The literature available has highlighted the importance of self-help group activities on women's empowerment. However, the findings are still inconclusive. There should be greater studies

into the exact relationship between entrepreneurial training practices and the empowerment of self-help group members. The study also suggests that more detailed studies be carried out to examine the effect of different self-help groups on empowerment outcomes. Further, the study recommends greater exploration into the differences in outcomes of group practice carried out by men and women groups.



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## APPENDICES

### Appendix I: Participant Informed Consent Form

Participant Information and Consent Form

Title of the Proposed Study:

**EFFECT OF SELF-HELP GROUP PRACTICES ON POVERTY LEVELS OF WOMENIN MACHAKOS COUNTY**

Section I:

Investigator: **Mary Yula**

Institutional Affiliation: **Strathmore Business School (SBS)**

Section II: Information Sheet–The Study

#### **2.1: Why is this study being carried out?**

The research is being undertaken as a partial requirement for the academic award of Master of Development Finance Degree. The information obtained from the participant (s) will only be used for this purpose.

#### **2.2: Do I have to take part?**

No, involvement in this examination is purely voluntary. The study will only consider the participants willing to respond to the attached questionnaire.

Even upon consent to take part in the study, the respondent can decline to take part in the study at any point within the course of the exercise.

#### **2.3: Who is eligible to take part in this study?**

The study is strictly open to the chairpersons of the women self-help group within Machakos County, Kenya.

**2.4: Who is not eligible to take part in this study?**

This research study is not open to anyone who is not the chairpersons a women self-help group within Machakos County, Kenya.

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

The study expects the respondents to honestly and truthfully respond to the attached research instrument.

**2.6: Are there any risks or dangers in participating in this study?**

The study poses no risk whatsoever to the respondents.

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

The study results are expected to be of significance in improving the poverty levels of women and identifying what key elements in self-help groups can accelerate the attainment of the stated goal.

**2.8: What will happen to me if I refuse to participate in this study?**

Nothing. Participation in the study is entirely voluntary.

**2.9: Who will have access to my information during this research?**

All the accessed research data was treated with the utmost confidentiality and will not be disclosed to anyone who is not a party to the research process.

**2.10: Who can I contact in case I have further questions?**

Any query can be directed to me Mary Yula, on +254 712 315 142. *Any further information can be sought from my Research Supervisor Dr. James Ndegwa, through the School of Business Strathmore University.*

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

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

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

Please tick the boxes that apply to you.

**Participation in the research study**

I AGREE to be part of the research (      )

I DO NOT AGREE to be part of the research (      )

**Storage of information on the completed questionnaire**

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

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

Participants Name: .....

Participants Signature: ..... Date: .....

I, \_\_\_\_\_ (Name of person taking consent) certify that I have followed the SOP for this study and have explained the study information to the study participant named above. That s/he has understood the nature and the purpose of the study and consents to the participation in the study.

Signature: .....

Date: .....

Name: Mary Yula



## Appendix II: Questionnaire for Women Self-Help Groups Leaders

Hello,

The attached research questionnaire evaluated collect study data to analyze the effect of self-help group practices in poverty levels of women. As a leader of the group, you have been selected to participate in this survey, and no research data collected was used for purposes other than the stated academic goals.

The findings of the study can be provided to you upon request. Thank you for participating in this research study.

### Part A: Socio-Demographic Information

#### 1. What is your age?

Below 35 years	( )	36-45 years	( )
46-55 years	( )	Over 56 years	( )

#### 2. What is your highest education level?

Secondary level	( )	College diploma	( )
Undergraduate degree	( )	Graduate degree	( )
Doctorate level	( )		

#### 3. What best describes your current marital status?

Single	( )	Married	( )
Widow	( )	Divorced	( )

#### 4. What best describes your current occupation status?

Unemployed	( )	Self-employed	( )
Employed	( )	Retired	( )

#### 5. How many members are within your self-help group?

Below 10 members	( )	11-20 members	( )
21-30 members	( )	Over 31 members	( )

## PART B: INFLUENCE OF SELF-HELP GROUPS ON POVERTY LEVELS OF WOMEN IN MACHAKOS COUNTY, KENYA

Please tick the level of agreement of the following statements.

**5= strongly Agree      4= Agree      3= Somewhat Agree      2= Disagree      1= Strongly Disagree**

	<b>Poverty levels of women</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>1.</b>	The group members have been able to participate in more income-generating activities actively					
<b>2.</b>	The group members are able to access quality healthcare services within the community					
<b>3.</b>	The group members are able to engage in more social programs					
<b>4.</b>	The group has witnessed an increased reduction in poverty levels among the group members					
<b>5.</b>	There is a general improvement in the economic welfare of our group members					

Please tick the level of agreement of the following statements.

**5= strongly Agree      4= Agree      3= Somewhat Agree      2= Disagree      1= Strongly Disagree**

	<b>Entrepreneurial Training</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>1.</b>	The group routinely engages in mentorship programs with institutional partners in the county					
<b>2.</b>	The group organizes regular training programs to expose the members to more economic opportunities					
<b>3.</b>	The group conducts routine team building activities which improve the skills of the members					
<b>4.</b>	The group collaborates with external stakeholders to introduce the members to new innovative opportunities					
<b>5.</b>	The group engages in group activities that provide professional empowerment of our members					


	<b>Financial Accessibility</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>1.</b>	The group conducts financial management training for our members, which improves financial savings culture					
<b>2.</b>	The group is able to access microfinance lending, which improves our financial capacity to engage in more economic activities					
<b>3.</b>	The group engages with financial institutions to create awareness among members on the available savings and investment opportunities					
<b>4.</b>	The group has created awareness among the members on the accessibility of microfinance services such as insurance and credit					
<b>5.</b>	The group regularly engages the county government to allocate financial resources to engage in more economic activities					

	<b>Market Collaboration</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>6.</b>	The group creates opportunities for the members to network with marketing agencies.					
<b>7.</b>	The group conducts regular expos to expand our market linkages and regional access markets					
<b>8.</b>	The group engages with suppliers with the region to improve the efficiency in our distribution channels					
<b>9.</b>	The group has been leveraging on emerging platforms such as WhatsApp and Facebook to conduct online marketing of our products					
<b>10.</b>	The group regularly participates in marketing seminars conducted by the county government to expand our knowledge on new production and pricing strategies					

### Appendix III: NACOSTI Research Permit

REPUBLIC OF KENYA  
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION  
Ref No: 161854  
Date of Issue: 09/May/2022

**RESEARCH LICENSE**




This is to Certify that **Ms. Mary Yula of Strathmore University, has been licensed to conduct research in Machakos on the topic: Factors Within Self Help Groups That Influence Women's Economic Development in Machakos County for the period ending : 09/May/2023.**

License No: NACOSTI/P/22/17363

Applicant Identification Number: 161854

Director General  
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code:



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

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## Appendix IV: Ethical Review Committee Approval



16<sup>th</sup> May 2022

Ms Kioko Mary,  
mary.kioko@strathmore.edu

Dear Ms Kioko,

**RE: Factors Within Self Help Groups That Influence Women's Economic Development in Machakos County**


This is to inform you that SU-IERC has reviewed and **approved** your above **SU Masters'** research proposal. Your application reference number is **SU-IERC1332/22**. The approval period is **16<sup>th</sup> May 2022 to 15<sup>th</sup> May 2023**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 48 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 48 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

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

Yours sincerely,

  
for: **Dr Ben Ngoye,**  
**Secretary; SU-IERC**

**Cc: Prof Fred Were,**  
**Chairperson; SU-IERC**

