

# Financial literacy and entrepreneurial sustainability of women investment groups in Nairobi, Kenya

Florence Wanjiru Githaiga & Hannah Orwa Bula (PhD)

## Abstract

Though entrepreneurial sustainability of women investment groups and businesses is integral to economic sustainability they are severely faced by a number of challenges in the quest of seeking entrepreneurial sustainability. This was quite evident during the COVID-19 pandemic where three in five businesses owned by women collapsed or downsized; resulting to job losses, and difficulties in accessing financing. This had a cascading effect on their sustainability, raising questions on the general sustainability of women investment groups and businesses. The most recurring problem that surfaced is that there exist substantial financial literacy gaps among these women groups that predispose them to financial challenges. It is on this premise that this study aimed to assess how financial literacy influence entrepreneurial sustainability of women investment groups in Nairobi. The study was anchored on human capital theory and employed descriptive research design. It targeted chairpersons drawn from 17000 groups; out of which a sample of 284 was used. The primary data was collected using semi-structured questionnaires that were self-administered. The results indicated that financial literacy had a strong positive influence on entrepreneurial sustainability of women investment groups. This powerful association emphasized the essential role played by financial literacy in empowering the women with fundamentals of financial management knowledge and skills that enable them to make sound financial and investment decision that bolsters not only growth but also entrepreneurial sustainability of their investment activities and businesses. In the light of this, the study recommended prioritization of financial education and literacy programs by all women investment groups; as well as customer-tailoring them to fulfill the diverse needs of each group. Additionally, it recommends that there should equity in access to financial education among women of all backgrounds. Equally, there should be increased collaboration and partnership between micro-financial institutions and women investment groups to promote access to credit, investment opportunities and other financial services; as well as development of policies that encourage financial inclusion.



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## Introduction

Entrepreneurial sustainability of women investment group impacts significantly to the economic growth of most developing economies in the world; as it ensure women's have potential to promote diversity in entrepreneurship and investment that leads to an investment and businesses thrive for long enabling it to fulfill its purpose. This in turn translates to sustainable job opportunities to women and other marginalized groups, such as youths, bolstering macroeconomic stability. The women investment groups spurs innovation and fosters productivity that goes a long way in enhancing the economy of the country (Qahtani et al., 2022). According to Orobia et al. (2020) women investment groups inclusive economy. The women's perspectives and experience is essential in entrepreneurship as can result to development of new products and services, as well as serve inadequately served market spurring economic growth and development (Kumar, 2013). Women entrepreneurs can make new discoveries and innovation due to challenges and impediments experiences in running successful. These are great platforms for improving internal processes and structures of the business and initiating change. The change can propelled through the value chain to enhance invaluable transfer of technology. Timely resource mobilization is a major aspect of technology transfer (Bula, 2021). It has been widely acknowledged that women investment groups can play an essential role in prioritization of sustainable and socially responsible business models and practices, significantly contributing to sustainable economy. Sustainable businesses and investments are more resilient to economic and pandemic shocks; as they have income streams that are well diversified; lower resource dependencies and robust risk management strategies. Moreover, sustainable investment and businesses leads to creation of job and business opportunities contributing to economic stability and growth. For instance, investing in green and socially responsible sectors can spur business and employment opportunities therein. Entrepreneurial sustainability is a key pillar to innovation and development of products that can contribute largely to social or environmental challenges that may result to economic competitiveness and growth (Nsengimana, Tengeh, & Iwu, 2017). Entrepreneurial sustainability must be accompanied by innovations which may not necessarily be full blown but any innovation can lead to sustainability albeit how rudimentary it is. Innovation capability demonstrates the relationship between creativity and implementation of the ideas into tangible products (Bula, 2019). Though entrepreneurial sustainability of women investment groups and businesses is integral to economic sustainability they are severely faced by a number of challenges in the quest of seeking entrepreneurial sustainability. This was quite evident during the COVID-19 pandemic where three in five businesses owned by women collapsed or downsized; resulting to job losses, and difficulties in accessing financing. This had a cascading effect on their sustainability, raising questions on the general sustainability of women investment groups and businesses. During the pandemic most women businesses in most sectors faced closures and declining consumer demands. Women in Kenya face harmful cultural practices such as female genital mutilation (FGM), forced early marriages, food taboos and sex violation which may negatively impact on women operated businesses, the marital status, family characteristics and responsibilities of women entrepreneurs family roles, financial responsibilities and spouse's support for the married, gender roles among others have a correlation to performance.(Bula, 2012). The vulnerabilities facing most women investment was brought to limelight during this period; and the most recurring problem that surfaced is that there exist substantial financial literacy gaps among these women groups that predispose them to financial and entrepreneurial sustainability challenges (Afshan, Shahid, & Tunio, 2021). Women Entrepreneurs in Kenya face socio-economic bottlenecks in running their businesses, their enterprises are likely to lag behind as compared to their male counterparts. Policies and practices on employment in Kenya, just like elsewhere globally have traditionally favored men and victimized women (Bula, 2014). In most of studies like that of Andriamahery

and Qamruzzaman (2022), financial literacy gaps in women businesses is a growing concern that has potential to impair their ability to make sound and informed investment decisions. This was attributed to the fact that women had limited opportunities to financial education programs resulting to knowledge gaps in their general understanding of financial concepts and investment strategies required to run highly competitive businesses. This culminated with the fact that most women are risk-averse and have a high preference of investments with relatively risks can result to diminishing returns or missed opportunities for wealth creation, which can significantly put the sustainability of their investments in jeopardy (Yasin, Mahmud, & Diniyya, 2020).

Additionally, women may lack adequate investment experience required to make optimal financial and investment decisions; a situation that can trigger uncertainty when making investment decisions. This can be due to limited access to investment information; which may hinder their ability to stay up to date on market trends and opportunities; this may severely influence the sustainability of their investment and business. According to Egbo et al. (2020) complexity of certain form of investments requires investors to have robust knowledge least they are prone to investment blunders and increased inability to harness investment opportunities in the business environment. This emphasizes the role of financial literacy in building sustainable businesses. Despite the increasing recognition of the relevance of financial literacy in entrepreneurial sustainability, women investment groups continue to face a myriad of challenges. The lack of sufficient financial literacy among women groups poses to be a substantial barrier to the sustainable growth and success of their investment and businesses. The extent to which financial literacy impact on women business success is articulated in World Bank (2022) report that noted that there is a significant financial literacy gaps among women involved in business. The report note that women consistently scored lower than men in financial literacy knowledge assessments. This gap hampers their individual ability to make sound and informed investment and financial decisions. The data from Global Entrepreneurship Monitor (2022) shows that women participation in investment groups and entrepreneurship is disproportionately on the low in most developing countries in Africa; this is partly attributed to lack of adequate financial literacy that deters women from adequately engaging in investment activities. Reports from United Nations Conference in Trade and Development (2023) indicate that most of investment groups, especially those that are women-led, are at a higher risk of dissolution before they celebrate their fifth birthday. The most contributing factor to this phenomenon is a lack of financial literacy. Equally, data from International Finance Corporation (2022) reveal that women entrepreneurs often encounter difficulties in access of financing, hampering their general ability to invest and grow their investment ventures. This challenge is exacerbated by lack of financial literacy that hinders their overall readiness to get sufficient external funding. This was also mirrored in Organization for Economic Cooperation and Development (2022), which noted that lack of financial literacy among women entrepreneurs and investors make them to make sub-optimal investment decisions leading to diminishing returns on their investments as compared to their male counterparts, a situation that exacerbate gender-based economic disparities. International Labour Organization (2022) shows that most women-led investment groups often struggle to realize long-term sustainability, due to inadequate financial literacy that hinders their ability to mitigate, manage financial and investment risks; putting the future of their entities in jeopardy. In a number of studies such as that of Burchi et al. (2021), financial literacy plays an essential role in sustainability of investment. For instance, through financial literacy women are empowered with knowledge and skills they require to make sound investment and financial decisions. This enables them to be actively involved in investment discussions enabling them to make sound decisions and minimize potential risks arising from

their investments. Financial literacy according to Njaramba and Chigeza (2015) enables women to diversify their investment portfolios protecting group's investments from market volatility. It also noted that women with sufficient financial literacy can achieve greater financial independence that is essential in entrepreneurship sustainability; as it allow them to reinvest their profits and make calculated risks. Moreover, financial literacy equips women entrepreneurs with skills that enable them to plan for long-term through setting clear financial and investment goals, monitoring progress and making necessary adjustments that are essential in sustaining their investments. Furthermore, financially literate entrepreneurs are more wired to make informed investment decisions reducing the risk of business failures; as businesses and entrepreneurs' with strong financial management are better equipped to weather economic and financial storms cushioning themselves from imminent bankruptcy. Financial literacy is also key towards promotion of innovation and global competitiveness. As entrepreneurs are better equipped with financial and investment skills; enabling them to navigate the complexities within the business environment, both internally and externally (Prasanna, Upulwehera, & Ekanayake, 2022). Despite the fact that financial literacy of women investment groups is an essential component of entrepreneurship sustainability; it is still a challenge that deters most women entrepreneurs and groups in making optimal investment decisions (Iswan, Arasa, & Ntale, 2020). It is against this background that this study purposed to assess how financial literacy impact on entrepreneurial sustainability of women investment groups in Nairobi, Kenya.

### **Literature Review**

The literature review examined extant research on entrepreneurial sustainability of women investment groups, focusing on theories anchoring the study and empirical studies relating with the variables under probe; and highlighting gaps that exist. It provide insights that inform on the current probe and explore areas that should be addressed.

### **Theoretical Framework**

The probe was based on human capital theory that was proposed by Gary Becker in 1962. The theory postulates that people's knowledge, and skills are forms of capital that go a long in enhancing their economic productivity and bolstering their sources of income. More particularly, the theory asserts that investing in education and training can significantly enhance human capital as they become more knowledgeable and resourceful to an organization resulting to high productivity (Hatak & Zhou, 2021; Prasetyo & Kistanti, 2020). The human capital theory assumes people make rational decisions to maximize their lifetime earnings after carefully examining the costs and benefits of acquiring knowledge and skills. Nonetheless, the theory has been criticized for being too simplistic while handling various human decisions that are complex. It neglects various aspects that influence education and training; such as social inequality, market imperfections and inequity in access of knowledge by people, which may vary from one person to another. The theory is also criticized for not adequately accounting for externalities that education and training can produce, both positive and negative. Despite these criticisms, this theory has been found useful and important as it emphasizes the importance of investing in education and training to entrepreneur's knowledge and skill sets that is essential in ensuring entrepreneurial success. In order for entrepreneurs to develop highly innovative products and adapt adequately to ever changing market condition, specialized knowledge realized through education and training programs is a prerequisite. Likewise, human capital with financial literacy and risk management skills can be in a position to make informed financial and investment decisions. It can also enhance their overall adaptability to change and remaining resilience in the face of challenges that they may encounter in their entrepreneurship quest (Marginson, 2019). In the context of

entrepreneurial sustainability of women investment groups, the theory of human capital is fundamental in highlighting the significance of provision of financial education programs to women investment groups, which can go a long way in promotion of entrepreneurship sustainability. By fostering financial literacy and investment knowledge of women entrepreneurs in these investment groups it can empower them to make sound and informed financial and investment decisions, eventually leading to entrepreneurial sustainability (Sadeghi, Kimiagari, & Biancone, 2020). By investing in human capital through enrolment of women in financial and investment education programs, women in the investment groups can make optimal financial and investment decisions, resulting to the long-term success and sustainability of their investments and businesses. Higher levels of financial literacy should be emphasized as it has the potential the ability of these women in making informed investment decisions contributing to the profitability and sustainability of these women investment groups. This theory on human capital emphasizes the importance of financial literacy in entrepreneurship especially in the promotion of long-term sustainability (Vadnjaj, 2020).

### **Empirical Review**

A review of empirical data has elicited mixed results, on the influence of financial literacy on entrepreneurial sustainability of women investment groups. For example in Jiyane and Zawada (2013) study on entrepreneurship sustainability and financial literacy in South Africa; found out that inadequate financial literacy among women entrepreneurs in the informal sectors negatively influenced the sustainability of their businesses. The study emphasized the need to institute training interventions among women to empower them with requisite skills that will enable them to make sound financial decisions. Their financial management behaviors were linked to their level of financial literacy; those with relatively high financial literacy were at better position to make informed financial decisions. However, this study narrowed to women entrepreneurs in the informal sector and relied mostly on secondary data, unlike the current study that expand the scope to include women investment groups from all sectors of economy and employ quantitative techniques of data collection. In yet another probe by Yasin, Mahmud and Diniyya (2020), which while investigating behavioural factors that impact on women entrepreneurs found out that financial literacy had a positive influence on business performance of women-led entrepreneurs. However, this probe only narrowed its scope to include Halal businesses undertaken by muslim women; unlike the current study that widens the scope to evaluate all women-led investment activities and business. In addition, the probe did not evaluate long-term effect of financial literacy on those halal business, as compared to the current probe that sought to assess the long-term influence of financial literacy on entrepreneurial sustainability of women investment group's activities and businesses. The findings of Yasin, Mahmud and Diniyya (2020) were also mirrored Baporikar and Akino (2020) who while assessing whether financial literacy impacts on women entrepreneurship; observed that inadequate financial literacy among women entrepreneurs is a key challenge influencing the growth of their ventures and investment. The study emphasized the need to enrol women entrepreneurs in financial education and training programs to build the financial management capabilities. This implied that there is need to strengthen women's entrepreneurship through financial literacy that plays a critical role in ensuring these women entrepreneurs make sound financial decisions that ensure they are in operation for a long-term enabling them achieve their economic and social goals. However, this probe purposively targeted 23 women entrepreneurs who had been in their respective business for five years; as compared to the current study that targeted women investment groups drawn from all sectors involving all forms of businesses and relying on quantitative form of data collection that is more robust. Correspondingly, Ribanda and Jeremiah (2023) probe on challenges facing women entrepreneurs in Namibia; found that despite the fact that most women entrepreneurs have

relatively high levels of education they still do not have financial management skills; as a result this negatively influence their businesses' sustainability. The probe also noted that men had relatively high financial literacy skills in comparison with their female counterparts. The study suggested that there is need to enhance financial education and training among women entrepreneurs who play an essential role in alleviation of poverty. The study demonstrated that financial literacy is an essential factor that has potential to influence the growth of women entrepreneurship. The gaps arising from this study is that it narrowed on women entrepreneurs in cosmetic industry as opposed to the current study that broaden it scope to include women-led businesses from all sectors; therefore obtaining results that are more generalizable. Babajide, et al. (2023) study on financial literacy and sustainability of 300 small businesses in Nigeria and using Structural Equation Modelling technique; also observed that financial literacy has positively significant influence on small businesses' sustainability. As such it recommended the adoption of sustainability model hinged on financial literacy. The entrepreneurs in these businesses should invest in financial literacy programs to revamp their decision making capabilities.

### **Research Methodology**

The probe utilized descriptive research design which allowed for systematic gathering of both quantitative and qualitative data relating to financial literacy and entrepreneurial sustainability of women investment groups. The research target population constituted of 17,000 chairpersons of women investment groups in Nairobi County; where using Cochran method sampling determination the researcher realized a sample of 384. The researcher utilized a cocktail of sampling techniques; where using stratified sampling method the researcher divided the population into six categories or strata namely real estate, retail business, agribusiness, light industries, technology and hospitality based groups. Thereafter, used snowballing sampling technique to recruit research participants who subsequently introduced the other members of other groups until the required sample size was realized. The data was gathered through a semi-structured questionnaires; which was subject to reliability tests using Cochran's alpha method. The collected data was analyzed using SPSS version 28.0; where descriptive and inferential statistics were used to analyze the data; which was presented in form of charts and graphs (Reilly, Harrison, & Creswell, 2020; Mariko & Creswell, 2023).

### **4.0 Results and Discussions**

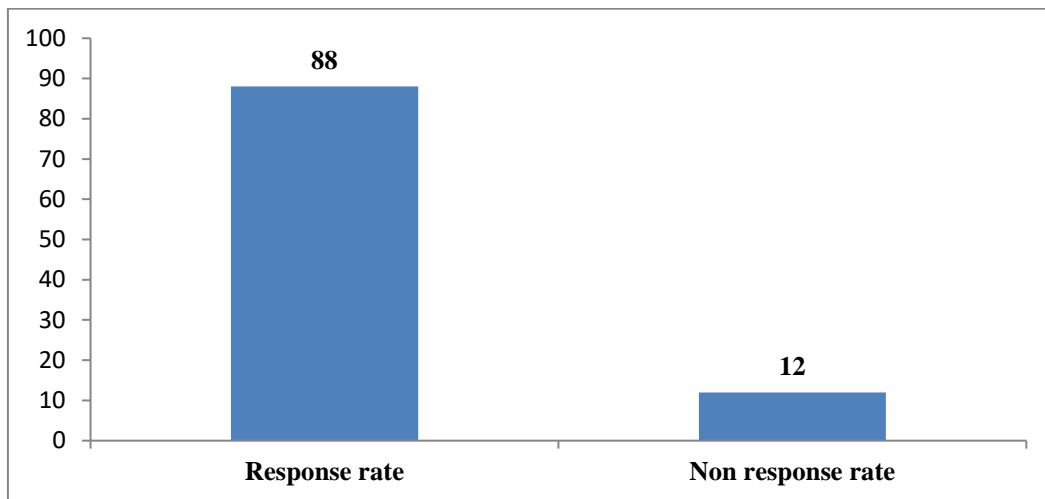
This section present analyzes and discusses the results obtained. It focuses on the key findings.

#### **Reliability Results**

The reliability test of the items in the questionnaire that was the primary data collection tool used produced robust results, with Cronbach's alpha coefficient of 0.748 implying there was a high level of internal consistency. It also implied that most items in the questionnaire were well constructed and were able to answer the questions that they were meant to; yielding data that was precise and more reliable

#### **Response Rate**

The probe achieved an exceptionally high response rate of 88% as out of 284 respondents targeted 250 responded as summarized in the following chart.

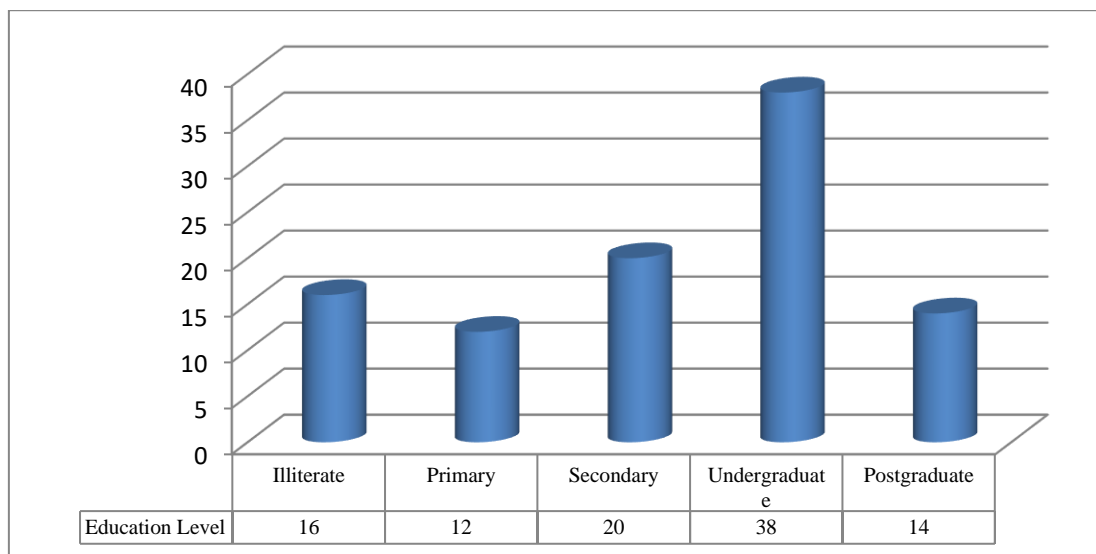


**Figure 1:** Response Rate

This implied that the data collection process was robust and effective. This demonstrated a relatively high level of engagement and participation by research participants; showing their willingness to contribute valuable insights to this probe on financial literacy and entrepreneurial sustainability of women investment groups in Nairobi.

**Demographic Analysis**

The demographic revealed noteworthy patterns among the respondents in the study, with most being above 35 years and a significant majority of the respondents at 84% having a formal education as illustrated in the figure below:



**Figure 2:** Education Level

It was quite evident that despite most women investment group leadership members having high levels of education attainment; a considerable number of the respondents still exhibited financial illiteracy. This raised lots of question on sustainability of women investment group businesses and investments. This finding underscores the significance of addressing the financial literacy needs of women investors and entrepreneurs, regardless of their education background as it directly influence their ability to make sound financial decisions. This therefore means that these women investment groups should prioritize on empowering their

members with comprehensive financial literacy programs that equip them with knowledge and skills they require to navigate complex and ever fluid financial and investment landscape.

**Descriptive Analysis**

The descriptive analysis of the investment preferences of most women investment groups revealed that most of them accounting for 58% invested in retail business, followed by a notable 17% investing in real estate. Additionally, 13% of these women investment groups invested stock; and the remaining 12% opted for wholesale businesses. The high prevalence of investment in retail business implies most women investment groups are more inclined on investments or businesses that they are familiar and are tangible in nature; indicative of a certain degree of financial caution. The relatively low investment in stock indicate that there is a potential gap in financial literacy or risk perception among members of most women investment groups. As a result they may be missing out on advantages associated with a diversified investment portfolio and other long-term benefits. To bolster entrepreneurial sustainability, there is increased need to focus on providing these women groups with financial education and training to inform their decisions while evaluating investment alternatives; therefore enhancing entrepreneurial sustainability.

**Table 1: Descriptive Analysis Results**

Question	SA	A	N	D	SD	Mean	Standard Deviation
We invite financial management expert periodically to enlighten us on the best form of investments	11.6% 30	16.5% 43	3.5% 10	39.4% 98	28% 70	2.6	2.4
I have attended various financial knowledge and literacy training programs	22.6% 58	15.4% 38	2.3% 10	32.6% 83	27.4% 68	3.4	3.2

The descriptive results from the five point Likert scale showed that majority of women investment groups at 67% (n = 168) do not frequently invite financial experts to educate their members about available investment opportunities. The response had a mean of 2.6 and a standard deviation of 2.5; this implies there is a potential need for enhanced financial education and literacy programs in most of the women investment groups. While some members may have reasonably high understanding of financial matters, most of them lag behind and there is need to bridge this disparity in financial literacy. Tailoured-made financial literacy programs can go a long way in alleviating this disparity. The survey results further revealed that a significant level of disagreement among respondents, with 60% expressing that they have never attended any financial management training program. It had a mean response score of 3.4 and a standard deviation of 3.2 indicative of a sizeable variance. The high percentage of the respondents who have never attended any form of financial management training program suggests a potential gap in financial education and knowledge. This means that there is increased need to address this gap; which is essential in addressing financial literacy in these women investment groups; as most members may lack adequate skills and insights required to make sound financial and investment decision, negatively influencing entrepreneurial sustainability of women investment groups. The wide variability in the response suggests a diversity of perspectives and experiences of respondents in most of women investment groups. To enhance entrepreneurial sustainability, it is essential for these women investment groups to consider tailoured-made financial education programs to accommodate diverse knowledge and experiences of the members.



**Inferential Analysis  
Correlation Analysis**

The use of Pearson Correlation coefficient in this probe revealed a strong positive correlation of 0.76 between financial literacy and entrepreneurial sustainability of women investment groups.

**Table 2: Correlation Analysis results**

		Sustainability of Women Groups	Financial Literacy
Sustainability of Women Groups	Sig (2 tail test) N R	1 250 0.72	
Financial Literacy	Sig (2 tail test) N R	0.000 250 0.76	1 250 0.29

This significant correlation implies that as the level of financial literacy increases among women investment group’s members; there is a corresponding increase in entrepreneurial sustainability of their investment initiatives. This therefore, means that by investing in financial literacy programs can significantly impact on entrepreneurial sustainability of women investment groups. This is because by strengthening financial knowledge-base of women investment groups can empower those women to make sound financial and investment decisions; therefore enhancing their financial well-being and success as investors and entrepreneurs. This finding in essence emphasizes the pivotal role of financial literacy in sustainable growth and profitability of women investment groups in Nairobi.

**Regression Analysis**

The results from the multiple regression conducted to assess the influence of financial literacy on entrepreneurial sustainability of women investment groups indicate that it had a beta coefficient of 0.7 with a probability score of 0.001 which was less than the significance level of 0.05.

**Table 3: Regression Summary**

Regression Model	Unstandardized		Standardized		Sig
	Beta	Standard Error	Beta	t	
-constant	6.73	1.25		5.4	0.002
Financial Literacy	0.70	0.05	0.18	14.0	0.001

This implied that financial literacy had a strong, positive and significant influence on entrepreneurial sustainability; indicating that as the financial literacy increases entrepreneurial sustainability tends to improve. This finding emphasizes the significance of financial literacy in promotion of entrepreneurial sustainability among women investment groups in Nairobi. This finding was in agreement with Yasin, Mahmud and Diniyya (2020) study which found out that financial literacy had a positive influence on business performance of women-led entrepreneurs. As was the case in Babajide, et al. (2023) study that established that financial literacy has positively significant influence on small businesses’ sustainability; and should be a priority for all categories of entrepreneurs.

**Conclusion**

Financial literacy has been found to exhibit a strong positive influence on entrepreneurial sustainability of women investment groups. The data have yielded compelling evidence that financial literacy is a crucial component that influences sustainability of women-led investment and businesses. It has been overwhelmingly shown that as the level of financial literacy of these women investment group increases; so does the likelihood of their investment being sustainable for a long period of time. This powerful association emphasizes the essential role

played by financial literacy in empowering the women with fundamentals of financial management knowledge and skills that enable them to make sound financial and investment decision that bolsters not only growth but also entrepreneurial sustainability of their investment activities and businesses.

### **Recommendation**

Based on the results; which indicated that financial literacy had a strong and positive influence on entrepreneurial sustainability of women investment group, the following can be made: Firstly, there should be promotion of financial literacy programs; which should be tailored-made to fulfill the diverse financial literacy gaps inherent in most women investment groups. It should aim at improving their basic understanding of financial management especially on investment and risk management strategies. Secondly, the government and other non-governmental organization should ensure that there is equity in access to financial education among women of all backgrounds including those with disability. Thirdly, there should be increased collaboration and partnership with micro-financial institutions and women investment groups to promote access to credit, investment opportunities and other financial services. Forth, there should monitoring and evaluation of the effectiveness of financial literacy programs to ascertain whether they empower women in ways enables them to make sound and rational financial and investment decisions. Lastly, the financial sector should develop policies that encourage financial inclusion, from access to credit, provision of microloans to provision of efficient safety nets to women investment groups.

### **Areas for further research**

Further research should be carried on the influence of financial literacy to entrepreneurial sustainability of micro small and medium enterprises involving both male and female entrepreneurs to ascertain whether the findings in this study holds or not. The study can also be replicated in other counties or country.

### **References**

- Afshan, G., Shahid, S., & Tunio, M. (2021). Learning experiences of women entrepreneurs amidst COVID-19. *International Journal of Gender and Entrepreneurship*, 13(2), 162-186.
- Andriamahery, A., & Qamruzzaman, M. (2022). Do access to finance, technical know-how and financial literacy offer women empowerment through women's entrepreneurial development. *Frontiers in Psychology*, 12, 1-4.
- Babajide, A., Osabuohien, E., Olayeni, P., Falola, H., Amodu, L., Olokoyo, F., .Ehikioya, B. (2023). Financial literacy, financial capabilities and sustainable business among small business owners in Nigeria. *Journal of Sustainable Finance and Investment*, 13(4), 1670-1692.
- Baporikar, N., & Akino, S. (2020). Financial literacy imperative for success of women entrepreneurs. *International Journal of Innovation in the Digital Economy*, 11(13), 1-21.
- Bula. H. Orwa(2021). Entrepreneurship: What Women Entrepreneurs and Any Small-Scale Trader Need in Order to Succeed. Utafiti Foundation. <https://utafitifoundation.com> › *Uncategorized*.
- Bula, Tiagha and Waiguchu(2014). An Empirical Analysis of Entrepreneurship Scorecard and Performance of Small Scale Women Entrepreneurs in Urban- Kenya. *International Journal of Humanities and Social Science*, 4 (5).
- Bula H.(2012)Performance of Women Entrepreneurs in Small Businesses: Marital Status and Family Characteristics. *European Journal of Business and Management*, 4 (7).
- Bula, H. O. (2019). The Role of Innovation Capability in Organizational Success for Small and Medium Enterprises in Kenya: A Critical Review of Literature.

- Burchi, A., Wlodarczyk, B., Szturo, M., & Martelli, D. (2021). The effects of financial literacy on sustainable entrepreneurship. *Sustainability*, 13(9), 5070.
- Egbo, O., Ezeaku, H., Igwemeka, E., & Okeke, O. (2020). Financial literacy and access: revisiting the bridges and barriers to women entrepreneurship in Nigeria. *Amazon Investiga*, 9(29).
- Global Entrepreneurship Monitor. (2022). *Women Entrepreneurship Report for 2021/2022*. London, England: Global Entrepreneurship Monitor.
- Hatak, I., & Zhou, H. (2021). Health as human capital in entrepreneurship: individual extension, and substitution effects on entrepreneurial success. *Entrepreneurship Theory and Practice*, 45(1), 18-42.
- International Finance Corporation. (2022). *SME finance and gender*. Washington DC: International Finance Corporation.
- International Labour Organization . (2022). *Women's entrepreneurship development*. Geneva, Switzerland: International Labour Organization .
- Iswan, A., Arasa, R., & Ntale, J. (2020). The role of financial literacy in the growth of women-owned micro enterprises: a case study of Busis County, Kenya. *Journal of African Interdisciplinary Studies*, 4-8, 21-34.
- Jiyane, G., & Zawada, B. (2013). Sustaining informal sector women entrepreneurs through financial literacy. *Libri*, 63(1), 47-56.
- Kumar, A. (2013). Women entrepreneurs in a masculine society: inclusive strategy for sustainable outcomes. *International Journal of Organizational Analysis*, 21(3), 373-384.
- Marginson, S. (2019). Limitation of human capital theory. *Studies in Higher Education*, 44(2), 287-301.
- Mariko, H., & Creswell, J. (2023). Applying core quality criteria of mixed methods research to an empirical study. *Journal of Mixed Methods Research*, 17(1), 12-28.
- Njaramba, J., & Chigeza, P. (2015). Financial literacy: the case of migrant African-Australian women entrepreneurs in the Cairns region. *Journal of Entrepreneurship and Sustainability Issues*, 3(2), 198-208.
- Nsengimana, S., Tengeh, R., & Iwu, C. (2017). The sustainability of businesses in Kigali, Rwanda: an analysis of the barriers faced by women entrepreneurs. *Sustainability*, 9(8), 1372.
- Organization for Economic Cooperation and Development . (2022). *March on gender: supporting women's entrepreneurship*. Paris, France: Organization for Economic Cooperation and Development (2022).
- Orobia, L., Tusiime, I., Mwesigwa, R., & Ssekiziyivu, B. (2020). Entrepreneurial framework conditions and business sustainability among youth and women entrepreneurs. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(1), 60-75.
- Prasanna, R., Upulwehera, J., & Ekanayake, E. (2022). Sustainability of the women-led SMEs in the economic competition in Sri Lanka: does financial literacy matter? *Journal of Entrepreneurship*, 1-3.
- Prasetyo, P., & Kistanti, N. (2020). Human capital, institutional economics and entrepreneurship as a driver for quality and sustainable economic growth. *Entrepreneurship and Sustainability Issues*, 7(4), 2575.
- Qahtani, M., Zguir, M., Fagih, L., & Koc, M. (2022). Women entrepreneurship for sustainability: investigations on status, challenges, drivers and potential in Qatar. *Sustainability*, 14(7), 4091.
- Reilly, T., Harrison, R., & Creswell, J. (2020). Methodological rigor in mixed methods: an application in management studies. *Journal of Mixed Methods Research*, 14(4), 473-195.
- Ribanda, S., & Jeremiah, A. (2023). Financial literacy challenges confronting female entrepreneurship sustainability in the Namibian cosmetic industry. *Journal of Public Administration*, 58(1), 216-230.

- Sadeghi, V., Kimiagari, S., & Biancone, P. (2020). Level of education and knowledge, foresight competency and international entrepreneurship: a study of human capital determinants in the European countries. *European Business Review*, 32(1), 46-68.
- United Nations Conference in Trade and Development . (2023). *Wome entrepreneurs take the spotlight at the world investment forum 2023*. Geneva, Switzerland: United Nations Conference in Trade and Development .
- Vadnjal , M. (2020). The role of human capital and social capital on the innovativeness of female entrepreneurs. *International Journal of Value Chain*, 11(4), 311-327.
- World Bank. (2022). *Women and financial inclusion*. Washington DC: World Bank.
- Yasin, R., Mahmud, M., & Diniyya, A. (2020). Significance of financial literacy among women entrepreneur on halal business. *Journal of Halal Industry and Services*, 3, 1-5.

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