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The Role of Gender and Education on Entrepreneurship Performance: The Case of Kenya's Micro and Small Businesses

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ABSTRACT: Although it is believed that entrepreneurship is the main driver of economic growth, it is basically a value-driven activity, and personal values appeared to have a significant impact on both the decision topursue entrepreneurship as well as how the enterer behaves or performs. The purpose of this study was to investigate the effects of owner/manager gender and educational background on the performance of micro and small businesses in Kenya. A sample of 398 licensed MSEs were chosen from a study population of 65,698 from three counties of Kisumu, Siaya and Vihiga in Western Kenya. Structured questionnaires were used in the study's descriptive survey approach to gather primary data. Descriptive and inferential statistics were used to present the data after it had been evaluated using statistical software (SPSS). The study's findings showed in objective one, that gender has significant difference in the performance of MSEs since ($F_0 = 3.895 > F_1$ (1, 397) = 3.86; $\alpha o = .049 < \alpha c = .05$). Objective two, the education level of owner/manager also has significant difference in MSE performance since, (Fo = 187.090> F₁ (1, 397) = 3.86; $\alpha o = .001 < \alpha c = .05$). The study recommends combined efforts to support female gender to access necessary resources as well the training and education to expose them to the new technologies. There is need for in-depth study to find out the extent to which gender disparities are affecting the expansion of the MSE sector.

KEYWORDS: Gender, Education, Entrepreneurial, Entrepreneurship, Micro and Small Enterprises

1.0 INTRODUCTION

Some authors contend that entrepreneurship is fundamentally a value-driven activity, and that personal values seem to have significant implications not only for the decision to pursue entrepreneurship but also for how the venture behaves or performs. Entrepreneurship is widely regarded as the driving force behind economic development around the world. Researchers in entrepreneurship are looking for constructions of personal traits that are exclusive to entrepreneurs and how these influence commercialconduct. Therefore, the researchers will look at whether the owner or manager's values, gender, and level of education have an impact on operational performance (Radipere & Dhliwayo, 2014).

In recent years, the academic literature has given more emphasis on the necessity for micro and small businesses (MSEs) to be entrepreneurial (Quaye, Acheampong, & Asiedu, 2015). The importance of entrepreneurs and the private sector has been progressively emphasized by most governments, and entrepreneurship is currently a hot topic in the majority of international economies. Business start-up programs serve a number of purposes, including encouraging young people to think of themselves asentrepreneurs and, more crucially, developing a comprehensive program to support new businesses. Young people can find work through entrepreneurial growth and business startups, which also make a substantial contribution to the socioeconomic development of the nation (Nguyen, 2018).

Arguably, entrepreneurs and entrepreneurship are the cornerstones around which societies' economic well-being was constructed. Their contribution to opportunity creation through new businesses and management of ongoing ones has been recognized (Mathew

& Johnson, u.d.).

Without new jobs, innovation is impossible to envision because new businesses modernize the market and with their competitiveness stimulate competitors to advance (Taboroši et al. 2022). Entrepreneurship is crucial for promoting economic growth, the key to innovation, job development, and economic expansion is majorly entrepreneurship. However, there are certain gender-related inequalities in the world of entrepreneurship (Mertz et al. 2021).

In reality, men not only own and control MSEs; women have also started to take an active part in these organizations. Women play significant roles in managing and owning MSEs nowadays. So, gender isn't an obstacle to doing business any more. Women entrepreneurs are a new phrase that has emerged in the entrepreneurial community as a result of the presence of women in business (Tasman, Yanuarta, Patrisia, 2023). MSEs will encounter fierce competition in the business sector. It is hoped that female entrepreneurs will succeed in the competition and be able to last a long time in the commercial sphere. Women entrepreneurs must be able to produce good business performance for the companies they run for this reason. MSEs will truly be able to stay a long time and prevail in the competition with the attainment of good business performance (Tasman et al. 2023).

Sedaghat & Lei (2020) contend that women are less likely than men to engage in entrepreneurial activities, and that entrepreneurial motivation and education are strongly related to those who are opportunity-driven as opposed to necessity-driven entrepreneurs. Inadequate family income, dissatisfaction with the salary offered for employment, difficulty finding a job and a lack of flexibility in their schedule to accommodate household responsibilities are characteristics closely associated with necessity entrepreneurship and are particularly common among female entrepreneurs. According to Schmidt et al. (2022) women and men have traditionally had various societal responsibilities to fulfill. Women held vocations within the realm of family management, whereas men had their social trajectory focused on exterior jobs like politics, military, and science. Women have close interactions for the aim of family planning in the setting of entrepreneurship

Entrepreneurial education is another characteristic that sets them apart from non-entrepreneurs. Inorder to differentiate between entrepreneurs who succeed better and those who struggle, education is one of the key variables. Entrepreneurs with higher levels of education are recognized to be better able to recognize, seize, and develop new business opportunities than those with lower levels of education (Sedaghat, & Lei, 2020). The impact of education, which is one of the elements that defines social, economic, and political interactions and explains the various educational levels and implications for each type of entrepreneurship, was thoroughly examined by Jiméneza et al. (2015). They discovered that the conventional wisdom has long held that greater levels of education will correlate with greater levels of entrepreneurship.

1.1 Problem Statement

Financial metrics like gross profit and personnel count are used more frequently to gauge how well acompany is doing. On the other hand, business performance must be assessed using non-financial metrics, and these metrics can be influenced by an entrepreneur's characteristics like gender and degreeof education. According to Tasman et al. (2023), gender and educational features do equip entrepreneurs for a variety of positions and responsibilities inside the firm and throughout society. There are disparities between the sexes in terms of entrepreneurial aptitude, goals, and other characteristics (Neneh, Zyl, & Noordwyk, n.d.).

In company operations, education, networking, and managerial experience are all crucial factors. Knowledgeable MSE owners and managers frequently see chances to grow their businesses internationally and are therefore more likely to join the global value chain (APEC, 2016). Even though they are few, according to a 2016 research by the Kenya National Bureau of Statistics, highly educated individuals hold the majority of the larger businesses. It is imperative to better investigate entrepreneur traits like gender and education and how they affect start-ups' chances of success in business given the high failure rate of micro and small firms. In order to determine whether gender and education haveany bearing on entrepreneurial achievement, the study looked into these topics. (Radipere et al., 2014).

1.2 Study Objective

The study aims to examine the role of gender and education of owner/manager on performance of micro and small enterprises in Kenya.

Specific Objectives

1) To establish the effects of gender on the performance of micro and small enterprises in Kenya.

2) To assess the effects of education levels of owner/manager on performance of micro and smallenterprises in Kenya.

2.0 LITERATURE REVIEW

2.1 Concept of Entrepreneurship

According to Latha et al. (2008) the terms "entrepreneur" and "entrepreneurship" have undergone a number of iterations before coming to denote the current substance. The definition of an entrepreneur has evolved from the economic area of starting any business to an adjective designating an undertaker who takes any chances in search of a profitable undertaking. The entrepreneur is a key player in creating investment prospects, according to economists (Madara, 2020). It is viewed by sociologists as a sensitive catalyst for society's modernization. An entrepreneurial individual, psychologically speaking, has motivations and goals associated with identifying favorable conditions for economic success. According to political scientists, entrepreneurship is the just offspring of the political system, which effectively aids in his emergence (Shravanvel, 1987).

Since the turn of the century, institutions and individual theorists alike around the world have developed a greater interest in entrepreneurship. This is crucial since there has been a tremendous rebirth in the recognition of small businesses over the past 25 years (McFarlane, 2016). In his posthumous writings, Cantillon (1755) introduced the idea of entrepreneurs and was the first economist to see them as important economic factors (Hisrich et al. 2009). The notion of entrepreneurship's earlierphase development closely resembles the history of the term entrepreneurship. A literal translation of the French word "entrepreneur" is "between-taker" or "go-between" (Saleemi, 2011).

2.2 Concept and Growth of Micro and Small Enterprises (MSEs)

Micro and small businesses (MSEs) are particularly vulnerable to a weak business climate (White, 2018). According to a World Bank report on doing business, regulations, quality, and efficiency are all encouraged. Effective regulations that are simple to comprehend and obey should be in place. Unnecessary red tape should be cut out in order to achieve economic gains, lower corruption, and promote the growth of MSEs (World Bank, 2019). All areas of the nation's economy are affected by micro and small enterprises, which are also one of the most important sources of employment and the foundation for medium and big industries, which are essential for industrialization. These businesses may be found all around Kenya today, and they have a great deal of potential to produce a wide range of jobs as well as broad-based economic benefits (GOK, 2005). MSEs have a harder time obtaining loans from commercial banks than from other small financial organizations, according to the KNBS Economic Survey of 2012. The business owners indicated a need for government support in market promotion and the creation of favorable conditions for fair competition in order to address the issues MSEs confront.

Since MSE growth has been difficult to predict, most discussions of MSE growth have occasionally been interpreted as referring to an entrepreneur's well-being (Madara et al. 2020a). The development of Kenyan micro and small enterprises (MSEs) into small business enterprises (SMEs) into large corporations, with a turnover of one billion, is as low, if not a depressing number, according to Muiruri (2014). He qualified it further by saying that only four companies, or 4%, of the top 100 MSEs examined by KPMG and Business Daily in 2008 advanced from the SMEs class to the \$1 billion mark.

There have been several hypotheses put forth regarding the expansion of MSEs; however, no single hypothesis has been shown to be sufficient to account for the expansion of small businesses (Smallbone et al. 1993). This is due in part to the variability that exists among the many MSE types as well as the variety of growth-affecting elements that may interact differently depending on the situation (Smallbone et al., 1993). Small enterprises can apply various types of funding at various business cycles, according to a financial growth cycle suggested by Berger & Udell (1998). Theyassert that changes in the ideal capital structure depend on the size, age, and accessibility of the firm's information.

The demographic background of small business owners may have an impact on financing choices and expansion in addition to firmspecific factors. Due to risk associated with agricultural output and the fact that the majority of rural MSEs are agro-based, many financial institutions, including microfinance, are reluctant to transact with them. As a result, they are likely to miss out on financing for expansion (Madara, 2005).

The law of proportionate effects, also known as Gibrat's law, has been a fundamental foundation for studies on the growth of MSEs (Bouazza et al. 2015). Firm growth rate is independent of firm size, according to Gibrat's law (Gibrat, 1931). Some research supports Gibrat's' law, whereas others do not. The Theory of the growth of the firm, written by Edith Penrose in 1959, outlined certain guiding principles for how enterprises should grow and how quickly they should do so (Nair et al. 2008). In order for businesses to expand, they require both internal and external resources that will help them compete. According to Penrose, firm size is incidental to the process of growth, but firm growth is driven by the efficient and creative management resources available within the organization, according to Nair et al. (2008) a company's capacity to access top management and technical talent acts as a growth catalyst.

2.3 Entrepreneurship Performance

Regarding the analytical evaluation, numerous researches examined the microeconomic performance of MSEs, describing the connections between the performance of MSEs and the influences of their internal environments, or with a combination of internal and external factors. According to Cicea et al. (2019) these studies are not pertinent to understanding specific mechanisms and determinants of the performance of the MSEs sector in a particular country or another, despite the fact that they may be helpful to entrepreneurs looking for the best ways to improve their organization's performance in a setting with limited resources.

Over-averaging the rate of return over a number of years produces positive results, according to Porter (1980). Success is a key notion in business management, and managers' and entrepreneurs' productivity evaluated. Good results are what decide the business's survival and growth (Gibcus & Kemp, 2003). The tiny business isn't merely a scaled-down version of the large one. Due to the crucial roles that owners, businesses, and managers play, which determine when performance results can be seen, this has several features (Leković & Mari, 2015).

In their 2016 paper Selvam, Gayathri, Vasanth, Lingaraja & Marxiaoli proposed MSEs performance measurement as the profit and growth that included growth in enterprise assets to which they say are relevant justification for the existence of a business firm and they must be included in any attempt to measure performance of firms. Additionally, they distributed a matrix outlining additional business performance metrics, including market value (sales volume), employees, and customer happiness and retention as a further performance indicator. They also included social and environmental performance in their matrix. Without outcome measurement, process improvement is not possible and performance assessment is absolutely necessary for the organization's effective management. Therefore, measuring organizational performance is necessary to determine how organizational resources affect business success (Al-Matari et al. 2014).

2.4 Gender and Entrepreneurship Performance

A person's personality traits might affect the choices he makes, therefore risk-takers, bold thinkers, andambitious persons may have more overt entrepreneurial goals. Most often, these characteristics are viewed as belonging to men. The phrase "successful entrepreneur" is usually entirely associated with men, and this story has also developed stereotypes in several cultures (Taboroši et al. 2022). Men and women approach and complete entrepreneurial endeavors differently. Women and men have traditionally had various societal responsibilities to fulfill. Women held vocations within the realm of family management, whereas men had their social trajectory focused on exterior jobs like politics, military, and science. Women had close interactions for the sake of family planning when it came to entrepreneurship. Men, on the other hand, maintained their talents in the business world and were able to stay in touch with more people for a shorter period of time. As a result, women were typically thought to only contribute to the family's income in a supplemental manner (Schmidt et al. 2022).

Taboroši et al. (2022) claim that women have a stronger fear of failure than men, which may prevent them from becoming entrepreneurs since they take less chances. According to gender theory, men and women manage their enterprises in different ways. This raises the question of whether the diverse company management strategies adopted by male and female business owners' result in necessarily different entrepreneurial performance (Quaye et al. 2015). OECD (2011) agrees that entrepreneurship isviewed as a key factor in economic growth and development in all economies. There appear to be Notable distinctions between the traits of male and female entrepreneurs in addition to the overall variation in entrepreneurial practices. Women are more likely than men to start and manage businesses in other industries, own smaller organizations, operate with lower levels of overall capitalization, and have slower business growth rates. For this reason, barriers to entrepreneurship still exist, many of which tend to be gender-specific. These barriers include cultural norms, unequal employment prospects, and a lack of access to financing for women. Women generally believe they are less capable than males of starting their own businesses, maybe because they are aware that they must have far more schooling to follow a similar vocation. Regarding the aspects of entrepreneurial activity put forward by Schmidt et al. (2022) differences between men and women can be seen. According to Hisrich et al. (2014), men are more innovative and idealistic than women are when it comes to innovation. According to Lukiastuti & Wahyuni (2023) the very nature of entrepreneurship produces different conditions and problems for men and women, some of which may be related to preconceptions that may prevent women from beginning their own firms. They add that since most women are concentrated in a variety of business sectors and typically work for a small number of companies, it is harder for them to raise money for their ventures or to find investors who are interested in supporting them.

2.5 Education Level and Entrepreneurship Performance

In order to foster employment equity and boost economic growth, formal education funding is crucial. It promotes productivity, develops both cognitive and non-cognitive skills, and gives people more opportunities to continue learning throughout their life. Better health and more investments in children's education and health are also related to higher rates of school participation, particularly among women and in developing nations (OECD, 2011).

Quality education boosts entrepreneurs' self-confidence and self-efficacy, which has a beneficial effect on business performance. Education increases knowledge, skills, psychology, and confidence, all of which are crucial for accomplishing organizational goals. Additionally, educated businesspeople willbe more inventive and creative, which will allow them to find novel ways to delight customers. A corporation may manage a complex environment and continue to pursue its corporate goals by having an educated owner or manager. The degree of knowledge and profession increases as a result of education, which is fundamental to the acceptance and usage of information technology (Lukiastuti, & Wahyuni, 2023). There are many justifications for the relationship between education and informational entrepreneurship. Higher educated people are more aware of the potential penalties and fines that may result from engaging in unofficial professional activities. They are also more conscious of morality and the detrimental effects on their social standing that society associates with unofficial economic activity (Jiméneza et al. 2015).

Education is supposed to boost intrinsic motivation and energizer behaviors, and the more education a business owner or management has, the higher their chances are of being successful entrepreneurs and, consequently, of growing their company. According to Peters & Bridjlal (2011) "education" refers to information, skills, problem-solving aptitude, self-discipline, motivation, and self-assurance, all of which can help an entrepreneur deal with challenges and be more successful. They also think that business owners with more education and experience will likely be more effective at looking for, acquiring, and analyzing data on the availability of possibilities that foster growth. However, it is still unclear how education affects how intense entrepreneurship is. Many founders and business owners have both above-average formal education and lesser levels of education (Lukiastuti & Wahyuni, 2023).

2.6 Study Conceptual Framework

The performance of MSEs was used as the dependent variable in the conceptual framework, and gender and educational characteristics were used as the independent variables. The conceptual framework shown in Figure I will therefore serve as a representation of the relationship between the independent and dependent variables.



Figure I. Study Conceptual Framework Source: Researchers

3.0 METHODOLOGY

A descriptive survey research design was employed in this study. Because it adheres to the scientific method, which entails seeing, describing, recording, evaluating, and reporting circumstances that already exist without change, descriptive research is regarded as the best type of research design. Characterizing events or traits unique to a subject community is another aspect of it. According to

Kothari (2004), descriptive surveys provide precise and helpful information about current events and, when appropriate, permit the formulation of trustworthy general inferences from the facts found. This type of survey has the advantage of increasing the rapid collection of data that are precise, affordable, efficient, and can easily be assessed the information about the target population. They are also less restrictive in their application (Khan, & Burki, 2020).

3.1 **Target Population**

Population is defined by Mugenda, & Mugenda (2003) as the total group of individuals, events, or things sharing a common observable attribute. In the three Counties of Kisumu, Siaya, and Vihiga, the study focused on all the licensed Micro, Small, and Medium Enterprises (MSMEs). According to the 2016 MSMEs survey report from the Kenya National Bureau of Statistics, there were 531,698 MSMEsoverall in the three Counties, including both licensed and unlicensed MSMEs. The total for the three Counties is shown in Table 1, along with an aggregate of MSMEs by county depending on their sizes.

		Licensed			Unlicensed	
County	Total	Micro	Small	Medium		Grand Total
Kisumu	40,199	34,009	5,306	884	197,000	237,199
Siaya	14,199	13,802	312	85	190,500	204,699
Vihiga	11,300	10,848	441	11	78,500	89,800
Total	65,698	58,659	6,059	980	466,000	531,698

Table 1. Distribution of licensed and Unlicensed MSMEs by County

Source; KNBS, (2016)

3.2 Sample size and Sampling Technique

The sample size was 398 calculated using Yamane (1967) model to determine the appropriate samplesize.

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

Where:

n is the desired Sample size, *N* is the Population size and, *e* is the level of PrecisionTherefore:

65,698 1+65,698(0.05)(0.05) n = *n* is therefore **398**.

This was reinforced by stratified selection of licensed MSMSEs from Counties of Kisumu, Siaya and Vihiga as shown in Table 2

Table 2. Distribution of Sample size to the Counties MSMEs

County	Total	%	Sample	
Kisumu	40,199	0.606	244	
Siaya	14,199	0.606	86	
Vihiga	11,300	0.606	68	
Total	65,698	0.606	398	

Adapted from KNBS, (2016)

3.3 Data Collection Instrument

In order to facilitate coverage and the convenience of gathering a lot of information in the least amount of time, data were collected utilizing questionnaires. Sajjad-Kabir (2016) notes that questionnaires offer a systematic way to respond to specified research questions, test hypotheses, and assess results.

3.4 Data Analysis and Presentation

To examine quantitative data that was provided in descriptive and inferential statistics, computer- supported software called SPSS was employed. Below is a list of the numerous linear models that were employed for the quantitative analysis. $Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$, Where: Y = MSEs Performance; X_1 = gender variable, X_2 = education level variable; and ϵ = Error term; While the $\beta 0$, β_1Bi represent regression coefficients, and independent variables were represented by X_1Xi and ϵ provided for the random variation in Y that X variable was not able to explain.

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

Four hundred ten (410) copies of the questionnaire were distributed in total. The study had extras in case any questionnaire was deemed invalid. Twelve (12) of the questionnaires were discovered to be invalid during data cleaning and coding. The researcher verified the validity of the remaining samples and input the precise sample size for analysis into the SPSS program. The response rate was 97% based on the total number of questionnaires distributed, which was good and related to the face-to-face survey method used, showing that the replies collectively exceeded the threshold of representativeness.

4.2 Demographic Information

4.2.1 Gender of Respondents

Men made up 211 (53% of responders), while women made up 187 (46.9%). Since the MSEs the respondents owned were licensed and more formal, this was consistent with the findings of a 2016 survey by the Kenya National Bureau of Statistics of MSMEs, which found that more men than women owned licensed MSEs, while more women owned unlicensed MSEs (KNBS, 2016). Additionally, APEC (2016) claims that women are more likely than men to work in the informal sector, with 85.1% of women-owned MSEs in Asia being informal compared to 76.7% of men-owned.

4.2.2 Age of Respondents

14 (6.6%) of male entrepreneurs are 30 years of age or younger, compared to 23 (12.3%) of female entrepreneurs in the same age range. In the age range of 31 to 42, 94 (44.5%) males and 98 (52.4%) females are present. 53 (28.3%) of females and 68 (32.2%) of males in the 43 to 54 year old age range are in this category. Between the ages of 55 and 66, there are 10 (5.3%) females and 27 (12.8%) males. There are just 3 (1.6%) females and 8 (3.8%) males in the 67 and older age group, respectively. There is a higher concentration of people between the ages of 31 and 54, indicating that productive peoplefall into this age range on average. According to a study by Nabutola (2015), there are more business owners between the ages of 31 and 42. She argues that this is because younger owner/managers are more motivated, energetic, and committed to their jobs, more willing to take risks, and more entrepreneurially active, which leads to better performance from MSEs. Age was discovered to have a big impact on getting a bank loan. So, according to Ogubazghi and Muturi (2014), policymakers, banks, and other development partners should support youthful owner/managers. A significant predictor of entrepreneurial success was also shown to be age (Wambua & Munyithya, 2015). According to Hisrich et al. (2008), the majority of entrepreneurs start their businesses between the ages of 22 and 45. He argues that, as long as the entrepreneur has the required skills and financial support, a profession can be started before or after these ages.

4.2.3 Marital Status of Respondents

22 of the male respondents (10.4%) and 28 of the female respondents (13%) are single. 172 men (81.5%) and 131 women (70.1%) are married. 10 men (4.7%) and 16 women (8.6%) are widowed. Finally, 12 (6.4%) of women and 7 (3.3%) of men are divorced. At 76.1%, it indicates that there are more married respondents. These findings are consistent with those of Wambua & Munyithya (2015), who found that marital status was a significant predictor of entrepreneurial success. According to Mutoko & Kapunda's (2017) research, married people are favored because the rate at which they are granted loans for their enterprises decreases as the number of married people applying for loans rises. Contrarily, it was discovered by Byrne et al. (2016) that entrepreneurs who are single had stronger development ambitions than those who are married or in a partnership.

4.2.4 Education levels of Respondents

In terms of the educational levels attained by respondents, 30 (14.2%) of males and 28 (15%) of females had completed primary education, 79 (37.4%) of males and 83 (44.4%) of females had completed secondary education, 70 (33.2%) of males and 57 (30.5%) of females had completed technical training, and 32 (15.2%) of males and 19 (10.2%) of females had completed university education. According to the data, the majority of respondents (40.7%) had a secondary education, followed by technical college education (31.9%), primary education (14.6%), and university education (12.8%), respectively.

The results of the Gachuhi (2016) study show a significant positive correlation between social characteristics, such as education levels, and MSE growth. According to Leitao & Franco (2011), MSEowners with high levels of education have a beneficial impact on their companies' performance. According to Hisrich et al. (2008), formal education is not required to launch a new firm, but it is significant for the entrepreneur's upbringing and can give them a solid foundation, particularly if it relates to the venture's industry. According to a World Bank (2016) study of Kenyan informal businesses, increase was observed in those whose owners had a secondary education (32 percent of firms) as opposed to those whose owners had only a primary school (16.6 percent of firms).

4.3 Regression Analysis

The model's regression analysis revealed how the independent variables—gender and educational attainment—affected the dependent variable, MSEs performance. Each independent variable was subjected to a straightforward regression analysis in accordance with the following study objectives.

4.3.1 The effects of gender on the performance of MSEs.

The first objective was to evaluate how the gender variable affected MSE performance. It examined whether there is a discernible difference between the performance of MSEs for each gender in the threeWestern Kenyan counties of Kisumu, Siaya, and Vihiga. The objective was assessed using simple regression analysis under the direction of the equation, $Y = \beta_0 + \beta_1 X_1 + \epsilon$. where X_1 represented gender variable and Y denoted performance of MSEs.

Table 3

Model Summary of gender and MSE performance

Model	R	R Square	Adjusted R Square	Std. Error of the	
				Estimate	
1	.099ª	.010	.007	1.17077	
a. Predictors: (Constant), Gender of Owner					

Source: Author's computation from study Sample Data 2023

In Table 3, the "multiple R" column represents the correlation between the independent variables that were actually observed and the anticipated dependent variable. R square, commonly referred to as the "coefficient of determination," is the square of R (Ojo, 2009). The gender variable could account for 1.0% of the variability in MSEs Performance according to this study's R square, which is .010.

Table 4

Coe	fficients, gender and MSE	performance				
Model		Unstanda	dized	Standardized	t	Sig.
				Coefficients		
			<u>Coefficients</u>			
		В	Std. Error	Beta		
1	(Constant)	3.424	.183		18.759	.000
	Gender of Owner	232	.118	099	-1.973	.049
a. Dep	endent Variable: MSE Pe	rformance				
Source	: Author's computation fr	rom study Sam	ple Data 2023			

The regression coefficient is shown in Table 4 with a constant value of 3.424, (p-value = 0.001). Without taking gender into account, the constant of 3.424 shows that other characteristics have an impact on MSE performance. The gender variable's results had a P-value of (P = .049) at (B = -.232), which indicates that it was significant (p-value = 0.049). According to the study's findings, a unit increase in the gender variable would result in a 23.2% decrease in MSE performance, proving that the gender gap is statistically significant. In light of the study's finding that the gender variable affects MSE performance, Table 4's coefficients reveal the general form of the linear regression model equation, which is as follows. Y = $3.424 - 0.232X_1 + \varepsilon$. Where Y= MSEs performance, X₁= gender variable, ε = Random Variation.

Mode	5l	Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	5.338	1	5.338	3.895	.049 ^b		
	Residual	542.801	396	1.371				
	Total	548.139	397					
a. Dependent Variable: MSE Performance								
b. Pre	edictors: (Constant),	Gender of Owner	b. Predictors: (Constant), Gender of Owner					

ANOVA of gender and MSE performance

Source: Author's computation from study Sample Data 2023

Since the model's *P*-value of 0.049 is less than 0.05 and the relationship between the independent and dependent variables is statistically significant, Table 5 demonstrates that there is a significant relationship between the gender of the owner/manager and the MSEs performance. As a result, it was determined that the gender of the owner/manager significantly influenced MSE performance in the three Western Kenyan counties of Kisumu, Siaya, and Vihiga. According to the ANOVA results, the independent variable of gender of owner/manager significantly account for the variation in MSE performance, since (F_0 = 3.895 > F_1 (1, 397) = 3.86; αo = .049 < αc = .05). Tasman et al. (2023) and Nguyen (2018) discovered that gender and job experience have a substantial impact on business performance and that women are less likely to become entrepreneurs than men. These findings lend validity to the study's findings.

4.3.2 The effects of education levels of owner/manager on performance of MSEs

The second objective was to determine how owner/manager education levels affected MSE performance. This purpose was to determine whether the education levels of business owners affected how well MSEs performed. This objective was investigated using the ANOVA by regressing owner/managers' education on the performance of MSEs using the equation. $Y = \beta_0 + \beta_2 X_2 + \epsilon$. where X_2 represented education level of owner/manager and Y denoted performance of MSEs.

Table 6

Model Summary of Education level and MSE performance

Model	R	R Square	Adjusted R Square	Std. Error of the		
				Estimate		
1	.566ª	.321	.319	.96957		
a. Predictors: (Constant), Education of Owner						

Source: Author's computation from study Sample Data 2023

The "R" value, which is 0.566, is used in Table 6 of the model summary to show the strength and direction of the association between the variables. The model explained 32.1% of the variation or change in the dependent variable, according to the coefficient of determination (R square) of 0.321, with the remaining 67.9% being explained by factors other than the education level of the entrepreneur. After reducing the predictor's explanatory behavior to 31.9%, the R square adjustment had no impact on the outcomes. It is obvious that the level of education of the entrepreneur might account for 32.1% of the variation in MSEs performance.

Model		Unstanda _	Unstandardized		t	Sig.
		(<u>Coefficients</u>			
		В	Std. Error	Beta		
1	(Constant)	1.269	.141		8.984	.000
	Education of Owner	.747	.055	.566	13.678	.000

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Source: Author's computation from study Sample Data 2023

The results of the owner/manager's education level's regression coefficient on the performance of MSEs are shown in Table 7. With a constant ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners predicted MSE performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners performance at ($\beta = 1.269$, *P-value* = .001), it was found that the education of business owners performance at ($\beta = 1.269$, *P-value* = .001), it was found to a .001. .747, P < .05). The study came to the conclusion that an increase in an entrepreneur's education level would result in a 74.7% improvementin the performance of MSEs. This indicates that the owner/manager's education level has a statistically significant impact on the performance of MSEs at P-value = .001. The coefficients were used to establish the general form of the linear regression model equation, which was $Y = 1.269 + .747X_2 + \varepsilon$.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	175.875	1	175.875	187.090	.000 ^b
Residual		372.263	396	.940		
Total		548.139	397			

a. Dependent Variable: MSE Performance

b. Predictors: (Constant), Education of Owner

Source: Author's computation from study Sample Data 2023

According to Table 8's Analysis of Variance (ANOVA) results, there is a correlation between the predictor variable (education level) and the dependent variable (MSEs' performance) in the link between owner/manager access to education levels and MSE performance. Since the model's P-value of 0.001 is less than 0.05 and shows that the relationship between the independent and dependent variables is statistically significant, the Analysis of Variance (ANOVA) of the relationship between access to education level and performance of MSEs is significant. Since the independent factors significantly account for the variance in MSE performance, according to the ANOVA results ($F_0 = 187.090 > F_1$ (1, 397) = 3.86; $\alpha o = .001 < \alpha c = .05$), there is a positive relationship between entrepreneur education and MSE performance. The likelihood of the business performing better increases with the owner's or manager's level of education. These results are consistent with a study by Tasman et al. (2023), which found that education and experience had a favorable and significantimpact on the success of women entrepreneurs in India. The ability of the business to grow by adding employees and increasing its annual turnover is also related to the owner or manager's level of education, according to Peters & Bridjlal (2011). Since the study was carried out in a developing economy, its findings are consistent with those of studies of a similar nature conducted in developed economies. According to Lukiastuti, & Wahyuni (2023), entrepreneurs with college degrees are Significantly more likely to be successful and have more entrepreneurial intensity than people with lower educational levels.

4.4 **Correlation Analysis- Performance of MSEs, Gender and Education levels**

The strength of link or relationship between two sets of data is statistically measured by the Pearson product moment correlation coefficient. The association between MSE performance and owner/manager education level and gender was examined using a Pearson product moment correlation.

Table 9

Correlations of gender, education and MSE performance

		ender of Owner	cation of Owner	MSE
				Performance
Gender of Owner	Pearson Correlation	1		
	Sig. (2-tailed)			
	Ν	398		
Education of	Pearson Correlation	075	1	
Owner	Sig. (2-tailed)	.133		
	Ν	398	398	
MSE	Pearson Correlation	099*	.566**	1
Performance	Sig. (2-tailed)	.049	.000	
	Ν	398	398	398
*. Correlation is sig	nificant at the 0.05 level (2-tai	led).		
**. Correlation is si	ignificant at the 0.01 level (2-ta	ailed).		

Source: Author's computation from study Sample Data 2023

The study discovered that there was an inverse link between MSEs Performance and owner gender, as indicated in Table 9. A statistically significant association between MSE performance and owner gender was discovered (rs= -.099, n = 398, P-value =.049) two tail. The MSEs Performance and owner/manager's education levels were significantly and favorably correlated. A statistically significant relationship between MSE performance and owner/manager education level was seen. Two tail (rs =.566, n = 398, P-value =.001). This overwhelmingly showed that there was a strong relationship between MSE performance and owner/manager education and gender.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

This study mainly examined how the owner/manager's gender and level of education affected the performance of micro and small businesses in Kenya. It also examined if these factors had an impacton MSE performance. The first objective was to determine how gender impacted Kenya's micro and small business performance. The results showed that the gender of the owner/manager was a crucial factor in determining the performance of MSEs, with male-led businesses performing much better thanthose led by females. The study found that the performance of MSEs considerably varies with the levelof education acquired by the owner/managers of the firms. Objective two of the study aimed to evaluate the effects of owner/manager education levels on the performance of micro and small Enterprises in Kenya. The possibility of the business performing better increases with the owner's or manager's level of exposure to higher levels of education.

5.1 Conclusion

According to the study's findings, there is a substantial correlation between the performance of MSEs as a whole and the independent variables of owner/manager's education level and gender. In addition toparticipating more in formal MSEs, male entrepreneurs outperform their female counterparts in the industry. The study also supports the idea that businesses perform better when their owners are exposed to greater levels of knowledge.

5.2 Recommendations

The study suggests coordinated efforts from the government and development agencies to help and support female gender access not only the resources needed to establish MSEs but also the education and training that will expose them to new technologies, allowing them to compete favorably in the MSE sector. A wider population will be exposed to developing technology and innovation as a result of deliberate training and inclusion of entrepreneurship education within most official school curricula.

5.3 Suggestions for Further Research

In three counties—Kisumu, Siaya, and Vihiga—the study focused on the gender and educational attainment of owner/managers of MSEs with licenses. Other counties could carry out the exact same study. To determine the extent to which gender gaps are influencing the growth of the MSE sector, a thorough study might also be carried out.

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6.1 Declaration of conflicting interests

The Author declare that there is no conflict of interest

REFERENCES

- 1) Al-Matari, E.M., Al-Swidi, A.K., & Fadzil, F.H. (2014). The measurements of firm performance's dimensions. *Asian Journal of Finance & Accounting*, Vol. 6, No. 1.
- 2) APEC, (2016). Gender-related constraints faced by women-owned SMEs. *Policy brief* No.15.
- 3) Berger, A. N., & Gregory F. U. (1998). The economics of small business finance: The roles of privateequity and debt markets in the financial growth cycle, *Journal of Banking and Finance* 22 (6).
- 4) Berglund, K. (2016). Entrepreneurship, gender and economic growth: Challenges to feminist theory.
- 5) Stockholm University Research projects.
- 6) Bouazza A. B., Ardjouman, D., & Abada, O. (2015). Establishing the factors affecting the growth of small and medium-sized enterprises in Algeria. *American International Journal of SocialScience* Vol. 4, No. 2.
- 7) Byrne, J., Tounés, A., Giacomin, O., & Fattoum, S. (2016). For better or worse? Marital status, parental status and entrepreneurial growth intentions. *Researchgate*.
- 8) Cantillon, R. (1755). "Essay on the nature of general commerce". *London*, P. 48.
- 9) Cicea, C., Popa, I., Marinescu, C. & Ștefan, S.C., (2019).Determinants of SMEs' performance: Evidence from European countries, *Economic Research-Ekonomska Istraživanja*, 32:1.
- 10) Gachuhi, S. M. (2016). An evaluation of socio-economic factors influencing the growth of small and medium enterprises in Kenya: A case study of Nairobi County. *United States International University Africa*.
- 11) Gibcus, P. and Kemp, R.G.M. (2003). Strategy and small firm performance. Research Report: Scales scientific analysis of entrepreneurship and SMEs. *Researchgate*.
- 12) Gibrat, R (1931). The economic inequalities: Applications: to the inequality of wealth, the concentration of, the population of cities, the statistics of families, etc. of a new law: the law of proportional effect. *The Sirey Collection*.
- 13) Government of Kenya (GOK), (2005) Sessional paper no 2 of 2005 on development of micro and small enterprises for wealth and employment creation for poverty reduction. *GovernmentPrinter Nairobi*.
- 14) Hisrich, R.d., Peters, M.P., and Shepherd D.A. (2008). *Entrepreneurship African edition*. McGraw-HillEducation Publisher.
- 15) Jiméneza, A., Palmero-Cámarab, C., González-Santosb, M. J., González-Bernalb, J. and Jiménez-Eguizábalb, J. A. (2015). The impact of educational levels on formal and informal entrepreneurship. *Journal of Engineering Management and Competitiveness (JEMC)* VOL. 12.
- 16) Kenya National Bureau of Statistics (KNBS), (2012). Kenya National Bureau of Statistics, Economic Survey. *Government printer Nairobi.*
- 17) Kenya National Bureau of Statistics (KNBS). (2016). Micro, small and medium establishment (MSME): Survey basic report. *Government printer Nairobi.*
- 18) Khan, M. A., & Burki, M. (2020). Determinants of small and medium enterprises performance with the interaction effect of managerial activities. *Research in Business & Social Science* VOL 9 NO 4. Kothari, C.R. (2004). Research Methodology, Methods and Techniques. New Age International
- 19) Publishers, ISBN (13): 978-81-224-1522-3.
- 20) Latha, K. L., Madhavaiah, C. and. Murthya, B.E.V.V.N, (2008). Small scale entrepreneurship in India.
- 21) Serbian Journal of Management 3 (2) 171 187.
- 22) Leitao, J., and Franco, M. (2011). Individual entrepreneurship capacity and small and medium enterprises (SME) performance: A human and organizational capital approach; *African Journalof Business Management Vol.* 5(15), pp. 6350-6365.
- 23) Leković, B. and Marić, S. (2015). Measures of small business success/performance importance, reliability and usability. *Original Scientific Paper*.
- 24) Lukiastuti, F., and Wahyuni, A. N. (2023). Demographic factors of entrepreneurs as predictor of Batik SMEs performance mediated by entrepreneurial orientation. *Magister Management Program, STIE Bank BPD Jateng, Semarang, Central Java,*

Indonesia.

- 25) Madara, M. W. O, (2020). Effects of microfinancing on performance of micro and small enterprises in Kenya. *Jaramogi Oginga Odinga University of Science and Technology Library.*
- 26) Madara, M. W. O., Onyango, M. A., & Nyagol, M. O. (2020a). Effects of microfinancing on performance of entrepreneurship: A study of selected counties in Western Kenya. *International Journal of Academic Research in Business and Social Sciences*, 10(7), 296–319.
- 27) Madara, M.W.O. (2005). The implications of microfinance on the provision of sustainable support to orphans: A case study of east and south east Alego in Siaya District. *Kenyatta University Library, Kenya*.
- 28) Mathew, S.K., & Johnson, J. (n.d.). An empirical study on the influence of age and gender on the entrepreneurial attitude orientation of engineering students in Kerala State. *M.G University, Kottayam*.
- 29) McFarlane, J. (2016). "Chapter 2 economic theories of entrepreneurship" in Arshed. Oxford: Good fellow Publishers.
- 30) Mertz, M.B., Ronchi, M. & Salvestrini, V. (2021). Early exposure to entrepreneurship and the creation of female entrepreneurs. *Queen Mary University of London, Centre for Research and Analysis of Migrations and The Rockwool Foundation.*
- 31) Mugenda, O. and Mugenda, A.G. (2003). *Research methods: qualitative and quantitative approaches.*
- 32) Nairobi acts Press.
- 33) Muiruri, P.M. (2014). The role of microfinance institutions to the growth of micro and small enterprises (MSE) in Thika, Kenya: Empirical review of non-financial factors. *International Journal of Academic Research in Accounting, Finance and Management Sciences* Vol. 4, No.4.
- 34) Mutoko, W., and Kapunda, S. M. (2017). Factors influencing small, medium and micro-sized enterprises" borrowing from banks: The case of the Botswana manufacturing sector. *Independent Research Journal in the Management Sciences*.
- 35) Nabutola, J. (2015). Factors influencing performance of SMEs in Central Business District Bungoma County, Kenya" University of Nairobi Library, Kenya.
- 36) Nair, A., Trendowski, J., & Judge, B. (2008). *The theory of the growth of the firm, by Edith T. Penrose*. Oxford: Blackwell, 1959 [book review]. Academy of Management Review, *33*(4), 1026-1028.
- 37) Neneh, B. N., Zyl, J. H., and Noordwyk, A. (u.d.). Gender differences in entrepreneurial orientation and performance: Evidence from South Africa. *Proceedings of the 28th Annual Conference of the Southern African Institute of Management Scientists.*
- 38) Nguyen, Cuong (2018). Demographic factors, family background and prior self-employment on entrepreneurial intention: Vietnamese business students are different: Why? *Journal of Global Entrepreneurship Research, Springer, Heidelberg,* Vol. 8, Iss. 10, pp. 1-17.
- **39)** OECD, (2011). Report on the gender initiative: Gender equality in education, employment and entrepreneurship.
- 40) Ogubazghi, S. K., & Muturi, W. (2014). The effect of age and educational level of owner/managers on SMMEs" access to bank loan in Eritrea: Evidence from Asmara City. *American Journal of Industrial and Business Management, 2014, 4*, 632-643.
- 41) Ojo, O. (2009). Impact of microfinance on the entrepreneurial development: A case of Nigeria. *The International Conference on Administration and Business.*
- 42) Peters, R.M. & Bridjlal, P. (2011). The relationship between levels of education of entrepreneurs and their business success: A study of the province of KwaZulu-Natal, South Africa. *Industry & Higher Education*, 25(4): 265 – 275.
- 43) Porter, M.E. (1980), Competitive strategy: Techniques for analyzing Industries and competitors.
- 44) Quaye, D., Acheampong, G., & Asiedu, M. (2015). Gender differences in entrepreneurial orientation: Evidence from Ghana. *European Journal of Business and Management* Vol.7, No.12.
- 45) Radipere, S., and Dhliwayo, S. (2014). The role of gender and education on small business performance in the South African small enterprise sector. *Mediterranean Journal of Social Sciences Publishing, Rome-Italy* Vol 5 No 9.
- 46) Sajjad-Kabir, S.M. (2016). Methods of Data Collection, https://www.researchgate.net/publication/325846997
- 47) Saleemi, N.A. (2011). Entrepreneurship simplified, East African Edition. Saleemi Publications ltd.
- 48) Schmidt, S., Bohnenberger, M. C. B., Nodari, C. H., & Da Silva, M. D. J.S. (2022). Gender, entrepreneurial behavior and firm performance of Brazilian students: Integrating economic and behavioral perspectives. *Elsevier Ltd. Feevale University, Novo Hamburgo, RS, Brazil.*

- 49) Sedaghat, M. and Lei, P.W. (2020). 'Entrepreneurs' gender, age and education shaping motives: Push of necessity and pull of opportunity in MENA and Denmark', *MENA J. Cross-Cultural Management*, Vol. 1, No. 1, pp.63–79.
- 50) Selvam, M., Gayathri, J., Vasanth, V., Lingaraja, K. & Marxiaoli, S., (2016). Determinants of firmperformance: A subjective model. *International Journal of Social Science Studies* Vol. 4, No. 7. Shravanvel, P. (1987). Development principles, policies and programmes. *Ess-Pee- Kay Publishing*
- 51) House, Madras, p.21, 25.
- 52) Smallbone, D.J., North, D. and Leigh, R. (1993). "The growth and survival of mature manufacturing SMEs in the 1980s: An urban-rural comparison"
- 53) Taboroši, S., Stojanović, E. T., Nikolić, M., Mali, P., Mitić, S., & Strukan, E. (2022). Effects of gender, age, and education on entrepreneurial orientation and intentions among freelancers.
- 54) Tasman, A., Patrisia, D., and Yanuarta, R.E.R. (2023). Demographic characteristics and business performance: Evidence in women entrepreneurs. *Universitas Negeri Padang, Padang, Indonesia*.
- 55) Wambua, P. P., & Munyithya, H. M. (2015). The gender factor influence on entrepreneurial success in Kitui County, Kenya. *International Journal of Education and Research* Vol. 3 No. 7.
- 56) White, S. (2018). Creating better business environments for micro and small enterprises. *Technical Report, Donor Committee for Enterprise Development, Cambridge, UK.*
- 57) World Bank, (2019). Doing business 2019: Training for reform, World Bank Publications Washington D.C.
- 58) World Bank. (2016). Informal Enterprises in Kenya. The World Bank. Washington, DC.



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