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Ayinaddis, Samuel Godadaw

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RESEARCH



Socio-economic factors affecting women's entrepreneurial performance in MSEs in Bahir Dar City, Ethiopia

Samuel Godadaw Ayinaddis^{1*}

*Correspondence: samuel.g@wldu.edu.et; samulala33@gmail.com

¹ Department of Management, Woldia University, Woldia, Ethiopia

Abstract

Women's entrepreneurship is the pillar of economic expansion in many developing countries and is increasingly recognized as an essential driver of economic growth, productivity, innovation, employment, and economic dynamism. This study aimed to investigate the socio-economic factors that affect women's entrepreneurial performance in MSEs in Bahir Dar City, Ethiopia. This study employed explanatory and descriptive survey designs using a quantitative research approach. The data were gathered from a survey of 348 registered women-owned MSEs. Statistical models, including factor analysis, correlation, and regression analysis, were used to look for patterns and relationships between variables apart from other descriptive statistics. Based on the statistical analysis, the variables social, economic, and legal and administrative factors have a positive relationship with women's entrepreneurial performance in MSEs. On the other hand, demographic factors are found to be insignificant variables in predicting women's entrepreneurial performance in MSEs. Therefore, the research recommends improvements in social and economic development to facilitate the successful performance of women entrepreneurs in MSEs in Bahir Dar city, Ethiopia.

Keywords: Women entrepreneurs, Socio-economic factors, Performance, MSEs

Introduction

A plethora of studies have been conducted to identify factors affecting women's entrepreneurial success in micro and small businesses. Kamberidou (2020) argues that the numerous and diverse benefits of women's entrepreneurship have been researched in great detail since the mid-1980s and are repeatedly associated with concepts of empowerment, leadership, and professional development, increasing women's quality of life and contributing to the economy, especially in western societies. She also points out that a growing body of research in the twenty-first century "continues to discuss the skills, characteristics, motives, and leadership styles of the female entrepreneur, along with the obstacles confronted, documenting case studies and strategies for success" (Kamberidou, 2020).

Certainly, she adds, the drive for innovation is the first criterion for successful entrepreneurship, and she uses a term coined by Carayannis and Stewart (2013),



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the "distinguished entrepreneur", who regardless of gender, is a person with a vision; an innovator, an individual who takes initiatives; accepts failure, change and risk; and organizes and re-organizes economic and social mechanisms (Kamberidou, 2013, 2020).

In her examination of developing economies, Kamberidou (2020) concludes that they are now recognizing and focusing on the socio-economic benefits of women's entrepreneurship. On the other hand, she adds that women's entrepreneurship in the so-called emerging economies, although appreciated in alleviating poverty, is being restrained since it challenges the gender order and consequently women confront more and significant socio-cultural barriers than their western counterparts in the emerging markets of Africa, the Middle East, and the Far East (Kamberidou, 2020).

In Ethiopia, women entrepreneurs own around 49% of micro and small enterprises, and creating 50% of all new jobs nationwide. However, despite the growing number of women entrepreneurs in Ethiopia and their contribution to the economy and reduction of societal problems, they still own and manage fewer small businesses than men (Abebe, 2014; CSA, 2004). This could be due to the fact that Ethiopia's culture is primarily male dominating, namely patriarchal and hinders the potential of women. In other words, the existence of pervasive and persistent gender role stereotypes impedes the advancement of women in the business environment (Ayinaddis, 2021).

According to the Ethiopian Economic Association (2004), small businesses and enterprises operated by women entrepreneurs contribute significantly to the local and national economy by stimulating economic growth through creating employment opportunities and alleviating poverty. However, they are provided little or no policy support from the Ethiopian Ministry of Trade and Industry. As a result, women entrepreneurs in Ethiopia often experience severe problems in acquiring the necessary technical skills, access to finance, business support, social support, raw materials, technological input, infrastructural development, and legal and administrative support. Development economists who have monitored the growth and development of small businesses and enterprises in Ethiopia over the past several years have pointed out that the level of strategic support provided to women entrepreneurs in SMEs is not proportionate to their contribution made by the sector to the national economy (Abebe & Kegne, 2023; Deininger et al., 2003).

A survey report conducted by the Ethiopian Ministry of Finance and Economic Development (2002) shows that women entrepreneurs in Ethiopia are not provided with adequate policy related support and strategic assistance from the national government. Despite the argument that small businesses in Africa owned by women are crucial in generating employment and contributing to economic growth, the literature clearly shows that critical factors such as individual, social, cultural, economic, legal and administrative factors are found to be critical constraints that determine the performance of women in MSEs (Abebe, 2014; Alene, 2020; Beriso, 2021).

Alene (2020), Abebe (2014), and Khan et al. (2021) demonstrated that women entrepreneurs who own small businesses would grow and boom, but the speed of business breakdown continues to rise because of the internal and external shortcomings influencing business performance are demographic variables, education and training, socio-economic factors, cultural influences, regulatory and leadership challenges. Others include inadequate financial resources, poor management experience, poor laws and regulations, poor economic situation, and critical factors such as lack of infrastructure, insufficient access to loans, and little demand for products and services in the market (Animaw, 2019). Khan et al. (2021) investigate the factors which affect women's entrepreneurial success in Pakistan. Data were collected from 181 registered SMEs through structured questionnaires. The results indicate that economic and socio-cultural factors positively and significantly influence the success of women-owned enterprises.

In recent years, the widespread attention to women and entrepreneurship in developing countries has increased to a great extent for development practitioners and policymakers (Minniti & Naudé, 2010; Vossenberg, 2013). However, despite this growing number of initiatives and resources made available to promote and develop women's entrepreneurship in developing countries, women still own and manage fewer businesses than men, they earn less money with their businesses that grow slower, are more likely to fail and women tend to be more necessity entrepreneurs. Ethiopia's women entrepreneurs cannot remain an exception. Thus, socio-economic factors affecting women's entrepreneurial performance in MSEs are not fully recognized and understood in Ethiopia. There is little research to provide a broader understanding of women's performance in MSEs as an entrepreneur. Therefore, understanding which determinant variables influence women's entrepreneurial performance appears remarkable. This is the reason this researcher was motivated to conduct this study on the socio-economic factors affecting women's entrepreneurial performance in MSEs in Bahir Dar city. Moreover, socio-economic factors affecting women's entrepreneurial performance in small and micro enterprises have not been addressed in the study area. This study, therefore, is deemed to fill the gaps by identifying the socio-economic factors that influence women's entrepreneurial performance in MSEs and shed light on womenspecific differentials that affect their performance.

The remaining sections are organized as follows: Section two presents a review of the literature on socio-economic factors affecting women's entrepreneurial performance in MSEs; section three discusses materials and methods, including the research design, target population and sampling design, sources of data, and study analysis. Finally, the last two sections, sections four and five, present the results and discussions and conclusions, respectively.

In line with the above, this study seeks to answer the following research questions:

- 1. What is the effect of demographic factors on women's entrepreneurial performance in MSEs?
- 2. What is the relationship between social factors and women's entrepreneurial performance in MSEs?
- 3. How economic factors influence women's entrepreneurial performance in MSEs?
- 4. What is the effect of legal and administrative factors on women's entrepreneurial performance in MSEs?

The objective of the study

The main objective of this study was to assess socio-economic factors affecting women's entrepreneurial performance in MSEs. In more specific terms, the study embraced the following specific objectives:

- 1. To evaluate the influence of demographic factors on women's entrepreneurial performance in MSEs.
- To examine the relationship between social factors and women's entrepreneurial performance in MSEs.
- To examine the effect of economic factors on women's entrepreneurial performance in MSEs.
- 4. To identify whether legal and administrative factors significantly affect women's entrepreneurial performance in MSEs.

Literature review and theoretical framework

The socio-economic environment is vital for the successful performance of any business, including a supportive environment that creates a multiplying effect for business growth in general and women entrepreneurs in particular (Raheem et al., 2019). Women entrepreneurs are those who participate in entrepreneurial activities, own and run their enterprises and take the risks involved in uniquely combining resources to take advantage of the opportunity identified in their immediate environment through the production of goods and services (Okafor & Mordi, 2010).

Several studies have been conducted to identify factors affecting women's entrepreneurial success in micro and small businesses. These studies indicated a range of items as determinant factors influencing women's entrepreneurial performance showed demographic factors, social factors; economic conditions, cultural attitudes towards entrepreneurship, and administrative and regulatory framework are crucial factors that affect entrepreneurial performance (Awoke, 2019; Haxhiu, 2015; Khan et al., 2021; Raheem et al., 2019; Wube, 2010).

The *demographic* characteristics of people shape their behaviors towards entrepreneurship. Many studies have highlighted the role of demographic characteristics such as gender, age, marital status, educational level and previous experience of entrepreneurship towards their entrepreneurial behaviors and business performance (Ahmad, 2007; Amofah & Saladrigues, 2022; Davidsson, 1995; Mehtap et al., 2017; Soomro et al., 2019; Welmilla et al., 2011).

Previous studies have yielded mixed results in confirming the relationship between demographic factors and women's entrepreneurial performance. Grilo and Thurik (2005) and Wilson et al. (2007) showed the role of gender in entrepreneurial ability and associated the importance of demographic characteristics and outstanding performance of the firms with the males. A comparative study conducted by Zampetakis et al. (2016) on sex differences in business growth among 572 business owners (286 females) demonstrated that demographic factors (i.e. gender) significantly influence the entrepreneurs' growth intention. Similarly, taking a sample of 180 women entrepreneurs selected using a random sampling technique. Alene (2020) assessed determinants that influence the performance of women entrepreneurs in micro and small enterprises in Ethiopia. The findings of this study, however, revealed that demographic factors such as age and marital status are insignificant variables in determining women entrepreneurs' performance.

Beriso (2021) also attempted to examine the determinants of economic achievement for women entrepreneurs in Ethiopia. The study used 698 sample women entrepreneurs selected randomly from 2450 respondents. The data were analyzed using descriptive statistics and multiple linear regression models. Their study revealed that some demographic factors such as women's educational level and family size were significant and positive predictors of the income of women entrepreneurs. But, they concluded that marital status has an insignificant relationship with economic achievement for women.

Kassa (2021) conducted a cross-sectional study to investigate the socio-economic determinant factors that affect the growth of micro and small enterprises (MSEs) in Ethiopia's North Wollo and Waghimira Zone. The finding of the study revealed that the age of the owner, access to finance, family business background and interest rate most likely affect the growth of the enterprises with a statistically significant level. On the contrary, entrepreneurship training, the experience of the owner, the inflation rate, and competition are less likely to affect the growth of the enterprises with a statistically significant level. The remaining factors, such as gender of the owners, educational background, business age, business type, social responsibility, and social attitude, were not statistically significant in determining the growth of MSEs. In the same vein, gender and education level are found to be insignificant variables in determining entrepreneurs' growth (Meressa, 2020).

Peter and Munyithya (2015) reported a negative relationship between marital status and the entrepreneurial performance of women in SMEs. They argued that single women perform in business more similar to men and their networks are diverse. Education and entrepreneurial knowledge are of the highest importance to lead an innovative firm to success crucial by enhancing the individual's managerial ability. Supporting this result, Beriso et al. (2016) argued that family assistance of funds is also an essential component to participate in different entrepreneurial activities. This implies that parents' economy influences household heads directly or indirectly to generate their income. According to the findings of Abebe (2014), demographic variables are significantly associated with the performance and success of women entrepreneurs in small and micro enterprises. Thus, the discussion leads to the following hypothesis:

Ha1 Demographic factors significantly and positively affect women's entrepreneurial performance in MSEs.

Social factors can go a long way in encouraging or discouraging the performance of women entrepreneurs in small and micro enterprises (Animaw, 2019). The social setting in which people grow shapes their fundamental beliefs, values and norms. Therefore, the social environment might constrain their business activities because societal norms control most of their activities (Jamali, 2009). Researchers agree women's societal position is confined by their social environment (Maas et al., 2014). Demssie (2020) points out that women entrepreneurs in the study area are challenged by various socio-cultural problems to run their own business in MSEs. The study concluded that social factors such as low network with outsiders and social acceptability, class biases; gender inequality and conflicting gender role, the negative attitude of societies towards women entrepreneurs, cultural influences, and the high burden of household responsibilities are the major socio-cultural problems that affect women entrepreneurs' business startup and expansion.

Different studies revealed that social factors contributed significantly towards the better performance of women entrepreneurs in small and micro enterprises (Khan et al., 2021; Mozumdar et al., 2020). Raheem (2013) conducted research to identify influencing factors affecting the performance of women entrepreneurs and concluded that social factor is the most essential variable, followed by economic and political factors. Social factors such as social acceptability, network, and social bias affected women's entrepreneurial performance. A related aspect to these is the attitude of society towards entrepreneurship. Certain societies encourage innovations and novelties, thus approving entrepreneurs' actions and rewards like profits. Certain others do not tolerate changes, and entrepreneurship cannot take root and grow in such circumstances. Similarly, some societies have an inherent dislike for any money-making activity (Animaw, 2019). Furthermore, Abebe (2014) demonstrates that social factor has a significant and positive influence on women's entrepreneurial performance in MSEs. Evidence in the context of developing countries indicates that socio-cultural hindrances proved to be the main obstacle to women's entrepreneurial performance in small businesses (Amine & Staub, 2009). Therefore, the study hypothesis is developed as follows:

Ha2 Social factors significantly and positively affect women's entrepreneurial performance in MSEs.

Economic factors are among the most critical elements in starting and running a business. Economic environment plays the most direct and immediate role in influencing the performance of women entrepreneurs in SMEs (Abu Bakar & Ahmad, 2016; Raheem et al., 2019). It refers to the arrangement of necessary internal and external financial funds that influence business success (Wube, 2010). The availability of access to capital, labor, raw materials, market, technology and infrastructure to run their business effectively can influence the performance of women entrepreneurs (Animaw, 2019). Most of the previous studies agreed that credit assistance to women entrepreneurs in MSEs helps entrepreneur's performance which best results in higher revenue and improved profit, income, investment, capacity to pay obligations and growth of the entrepreneurs (Abebe, 2014; Alene, 2020; Khan et al., 2021; Wube, 2010). According to Raheem (2013), in a study conducted in Pakistan, economic factors were found to have a positive and significant effect on women entrepreneurs' performance. Khan et al. (2021) investigate the factors that affect women entrepreneurs' success in small and medium-sized enterprises in the emerging market of Pakistan using data collected from 181 registered SMEs through structured questionnaires. The results demonstrated economic factors significantly and positively affect the performance of women entrepreneurs. Based on the ground of the above studies, the following hypothesis is developed:

Ha3 Economic factors significantly and positively affect women's entrepreneurial performance in MSEs.

Many studies agree that the *legal and administrative* environment are the major factors determining small enterprise success in development (Mulugeta, 2014). The

business performance of MSEs are affected by their business climate. According to Alene (2020), favorable government support positively affects small business profitability in the legal and administrative environment. Similarly, International Labour Office (2003) reported that legal and institutional frameworks are important pillars that determine the effectiveness and efficiency of critical business infrastructures such as business development support, microfinance institutions, marketing and research and development. Davidsson (1995) confirmed that complicated rules and regulations from administrative bodies could heavily hamper small business performance. Legal and administrative includes support from the government, a network with administrative bodies, access to policymakers, legal and institutional constraints, interest rate, and credit loan attached to collateral. Research on the performance of women entrepreneurs indicates that legal and regulatory factors significantly affected women entrepreneurs (Haxhiu, 2015). In his study, Tehulu (2019) identified a positive relationship between legal and administrative factors and the business performance of MSEs in the Amhara region. Alemayehu (2018) and Animaw (2019) have attributed the legal and administrative factors significantly affecting the performance of women entrepreneurs in the SMEs sector. Therefore, the hypotheses of the study are stated as follows:

Ha4 Legal and administrative factors significantly and positively affect women's entrepreneurial performance in MSEs.

Conceptual framework of the study

The researcher has used women's entrepreneurial performance as the dependent variable and socio-economic factors as an independent variable. The four dimensions of independent variables include demographic, social, economic, legal and administrative factors. These variables are connected and linked to form a test in this study, as illustrated in Fig. 1.

Materials and methods

Concerning the research approach and philosophy, this study employed a quantitative strategy, which is consistent with positivists' view that a positive level of knowledge is reached as people depend on reasoning, empirical data and the development of laws to explain phenomena. This was because the nature of the problem itself requires numerical description. Positivists believe that the scientific method is the most straightforward way to build practical knowledge based on the premise that reality exists "out there" and is only waiting to be discovered. Scientific approaches can be used to find this information, and the quantitative method is the ideal one (Fraenkel et al., 2012; Louis et al., 2000).

Furthermore, this study followed a descriptive and explanatory research design to carry out this study. The researcher applied a descriptive research design to describe the data and characteristics of what is being studied (Saunders et al., 2009). The explanatory research design also enables the study to show the influence of socio-economic variables on women's entrepreneurial performance in MSEs. To achieve the stated objective, the

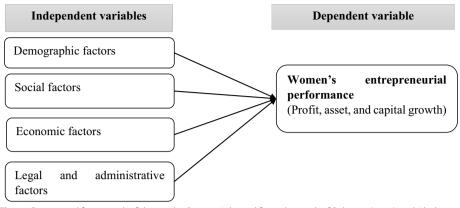


Fig. 1 Conceptual framework of the study. Source: Adapted from the work of Raheem (2013) and Abebe (2014)

researcher implemented quantitative research approach; here, a questionnaire was used as a tool to provided predominantly descriptive and quantitative data. In terms of data collection design, the paper employed a survey design using cross-sectional methods with a purely quantitative research approach to measure both dependent and independent variables at the same time.

According to Bahir Dar city technique and vocational development office, a total of 4598 women entrepreneurs operated in five sectors. From the total MSEs firm's, 2465 are operating under "food and beverage", 1385 under "wood and wood products", 395 under "textile", 200 in "urban agriculture", and the remaining 153 are categorized under "construction" enterprises. Therefore, from a total population of 4598 MSEs, 368 were taken as a sample for this study. The representative sample size was determined using Yemane's (1967) sample size determination formula, calculated as follows:

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

where n = sample size; N = target population, which is known (i.e., 4598); and e = the acceptable sampling error at 0.05.

Hence,
$$n = \frac{4598}{1+4598(0.05)^2} = 367.98 \approx 368.$$

The researcher applied stratified sampling technique and divided the total population into strata based on the type of sector of MSEs to make the sample size proportional to population size. Accordingly, 197 respondents were selected from food and beverage, 111 from wood and wood products, 32 from textile enterprise, 16 from urban agriculture, and 12 from the construction sector.

Data were gathered from primary sources through a close-ended questionnaire to record respondents' opinions about the influence of socio-economic factors on women's entrepreneurial performance in MSEs. The questionnaire was designed to collect necessary data about independent variables and incorporated 32 questions, which were measured by a Likert scale ranging from strongly agree (5) to strongly disagree (1). The questionnaire was initially designed in English and then translated into Amharic (the local language) by experts to ensure that the respondents would comprehend it. Besides, secondary data were also collected from different journals and publications for assessing the existing findings, the internet, books and documents. Once the collected quantitative data were recorded, coded, and categorized conveniently, it was then analyzed through different statistical tools such as descriptive analysis, factor analysis, correlation, and regression analysis to look for patterns and relationships between variables. The statistical package for social science (SPSS version 26) was used to analyze the data obtained from primary sources.

Results and discussion

The calculated sample size of this study was 368. The researcher distributed research questionnaires to the sample respondents and a total of 348 well-filled questionnaires were well returned. This is a response rate of 94.56%. Sekaran and Bougie (2016) noted that any response rate above 75% is classified as the best data that could be generalized to represent respondent's opinions about the study problem. Thus, this response rate indicates sufficient data were available for generalization. Various statistical procedures have been followed to arrive at the desired output for analysis and presentation. Both descriptive and inferential statistics were used during the analysis process.

Explanatory factor analysis results

Explanatory factor analysis was applied to identify the factors affecting women's entrepreneurial performance in MSEs firms. This technique was used in the study to reduce a large number of variables into a few numbers of core factors.

KMO and Bartlett's test

The Kaiser–Meyer–Olkin (KMO) and Bartlett's test measure of sampling adequacy were used to examine the appropriateness of factor analysis. The approximate Chi-square is 5902.328 with 276 degrees of freedom, which is significant at 0.05. Furthermore, the KMO statistic of 0.908 is also significant (greater than 0.50). Hence factor analysis is considered an appropriate technique for further data analysis. Kaiser–Meyer–Olkin (KMO) and Bartlett's test of the study is described in Table 1.

As shown in Table 2, factors were extracted from study data; there was a linear relationship between variables. From the table, we understand that five variables have more than eigenvalue one. The first factor scored the value 38.233 of the variance, the second value is 12.813 of the variance, the third factor scored 8.986 of the variance, the fourth factor accounts for 7.038 of the variance, and the fifth factor scored 5.124 of the variance. These five extracted factors together explained 72.19% of the variability in socioeconomic factors towards the women's entrepreneurial performance in MSEs (Table 2).

The screen plot graph shows the eigenvalue against each factor. As shown from the graph, there is a sharp change in the curvature after the 5th factor. Five factors are well

Kaiser–Meyer–Olkin measure of sampling adequacy		0.908
Bartlett's test of sphericity	Approx. Chi-square	5902.328
	df	276
	Sig	0.000

Table 1 KMO and Bartlett's test

Source: Own survey (2021)

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	9.176	38.233	38.233	9.176	38.233	38.233	7.006
2	3.075	12.813	51.046	3.075	12.813	51.046	6.149
3	2.157	8.986	60.031	2.157	8.986	60.031	4.708
4	1.689	7.038	67.070	1.689	7.038	67.070	6.008
5	1.230	5.124	72.194	1.230	5.124	72.194	4.734
6	0.619	2.580	74.773				
7	0.574	2.393	77.166				
8	0.539	2.247	79.413				
9	0.515	2.145	81.558				
10	0.476	1.985	83.543				
11	0.450	1.876	85.419				
12	0.408	1.700	87.119				
13	0.388	1.615	88.735				
14	0.375	1.563	90.298				
15	0.346	1.440	91.738				
16	0.303	1.264	93.002				
17	0.283	1.179	94.181				
18	0.271	1.130	95.311				
19	0.264	1.098	96.409				
20	0.229	0.954	97.363				
21	0.213	0.889	98.252				
22	0.190	0.790	99.042				
23	0.184	0.767	99.809				
24	0.046	0.191	100.000				

Table 2 Total variance explained

Extraction method: principal component analysis

^a When components are correlated, sums of squared loadings cannot be added to obtain a total variance Source: Own survey (2021)

above eigenvalue 1. This shows that after the 5th factor, the total variance accounts for smaller and smaller amounts (Fig. 2).

Moreover, Table 3 shows the Pattern Matrix based on Promax with Kaiser normalization, five factors have been extracted. Each factor is constituted of variables that have factor loadings greater than 0.5. Therefore, 24 item variables were clubbed into five factors. These 5 factors explained 72.19% of the variability in the women's entrepreneurial performance in MSEs.

Additionally, as can be observed from Table 3, the first variable (social factor) accounts for 38.233% of the variance with an eigenvalue of 9.176. The highest contributed component factors were item SF7 (weight = 0.901), SF6 (weight = 0.808), SF3(weight = 0.799), SF8 (weight = 0.799), SF2 (weight = 0.780), SF4 (weight = 0.769), respectively. However, two items (SF1 and SF5) were not significant and removed from further analysis.

The second factor is demographic factors (DF) which accounts for 12.813% of the total variance and eigenvalue of 3.075. The contributed component factors were five items including DF1 (weight=0.861), DF4 (weight=0.838), DF2 (weight=0.830),

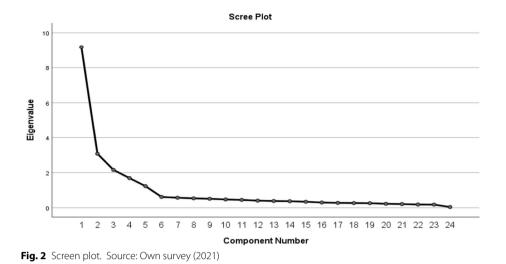


Table 3 Pattern matrix^a

	Component				
	1	2	3	4	5
SF7	0.901				
SF6	0.808				
SF3	0.799				
SF8	0.799				
SF2	0.780				
SF4	0.769				
DF1		0.861			
DF4		0.838			
DF2		0.830			
DF5		0.827			
DF3		0.827			
LAF4			0.871		
LAF5			0.867		
LAF2			0.836		
LAF3			0.815		
LAF6			0.717		
EF5				0.865	
EF3				0.790	
EF6				0.779	
EF4				0.757	
EF2				0.625	
WEP5					0.980
WEP3					0.909
WEP4					0.906

Extraction method: principal component analysis

Rotation method: Promax with Kaiser normalization

^a Rotation converged in 6 iterations

Source: Own survey (2021)

DF5 (weight = 0.827), and DF3 (weight = 0.827). But, the component item (DF6) was not significant for further analysis. Moreover, the third factor is legal and administrative factors (LAF) which account for 8.986% of the variance. Besides the eigenvalue of this factor is 2.157. Five component items were contributed LAF4 (weight=0.871), LAF5 (weight=0.867), LAF2 (weight=0.836), LAF3 (weight=0.815) and LAF6 (weight=717). Again, two items (LAF1 and LAF7) were insignificant and not incorporated for further analysis.

The fourth factor is economic factors (EF). This variable has five items which accounts for 7.038% of the variance with eigenvalue of 1.689. EF5 weight=0.865, EF3 weight=0.790, EF6 weighted 0.779, EF4 weight=757 and EF2 weight=625 found to have the highest contributed component items, respectively. One item (EF1), however, was found to be not significant and removed from further analysis. Finally, the last factor is women's entrepreneurial performance (WEP) which explains 5.124% of the variance. This variable has three component items with an eigenvalue of 1.23. However, two items (WEP1 and WEP2) were not significant and only items WEP5 (weight=0.980), WEP 3 (weight=0.909, and WEP4 (weight=0.906) were considered for further analysis of the study.

Descriptive analysis of the study variable

To measure the agreement level of respondents in each of the variables (demographic, social, economic, legal and administrative factors, and women's entrepreneurial performance), descriptive data, mean and standard deviations were presented and discussed in detail. In this study, the researcher applied an inherent assumption of a mean range developed by Al-Sayaad et al. (2006), which states that mean and standard deviation as the best measures for descriptive analysis. Hence, the researcher has interpreted the Likert scale based on the standardized agreed assumption listed range as "strongly disagree" when the mean fall in the range of 1.00 to 1.80, "disagree" 1.80 to 2.60, "neutral" for the mean range of 2.60 to 3.40, "agree" for the mean range of 3.40 to 4.20 and "strongly agree" when the mean fall in the range of 4.20 to5.00.

As indicated in Table 4, the mean and standard deviation for the variables were calculated. Social and economic factors have the highest mean score of 4.2294 with a dispersion of 0.73201 and 3.8724 with a dispersion of 0.84023, respectively. According to the criterion set above, the mean score of the above two variables falls to the "agree level" of the respondents. Demographic factor, legal and administrative factor, and women's entrepreneurial performance have an overall mean of 3.7805, 3.0351, 3.4990, with a standard deviation of 0.95033, 1.01506, 1.09682, respectively. Compared to other variables, the least mean score of 3.0351, with SD = 1.01506, is calculated from the overall legal and administrative factors. This mean score is placed between the mean range of (2.60–3.40) and the response category of "neutral".

Association of the study

The Pearson correlation coefficient measures the degree of strength and direction of the relationship between two variables. Therefore, variables found with Pearson *r*-value closer to -1.00 or +1.00 identified as perfectly related. A significance of p=0.05 is generally accepted conventional level in social science research, and this indicates that 95%

	Ν	Mean	Std. deviation
DF	348	3.7805	0.95033
SF	348	4.2294	0.73201
EF	348	3.8724	0.84023
LAF	348	3.0351	1.01506
WEP	348	3.4990	1.09682
Valid N (listwise)	348		

 Table 4
 Descriptive statistics

Source: Own survey (2021)

of the researcher can be sure that there is an actual or significant correlation between the two variables, and there is only a 5% chance that the relationship does not truly exist.

An interpretation of the size of the coefficient has been described by Cohen (2013) as follows: the correlation coefficient value found within; -0.3 to +0.3, the association is weak; -0.5 to -0.3 or 0.3 to 0.5, the association is moderate; -0.9 to -0.5 or 0.5 to 0.9, the association is strong; -1.0 to -0.9 or 0.9 to 1.0, the relationship is very strong.

The Pearson correlation analysis result indicates all the independent (demographic, social, economic, and legal and administrative factors) have a positive and significant relationship with the dependent variable women's entrepreneurial performance in MSEs, at a correlation coefficient of 0.343, 0.417, 0.442, and 0.353, respectively. Since the p value is less than 0.05 (at p = 0.000) or even strictly p < 0.01, the value is highly significant. However, the strength of the relationship among each of the variables is different. The highest relationship was found between the economic factor and social factor towards the dependent variable. Moreover, the correlation coefficient of the above variables falls under the coefficient range of (± 0.30 to ± 0.50). This indicates a moderate relationship between those variables and women's entrepreneurial performance in MSEs in Bahir Dar city (Table 5).

Finally, the correlation coefficient of demographic factor and women's entrepreneurial performance indicated the lowest, however, statistically significant and positive, correlation compared from other variables with an (r=0.343, p=0.000). The value of the correlation coefficient, which is 0.343, falls under the coefficient range of (± 0.30 to ± 0.50). That represented moderate linear relationship between demographic factors and women's entrepreneurial performance in SME in Bahir Dar city (Table 5).

Effect analysis of the study

Multiple regression analysis examines the relationship between a single outcome measure and several predictors or independent variables (Jaccard et al., 2006). This analysis shows the directional relationship between independent and dependent variables. In other words, it showed the effect of independent variables on the dependent variable. In this study, the researcher employed multiple regression analysis to examine the effect of socio-economic factor on the performance of women entrepreneurs in MSEs, Bahir Dar city.

Table 6 displays the multiple regression estimates of the independent variables against its dependent variable for the sample of 348 registered women-owned MSEs. Based on the results, the value *R*-square is 0.280; is the correlation between the dependent and

		WEP	DF	SF	EF	LAF
WEP	Pearson correlation	1	0.343**	0.417**	0.442**	0.353**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	Ν	348	348	348	348	348
DF	Pearson correlation	0.343**	1	0.545**	0.427**	0.362**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	Ν	348	348	348	348	348
SF	Pearson correlation	0.417**	0.545**	1	0.624**	0.210**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
	Ν	348	348	348	348	348
EF	Pearson correlation	0.442**	0.427**	0.624**	1	0.309**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000
	Ν	348	348	348	348	348
LAF	Pearson correlation	0.353**	0.362**	0.210**	0.309**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	348	348	348	348	348

Table 5 Association between variables

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

Source: Own survey (2021)

Table 6 Model summary^b

Model	R	R-square	Adjusted R-square	Std. error of the estimate	Durbin-Watson
1	0.529 ^a	0.280	0.271	0.93616	1.902

^a Predictors: (Constant), LAF, SF, DF, EF

^b Dependent variable: WEP

Source: Own survey (2021)

independent variable values of the study. R^2 is also called the squared multiple correlation coefficient or the coefficient of determination since $(R)^2 = (0.529)^2 = 0.279841$, which rounds to 0.280. For this study Adjusted *R* Square (0.271) is taken for interpretation. Adjusted *R*-square is the proportion of variation in the dependent variable of performance of women entrepreneurs that is explained by the independent variables. Therefore, it is pointed out that 27.1% of the change in explanatory variables (demographic factor, social factor, economic factor and legal and administrative factors) have the power to explain the dependent variable of women's entrepreneurial performance in small and micro enterprises in Bahir Dar city. The remaining 72.9% is affected by other variables which are not incorporated under this study.

Table 7 indicates that there is a statistically significant effect between the independent variables (demographic factor, social factor, economic factor, and legal and administrative factors) has a strong effect on the dependent variable of women's entrepreneurial performance at p < 0.05 indication level. Besides the *F*-test is 33.33 helps to judge the significance to accept and reject the study hypothesis which states that there is statistically significant effect of independent variables on the dependent variable and this implies the overall model is fit.

A standardized beta coefficient compares the strength of the effect of each individual independent variable to the dependent variable in the regression analysis. If the

Model		Sum of squares	df	Mean square	F	Sig
1	Regression	116.840	4	29.210	33.330	0.000 ^b
	Residual	300.604	343	0.876		
	Total	417.444	347			

Table 7 ANOVA^a (analysis of variance)

^a Dependent variable: WEP

^b Predictors: (Constant), LAF, SF, DF, EF

Source: Own survey (2021)

Table 8 Coefficients^a of multiple regression of the study

Model		Unstandardized coefficients		Standardized coefficients	t	Sig	Collinearity statistics	
		В	Std. error	Beta			Tolerance	VIF
1	(Constant)	0.128	0.312		0.411	0.682		
	DF	0.068	0.066	0.059	1.026	0.306	0.636	1.572
	SF	0.296	0.096	0.197	3.081	0.002	0.511	1.956
	EF	0.294	0.079	0.225	3.728	0.000	0.574	1.741
	LAF	0.238	0.054	0.220	4.388	0.000	0.832	1.202

^a Dependent variable: WEP

Source: Own survey (2021)

value is positive, it indicates that there is a positive relationship between the predictor and the outcome, whereas negative coefficient represents a negative relationship between predictors and outcome.

Based on Table 8, the following equation is formed:

 $Y = 0.128 + 0.068(X_1) + 0.296(X_2) + 0.294(X_3) + 0.238(X_4),$

where Y = women's entrepreneurial performance; $X_1 =$ demographic factor; $X_2 =$ social factor; $X_3 =$ economic factor; $X_4 =$ legal and administrative factor.

The individual effects of independent variables can be explained by their respective unstandardized beta coefficients. From the above multiple regression table social factor, economic factor and legal and administrative have positive significant effect on women's entrepreneurial performance at beta value of 0.296, 0.294 and 0.238, respectively. The p values are well below 0.05, which means that there is a significant relationship between this factors and the dependent variable. Among all variables, social factor was found to have strongest influence on women's entrepreneurial performance in MSEs as compared to other variables beta value of 0.296. This means that the increase or decrease of social factor by one unit significantly affects overall women's entrepreneurial performance in the same direction by 29.6% followed by economic factor (29.4%) and legal and administrative factor (23.8%), respectively (Table 8).

Hypothesis testing

In this study, the proposed hypothesis was tested based on the standardized coefficient of beta with 95% confidence level and *p*-value to test whether hypothesis is accepted or rejected. The general rule is: reject H0 if p < 0.05 and accept H0 if $p \ge 0.05$ (Pallant, 2020) (Table 9).

Discussion of findings

In this part of the study, major findings with other relevant theoretical and empirical concepts are discussed to validate the study objectives and hypotheses. The primary purpose of this study was to assess socio-economic factors affecting women's entrepreneurial performance in MSEs in Bahir Dar city.

The correlation coefficient result showed a positive and significant relationship between all independent variables (demographic, social, economic, legal and administrative factors) and women's entrepreneurial performance. The analysis indicates that economic and social factors have the highest correlation coefficient values of 0.442 and 0.417, respectively. Supporting this result, the findings of Raheem (2013) and Raheem et al. (2019) argued that there is a strong positive and significant relationship between social and economic factors and women's entrepreneurial performance.

The regression model summary shows that the adjusted R-square value for the regression model showed that 0.271 (27.1%) of the dependent variable (women's entrepreneurial performance) in the model can be predicted by all the independent variables. The Beta coefficients revealed the proportion of each variable in the model. The t and p-values showed the influence of the independent variable on the dependent variable, women's entrepreneurial performance in the study area.

The effect analysis of this study showed that social factor was found to be statistically positive and significantly influenced women's entrepreneurial performance at p < 0.05 significant level. This implies that social factors such as social acceptability, network, and social bias can go a long way in encouraging or discouraging the performance of women entrepreneurs in small and micro enterprises. This finding is consistent with the view of Raheem (2013) and Khan et al. (2021) who demonstrated that social factor has a significant impact on women's entrepreneurial performance in MSEs.

Similarly, the study confirmed that economic factor is also statistically significant and positively associated with women's entrepreneurial performance. This indicated that women entrepreneurs perform better in their businesses when they access the necessary internal and external financial funds. This means that a set of internal project financing and external market condition, such as access to capital, labor, raw materials, market, and technology to run their business effectively can influence their performance. This finding accords with the results of Raheem (2013) and Khan et al. (2021), who reported that economic factor significantly and positively affects women's entrepreneurial performance.

Proposed hypothesis of the study	Decision
Ha1: Demographic factors significantly and positively affect women's entrepreneurial perfor- mance in MSEs	Not supported
Ha2: Social factors significantly and positively affect women's entrepreneurial performance in MSEs	Supported
Ha3: Economic factors significantly and positively affect women's entrepreneurial performance in MSEs	Supported
Ha4: Legal and administrative factors significantly and positively affect women's entrepreneurial	Supported

 Table 9
 Hypothesis testing

Source: Own survey (2021)

Moreover, the legal and administrative factors were also included in the regression model to see whether or not it affects women's entrepreneurial performance (i.e. profit, asset, and capital growth) in MSEs. In this context, the evidence of the regression output revealed that legal and administrative factor has a positive and statistically significant influence on women's entrepreneurial performance in MSEs at p < 0.05 significant level (Haxhiu, 2015; Tehulu, 2019). The main legal and administrative factors, including access to policymakers, high amount of tax and interest, bureaucracies and red tape, and overall legal and regulatory environments, significantly influence women's entrepreneurial performance (Wube, 2010).

On the other hand, however, this study provides empirical evidence that demographic factors have no significant impact on women's entrepreneurial performance in MSEs, with a coefficient of 0.068 and *p*-value of 0. 306. The implication here is that demographic variables such as gender, marital status, level of education, and previous entrepreneurial experience have an insignificant impact on women's entrepreneurial performance. Research that had been done by Zampetakis et al. (2016), Green and Cohen (1995), and Alene (2020) also obtained the same result that demographic factors had no relationship with women's entrepreneurial performance in MSEs. To the contrary, some of the studies have associated the importance of demographic characteristics remarkable effect on women's entrepreneurial performance in MSEs (Alene, 2020; Beriso, 2021; Grilo & Thurik, 2005; Soomro et al., 2019; van der Kuip & Verheul, 2004; Wilson et al., 2007).

Conclusion and recommendations

There is no denying that women's contribution to the socio-economic well-being of societies in social change and economic progress through their entrepreneurial activities has received little attention from policymakers and researchers and has been taken for granted (Buame, 2012). Therefore, this study examines socio-economic determinant factors that influence women's entrepreneurial performance based on the data drawn from 348 women entrepreneurs in Bahir Dar city. This research was conducted with the prime intent to critically assess the factors affecting women's entrepreneurial performance in MSEs engaged in construction, wood products, food processing, textile and garment, and urban agriculture sectors in Bahir Dar city. Accordingly, 368 women-owned MSEs were included in the study. Different statistical tools, such as descriptive analysis, factor analysis, correlation, and regression analysis was performed to look for patterns and relationship between variables. The major findings of this study are summarized as follows.

Based on Pearson's correlation analysis, the study has revealed that social and economic factors are among the most leading factors influencing women's entrepreneurial performance in MSEs, as first and second, respectively. The abovementioned variables have a highly significant relationship at 0.01 levels of significance with women's entrepreneurial performance. The other research finding based on regression output of adjusted $R^2 = 0.271$ means that all independent variables (demographic, social, economic, and legal and administrative factors) together explain the total variance of the dependent variable women's entrepreneurial performance in MSEs by 27.1%.

The regression results of data analysis in this study evidently indicate that social factors had the highest impact, followed by an economic factor, on women's entrepreneurial performance in MSEs. Even though the social aspects are easing daily in major towns of Ethiopia like Addis Ababa, economic challenges like access to finance, inputs, market, and infrastructural challenges are still tremendous hurdle that continues to affect the women's entrepreneurial performance in MSEs. Furthermore, legal and administrative factors were found to be the determinant factors that influence women's entrepreneurial performance in MSEs. Overall, the researcher found that social, economic, and legal and administrative factors significantly and positively affect women's entrepreneurial performance in MSEs in the study area.

On the other hand, however, the study provides a piece of empirical evidence that demographic variables such as gender, marital status, level of education, and previous entrepreneurial experience have a non-significant impact on women's entrepreneurial performance in MSEs with a coefficient of 0.068, and *p*-value of 0. 306. Green and Cohen (1995) asserts that "an entrepreneur is always entrepreneur", and it does not matter whether he is a man or woman, married or not, what family size and role or any other demographic characteristic he or she may possess. Therefore, from the outcome of the current study, the research recommends the local and national government improve the social, economic, legal and administrative assistance to facilitate the successful women's entrepreneurial performance in the study area.

Theoretical implications

This research argues that most of the studies on the determinants factors affecting women's entrepreneurial performance in MSEs were in developed countries and some African countries where their social and cultural context is different from the context in Ethiopia. The study contributes to the existing literature on women's entrepreneurship by revealing the critical socio-economic factors that hamper women's entrepreneurial performance in small and micro enterprises in Ethiopia and may help the local government devise ways to support women's involvement in MSEs achieve economic growths of the country.

Managerial implications

Based on the findings of this study, the following managerial implications are made: the local and national government should incorporate women's entrepreneurial dimension in forming all MSEs-related policies and strategies. This can be done by ensuring that the impact of social, economic, legal and administrative factors on women's entrepreneurship is considered at the design stage. Moreover, periodically evaluate the result of any MSEs-related policies on the success of women-owned businesses and the extent to which such companies take advantage of them. The objective should be to identify ways to improve the effectiveness of those that should be retained. Good practices placed in this way should be disseminated and shared internationally.

Limitations and ideas for future research

The first possibility for future research would be to repeat the present study using panel data. This study used cross-sectional survey data to measure women's entrepreneurial performance in MSEs, and as such, the absence of objective measures of performance could be a problem. However, it should be noted that scholars agree that self-assessment

of performance is relevant, especially when objective performance measures are unreachable. Second, this research was limited to a sample of women entrepreneurs from Bahir Dar city. To guarantee the generalizability of the results, it is suggested to expand the sample size and investigate the topic in different areas to get more reliable results. Third, for future study, it suggested extending this study by incorporating moderating and mediating variables.

Abbreviation

DF	Demographic factor
SF	Social factor
EF	Economic factor
LAF	Legal and administrative factor
WEP	Women's entrepreneurial performance
MSEs	Micro and small enterprises

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Author contributions

The research was done independently and solely by the author. The author read and approved the final manuscript.

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Availability of data and materials

The data used in the findings of this study are available on hand from the author.

Declarations

Ethical approval and consent to participate

Not applicable.

Consent for publication

The author personally consents that his paper be published in this journal.

Competing interests

The author declares that there is no known legal or financial interest that could have appeared to influence the findings presented in this study.

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