# **Entrepreneurs Perceived Impact of Covid-19 On Businesses: Does Gender Matter?**

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## Abstract

The widespread of the COVID-19 pandemic has affected world economies immensely. In the case of Ghana, small businesses became vulnerable to supply and demand shocks which inhibited normal economic activity. The purpose of this study was to analyse the differences in the perceived effect of the COVID-19 crisis on small businesses as regards to gender, using a sample size of 508 Ghanaian small firms (280 male-owned and 228 female-owned firms). With disparities in social systems, the nature of social roles associated with men and women, especially in developing countries, and the degree of risk sensitivity and emotions of women, gender was considered as a demographic variable to provide a fundamental understanding of differences in the perceived impact of COVID-19 on small businesses. The study adopted a cross-sectional and quantitative survey covering micro entrepreneurs in Ghana. Data was collected online through the use of Google forms and was analysed with the aid of Predictive Analytics Software. The findings demonstrated strong evidence that female-owned small firms differ significantly from male-owned small firms with regard to the sustainability of business. Hence, the study recommends that governments and policy makers should introduce policies to revamp female-owned businesses, and women should try to attain the same levels of prospects attained by men. On the other hand, variables such as financing sources, financial health, budget targets and composite perceived impact of COVID-19 were found to be statistically insignificant between male and female owners. It is recommended, therefore, that health, socio-economic, and humanitarian policies are endlessly adhered to by businesses in addition to the effective emergency funding of programmes provided by governments around the world to businesses. Governments should ensure that the programmes expedite the 3 Es' (Economy, Efficiency and Effectiveness). This would enable small businesses streamline their activities.

#### Keywords

COVID-19; firms; Entrepreneurs; Gender

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## 1. Introduction

The COVID-19 pandemic is a crisis that has had devastating effects on economies and individuals [1]. Governments around the world have implemented social distancing and, in some instances, lockdown steps to limit the spread of the virus. Examining the implications of this pandemic on the most vulnerable workers and communities in the world has become a primary global policy priority [1, 2, 3, 4, 5, 6, 7].

Uncertainty levels intensify at such a pace during shocks and crisis incidents, their consequences become extremely crippling for entrepreneurs and entrepreneurial activities such as fashion, food services and brokers [8, 9]. The Covid-19 pandemic was disseminated virally through global pipelines of people travelling across the world. The study of [5] suggested that the pandemic has already caused massive dislocation among small businesses. The widespread closing of stores and businesses around the world, especially in developing countries, is unprecedented. Several businesses have closed due to policy mandates, downward demand shifts, health concerns, and other factors [10]. The impact on small businesses around the world is likely to be severe. In Ghana's case, restrictions on lockdown necessitated a decrease in household entrepreneurial activities, which eventually dwindled the performance of most small businesses in general. The closure of businesses like, schools, clubs, restaurants, beaches, cinemas and other entrepreneurial activities seriously affected the demand. Because of the unprecedented nature of the situation caused by the COVID-19, entrepreneurs

had to quickly adapt themselves to these changes. The Government of Ghana, as a matter of urgency, instituted some policies to enable small businesses thrive during the COVID-19 restrictions, but the impact of COVID-19 is still felt by businesses due to the low demand for goods and services.

Most studies have considered the effects of demographics on the performance of small businesses [11, 12, 13, 14, 15 and 16] with inconclusive results and a research into the impact of COVID-19 on small businesses is necessary. An insightful paper by [17] highlights the significance of demography for analysing COVID-19. Extant literature has assessed the effects of COVID-19 on businesses across the globe. However, there have been mixed effects of Covid-19 on businesses, leading to either the thriving or collapse of certain businesses. However, the impact of gender also needs to be investigated. The impact may be different between males and females. The disparities in social systems between developed and developing countries, as well as the social roles associated with men and women in these countries, may explain this phenomenon [18]. Categorically, developing countries are characterized by their masculinity. It can also be argued that women invest more in household consumables. It is known from extant literature that women are more sensitive to risk and emotions side by side men. For instance, in the study of [18], it was revealed that female-owned small firms differ from male-owned small firms as regards their gross revenues, especially during normal times. However, no significant differences were found between female and male owners in terms of their incomes. The significant difference was attributed to factors such as, the owner's level of education, the owner's business, the firm's age, and the firm's size. This suggests that even during normal times, the outcomes of gender differences are not symmetrical. In the case of crises such as the COVID-19 pandemic, [19] concluded that investment and consumption appear to decline as entrepreneurs and customers begin to lose their incomes and face increased uncertainty at the same time. SMEs tend to complicate these consequences, as employers are unable to pay wages leading to lay-off of employees and SMEs' inability to fulfil their regular business obligations [20]. Although risks and uncertainties exist in everyday activities, the impact of COVID-19 has the potential of intensifying the risks of small businesses.

According to the disaster vulnerability theory, liability and capabilities explain the susceptibility of individuals, groups, organizations, communities, and countries to losses from disaster [21]. Liabilities are environmental characteristics that magnify the effects of stress, adversity, or loss, while environmental capabilities reflect aspects of the social, physical, and natural environment which provide the resources needed to mitigate, prepare for, respond to, and recover from disaster [22]. [21] identified liabilities that lead to increased vulnerability to include female roles, endemic poverty, racism, a history of colonial exploitation, imbalances in trade, and underdevelopment. In Ghana and most African communities, female roles are played by women and thereby likely to be an affected disaster. This corroborates [23] who asserts that disasters do not discriminate, but their impact does heavily hit women in all aspects of life.

The contributions of this study are the choice of variables such as financing sources, financial health, budget targets, sustainability of business and business performance and the averaged perceived impact by gender in the advent of COVID-19. The present study would assist business owners and propel them to improve their capabilities. In addition, the study seeks to demonstrate that there is nothing essentially masculine or feminine; these terms are seen as socially constructed and may differ with time and place. Moreover, by exploring the working environment for males and females and the differences in the impact of COVID-19 pandemic, this study can enable governments as well as policy makers to institute policies to revamp small businesses and maintain the equality between males and females as regards small businesses. Therefore, by analysing the differences in the effect of COVID-19 crisis on small businesses with respect to gender in Ghana, this paper makes an important contribution to literature in entrepreneurship.

## 2. Materials and Methods

#### 2.1 Study design and sampling procedure

The study adopted a cross-sectional and quantitative survey covering micro entrepreneurs in Ghana. This study employed a random sampling technique to randomly select 508 micro entrepreneurs from an infinite population. A random sample from an infinite population is a sample selected such that the following conditions are satisfied: (i) each element selected comes from the same population; and (ii) each element is selected independently. The representativeness of the sample determination was guided by [26] minimum returned sample size determination table with 50% proportion (p = 0.5), the margin of error of 0.05 and an expected non-response rate of 10%. A total of 508 responded and subsequently used for the analysis.

#### 2.2 Data and Data Collection

The study employed a questionnaire consisting of seven (7) questions of which two (2) elicit demographic and socioeconomic information such as sex and age group, and five (5) measuring entrepreneurs' perception of COVID-19 on their operation. The perception of COVID-19 was elicited through five (5) rating scale questions of the respondents' perception of impact of COVID-19 on financing sources, financial health, budget targets, sustainability of business and business performance. The questionnaires were adopted from [27] Gyasi et al. (2021). The questionnaires were initially pretested with fifteen (15) entrepreneurs and changes were made to some of the questions. The final approved questions were administered online through Google forms to entrepreneurs over a period of one month using contacts with associations. The online link received over 1500 respondents and 508 entrepreneurs were extracted based on their responses.

#### 2.3 Data Analysis Method

The background characteristics of the study sample were conducted using descriptive statistics. The study followed [28], organised and presented frequency tables and proportionate counts in addition to bivariate analyses with Pearson's Chi-Square test and Fisher's exact test to identify the associations between variables and COVID-19-impact dimensions. Predictive Analytics Software (PASW) for Windows application programme (version 17.0) was used to carry out the analysis with 5% significance level.

## 3. Results

Sample Characteristics. The background characteristics of the study participants about sex status and age are presented in Table 1. The total sample included were 508 small business owners. The majority (55.1%) of the respondents were males with females constituting (44.9%). The difference could be explained by the malefemale gap in start-up of business in Ghana [29, 30]. A Chi-square goodness-of-fit test to compare the difference in the proportion of male and female participants respondents indicates a significant difference across the respondents,  $\chi^2(1, n = 508) = 5.323, p = .021$ . Table 1 shows that 26 (5.1%) of the respondents are less than 25years, 404(79.5%) are between 25 and 45 years, 52(10.3%)are between 45 and 60 years and 26(5.1%) are above 60 years. The age distribution corroborates the report that entrepreneurs with older ages from 25 to 45 years have higher entrepreneurial endeavours and hence are more successful than their younger counterparts [31, 32].

To ensure homogeneity of males and female with respect to age distribution, a bivariate analysis was conducted to compare the age characteristics between males and female respondents. The study found no statistically significant differences between the two subgroups in relation to age distribution,  $\chi^2(1, n = 508) = 2.976$ , p=.395, Phi=.077. It implies that the two subgroups, males and females are homogeneous as regards age distribution.

#### 3.1 Gender and COVID Perceived Impact

The analysis of gender differences in perceived COVID -19 impact was preceded by the following: first, I examined the difference in perceived impact of COVID-19 on financing sources, financial health, budget targets, sustainability of business and business performance and the averaged perceived impact by gender. Table 2 shows the relationship between gender statuses of the respondents against their perceived impact of COVID-19 dimensions by the use of Mann Whitney U statistics. Table 2 reports the sub-sample, Mean rank, Sum of ranks by sex, Mann Whitney U test of independents, Z-score and pvalue associated with Mann Whitney U test. Regarding "sustainability of business" the Mann Whitney U test showed a significant difference between male and female [U=28816, Z=-2.023, p=0.043, r=-0.082] with female feeling more insecure about their businesses than males. The effect size of the observed difference at 5% significance is -0.082, which is considered a very small effect using [33] criteria of 0.10 for small effect, 0.30 for medium effect and 0.50 for large effect.

On the contrary, Mann Whitney U test detect no significant difference regarding perceived impact of COVID on entrepreneurs financing sources [U=31054,Z=-0.581, p=0.561, r=-0.024, financial health [U=29766,Z=-1.421, p=0.155, r=-0.059, budget targets [U=30736,Z=-0.776, p=0.438, r=-0.032 and business performance [U=31684, Z=-0.154, p=0.887, r=0.006. However, the nominal figures show that females perceived high impact of COVID-19 on their businesses than their male counterparts. The significant difference of perceived COVID-19 impact on sustainability of business and nominal difference on sources of business finance, financial health, budget targets, and business performance reinforce the females' greater sensitivity risk [34](Hitchcock, 2000).

Having, analyse the perceived COVID-19 impact dimension, I analysed the overall gender difference by constructing the composite perceived COVID-19 impact after conducting exploratory factor analysis which suggested all items be maintained (Kaiser-Meyer-Olkin measure of sampling adequacy of 0.73, Bartlett's Test of Sphericity  $[\chi^2(10, n = 508) = 999.4, p < .0001]$ , Cronbach alpha  $(\alpha)=0.810$ ). Behrman et al (2010) argued that more sophisticated measures of constructs perform as well as the simple additive; hence, simple arithmetic average was used as composite measure. Table 3 shows the results of independent t-test to compare the mean scores of the composite perceived COVID-19 impact between male and female respondents. The result showed that there was insignificant difference in mean scores for male (M = 2.43,SD = 0.87) and female [M = 2.57, SD = .96; t (506) = 1.667, p = .097].

Variable	Male		Female		Total			
	Ν	(%)	Ν	(%)	Ν	(%)	P-Value	$\operatorname{Phi}(\phi)$
Sex Distribution								
	280	55.1	228	44.9	508	100	$0.021^{a}$	-
Age Distribution								
Less than 25	12	4.3	14	6.2	26	5.1	0.403	0.077
25-45	222	43.6	182	79.8	404	79.5		
46-60	28	10	24	10.5	52	10.3		
Above 60	18	6.4	8	3.5	26	5.1		
Total	280	100	228	100	508	100		

**Table 1.** Characteristics of participants based on sex status and age

Table 2. Gender statuses of respondents against their perceived impact of COVID-19

	Ranks Gender	Ν	Mean Rank	Sum of Ranks	Mann Whitney U	Z(P-values)
Sustainability of Business	Female	228	240.89	54922	28816	-2.023(0.043)
	Male	280	265.59	74364		· · · ·
	Total	508				
Financial Health of Business	Female	228	245.05	55872	29766	-1.421(0.155)
	Male	280	262.19	73414		· · · ·
	Total	508				
Source of Business Finance	Female	228	250.7	57160	31054	581(0.561)
	Male	280	257.59	72126		
	Total	508				
Budget Targets	Female	228	249.31	56842	30736	776(0.438)
	Male	280	258.73	72444		× /
	Total	508				
Business Performance	Female	228	253.46	57790	31684	154(0.877)
	Male	280	255.34	71496		. /
	Total	508				

**Table 3.** Perceived COVID-19 Impact by Gender

Ν								
		Mean	St. Deviation	Т	p-value			
Male	280	2.43	0.87					
Female	228	2.57	0.96	1.667	0.097			
Levine's test of equality of Variance (F=1.475, P-value=0.225)								

#### 4. Discussion

In a sample of 280 (55.1%) male owners and 228 (49.1%)female owners, the preliminary analysis of our study revealed that gender is homogeneous across the age distributions considered. This made the analysis robust by having representative age groups based on gender, coupled with their diverse opinions in order to establish their differences in terms of COVID-19 impact. I examined the difference in perceived impact of COVID-19 on financing sources, financial health, budget targets, sustainability of business and business performance using Mann Whitney U test of independents and the averaged perceived impact using Independent sample t-test based on gender. Comparing Ghanaian female-owned and male-owned firms as regards perceived COVID-19 impact, there was a statistically significant difference in "sustainability of business". This confirms the assertion that female owners feel more insecure about their businesses as they are sensitive to risks and emotions than male owners. This finding also corroborates the declaration of [18] that there exist disparities in social systems and social roles associated with men and women. On the other hand, the results on the remaining perceived impacts of COVID-19 pandemic, namely, "financing sources, financial health and budget targets", prove otherwise. The foregoing notwithstanding, the significant difference of perceived COVID-19 impact on sustainability of business and the nominal difference on sources of business finance, financial health, budget targets, and business performance reinforce the females greater sensitivity risk [34]. Moreover, the overall gender difference was analysed by constructing the composite perceived COVID-19 impact after conducting exploratory factor analysis which suggested the maintenance of all items. The result was sustained by an insignificant difference in mean scores for female-owned and male-owned firms. This confirms the assertion of [35] that the labour force participation of women is proportional to that of men. Also, women share housework (such as cooking and cleaning) and childcare with men as well as incurring household expenses. The outcome is further linked to the "survival mentality" and "doing business mainly for hand to mouth on daily basis" which are characterised by most small businesses in Ghana. Both businessmen and businesswomen were, therefore enthusiastic to pursue their businesses during the heat of the COVID-19 lockdown. As a result, the perceived COVID-19 impact is proportionately felt by both men and women. Additionally, [36]

makes a profound contribution to women's empowerment following a disaster and found that although vulnerability increases in times of a disaster, resilience can potentially neutralise women's vulnerability. Contrary to the study of [37], they found that COVID-19;s impact on small businesses is significantly larger for women than men.

## 5. Conclusions and Implications

In this article, I studied entrepreneurs' perceived impacts of COVID-19 on small businesses with gender in focus. The outcome on "sustainability of business" was seen to be significantly different between males and females. On the other hand, the variables of financing sources, financial health, budget targets and composite perceived impact of COVID-19 were found to be statistically insignificant between male and female owners. The significant difference in sustainability of business between males and females has policy implications. Thus, the disproportionate perceived sustainability of business to the number of female-owned firms would only further upsurge gender inequality in business ownership and perhaps broader economic inequality. It is recommended that, governments and policy makers should institute policies to revamp female-owned businesses. Besides, women should be able to break the barriers as they try to attain the same levels of prospects attained by men. This would assist female-owned businesses, propel them to improve their capabilities and give them additional values. Based on the findings of financing sources, financial health, budget targets and the composite perceived impacts of COVID-19 on small businesses, this study sought to demonstrate that there is nothing essentially masculine or feminine with regards to small businesses. This contributes to the concept of gender equality which is fundamental to fast-tracking sustainable development. It is known that governments around the world provide effective emergency funding programmes that respond to the plight of business owners regardless of gender. However, since governments alone cannot address the challenges stemming from the Covid-19 impact which continues to upsurge across the world with a trajectory difficult to forecast, it is recommended that the health, socio-economic and humanitarian policies are endlessly adhered to by businesses. This would assist small businesses in streamling their activities.

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