Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Positive externality matters in the COVID-19 pandemic: the case of women informal businesses in District Mardan, Pakistan

Said Muhammad¹, Kong Ximei¹, Shahab E. Saqib² and Lene Foss³

¹School of Business, Zhengzhou University, Zhengzhou, Henan, China; ²Directorate of Commerce Education and Management Sciences, Higher Education, Archives and Libraries Department, Peshawar, Khyber Pakhtunkhwa, Pakistan; ³School of Education and Communication, Jönköping University, Jönköping, Sweden

1. Introduction

The world has jumbled to face the multidimensional effects of the current pandemic spread across the globe within no time claiming thousands of precious lives and infecting millions of masses (Muhammad et al., 2021). Its quick emergence critically disturbed economic, health, social, and political systems. The virus is still spreading but the rate is comparatively low as it was at the start of the pandemic. Everyone is waiting for corona vaccines to treat with, but no medicines to cure it so far. Smart lockdown measures have been used to implement social distancing that restricts business and social activities (Muhammad et al., 2021). We need to live with, and the only way is to follow the pandemic SOPs. The SOPs (Standard Operating Procedures) are the step-by-step guidelines issued by the organizations/government about the Coronavirus to protect their people from spreading the virus. The severity of these restrictions varies among different countries and the states are bewildered to tighten or lose their SOPs to save the economy or lives in response to the increasing cases of the second layer of corona pandemic.

Women’s engagements in business activities have been reflected as the main driver of economic growth and development (De Vita et al., 2014; Muhammad, Ximei, Saqib, et al., 2020).
Entrepreneurship creates employment opportunities and enhancing the living standards of the masses by alleviating poverty (Kelikume, 2021) which is one of the fundamental sustainable development goals (UN, 2020). But these goals may in/directly be affected by the ongoing pandemic. In the current scenario, we can’t restrict the COVID-19 pandemic effects specifically to one area or sector. There is a need to investigate the outbreak with special reference to its repercussions on the women engaged in the informal sector. It has different financial effects around the world while the socioeconomic impact on women is severe (OECD, 2020).

In a special issue published by International Journal of gender and entrepreneurship, titled “Women’s Entrepreneurship in the Wake of the Covid-19 Crisis” edited by (Foss and Henry, 2021) write that “Women’s entrepreneurship in developing countries is particularly at risk, as women’s anticipated vulnerability through the COVID-19 crisis will likely be exacerbated (OECD, 2020). The exposure to health risks in areas with inadequate or underdeveloped healthcare infrastructure is of immediate concern. Women’s entrepreneurship research would benefit from more contributions from developing countries to add diversity to contemporary entrepreneurship scholarship.” Following this call, this chapter focuses on the Pakistani context as we aim to contribute with new empirical knowledge, from a developing country, which will add to more diverse knowledge on women’s entrepreneurship in the wake of a crisis the world over.

We also recognize that published research on the positive externality of the COVID-19 pandemic is scarce. The term positive externality has been used in this context; that the demand for the goods and services may increase in the pandemic which may have a positive impact on the sales volume of these businesswomen and the society. On one side, the sales volume increases to get more profit while on the other side, the people have the opportunity to meet their needs and demands locally to reduce the spread of virus instead of approaching big markets and shopping malls. The governments in consultation with the federal and provincial authorities closed down all the educational institutes. All types of international and local travel were restricted; big markets, shopping malls, other businesses, and all types of public and social gatherings were banned. The lockdown was extended from time to time as per the spread of the virus in the form of positive cases reported. The government and law enforcement agencies induced and forced people to be at home and follow the pandemic SOPs.

These measures aim to limit the spread of the virus. The pandemic has increased the burden on women entrepreneurs in the form of mental stress (Safdar & Yasmin, 2020). To create new knowledge on the impact on the rural—urban women’s informal business, this study has two objectives: first, to examine the rural—urban impact of the COVID-19 pandemic on the sales volume of products offered by informal businesswomen in Pakistan; and second, to know the attitude of these informal businesswomen toward following COVID-19 pandemic SOPs. The rest of the chapter is organized as follows. We first give a contextual overview of the Pakistani context, followed by a brief overview of current research results on women’s entrepreneurship in the wake of the COVID-19 pandemic. Then the methods and data are presented followed by results, discussion and contribution, and conclusion.

Women comprise almost half of the Pakistan population (PBS, 2017–18). Their involvement in business activities is lower than men’s (Muhammad, Ximei, Sharif, & Haq, 2020; Zeb and Ihsan, 2020) due to unequal opportunities. The business profession is dominated by men and women received low prestige and return than male-dominated activities.
(Thomason & Macias-Alonso, 2020). Women’s mobility and visibility have been growing across the country but their businesses have less potential to grow. The increasing participation of women in economic activities confronts them with many challenges of work and family obligations (Aju and Adeosun, 2021). Their business activities give them freedom, financial independence, and flexibility of time in managing family and social responsibilities (Muhammad, Ximei, Sharif, & Haq, 2020). If they work in the formal sector, generally it is expected that women’s primary duty is to take care of family and children (Dush et al., 2018). Due to these responsibilities of managing work and family care women sometimes use the option of quitting their professional careers.

The situation becomes more complex in a patriarchal society like Pakistan where women are restricted to their homes due to the dominancy of social, religious, and cultural norms (Muhammad, Ximei, Saqib, et al., 2020). The literature revealed (Safdar & Yasmin, 2020) that due to sociocultural norms women’s role in Pakistan is seen from the perspective of religion and culture. They are restricted not to participate in mixed-gender programs to follow their cultural norms. These informal, home-based businesses give them the flexibility to do work while staying at home to take care of their families (Higgins et al., 2000; Muhammad, Ximei, Saqib, et al., 2020), and at the same time can enhance their family educational wellbeing. Due to these reasons, women in Pakistan prefer to work closer to their homes to perform their household responsibilities in a better way as they have been spatially trapped.

The pandemic interrupted the global supply chain and many workers lost their jobs and some workers were forced to be at home subject to lockdown (ILO, 2020). Especially the low-income women who are supporting their family alone raising a question to buy necessities like medicines and food are exposed to a higher risk of economic instability. Several ventures are seriously facing a decline in their income and growth particularly operated on a small scale during the COVID-19 pandemic. Most of these businesses are specifically vulnerable to shocks due to less profitability and disproportionally operating in the informal sector. While some findings revealed that small businesses are more resilient to crises (Muhammad and Ximei, 2020) due to their nature and most of these ventures are self-financed or supported by their families. Thus, the study in hand brings attention to a particular type of entrepreneur: informal businesswomen, to investigate the effect of the COVID-19 pandemic externalities which received little attention in the ongoing public debate. The findings of the study will contribute to the existing literature of women informal businesses resilience in times of a natural disaster like COVID-19 pandemic. In the next section we review current research findings of women’s entrepreneurship during the COVID-19 pandemic.

1.1 Prior research on the women’s entrepreneurship in the COVID-19 pandemic

Ayatakshi-Endow and Steele (2021) use the business family interaction construct to examine how women entrepreneurs in Brazil manage their businesses and gender roles at home in the context of the COVID-19 epidemic. Using an interpretivist approach and the Gioia methodology on women entrepreneurs, the findings demonstrate that women implement numerous strategies including reliance on social relationships within the family and externally, to manage the home-business expectations. The findings also reveal entrepreneurial resilience and adaptability in the face of a crisis.
Mustafa et al. (2021) conducted a qualitative study in Pakistan to examine the impact of the COVID-19 pandemic lockdown on microbusinesses owned by women borrowers from microfinance institutions. They gained insight into how the COVID-19 crisis impacted women entrepreneurs in terms of household income, business sales, lifestyle, and mental health. Afshan et al. (2021) use experimental learning theory in their exploratory study of women entrepreneurs in the Sindh region in Pakistan. The study contributes new knowledge from novel learning of the female entrepreneurs throughout the pandemic. The transformation from manual business dealings and financial transactions to virtual dealing and the online transaction was the addition of novel learning. The study also provides an understanding of entrepreneurial learning about market access, communication and coordination with the consumers, and maintaining business transactions while following SOPs.

Finally, a relevant recent study is by Stephens et al. (2021) of female entrepreneurs in a time of crisis: evidence from Ireland, based on an online survey during the lockdown. The key findings highlight the resilience of female entrepreneurs, their willingness to contribute to charitable and community-based organizations, and their desire to seek and receive emotional support from their peers.

We believe these freshly published studies in the special issue in the *International Journal of Gender and Entrepreneurship* are highly relevant for our study as most of them provide empirical evidence from the regions which have been hardest hit by the epidemic, Southeast Asia and the Americas. Further, they all directly or indirectly indicate the issue of a positive externality.

2. Data and methods

2.1 Study setting

Following the objectives of the study and the review of papers in the recent special issue of *Women’s entrepreneurship in the wake of the COVID-19 crises* by Foss & Henry (2021), we choose an exploratory research design to examine the increase/decrease of sales volume of informal businesswomen and their attitude toward the COVID-19 pandemic SOPs. Primary data were collected by using a quantitative technique from 400 respondents in the rural—urban areas of District Mardan, Khyber Pakhtunkhwa, Pakistan (Fig. 25.1). The district Mardan was purposively selected as one of the most cases reported in the initial days (Daily Dawn, 2020) and the second-largest and central district of the Khyber Pakhtunkhwa province. The study aims to focus on informal businesswomen who were engaged in informal home-based entrepreneurial activities.

2.2 Sampling procedure

A multistage sampling procedure was adopted to pick the sample size (Saqib et al., 2016). In the beginning, this province was purposively selected due to new trends in women’s business engagements. In the second phase, the Mardan district was selected due to the high-risk district and central region of the province. Initial information was obtained from the researcher survey list of 2500 informal businesswomen (Muhammad et al., 2021) and district government. Six businesses named cloth, dairy products, cosmetics, beautician, tailoring, and
grocery were selected due to the new trend of women engagements in entrepreneurial activities. By using the formula of Yamane (1967) a sample of 392 informal businesswomen were selected randomly at a 95% level of confidence and ±5% margin of error (Eq. 25.1)

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

(25.1)
\( n = \text{Sample size.} \)
\( N = \text{Informal businesswomen.} \)
\( e = \text{Precision level as 0.05\%.} \)

### 2.3 Data collection and instruments

Data were gathered from 400 informal businesswomen from June 1 to August 15, 2020, questionnaire survey. Due to low literacy and cultural sensitivity, seven master graduated female administrators were engaged in data collection to assist in the survey. Face masks were distributed voluntarily among study participants. They were guided by the administrators to wear the mask and observe the SOPs while interacting and interviewing businesswomen. The administrators, who were highly supervised by the first author in the whole survey period, were trained not to influence participant’s answers to reduce potential bias in the data collection (Muhammad, Ximei, Saqib, et al., 2020). A questionnaire containing open- and closed-ended questions was drafted and translated into the local language Pashto. The educated participants could use the option to fill in the questionnaire on their own. The drafted questionnaire was first pretested on 30 participants. After pretesting of the questionnaire, modifications were made to the question text. The sales volume of the products offered was reduced to two categories—decrease and increase as no one marked the option of “no effect” in the pretested questionnaire.

### 2.4 Data analysis

#### 2.4.1 Descriptive statistics

The collected data from informal businesswomen were entered and analyzed by using the IBM SPSS 25 software. Descriptive statistics were used to explore the pandemic impacts on the rural–urban areas. Table 25.1 showed frequencies, mean, and standard deviations of the study variables.

#### 2.4.2 Bivariate analysis

Bivariate analysis was performed by using Chi-square to test the differences among the groups. The bivariate test best suits as both the variables were categorical (Hwang, 2008). We have tried to measure the variable in its natural form but for better insights, the continuous variables have been transformed into categories for in-depth analysis. In the first step, the difference between decrease/increase in the products offered, in the rural–urban areas, was analyzed. Fisher exact test was employed on those variables whose frequency was in the range from one to five (Leon, 1998). In the second step, the businesswomen were asked to report their attitude about observing the corona SOPs. A five-point Likert scale was used to record their responses.

### 3. Results

#### 3.1 Descriptive results

The descriptive results about respondent’s demographics in the form of frequency, mean, and standard deviation have been reported in Table 25.1. The mean age of the respondents was 36 years with a standard deviation of 7.31. Of the women entrepreneurs, 36.5\% were...
TABLE 25.1  Descriptive analysis of variables.

| Variables                      | n    | %   | Mean | SD  |
|--------------------------------|------|-----|------|-----|
| Age (years)                    |      |     |      |     |
| 23–32                          | 138  | 34.5|      |     |
| 33–40                          | 146  | 36.5|      |     |
| 41–51                          | 116  | 29.0|      |     |
| Education (years)              |      |     |      |     |
| Illiterate                     | 179  | 44.6|      |     |
| Primary schooling              | 96   | 24.0|      |     |
| Middle schooling               | 42   | 10.5|      |     |
| High schooling                 | 39   | 9.8 |      |     |
| Higher secondary schooling     | 25   | 6.3 |      |     |
| University education           | 19   | 4.8 |      |     |
| Marital status                 |      |     |      |     |
| Single                         | 85   | 21.3|      |     |
| Married                        | 315  | 78.7|      |     |
| Location                       |      |     |      |     |
| Urban                          | 137  | 34.3|      |     |
| Rural                          | 263  | 65.7|      |     |
| Household size (family members)|      |     |      |     |
| 4–7                            | 160  | 40.0|      |     |
| 8–10                           | 119  | 29.7|      |     |
| 11–21                          | 121  | 30.3|      |     |
| Business experience (years)    |      |     |      |     |
| 1–6                            | 117  | 29.3|      |     |
| 7–11                           | 168  | 42.0|      |     |
| 12–26                          | 115  | 28.7|      |     |
| Sales volume (decrease/increase)| |     | 0.67 | 0.47 |
| Decrease in sales volume       | 131  | 32.8|      |     |
| Increase in sales volume       | 269  | 67.2|      |     |

SD, standard deviation.

Field survey (2020).
in the 33–40 age group. Our findings showed that most of the businesswomen were illiterate with a mean education of 4.03. Of the respondents 78.7% were married and 65.7% belong to a rural location. The mean household size comprised 10 members with a standard deviation of 4.06. In addition, 40% of the respondent’s household size comprised of four to seven family members. The entrepreneur’s average business experience was reported 9 years with a standard deviation of 4.94 while 42% of the women have entrepreneurial experience from 7 to 11 years. The sales volume of 67% of businesswomen has been enhanced which confirmed that this COVID-19 pandemic has a good impact on the sales volume of most of the engaged informal businesswomen.

3.2 Bivariate test results

Cross-tabulation of the decrease/increase in the sales volume of products offered in the rural—urban location variables was estimated in Table 25.2. Cloth, beautician, and tailoring reported significant results. The cosmetics and grocery also showed an increase in the rural but the results were found insignificant. The increase in the sales volume of cloth in the rural and urban areas reported 94.4% and 84.1%, respectively. While the tailoring also showed an increase in the rural and urban areas 94.4% and 93%, respectively. However, beautician businesses reported different results. The urban—rural beautician businesswomen showed a decrease of 55% and 87.5%, respectively, in their sales volume.

3.3 Attitude of businesswomen during COVID-19 pandemic

Corona pandemic standard operating procedures pertaining to the attitude of the businesswomen are shown in Table 25.3. The results showed that 56.7% of businesswomen in rural areas were not wearing a mask while traveling, while 64.6% of the respondents have reduced their traveling during COVID-19. The pandemic has affected the mode of traveling and the results showed that 68.6% of the respondents in the urban have changed their mode of traveling. Dealing with customers is also a risky job and 39.4% of the urban women wear masks while 87.5% in the rural areas were found not shaking hands with their customers. 43.1% of the entrepreneurs in the urban areas believe that their business activities have more risk of corona exposure. Of the women entrepreneurs, 67.7% in the rural areas very often followed the social distancing guidelines. The results revealed that 46% of urban women have reduced their social activities. Furthermore, 88.6% in the rural areas don’t follow social distancing in their family set up while 63.5% of the businesswomen in the urban areas keep social distancing in attending social gatherings. 43.1% of the respondents in the urban areas reported that COVID-19 often affected their personal life.

4. Discussion and contribution

The findings of the study showed that most of the businesswomen were not formally educated. A study conducted in Bulgaria revealed no relationship between education and business growth expectations and performance (Lerner et al., 1997; Manolova et al., 2007).
### TABLE 25.2
District Mardan, the difference between decrease/increase in the sales volume of products offered in the rural–urban location.

|          | Cloth | Dairy | Cosmetics | Beautician | Tailoring | Grocery |
|----------|-------|-------|-----------|------------|-----------|---------|
|          | Decrease | Increase | Decrease | Increase | Decrease | Increase | Decrease | Increase | Decrease | Increase | Decrease | Increase | Decrease | Increase |
| Urban    | 13 (15.9) | 69 (84.1) | 11 (52.4) | 10 (47.6) | 11 (32.4) | 23 (67.7) | 11 (55.0) | 09 (45.0) | 10 (18.5) | 44 (81.5) | 04 (28.6) | 10 (71.4) |
| Rural    | 04 (05.6) | 68 (94.4) | 73 (56.6) | 56 (43.4) | 19 (30.6) | 43 (69.4) | 14 (87.5) | 02 (12.5) | 03 (07.0) | 40 (93.0) | 07 (19.4) | 29 (80.6) |
| $x^2$    | 4.14<sup>a</sup> | 0.13 | 0.03 | 4.42<sup>b</sup> | 2.74<sup>a</sup> | 0.48 |

<sup>a</sup>Significance $P < .05$ level.

<sup>b</sup>Significance $P < .01$.

Field survey 2020.
TABLE 25.3 Corona pandemic SOPs and the observant attitude of informal businesswomen.

| Variables                                    | $x^2$ | No Less often | Less often | Often | Very often | All the time |
|----------------------------------------------|-------|---------------|------------|-------|------------|--------------|
| Wear a mask in traveling                    | 16.61 | 208 (52.0)    | 97 (24.3)  | 74 (18.5) | 16 (04.0)  | 05 (01.3)    |
| Urban                                        |       | 57 (41.6)     | 32 (23.4)  | 36 (26.3) | 10 (07.3)  | 02 (01.5)    |
| Rural                                        |       | 149 (56.7)    | 65 (24.7)  | 38 (14.4) | 06 (02.3)  | 05 (01.9)    |
| Reduced traveling                            | 02.38 | 15 (03.8)     | 65 (16.3)  | 38 (14.8) | 252 (63.0) | 09 (02.3)    |
| Urban                                        |       | 06 (04.4)     | 21 (15.3)  | 25 (18.2) | 82 (59.9)  | 03 (02.2)    |
| Rural                                        |       | 09 (03.4)     | 44 (16.7)  | 34 (12.9) | 170 (64.6) | 06 (02.3)    |
| Changed traveling mode of transportation     | 57.12 | 58 (14.5)     | 155 (38.8) | 172 (43.0) | 09 (02.3)  | 06 (01.5)    |
| Urban                                        |       | 08 (05.8)     | 31 (22.6)  | 94 (68.6) | 02 (01.5)  | 02 (01.5)    |
| Rural                                        |       | 50 (19.0)     | 124 (47.1) | 78 (29.7) | 07 (02.7)  | 04 (01.5)    |
| Wear mask dealing with customers             | 26.75 | 16 (04.0)     | 69 (17.3)  | 114 (28.5) | 90 (22.5)  | 111 (27.8)   |
| Urban                                        |       | 07 (05.1)     | 08 (05.8)  | 39 (28.5) | 29 (21.2)  | 54 (39.4)    |
| Rural                                        |       | 09 (03.4)     | 61 (23.2)  | 75 (28.5) | 61 (23.2)  | 57 (21.7)    |
| Shake hands/hug with customers               | 09.35 | 354 (88.5)    | 20 (05.0)  | 08 (02.0) | 09 (02.3)  | 09 (02.3)    |
| Urban                                        |       | 114 (83.2)    | 13 (09.5)  | 03 (02.2) | 03 (02.2)  | 04 (02.9)    |
| Rural                                        |       | 230 (87.5)    | 07 (02.7)  | 08 (03.0) | 09 (03.4)  | 09 (03.4)    |
| Risk at business activities                  | 38.74 | 08 (02.0)     | 110 (27.5) | 162 (40.5) | 108 (27.0) | 12 (03.0)    |
| Urban                                        |       | 02 (01.5)     | 17 (12.4)  | 53 (38.7) | 59 (43.1)  | 06 (04.4)    |
| Rural                                        |       | 08 (03.0)     | 91 (34.6)  | 109 (41.4) | 49 (18.6)  | 06 (02.3)    |
| Follow social distancing in business         | 89.68 | 12 (03.0)     | 20 (05.0)  | 08 (02.0) | 140 (35.0) | 220 (55.0)   |
| Urban                                        |       | 03 (02.2)     | 02 (01.5)  | 02 (01.5) | 89 (65.0)  | 41 (29.9)    |
| Rural                                        |       | 12 (04.6)     | 18 (06.8)  | 08 (03.0) | 47 (17.9)  | 178 (67.7)   |
| Reduction in social activities               | 98.38 | 71 (17.8)     | 113 (28.2) | 141 (35.3) | 53 (13.3)  | 22 (05.5)    |
| Urban                                        |       | 10 (07.3)     | 16 (11.7)  | 63 (46.0) | 44 (32.1)  | 04 (02.9)    |
| Rural                                        |       | 61 (23.2)     | 97 (36.9)  | 78 (29.7) | 09 (03.4)  | 18 (06.8)    |
| Risk perception in social activities         | 04.05 | 18 (04.5)     | 98 (24.5)  | 131 (32.8) | 133 (33.3) | 20 (05.0)    |
| Urban                                        |       | 09 (06.6)     | 33 (24.1)  | 48 (35.0) | 39 (28.5)  | 08 (05.8)    |
| Rural                                        |       | 09 (03.4)     | 65 (24.7)  | 83 (31.6) | 94 (35.7)  | 12 (04.6)    |
Most of the respondents were married. The high married ratio showed that these economic engagements are necessity-driven as families need more resources to meet the necessary expenditures to enhance their individual and family’s health, educational, social, and financial well-being.

The cloth and tailoring in the rural location reported a significant increase in the sales volume. This shows that the pandemic has a good impact on sales of cloth and tailoring businesswomen. The reason for an increase in the sales volume may be: first, due to the social interaction and large family network which can use as a source of the promotional selling strategy (Muhammad et al., 2021). Second, most of the people were shifted into their hometowns due to lockdowns and the closure of businesses. Third, the urban areas and cities were more vulnerable to infection spread and the people preferred to buy from their rural locations which were less risky than urban locations. Fourth, the big markets were closed due to lockdowns and the women preferred to buy from easily available options, near to their localities. Fifth, “Eid Ul Fitr,” Muslims’ religious festival in which people buy (clothes, shoes, and other stuff) for their families, also fell in the pandemic period which would be a possible source of sale increase in the said period. The social, religious, and family gatherings were suspended in the peak corona period. Due to this, beautician business showed a decrease in their sales volume and was adversely affected.

In Pakistan, most people prefer to live in a joint family. The large family size can be used as a strength (Perrons, 2003) to manage work–life balance. Furthermore, it can provide an option of family partnership in the future (Muhammad, Ximei, Saqib, et al., 2020; Tahir et al., 2018). In addition, partnership within the family will help to receive family support (Althalathini et al., 2020; Prasad et al., 2013) which further enhances the chance of business success (Dunn and Holtz-Eakin, 2000; Leung et al., 2020).

### III. Livelihoods

#### TABLE 25.3 Corona pandemic SOPs and the observant attitude of informal businesswomen.—cont’d

| Variables                        | $x^2$ | No (%) | Less often (%) | Often (%) | Very often (%) | All the time (%) |
|----------------------------------|-------|--------|----------------|-----------|----------------|-----------------|
|                                  |       | n (%)  | n (%)          | n (%)     | n (%)          | n (%)           |
| Social distancing in family      | 15.52b| 354 (88.5) | 09 (02.3)     | 11 (02.8) | 10 (02.5)     | 16 (04.0)       |
| Urban                            |       | 118 (86.1) | 02 (01.5)     | 03 (02.2) | 09 (06.6)     | 05 (03.6)       |
| Rural                            |       | 233 (88.6) | 07 (02.7)     | 11 (04.2) | 01 (00.4)     | 11 (04.2)       |
| Social distancing in social      | 109.78b| 29 (07.2) | 24 (06.0)     | 29 (07.2) | 121 (30.3)    | 197 (49.3)      |
| gatherings                        |       |         |               |           |               |                 |
| Urban                            |       | 05 (03.6) | 06 (04.4)     | 05 (03.6) | 87 (63.5)     | 34 (24.8)       |
| Rural                            |       | 24 (09.1) | 18 (06.8)     | 24 (09.1) | 34 (12.9)     | 163 (62.0)      |
| Effect personal life             | 35.72b| 08 (02.0) | 56 (14.0)     | 171 (42.8)| 149 (37.3)    | 197 (49.3)      |
| Urban                            |       | 03 (02.2) | 07 (05.1)     | 59 (43.1) | 52 (38.0)     | 16 (11.7)       |
| Rural                            |       | 05 (01.9) | 49 (18.6)     | 110 (41.8)| 97 (36.9)     | 02 (0.8)        |

*aSignificance P < .05 level.

*bSignificance P < .01.

Field survey 2020.
The business experience can play a role to attract customers by creating goodwill and helps in good decision-making (D’haese et al., 2008). As stated by Muhammad, Ximei, Saqib, et al. (2020) the experience is also a source to build a social network and create a good reputation which can enhance sales. Other findings of a study by Muhammad, Ximei, Saqib, et al. (2020) reported that experience can also help in acquiring finance in the form of credit purchases and discounts as more good relations were developed in the past with other business parties.

The people have different attitudes toward following the SOPs guidelines during the pandemic. Among the entrepreneurs, half of the rural women were not wearing masks during traveling. This is alarming as traveling without observing the pandemic SOPs was very risky and has more chances of virus spreading. The situation is different in the Pakistani patriarchal and cultural society especially in the rural areas of Khyber Pakhtunkhwa. Most of the women use a long, loose garment called Burqa or Niqaab which covers their face and the whole body. It is used as a Purdah (veil) in the Islamic context and women used it while going out of their homes (Muhammad, Ximei, Sharif, & Haq, 2020). The traveling reduction or changing mode of traveling is a part of observing SOPs. Dealing with customers is a risky job that’s why they observe the SOPs guidelines of wearing masks and not shaking hands with customers. The results showed that women entrepreneurs have reduced their social activities. These findings are in line with the findings of a study that reported, the pandemic also affects the social lives of the masses (Bacq et al., 2020). This demonstrates that the pandemic has not only affected the business world but personal and social life has been also affected badly.

Our study contributes to research on women’s entrepreneurship in times of crisis in the following ways. First, it provides an enhanced understanding of the effectiveness of informal businesswomen during economic crises. Second, within the sociocultural norms (Zighan, 2021) in society, women can also increase their family and economic well-being by doing business at home even in the challenging times of a pandemic. Thirdly, these businesswomen can become role models for other women in society as it showed resilience to the COVID-19 pandemic. Fourthly, our study adds to and also confirms recent findings in international published research on women’s entrepreneurship in the wake of the COVID-19 pandemic (Afshan et al., 2021; Ayatakshi-Endow & Steele, 2021; Bonin et al., 2021; Mustafa et al., 2021; Stephens et al., 2021).

We acknowledge that the study in hand is limited to women businesses operating in the informal sector. The fluctuations in the sales volume of the products may be sporadic due to the current pandemic. In normal business time, the results can be different. We have targeted women’s informal businesses. We encourage future research to also explore male-owned businesses in the wake of the current pandemic situation to create new knowledge of the role of gender in informal businesses, and consequently to the entrepreneurship literature.

5. Conclusion

The current COVID-19 pandemic appearance has compelled the world to close their nonessential economic activities and lockdown the infected or more cases reported areas. The long-lasting effect of the pandemic can be felt for many years and the situation is still
uncertain. In today’s worldwide uncertainty, this study is an early indication centered replication on how the current pandemic affects the informal businesswomen in terms of sales volume. Now it is believed that the second layer of the pandemic has started as cases are increasing again. This pandemic gives a signal to families about the informal businesswomen’s role in financing family expenditures as most of the selected business sales have been increased in the pandemic period. The informal sector has been less affected by the ongoing pandemic and lockdowns in Pakistan. The cloth and tailoring show a significant increase, while the beautician has been adversely affected in terms of sales volume. In the situation of economic crunch, these informal businesses can play a vital role in sustaining the livelihood of families regardless of their income volume. In addition, these women will feel secure as income-generating activities can also enhance their decision-making abilities. The government has adopted the policy of smart lockdown and directed the people to follow the corona SOPs. It is also believed that the infected cases can be increased in the winter if the situation is not handled precautionary. By following the government guidelines of social distancing, they can serve the local community by providing products and services socially and responsibly and can earn income for their livelihood. No doubt, their business growth (Muhammad et al., 2021) and income is low as compared to male businesses but can give an edge to support their families and create jobs for others as well (Muhammad, Ximei, Sharif, & Haq, 2020). However, women’s informal businesses can play a crucial role in stabilizing family financial positions during unfavorable circumstances. To consider the current and future insecurity, the government should help financially these insecure entrepreneurs and their families. We recommend emerging rethinking for policymakers to promote these women businesses for their empowerment, which ultimately enhances their family, economic, and societal well-being. Furthermore, in rural settings mass awareness is required about corona SOPs.

References
Afshan, G., Shahid, S., & Tunio, M. N. (2021). Learning experiences of women entrepreneurs amidst COVID-19. *International Journal of Gender and Entrepreneurship, 13*(2), 162–186. https://doi.org/10.1108/IJGE-09-2020-0153
Aju, S. I., & Adeosun, O. T. (2021). Constraints to participation in the management of cooperative societies: Insights for women in Awka community. *Journal of Enterprising Communities: People and Places in the Global Economy, 15*(4), 508–530. https://doi.org/10.1108/JEC-08-2020-0146
Althalathini, D., Al-Dajani, H., & Apostolopoulos, N. (2020). Navigating Gaza’s conflict through women’s entrepreneurship. *International Journal of Gender and Entrepreneurship, 12*(4), 297–316. https://doi.org/10.1108/IJGE-01-2020-0014
Ayatakshi-Endow, S., & Steele, J. (2021). Striving for balance: Women entrepreneurs in Brazil, their multiple gendered roles and Covid-19. *International Journal of Gender and Entrepreneurship, 13*(2), 121–141. https://doi.org/10.1108/IJGE-09-2020-0142
Bacq, S., Geoghegan, W., Josefy, M., Stevenson, R., & Williams, T. A. (2020). The COVID-19 Virtual Idea Blitz: Marshaling social entrepreneurship to rapidly respond to urgent grand challenges. *Business Horizons, 63*(6), 705–723. https://doi.org/10.1016/j.bushor.2020.05.002
Bonin, S., Singh, W., Suresh, V., Rashed, T., Uppaal, K., Nair, R., & Bhavani, R. R. (2021). A priority action roadmap for women’s economic empowerment (PARWEE) amid COVID-19: A co-creation approach. *International Journal of Gender and Entrepreneurship, 13*(2), 142–161. https://doi.org/10.1108/IJGE-09-2020-0148
Daily Dawn. (March 26, 2020). Dawn. Retrieved from https://www.dawn.com/news/1543791.
De Vita, L., Mari, M., & Poggesi, S. (2014). Women entrepreneurs in and from developing countries: Evidences from the literature. *European Management Journal, 32*(3), 451–460. https://doi.org/10.1016/j.emj.2013.07.009

III. Livelihoods
D’haese, M., De Ruijter De Wildt, M., & Ruben, R. (2008). Business incomes in rural Nicaragua: The role of household resources, location, experience and trust. *Entrepreneurship & Regional Development, 20*(4), 345–366.

Dunn, T., & Holtz-Eakin, D. (2000). Financial capital, human capital, and the transition to self-employment: Evidence from intergenerational links. *Journal of Labor Economics, 18*(2), 282–305.

Dush, C. M. K., Yavorsky, J. E., & Schoppe-Sullivan, S. J. J. S. R. (2018). What are men doing while women perform extra unpaid labor? Leisure and specialization at the transitions to parenthood, 78(11–12), 715–730.

Foss, L., & Henry, C. (2021). Women’s entrepreneurship in the wake of the Covid-19 crisis. *International Journal of Gender and Entrepreneurship, 13*(3), 97–105. https://doi.org/10.1108/IJGE-06-2021-202

Higgins, C., Duxbury, L., & Johnson, K. L. (2000). Part-time work for women: Does it really help balance work and family? *Human Resource Management, 39*(1), 17–32.

Hwang, E. (2008). Determinants of job satisfaction among South Korean police officers. *Policing. An International Journal of Police Strategies & Management, 31*(4), 694–714. https://doi.org/10.1108/13639510810910634

ILO. (2020). COVID-19 and the world of work: Impact and policy responses. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_738753.pdf.

Kelikume, I. (2021). Digital financial inclusion, informal economy and poverty reduction in Africa. *Journal of Entrepreneurising Communities: People and Places in the Global Economy, 15*(4), 626–640. https://doi.org/10.1108/JEC-06-2020-0124

Leon, A. C. (1998). 3.12 - descriptive and inferential statistics. In A. S. Bellack, & M. Hersen (Eds.), *Comprehensive clinical psychology* (pp. 243–285). Oxford: Pergamon.

Lerner, M., Brush, C., & Hisrich, R. (1997). Israeli women entrepreneurs: An examination of factors affecting performance. *Journal of Business Venturing, 12*(4), 315–339.

Leung, Y. K., Mukerjee, J., & Thurik, R. (2020). The role of family support in work-family balance and subjective well-being of SME owners. *Journal of Small Business Management, 58*(1), 130–163.

Manolova, T. S., Carter, N. M., Manev, I. M., & Gyoshev, B. S. (2007). The differential effect of men and women entrepreneurs’ human capital and networking on growth expectancies in Bulgaria. *Entrepreneurship: Theory and Practice, 31*(3), 407–426.

Muhammad, S., & Ximei, K. (2020). Islamic financial system: A brief introduction from the literature. *Al-Azhāar, The University of Agriculture, Peshawar, Pakistan, 6*(2), 01–12.

Muhammad, S., Ximei, K., Haq, Z. U., Ali, I., & Beutell, N. (2021). COVID-19 pandemic, a blessing or a curse for sales? A study of women entrepreneurs from Khyber Pakhtunkhwa community. *Journal of Entrepreneurising Communities: People and Places in the Global Economy*. https://doi.org/10.1108/JEC-05-2021-0060 (ahead-of-print).

Mustafa, F., Khursheed, A., Fatima, M., & Rao, M. (2021). Exploring the impact of COVID-19 pandemic on women entrepreneurs in Pakistan. *International Journal of Gender and Entrepreneurship, 13*(2), 187–203. https://doi.org/10.1108/IJGE-09-2020-0149

OECD. (2020). Women at the core of the fight against COVID-19 crisis. Retrieved from https://read.oecd-ilibrary.org/analytics/women-at-the-core-of-the-fight-against-COVID-19-crisis-fi

PBS. (2017-18). Percentage distribution of population by age, sex, and area. Retrieved from http://www.pbs.gov.pk/sites/default/files//Labour%20Force/publications/lfs2017_18/TABLE_1_perc_R.pdf.

Perrons, D. (2003). The new economy and the work–life balance: Conceptual explorations and a case study of new media. *Gender, Work and Organization, 10*(1), 65–93.

Prasad, V. K., Naidu, G. M., Kinnera Murthy, B., Winkel, D. E., & Ehrhardt, K. (2013). Women entrepreneurs and business venture growth: An examination of the influence of human and social capital resources in an Indian context. *Journal of Small Business and Entrepreneurship, 26*(4), 341–364.

Safdar, M., & Yasin, M. (2020). COVID-19: A threat to educated Muslim women’s negotiated identity in Pakistan. *Gender, Work and Organization, 27*(5), 683–694. https://doi.org/10.1111/gwao.12457

Saqib, S.e., Ahmad, M. M., Panezai, S., & Ali, U. (2016). Factors influencing farmers’ adoption of agricultural credit as a risk management strategy: The case of Pakistan. *International Journal of Disaster Risk Reduction, 17*, 67–76.
Shah, M. K., Saddique, U., Ahmad, S., Hayat, Y., ur Rahman, S., Hassan, M. F., & Ali, T. (2017). Isolation rate and antimicrobial susceptibility profiles of Mycoplasma mycoides subspecies capri field isolates from sheep and goats in Pakistan. Small Ruminant Research, 153, 118–122.

Stephens, S., Cunningham, I., & Kabir, Y. (2021). Female entrepreneurs in a time of crisis: Evidence from Ireland. International Journal of Gender and Entrepreneurship, 13(2), 106–120. https://doi.org/10.1108/IJGE-09-2020-0135

Tahir, M. W., Kauser, R., Bury, M., & Bhatti, J. S. (2018). 'Individually-led' or 'female-male partnership' models for entrepreneurship with the BISP support: The story of women’s financial and social empowerment from Pakistan. Women’s Studies International Forum, 68, 1–10. https://doi.org/10.1016/j.wsif.2018.01.011

Thomason, B., & Macias-Alonso, I. (2020). COVID-19 and raising the value of care. Gender, Work and Organization, 27(5), 705–708. https://doi.org/10.1111/gwao.12461

UN. (2020). Sustainable development goals. Retrieved from https://www.un.org/sustainabledevelopment/sustainable-development-goals/

Yamane, T. (1967). Statistics: An introductory analysis. In Harper & row, New York (2nd ed.). Tokyo: Evanston & London and John Weatherhill, Inc.

Zeb, A., & Ihsan, A. (2020). Innovation and the entrepreneurial performance in women-owned small and medium-sized enterprises in Pakistan. Women’s Studies International Forum, 79, 102342. https://doi.org/10.1016/j.wsif.2020.102342

Zighan, S. (2021). Challenges faced by necessity entrepreneurship, the case of Syrian refugees in Jordan. Journal of Enterprising Communities: People and Places in the Global Economy, 15(4), 531–547. https://doi.org/10.1108/JEC-09-2020-0168

III. Livelihoods