COVID-19 impediments and business start-ups in Pakistan: Evidence from the second wave of the pandemic

Bahadur Ali Soomro | Ghulam Rasool Lakhan | Naimatullah Shah

1Department of Economics, Federal Urdu University of Arts, Science and Technology, Abdul Haq Campus, Karachi, Karachi, Pakistan
2Department of Economics, Federal Urdu University of Arts, Science and Technology, Abdul Haq Campus, Karachi, Pakistan
3Department of Public Administration, University of Sindh, Jamshoro, Pakistan

Correspondence
Bahadur Ali Soomro, Department of Economics, Federal Urdu University of Arts, Science and Technology, Abdul Haq Campus, Karachi, Karachi, Pakistan.
Email: bahadur.ali@scholars.usindh.edu.pk

The present paper examines COVID-19 impediments and business start-ups in Pakistan when the country entered the second wave of the COVID-19 pandemic. This study selected entrepreneurs in Pakistan to explore the effects of the second wave. The study findings highlight the significant negative impacts of fear of COVID-19 (FC), COVID-19 stress and anxiety (SA), and perceptions of the arrival of COVID-19's second wave (ASW) on business start-ups (BS). The findings may support policy makers in diminishing the fear, anxiety, and negative perceptions of the arrival of COVID-19 waves.

1 | INTRODUCTION

In the present era, the COVID-19 pandemic has significantly disrupted national and global economies. The World Health Organization (WHO) recently conveyed the information that 196/251 nations have been seriously influenced by COVID-19, representing 80% of the world’s nations (WHO, 2020a). From an economic perspective, China's exports declined by nearly 17.2%. At the same time, Europe, North America, and Asia could not deliver to parts of their global markets. The New York Times (2020) reported that more than 50 start-ups in Silicon Valley laid off 6000 workers in a few weeks due to the COVID-19 pandemic. Various small-scale businesses, start-ups, and entrepreneurs have remained the most vulnerable groups due to the pandemic crisis (Ratten, 2020). Entrepreneurs/industrialists have confronted massive hygiene and health problems that have caused distress to millions or even billions of individuals all over the planet. At the same time, the global economy has experienced an exceptional downturn.

In the context of Pakistan, start-ups were growing rapidly before COVID-19, with start-ups floating over US$32 million in funding in 2019, following US$24.5 million in 2018 (Lilani, 2019). Subsequently, the pandemic hit globally: in Pakistan, many businesses had to stop their operations and processes. In seeking to examine the impact of the pandemic on local businesses or start-ups by entrepreneurs, we have developed questions such as “what factors have impacted on entrepreneurs in starting their businesses?” and “how have they paused their business operations?”

In this way, the present study investigates the impact of fear of COVID-19 (FC), COVID-19 stress and anxiety (SA), and perceptions of the arrival of COVID-19’s second wave (ASW) on business start-ups (BS) among entrepreneurs after the arrival of the pandemic’s second wave. The study findings may help develop a foundation for future investigations of upcoming waves of the pandemic. The study outcomes may further deepen the understanding of the pandemic in relation to fear, anxiety, and perceptions of the arrival of subsequent COVID-19 waves.

2 | LITERATURE REVIEW AND CONCEPTUALIZATION

Globally, almost all national economies have been extremely disrupted due to the COVID-19 pandemic. It has had a catastrophic effect on economies and businesses (Maritz et al., 2020). Small- and medium-sized enterprises (SMEs) and small businesses continue to be significant victims of the pandemic (Shafi et al., 2020). According to Donthu and Gustafsson (2020), the emergence of dangerous viruses affects the economy and seriously affects society and people's lives. The COVID-19 pandemic has significantly deflated sectors such as retail, tourism, and higher education. The behavior of consumers has changed. Leadership issues in business, ethics, and the management of
employees have become dominant. Xia et al. (2018) propose that start-ups, in positioning themselves as offering quality, face significant demand uncertainty in the initial stage. Start-ups position themselves as offering quality to make the most of their probability of survival, but established firms seek to maximize profits. According to Hopp and Martín (2018), risk tolerance and plasticity have positive impacts on selection, while having negative impacts on income derived from entrepreneurship. O’Brien et al. (2003) demonstrate that high uncertainty in the target industry can be affected by investment decisions at firm level and industry level. Based on the perceptions of Dai et al. (2020), the COVID-19 outbreak and subsequent lockdowns have extracted a heavy toll on SMEs in China. Most SMEs had closed with the total number of jobs having decreased.

Schäfer et al. (2020) found that mental health was stable among various participants, although a small number of participants experienced increased psychopathological indications from pre-outbreak to post-outbreak. According to the perceptions of Fabeil et al. (2020), microentrepreneurs have significantly had to face the crisis and have been extremely confused about what decisions they must make for business survival. The COVID-19 pandemic has aroused terror and existential anxiety. Unemployment caused by lockdowns has worsened the life-threatening situation (Mamun & Ullah, 2020). Addo et al. (2020) found sharp dynamics in the connection between fear and the appeal of online purchases in relation to the COVID-19 pandemic. The stock market (before and during lockdowns) went in opposite directions due to the arrival of the pandemic. The lockdown period significantly affected stock performance and various business segments (Anh & Gan, 2020). Factors such as health consciousness, fear, and knowledge of COVID-19 were significant predictors of attitudes towards mask purchases (Shah et al., 2020), van der Wielen and Barrios (2020) claimed that people were expressively more outspoken about the subsequent fear in the European nations hit the hardest in their economic standing. These scholars likened the significance of the COVID-19 lockdown period to the great recession of 2007–2009, during which enormous economic anxiety was observed. Unparalleled policy responses, for example, the reform or implementation of short-term working structures at the onset of the COVID pandemic, do not appear to have mitigated economic anxiety.

Gómez et al. (2020) proposed a substantial effect of the COVID-19 pandemic’s arrival and workplace stress on businesses from the business viewpoint. The pandemic has seriously affected almost all segments of life and the global economy. The adverse impact of COVID-19 has seriously disrupted most newly developed companies and start-ups. Numerous entrepreneurs and start-ups face a substantial decrease in revenue due to the pandemic’s influence on the global supply chain of goods and services (Meahjohn & Persad, 2020). Economies and several commercial sectors (Smith-Bingham & Hariharan, 2020) have collapsed, as have divisions such as aviation, infrastructure, entertainment, tourism, education, electronics, and luxury goods (Accenture, 2020; Smith-Bingham & Hariharan, 2020). In manufacturing units, COVID-19 has interrupted global supply and demand. Industries and individuals have had to confront many issues due to uncertainty and ambiguity in the demand and supply of goods (Guerrieri et al., 2020). The current international economic crisis is a significant consequence of the COVID-19 pandemic. The pandemic and its effects have destroyed the production structures of numerous economies and have opposed economic growth and entrepreneurial processes.

Various scholars have sought to examine different factors, such as social entrepreneurial intention, deep socio-economic crises, high uncertainty, a massive shift towards online learning, and uncertainty in the supply and demand of goods, as they relate to economic and entrepreneurship development during the COVID-19 pandemic (Guerrieri et al., 2020; Ruiz-Rosa et al., 2020). These concerns and uncertainties have produced worries, anxiety, and fear among individuals (Ahorsu et al., 2020). Factors, such as fear, stress, anxiety, and perceptions of the arrival of COVID-19, have had drastic effects on entrepreneurial development and business practices (Ahorsu et al., 2020; Gómez et al., 2020; Pervitchko et al., 2020). Figure 1 illustrates the conceptual model designed for investigation of the factors discussed above.

Fear is commonly considered a negative predictor of business and entrepreneurial performance (Cacciotti et al., 2016). It is a severe threat, destroying individuals’ motivation to undertake business initiatives (Dickson & Giglierano, 1986; Venkataraman, 2002). In the current environment of the COVID-19 pandemic, fear is the producer of concerns, worries, and anxiety among people globally (Ahorsu et al., 2020). Irrefutably, being in contact with people diagnosed as having a positive COVID-19 test result generates considerable fear (Lin, 2020). According to the perceptions of Guan et al. (2020) and Huang et al. (2020), the arrival of COVID-19 and its pandemic environment have intensified fear worldwide. In the complicated situation of the COVID-19 pandemic, managers, business owners, and employees have become unable to make rational decisions to promote their organizations and to generate profits (Wang et al., 2020).

COVID-19 has created several issues disruptive to business in both the short term and long term (Maritz et al., 2020), including companies’ survival strategy and growth prospects (Sedlacek & Sterk, 2020). Isolation and confinement due to COVID-19 outbreaks have significantly enhanced the stress and anxiety observed among individuals (Deloitte, 2020). Individuals’ mental health and emotional state have negatively affected their ability to be productive (WHO, 2004). According to Castro-de-Araujo and Machado (2020), individuals’ poor mental health leads to high economic uncertainty and crisis. Stress is also a significant factor that substantially affects the likelihood of new venture termination, diminishing satisfaction and entrepreneurial performance (Örtqvist, 2007). The exploration by Gómez et al. (2020) underlines the need to recognize individuals’ perceptions of several aspects correlated with pandemics. The arrival of COVID-19 has shown its severe effects on employees and businesses. The consequences of COVID-19 have seriously affected the economy and almost all of society. These effects have also laid the grounds for adverse impacts, dramatic changes in the way in which enterprises act and consumers behave, and supply chain disruption (Donthu & Gustafsson, 2020; Shafi et al., 2020).
In conclusion, the literature related to COVID-19 has highlighted the constructs, namely, fear, anxiety, stress, perceptions of the arrival of COVID-19, consumer behavior, and economic uncertainty, that are significant challenges to the ways in which businesses and entrepreneurship develop (Ahorsu et al., 2020; Donthu & Gustafsson, 2020; Gómez et al., 2020; Pervickho et al., 2020). These factors have been tested with other outcome variables, such as unpredictability of supply and demand; individuals' mental health; attitudes and intentions towards wearing masks; and intentions to start a business during the pandemic (Guerrieri et al., 2020; Shah et al., 2020). Despite this, we found a lack of evidence in developing economies highlighting the effect of pandemic factors during the second wave on businesses or start-ups (Fabeil et al., 2020; Shah et al., 2020). Hence, the study has developed the following hypotheses:

**H1.** Fear of COVID-19 (FC) significantly and negatively affects business start-ups (BS).

**H2.** COVID-19 stress and anxiety (SA) significantly and negatively affect business start-ups (BS).

**H3.** Perceptions of the arrival of COVID-19's second wave (ASW) significantly and negatively affect business start-ups (BS).

3 | METHODS

3.1 | Approach and data initialization

The study's investigation used a quantitative approach. The cross-sectional data were gathered soon after the arrival of the second wave of COVID-19 in Pakistan. We initiated the collection of the data after an official announcement on October 29, 2020, of the arrival of the second COVID-19 wave (UCA News, 2020). At that time, Pakistan confirmed more than 3000 COVID-19 cases, with 59 people dying during the previous 24 h. The National Command and Operation Center (NCOC) of Pakistan also announced that 98 health professionals had died due to the pandemic (UCA News, 2020). On October 29, 2020, Pakistan reported over 1000 COVID-19 cases for the first time since July 2020, confirming that this COVID-19 variant was much more resistant. Health experts of Pakistan had warned the nation that the grasp of a second COVID-19 wave could be more deadly than the first wave.

3.2 | Respondents, data collection, and sample size

Our study selected entrepreneurs in Pakistan as our respondents. Entrepreneurs are significant as they are individuals who constantly face challenges and threats from the economic mechanisms, natural disasters, and human behavior (Doern et al., 2019). Entrepreneurs may feel more uncertainty, boredom, anxiety, and isolation due to business downturns and fluctuations (Shah et al., 2020). They may also feel more grief and fear over the effects of the coronavirus on their families and business (WHO, 2020b).

We employed an online survey as many public and private modes have had to shift online (Liguori & Winkler, 2020), with entrepreneurs not exempt, also having to switch their business activities online. COVID-19 has significantly affected the entrepreneurial engagement of self-employed individuals. Some entrepreneurs have had to momentarily close their businesses due to government restrictions. In the pandemic situation, entrepreneurial activities may have experienced disruption in relation to decision making (Chell, 2013; Kuckertz et al., 2020; Turner & Akinremi, 2020); communication and conflict management (Aldairany et al., 2018); and well-being and entrepreneurial output (Stephan, 2018; Wach et al., 2016). We conducted the
online survey complying with the social distancing policy of the government of Pakistan. An online survey was preferred due to its ability to examine human behavior during times of pandemic as shown in previous studies (Brooks-Pollock et al., 2011; Maheshwari et al., 2020; Sumaedi et al., 2020). Due to movement restrictions, we applied convenience sampling to target entrepreneurs (Sumaedi et al., 2020). In behavioral model testing, this sampling technique is more frequent and is often used (Sumaedi et al., 2016, 2020). In total, 268 usable samples were received for analysis to determine the outcomes.

3.3 | Nonresponse bias

One fundamental concern of data collection, namely, a nonresponse, was considered to avert problems in the survey outcomes (Saunders et al., 2007). Nonresponse bias (NRB) commonly occurs when participants vary significantly from nonparticipants (Armstrong & Overton, 1977; Churchill, 1979). In our study, we traced NRB by assuring that the sample was representative of the general population. We observed that the Mann–Whitney U test compares early and late participants (Weiss & Heide, 1993). The first 50 collected surveys were deemed to be early participants, while the last 50 surveys collected were deemed to be late participants. The score of any construct was not greater than or equal to a probability of .5 (i.e., not significant [n.s.]); subsequently, no substantial variance was found between early and late participants, with no presence of NRB.

3.4 | Measures

3.4.1 | Fear of COVID-19 (FC)

The FC was evaluated on a seven item “fear of COVID-19 scale” using a unidimensional scale with vigorous psychometric characteristics (Ahorsu et al., 2020). Examples of these items on the scale were “I am most afraid of COVID-19” and “It makes me uncomfortable to think about COVID-19.”

3.4.2 | COVID-19 stress and anxiety (SA)

We assessed SA using seven items adopted from the investigation by Gómez et al. (2020). Examples of items on the scale were “I feel prepared for the arrival of COVID-19 to the place where I live” and “I think companies should develop strategies to deal with COVID-19.”

3.4.3 | Perception of the arrival of the second wave of COVID-19 (ASW)

We measured ASW using six items adapted from Madero and Flores (2009, 2010), as employed by Gómez et al. (2020). We slightly modified the items by adding the second wave of the pandemic. Items such as “I feel prepared for the arrival of the second wave of COVID-19 to the place where I live” and “I think that the second wave of COVID-19 will affect people’s work activities” were applied.

3.4.4 | Business/start-up (BS)

We evaluated BS on seven items adapted from Burgos (2020). Examples of items on the scale were “I trust the government’s capability in rescuing start-ups like ours from the negative effect of COVID” and “Our business has cut back expansion plans such as launching into new markets or products.”

We gauged all the items using a 5-point Likert scale (ranging from strongly agree = 1 to strongly disagree = 5).

4 | RESULTS

4.1 | Demography

Only three demographic indicators were observed to determine respondents’ trends in terms of age, gender, and entrepreneurial experience. The demography highlighted mainly males at 73.88% (n = 198) compared to females at 26.12% (n = 70). As far as age was concerned, 44.78% (n = 120) of respondents were aged 31–40 years; 17.91% (n = 48) were aged 20–30 years, while 14.92% (n = 40) were aged 51–60 years (Table 1). Work experience data highlighted that most respondents (50.75%; n = 136) had 5 years of experience; 29.10% (n = 78) of respondents had 16–20 years of experience; while a smaller proportion (7.46%; n = 20) of respondents had over 21 years of experience (Table 1).

| Category     | Frequency | %    |
|--------------|-----------|------|
| Gender       |           |      |
| Male         | 198       | 73.88|
| Female       | 70        | 26.12|
| Total        | 268       | 100.0|
| Age          |           |      |
| Less than 20 years | 04 | 1.49 |
| 20–30 years  | 48        | 17.91|
| 31–40 years  | 120       | 44.78|
| 41–50 years  | 56        | 20.90|
| 51–60 years  | 40        | 14.92|
| Total        | 268       | 100.0|
| Work experience |      |      |
| <10 years    | 20        | 07.46|
| 11–15 years  | 136       | 50.75|
| 16–20 years  | 78        | 29.10|
| 21 years and above | 34 | 12.69|
| Total        | 268       | 100.0|
4.2 | Descriptive statistics and correlations

We calculated descriptive statistics to define the entire sample's representation of data (Hair et al., 1998), with the highest mean score being for BS (at 3.800) and the lowest for FC (at 2.194). At the same time, the maximum standard deviation score was for ASW at 1.304, whereas the minimum value was for FC (1.143) (Table 2). We also ensured the strength of the association (Hair et al., 1998) through a correlation matrix. Consequently, we determined the correlations between all factors (independent) with the dependent variable (Table 2).

**Table 2: Descriptive statistics and correlation matrix**

| Variables                                      | Mean  | SD   | 1    | 2    | 3    | 4    |
|------------------------------------------------|-------|------|------|------|------|------|
| 1. Business/start-ups (BS)                     | 3.800 | 1.143|      |      |      |      |
| 2. COVID-19 stress and anxiety (SA)            | 3.430 | 1.188| .030 |      |      |      |
| 3. Perception of arrival of COVID-19 (ASW)     | 2.923 | 1.304| -.015| .066 |      |      |
| 4. Fear of COVID-19 (FC)                       | 2.194 | 1.237| -.082| -.119| .142*|      |

*Correlation is significant at the .05 level (two tailed).

4.3 | Measurement model

We observed the assumption of factor loadings to evaluate each individual item's reliability. Most items achieved a loading value greater than .70. On the other hand, the items fc57, sa6, and asw5 did not achieve the required value and were deleted from further estimation (Hair et al., 2017). The values of composite reliability (CR) were also found to be between .849 and .880 (Table 3), thus above the suggested value of .70 (Gefen et al., 2000; Kline, 2010). Similarly, we identified the construct's identity through average variance extracted (AVE) values and noticed that AVE values were between .792 and .898.

**Table 3: Measurement model**

| Construct                                      | Item code | Factor loadings | CR   | AVE  | α    |
|------------------------------------------------|-----------|----------------|------|------|------|
| Business/start-ups (BS)                        | bs1       | .883           | .879 | .876 | .827 |
|                                               | bs2       | .870           |      |      |      |
|                                               | bs3       | .853           |      |      |      |
|                                               | bs4       | .841           |      |      |      |
|                                               | bs5       | .782           |      |      |      |
|                                               | bs7       | .734           |      |      |      |
|                                               | bs6       | .728           |      |      |      |
| COVID-19 stress and anxiety (SA)               | sa2       | .890           | .880 | .827 | .898 |
|                                               | sa1       | .871           |      |      |      |
|                                               | sa3       | .854           |      |      |      |
|                                               | sa4       | .832           |      |      |      |
|                                               | sa5       | .789           |      |      |      |
|                                               | sa7       | .766           |      |      |      |
| Perception of the arrival of the second wave of | asw2      | .882           | .849 | .792 | .870 |
| COVID-19 (ASW)                                 | asw3      | .860           |      |      |      |
|                                               | asw4      | .837           |      |      |      |
|                                               | asw6      | .823           |      |      |      |
|                                               | asw1      | .800           |      |      |      |
| Fear of COVID-19 (FC)                          | fc6       | .836           | .876 | .892 | .838 |
|                                               | fc2       | .824           |      |      |      |
|                                               | fc1       | .798           |      |      |      |
|                                               | fc3       | .742           |      |      |      |
|                                               | fc4       | .728           |      |      |      |

Abbreviations: α, Cronbach’s alpha coefficient (reliability); AVE, average variance extracted; CR, composite reliability.
.892 for all constructs (thus, being >.50) (Hair et al., 2010). Lastly, we ensured that the values for Cronbach’s alpha coefficient (α) for all constructs were between .827 and .898 or within the acceptable range of being >.70 (Nunnally & Bernstein, 1994) (Table 3).

### 4.4 | Structural model

By employing structural equation modeling (SEM), we ensured the fitness of the model by observing the values for the model fit indices.

| Model fit indicators | CMIN/df | GFI | AGFI | NFI | CFI | RMSEA |
|----------------------|---------|-----|------|-----|-----|-------|
| Suggested values     | <3      | >0.90 | >0.90 | >0.90 | >0.90 | <0.05 |

Abbreviations: AGFI, adjusted goodness-of-fit index; CFI, comparative fit index; CMIN, $\chi^2$/chi-square; df, degrees of freedom; GFI, goodness-of-fit index; NFI, normed fit index; RMSEA, root mean square error of approximation.

The CMIN = $\chi^2$/chi-square value was noted as 1.662. The values of the other constructs in relation to model fitness were also observed, that is, the goodness-of-fit index (GFI) at 0.972; adjusted goodness-of-fit index (AGFI) at 0.932; normed fit index (NFI) at 0.909; comparative fit index (CFI) at 0.943; and the root mean square error of approximation (RMSEA) at 0.039 (all within adequate values) (Table 4 and Figure 2).

Furthermore, to explore the hypothesized paths, we examined three main indicators, namely, standard error (SE), critical ratio (CR), and $p$ value to gauge the robustness of the effects of predictors on

**TABLE 4** Model fit indices

**FIGURE 2** Structural equation model. BS, business/start-ups; FC, fear of COVID-19; SA, COVID-19 stress and anxiety; ASW, perception of the arrival of the second wave of COVID-19 [Colour figure can be viewed at wileyonlinelibrary.com]
the dependent variable (Sullivan & Feinn, 2012). The findings supported H1, by underscoring the significant negative effect of FC on BS (SE = 0.071, CR = −1.078; p > .1) (Figure 2 and Table 5). Thus, H1 is accepted. Moreover, we observed a nonsignificant effect of SA on BS (SE = 0.082, CR = 1.038; p > .01) (Figure 2 and Table 5). Therefore, these scores indicated acceptance of H2. Lastly, fulfilling our proposal, the weights of SEM for H3 underlined a significant negative effect of ASW on BS (SE = 0.069, CR = −0.301; p > .01) (Figure 2 and Table 5); thus, H3 was accepted.

| H. No. | Independent variables | Path | Dependent variable | Estimate | SE | CR | p   | Decision |
|-------|-----------------------|------|---------------------|----------|----|----|-----|----------|
| H1    | Fear of COVID-19      | ➔    | Business/start-ups | −0.080   | 0.071 | −1.078 | .268 | Accepted |
| H2    | COVID-19 stress and anxiety | ➔   | Business/start-ups | 0.079    | 0.082 | 1.038 | .288 | Accepted |
| H3    | Perception of the arrival of the second wave of COVID-19 | ➔   | Business/start-ups | −0.029   | 0.069 | −0.301 | .752 | Accepted |

Abbreviations: CR, critical ratio; SE, standard error.
***Significance level at p < .05.

5 | DISCUSSION AND CONCLUSION

This study proposed the effects of COVID-19 impediments on business start-ups in Pakistan. We collected the data after the official announcement of the second wave of the pandemic. The base of the study was cross-sectional data. We borrowed validated items, further validating them by conducting the different steps required.

The SEM results found a significant negative effect of FC on BS, thus indicated acceptance of H1. This outcome was in line with that of numerous researchers, for example, Maritz et al. (2020), Shafi et al. (2020), and Dai et al. (2020) who all found the terrible effects of FC on businesses and the overall economy. This result reflected the impact of the pandemic on businesses, with SMEs the most prominent victims. The COVID-19 pandemic has affected commercial activities and social and daily lives of communities and individual people (Donthu & Gustafsson, 2020). The significant negative association between FC and BS has made entrepreneurs afraid through uncomfortable thinking and worried reactions to the pandemic. They may have negative thoughts about COVID-19 as it is an unpredictable disease that can take people's lives. They become more nervous and anxious when watching stories of COVID-19 fatalities on social media. At times, they are unable to sleep well due to worry about the pandemic, even experiencing heart palpitations when thinking about getting COVID-19.

Furthermore, our study found the insignificant effect of SA on BS (with H2 accepted). This finding concurs with previous investigations (Deloitte, 2020; Gómez et al., 2020) that have related stress and anxiety to business and entrepreneurial performance. The finding underlines the point that Pakistan's entrepreneurs face severe problems of stress and tension that make it difficult for them to initiate or run their businesses effectively. They also feel worried or tense about the effects of COVID-19. Sometimes, they procrastinate about their routine entrepreneurial activities when thinking about the impact of the pandemic.

Finally, we found the negative effect of ASW on BS (with H3 supported). The finding is supported by numerous studies, such as the work of Gómez et al. (2020) who also found that ASW and BS have a negative relationship. The present study's finding was also reinforced by that of Fabeil et al. (2020) who claimed that micro-entrepreneurs are significantly confronted by COVID-19 challenges and enormously confused about what decision they must make for the survival of their business. In these conditions, our respondents may feel that if the arrival of the second wave of the pandemic occurred while they were at work, it would affect their work activities. They perceived that the second wave's spread and appearance were significant reasons preventing them from going to work or initiating entrepreneurial activities. In their perceptions, the second wave would collapse the economy and create more financial crises among companies.

In brief, the present study's overall findings reported a significant and negative effect of FC, SA, and ASW on BS (business/start-ups). The results showed that FC, SA, and ASW were the negative factors that affected entrepreneurs in commencing business and entrepreneurial activities. Entrepreneurs were scared due to fear, stress, anxiety, and their perceptions of the arrival of the pandemic's second wave, with these factors causing them to hold off on their business or start-up.

Vaccines protecting against COVID-19 are being rolled out but may be delayed in some countries, with lockdowns possibly continuing in the future. In such situations, governments and policy makers should make serious efforts to diminish fear, particularly among businesses or SME associates, as fear is the negative factor that affects business and entrepreneurial performance (Cacciotti et al., 2016). Fear also creates considerable resistance against making rational decisions (Wang et al., 2020). Such initiatives by governments and policy makers would further boost motivation among business communities to continue their entrepreneurial activities. Similarly, COVID-19's outbreaks and lockdowns have brought stress and anxiety and created confinement and isolation among those engaged in business. These complications may possibly continue until the complete rollout of the vaccine. Therefore, governments must take notice of the critical need to reduce the complexities of mental health and resume creative enterprises.
Furthermore, the chances of the appearance of new waves of COVID-19 pose further threats of adverse effects on employees and businesses. Such threats divert those engaged in business and the minds of consumers, leading to procrastination in business plans and supply chain continuation. Hence, it is necessary to control rumors about further waves of the pandemic so businesses can run smoothly.

6 | LIMITATIONS, IMPLICATIONS, AND FUTURE RESEARCH

The present study is limited due to its use of cross-sectional data collected through a single source. We started the data collection after the announcement of the second wave of the COVID-19 pandemic. We conducted an online survey in which convenience sampling was applied. The study did not involve any theory that may have been relevant for underpinning its conceptualization. Our research was restricted only to entrepreneurs.

The study’s findings will provide paths for making business plans to replan decisions canceled during the pandemic. The results will help entrepreneurs to enter post-COVID-19 markets with different products. The study will also help policy makers to understand situations in which fear and anxiety are created soon after the arrival of new waves of the pandemic. The study will support strategies for overcoming fear, anxiety, and concerns about the pandemic’s arrival to reduce worry and calm racing hearts. The study’s adverse outcomes will further strengthen those engaged in business and entrepreneurs in facing upcoming downturns and challenges related to the COVID-19 pandemic. Finally, the study’s findings will enrich the depth of the literature on psychology, management, and business.

In future, longitudinal studies should be conducted to observe differences in fear, anxiety, and stress arising from different waves and outbreaks of the pandemic. Relevant theories could be used to support the conceptualization to further strengthen such approaches. Respondents, other than entrepreneurs, could be the focus. Finally, other psychological and environmental factors should be explored to observe the effects of upcoming dangerous waves of the pandemic.

REFERENCES

Accenture. (2020). Outmaneuver uncertainty: Navigating the human and business impact of Covid-19. Available at: www.accenture.com/hi-en/about/company/coronavirus-business-economic-impact. (Accessed 25 September 2020).

Addo, P. C., Jiaming, F., Kulbo, N. B., & Liangqiang, L. (2020). COVID-19: Fear appeal favoring purchase behavior towards personal protective equipment. The Service Industries Journal, 40(7-8), 471–490. https://doi.org/10.1080/02642069.2020.1751823

Ahorsu, D. K., Lin, C., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 scale: Development and initial validation. International Journal of Mental Health and Addiction. https://doi.org/10.1007/s11469-020-00270-8

Aldairany, S., Omar, R., & Quoquab, F. (2018). Systematic review: Entrepreneurship in conflict and post conflict. Journal of Entrepreneurship in Emerging Economies, 10(2), 361–383. https://doi.org/10.1108/JEEE-06-2017-0042

Anh, D. L. T., & Gan, C. (2020). The impact of the COVID-19 lockdown on stock market performance: Evidence from Vietnam. Journal of Economic Studies, 48, 836–851. https://doi.org/10.1108/JES-06-2020-0312

Armstrong, J. S., & Overton, T. S. (1977). Estimating non-response bias in mail surveys. Journal of Marketing Research, 14(3), 396–402. https://doi.org/10.1177/00222437701400320

Brooks-Pollock, E., Tilston, N., Edmunds, W. J., & Eames, K. T. (2011). Using an online survey of healthcare-seeking behavior to estimate the magnitude and severity of the 2009 H1N1 influenza epidemic in England. BMC Infectious Diseases, 11(1), 1–8. https://doi.org/10.1186/1471-2334-11-68

Burgos, J. (2020). Asian startups in state of tension amid coronavirus pandemic: Tech in Asia survey. Available at: https://www.techinasia.com/asian-startups-state-tension-coronavirus-outbreak-raises (Assessed on 25 December 2020).

Cacciatore, G., Hayton, J. C., Mitchell, J. R., & Giazzitoglu, A. (2016). A conceptualization of fear of failure in entrepreneurship. Journal of Business Venturing, 31, 302–325. https://doi.org/10.1016/j.jbusvent.2016.02.002

Castro-do-Araujo, L. F. S., & Machado, D. B. (2020). Impact of COVID-19 on mental health in a low and middle-income country. Ciência & Saúde Coletiva, 25(1), 2457–2460. https://doi.org/10.1590/1413-81232020256.1.10932020

Chell, E. (2013). Review of skill and the entrepreneurial process. International Journal of Entrepreneurial Behavior & Research, 19(1), 6–31. https://doi.org/10.1501/ijebre.2013.233

Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. Journal of Marketing Research, 16(1), 64–73. https://doi.org/10.1177/002224377901600110

Dai, R., Feng, H., Hu, J., Jin, Q., Li, H., Wang, R., Wang, R., Xu, L., & Zhang, X. (2020). The impact of COVID-19 on small and medium-sized enterprises: Evidence from two-wave phone surveys in China. Working Paper 549 September 2020, Centre for Global Development, http://www.cgdev.org. Retrieved on 10 September 2020.

Deloitte. (2020). 10 Medidas que deben adoptar las empresas Para afrontar una pandemia. Available at: https://www2.deloitte.com/es/pages/about-deloitte/articles/10-medidas-adopcion-empresasapara-afrontar-pandemia.html (Accessed 10 October 2020).

Dickson, P. R., & Gigglerano, J. J. (1986). Missing the boat and sinking the boat: A conceptual model of entrepreneurial risk. Journal of Marketing, 50(3), 58–70. https://doi.org/10.1177/00222498605000305

Doern, R., Williams, N., & Vorley, T. (2019). Special issue on entrepreneurship and crises: business as usual? An introduction and review of the literature. Entrepreneurship & Regional Development, 31(5–6), 400–412.

Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. Journal of Business Research, 117, 284–289. https://doi.org/10.1016/j.jbusres.2020.06.008

Fabei, N. F., Pazim, K. H., & Langgat, J. (2020). The impact of Covid-19 pandemic crisis on micro-enterprises: Entrepreneurs’ perspective on business continuity and recovery strategy. Journal of Economics and Business, 3(2), 837–844.

Gefen, D., Straub, D., & Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. Communications of the Association for Information Systems, 4, 1–79.

Gómez, S. M., Mendoza, O. E., Ramírez, J., & Olivas-Luján, M. R. (2020). Stress and myths related to the COVID-19 pandemic’s effects on remote work. Management Research, 18(4), 401–420.

Guan, W. J., Ni, Z. Y., Hu, Y., Liang, W. H., Ou, C. Q., He, J. X., Liu, L., Shan, H., Lei, C. L., Hui, D. S. C., Du, B., Li, L. J., Zeng, G., Yuen, K. Y., Chen, R. C., Tang, C. L., Wang, T., Chen, P. Y., Xiang, J., ... Zhang, N. S. (2020). Clinical characteristics of coronavirus disease 2019 in China. New England Journal of Medicine, 382(18), 1708–1720. https://doi.org/10.1056/NEJMoa2002032
Venkataraman, S. (2002). Ten principles of entrepreneurial creation. *Batten Briefings*, 1(1), 1–5.

Wach, D., Stephan, U., & Gorgievski, M. (2016). More than money: Developing an integrative multi-factorial measure of entrepreneurial success. *International Small Business Journal*, 34(8), 1098–1121. https://doi.org/10.1177/0266242615608469

Wang, D., Hu, B., Hu, C., Zhu, F., Liu, X., Zhang, J., & Zhao, Y. (2020). Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus–infected pneumonia in Wuhan, China. *JAMA*, 323(11), 1061–1069. https://doi.org/10.1001/jama.2020.1585

Weiss, A. M., & Heide, J. B. (1993). The nature of organizational search in high technology markets. *Journal of Marketing Research*, 30(2), 220–233. https://doi.org/10.1177/002224379303000207

World Health Organization. (2004). La organizacion del trabajo y el estrés. Available at: www.who.int/occupational_health/publications/pwh3sp.pdf?ua=1 (Accessed 11 October 2020).

World Health Organization. (2020a). WHO Timeline—COVID-19. Available at: https://www.who.int/news-room/detail/27-04-2020-who-timeline—covid-19 (Accessed 27 April 2020).

World Health Organization. (2020b). Coronavirus disease 2019 (COVID-19) situation report–59. Available at: www.who.int/docs/default-source/coronaviruse/situation-reports/20200319-sitrep-59covid-19.pdf?sfvrsn=c3dcdef9_2

Xia, B., Guo, J., & Fung, R. Y. K. (2018). Quality investment timing by the startup and the established firm. *Managerial and Decision Economics*, 39(3), 275–284. https://doi.org/10.1002/mde.2902

How to cite this article: Soomro, B. A., Lakhan, G. R., & Shah, N. (2021). COVID-19 impediments and business start-ups in Pakistan: Evidence from the second wave of the pandemic. *Managerial and Decision Economics*, 42(7), 1909–1918. https://doi.org/10.1002/mde.3445