



Global Business and Economics Review

ISSN online: 1745-1329 - ISSN print: 1097-4954
<https://www.inderscience.com/gber>

**A conceptual approach: relationship between crisis, resilience,
and entrepreneurial actions**

Shikha Bhardwaj

DOI: [10.1504/GBER.2024.10051204](https://doi.org/10.1504/GBER.2024.10051204)

Article History:

Received:	01 May 2021
Accepted:	04 April 2022
Published online:	04 December 2023

A conceptual approach: relationship between crisis, resilience, and entrepreneurial actions

Shikha Bhardwaj

Indian Institute of Management Sambalpur,
Sambalpur – 768006, Odisha, India
Email: shikhab@iimsambalpur.ac.in

Abstract: The paper intends to gain a deeper understanding and give insights into how a crisis influences entrepreneurial behaviour. It reviews the conceptual and developmental papers on crisis management. To formulate and build a distinctive conceptual framework, a review of existing literature focused on entrepreneurship, crisis management and COVID-19 was undertaken. The study identifies the impact of COVID-19 on entrepreneurs, factors that drive entrepreneurial intention during crisis and their entrepreneurial actions. As a result, most of the research studies identify entrepreneurial resilience as a force behind entrepreneurial behaviour during crisis. The factors determining entrepreneurial intention include self-efficacy, positive emotions, growth mindset and fear of failure. The findings act as valuable groundwork for future research on crisis management and entrepreneurship. From social, managerial, policy makers and economic perspective, entrepreneurial action act as catalyst to bounce back from crisis. Therefore, an integrated collaborative support mechanism may result in rise of entrepreneurial actions even during crisis.

Keywords: entrepreneurial action; resilience; crisis; entrepreneurial action; COVID-19.

Reference to this paper should be made as follows: Bhardwaj, S. (2024) 'A conceptual approach: relationship between crisis, resilience, and entrepreneurial actions', *Global Business and Economics Review*, Vol. 30, No. 1, pp.93–106.

Biographical notes: Shikha Bhardwaj presently works as an Assistant Professor – OB and HR at Indian Institute of Management (IIM) Sambalpur. Her current research interests include neuroscience in business, small business and technologies at workplace.

1 Introduction

According to WHO reports, the COVID-19 pandemic resulted in approx. 140 million confirmed cases and more than 3 million confirmed deaths worldwide, affecting every single country. COVID-19 is seen as a global emergency on January 30, 2020 (Sohrabi et al., 2020), and it was declared a global pandemic by the World Health Organisation in March 2020 (Cortez and Johnston, 2020). It created a fear of economic crisis, recession, and high socio-economic uncertainty (Nicola et al., 2020). Social distancing, self-isolation, and travel restrictions have impacted social behaviours and business. The

unprecedented nature of COVID-19 (Gössling et al., 2020) has led to a massive economic decline (Nicola et al., 2020). It was declared a health emergency of international nature. It has not only created a social and economic loss but notably affected all businesses due to its easy spread (Ratten, 2020). The crippling effect can be felt; however, the long-term consequences may downturn the economy later.

Historically much research on entrepreneurship has focused on economic and social development, job creation, and innovation (Ucbasaran et al., 2013). It has a vital role in bringing change in economic, social, institutional, and cultural environments through an individual's entrepreneurial actions or group of individuals (Rindova et al., 2009). Entrepreneurship is the culmination of several entrepreneurial actions. This means that in times of crisis, the entrepreneurial actions need to adapt and learn to survive (Veil, 2011), and most of the literature refers to resilience as the ability to recuperate from and endure disturbances. Others acknowledge a socio-economic system's 'self-adapting capabilities' (Cooke, 2011). Majority of researchers have focused on how crisis affect existing small businesses (Irvine and Anderson, 2004), their response, and what variables improve the odds of their survival (Linnenluecke and Griffiths, 2010) and industry-specific (Ratten, 2020) recovery (Winn et al., 2011) but very few focuses on the potential relationship between COVID-19 and entrepreneurial resilience.

This research paper examines COVID-19 as a crisis and its impact on entrepreneurial actions. Entrepreneurial actions are driven by entrepreneurial mindset. Scholars highlighted that given the information on entrepreneurial actions, entrepreneurs transform crisis into entrepreneurial opportunities through resilience. There are numerous examples of many new and old ventures responding to the crisis through facilitation, restructure, redesign, accelerate, and rebuild the socio-economic community during crisis. However, literature lags the evidence-based research on entrepreneurial actions and crisis management. Although it is important to understand how entrepreneurial actions survive during crisis, it is also critical to conceptualise COVID-19 as a source of innovation and opportunities for new ventures. Identifying, conceiving, and developing new venture opportunities has been identified as a successful entrepreneur (Stevenson and Gumpert, 1985) post disaster, but several in-depth research on these questions has been virtually ignored (Monllor and Altay, 2016).

This research study reviews and examine the conceptual background of COVID-19 as a crisis and Entrepreneurial Resilience to build and formulate an approach that portrays crisis as an antecedent to more entrepreneurial activity as an outcome. To formulate a conceptual framework, subsequent sections of the study are divided into seven parts. Section one covers the background study of COVID-19 disease, role of resilience and research questions. Section two discusses the methodology, followed by conceptual development in section three. Section four covers research framework and formulates propositions. Section five covers the discussion and development of conceptual model. Section five covers conclusion. Last, captures the implication and limitation of the research study.

2 Review background

2.1 *Coronavirus diseases*

In late 2019, a novel COVID-19 was originated in the city of Wuhan, China (Toresdahl and Asif, 2020). It was in early 2020, World Health Organisation (WHO) declared it as 'coronavirus disease' (COVID-19) as a state of global health emergency. Due to contagious nature of the virus, it affected large number of people across various parts of the world. According to WHO report, the virus has similar patterns as other two viruses namely the severe acute respiratory syndrome (SARS) in 2002 and the Middle East respiratory syndrome (MERS). All of them belong to the same COVID-19 family and their vector was peculiar category of animal. In case of COVID-19, most probably it is bat, thus these are Zoonotic form of viruses that spread from animals to humans. COVID-19 showed profound changes in business and economy around the world from creators to consumers (Pantano et al., 2020). Therefore, since beginning of 2020, COVID-19 was taken as a big threat to economy with uncertainty (Kirk and Rifkin, 2020) and high risk for business survival. This makes it hard for entrepreneurs, job creator and process owners to plan for future economic action (Ansell and Boin, 2019).

The unprecedented times have caused stress, anxiety, and fear of unknown. Simultaneously it has given time to pause and rethink the probable opportunities and emerging possibilities as way forward. Literature gives sufficient reasons to believe that during crisis, many risk-taking decisions are taken and during crisis, stakeholders emerge out as better decision makers. It has given time to formulate more sustainable and resilient entrepreneurial activity.

2.2 *Entrepreneurial resilience*

Entrepreneurial resilience as a mix of individual traits or characteristics like flexibility, perseverance, self-efficacy, hope, motivation and hope (Hmieleski et al., 2015; De Vries and Shields, 2006) or entrepreneur's emotional intelligence (Humphrey, 2013) or some behavioural resources used individually to survive in dynamic conditions (Hmieleski et al., 2015). Researchers often use resilience as psychological strength or capital that construct preparedness, hardiness, persistence, or self-efficacy in entrepreneur. This also explains that there is a positive relationship between psychological capital and firm's performance in dynamic environment conditions. Resilient entrepreneurs perform better than their non-resilient peers. Second, certain cognitive and behavioural traits with unique dimensions such social entrepreneurs, humane entrepreneurs, peer to peer entrepreneurs and community entrepreneurs are seen with better surviving skills and ability to adjust to ever changing circumstances to long-term sustainability through innovation (Biggs et al., 2010). Entrepreneurial resilience as "cushion [...] against disruptions" [Danes et al., (2009), p.336], while few studies imply entrepreneurial resilience as coping ability or preparedness, adaptive capacity. Bishop and Shilcof (2017) studied how and why entrepreneurial ventures respond differently in given adverse circumstances of declining industries. They found that entrepreneurial traits and identities determine their differential response to adversity, in other words, entrepreneurial traits influence entrepreneurial actions that's how different venture enact and construe differently. In a longitudinal study on green community entrepreneurship, Gliedt and Parker (2014) used the notion of adaptive resilience as a process of transformative change

from present state to new state. In contrast to this, few literatures used a concept of engineered resilience, skill set that aims to bring back the venture in pre-disruption state. Likewise, few more research showed that resilient micro enterprises not only survived dramatic shocks like earthquakes, economic crisis and terrorism but also lowered their vulnerability to future disruptions in comparison to innovative enterprises. Entrepreneurial resilience enables economies in responsiveness and performance during external shocks, it results from effective planning and improvisation (Williams and Vorley, 2014). Entrepreneurial resilience clearly aims at immediate outcome during crisis and frames four vital entrepreneurial approach: scaling of organisational responses, emergence, entrepreneurial business continuity and improvisation (Linnenluecke and McKnight, 2017). Entrepreneurial resilience is critical and important for entrepreneurial venture during crisis in three ways: it enhances flexibility and therefore better response mechanism to crisis, they are adaptable because of restored preparedness and self-efficacy, and they can find alternate ways to survive in the new normal.

2.3 Research question

Due to COVID-19 many entrepreneurial challenges can generate entrepreneurial intentions to convert inconveniences and coincidences into opportunities (Johannisson and Olaison, 2007), applying entrepreneur's traits and capabilities into practice for survival. The present circumstances have emerged far more serious and prolonged than imagined, thus producing crippling effect across all industry, in contrast signify enormous opportunity of new set of entrepreneurial actions. This means the entrepreneurial actions have two options either to gradually adapt change and return to normal or create an alternate radically to new societal needs, leading to higher entrepreneurial potential.

- RQ1 What is the relationship between challenges faced during crisis and their impact on entrepreneurial actions?
- RQ2 How entrepreneurial resilience can possibly bring enhance entrepreneurial actions outcome during crisis?
- RQ3 Illustrate factors that drive entrepreneurial intention during crisis?
- RQ4 How can these factors be integrated into a conceptual framework to convert entrepreneurial intentions into entrepreneurial actions during crisis?
- RQ5 What key learnings can be derived from conceptual framework?

3 Methodology

The aim was to find research articles that covers topic related to COVID-19, entrepreneurial resilience and recognition of entrepreneurial opportunities or creation during crisis including natural disasters. Mere search from keywords was not sufficient as only few literatures were focused on COVID-19 as crisis, entrepreneurial resilience, and entrepreneurial actions during crisis. Therefore, a criterion-based search of all research articles published in peer-reviewed journals was undertaken. The research study followed

four broad steps in collecting the research studies for review, based on previous studies (Gupta et al., 2020; Hota et al., 2017). These are:

- Step 1 Scopus and Google scholar databases were used for searching the research articles published on crisis and entrepreneurship
- Step 2 Several search terms or strings or keywords were made for the purpose of this study, to retrieve relevant articles published. The search words include ‘crisis’ OR ‘COVID-19’ OR ‘crisis management’ OR ‘COVID-19’ And ‘entrepreneurial resilience’ and ‘entrepreneurship’, ‘entrepreneurial action’, ‘entrepreneurial intention’. The Boolean search ensured that all the published research articles on ‘crisis management’ and ‘entrepreneurship’ were extracted from databases.
- Step 3 To maintain the conceptual as well as methodological rigor, only peer-reviewed journal articles were considered, and a thorough review process of screening to ensure quality was followed. This allowed the author to incorporate only those article that meet the criterion-based need of research study. The step resulted in 75 research articles.
- Step 4 Lastly, to maintain high impact peer-reviewed articles published in the domain of crisis management and entrepreneurship, only those research article with social Sciences citation index (SSCI) were considered. Total 51 articles were considered.

Each research article was thoroughly reviewed to understand the objectives, research questions raised, findings and result drawn. Through this process, the research articles were broadly classified into two broad categories of antecedents and outcomes. A conceptual approach based on results from past studies is developed to illustrate the impact of COVID-19 on entrepreneurial actions. In next section, a series of important concepts that supports the conceptualisation are explained to identify variables and interrelations between them. The study proposes few propositions as distinct conceptual approach, that can be tested further or integrated aspect can provide a deeper sense of understanding the factors influencing entrepreneurial intention during crisis or COVID-19, also explains framing few during crisis recovery strategies.

4 Conceptual development

The danger that economic development can stall because of COVID-19 can force many ventures to scale down operations, close, or move out of the region (Williams and Vorley, 2014). In this regard, reconstruction by resilient communities, region, and societies along with government policy facilitates the ventures to improve business dynamics (Das, 1998). Past studies have shown significant improvement in economy with disruption of existing traditions, policies, and structures, that results in more innovation and entrepreneurship (Monllor and Altay, 2016).

The global pandemic due to COVID-19 is predicted similar Spanish Flu that occurred in 1918–1919 for which no vaccine or treatment existed. Government agencies, local authorities and local entrepreneurs play pivotal role as deeper community-based collective strength for post-disaster recoveries, cumulative knowledge and experience facilitates problem identification and feasible solutions (Sautet, 2008). Private firms and

the for-profit sector play an important role in ‘Whole community’ approach to crisis management, putting the stakeholder’s interest on high (McKnight and Linnenluecke, 2016). Prior experience and knowledge of existing market, consumer, crisis, culture, place an individual into better state to solve problems and discover opportunities created post-disaster (Hajizadeh and Zali, 2016; Shane, 2000). Generally, a crisis occurs in some form of surprise that is unpredictable (Runyan, 2006) in periodic or continual manner (Williams et al., 2017) like Ebola and Zika. But both these crises were largely restricted in a geographical region unlike COVID-19. Thus, the present situation has created a huge sense of uncertainty among all and shifts on the capacity to trigger entrepreneurial passion in individuals towards entrepreneurial drive. Leveraging entrepreneurship during pandemic and post-pandemic will require huge entrepreneurial resilience and exceptional ways to emerge out of situation. Therefore, a collaborative effort from government, regional communities, policy makers, established, new and not so new entrepreneurs will build a collective strength to entrepreneurial resilience. This means all stakeholder’s input must align with entrepreneurship in larger interest post-COVID-19 era.

4.1 Entrepreneurial action

Entrepreneurial action involves a series of actions or a specific event that forces an individual to act in entrepreneurial way. It often begins with acquiring knowledge of a particular situation or condition that generate potential entrepreneurial action such are ‘precipitating events’ (Shapero, 1982). Research states that a sizable amount of entrepreneurial activity is an outcome of significant life events that trigger it (Krueger, 2000). Such events can be positive or negative, constructive or destructive, but disrupts the inertia that guides human behaviour (Shapero, 1982). As a result, such events formulate person-situation learning fit to convert situation into opportunity, therefore individual’s act of establishing a new venture has a close association with entrepreneurial intention (Dimov, 2007) emerging from preceding action (Shook et al., 2003). The seed of entrepreneurship starts from entrepreneurial mindset to entrepreneurial intent, also defined by Thompson (2009) as ‘a self-acknowledged conviction by a person to set up a new business venture and consciously plan for future in context of entrepreneurship. Life changing events often develops displacement in behaviour when an individual had no choice but seek opportunity to change behaviour (Katz, 1992). Several evidence-based research show that a large number of entrepreneurial actions are attributable to displacement (Monllor and Altay, 2016) especially in crisis or disaster. Also, studies indicate higher entrepreneurial perceptions during crisis and individuals tend to recognise opportunities in more than one way, to remove new challenges so that old actions can continue (Brück et al., 2011). Therefore, during crisis the situation may trigger higher entrepreneurial actions to regain socio-economic stability by entrepreneurs.

4.2 Self-efficacy

Research reveals that Self-efficacy has been instrumental in influencing perceptions and individual intentions towards entrepreneurship (Shapero, 1982). Recently self-efficacy has been explained as relevant to environmental obstacles and feasibility (Krueger et al., 2008), construct of entrepreneurial intentions (Krueger, 2000) and leverage inherent entrepreneurial resilience at micro level. It elaborates that why few people have entrepreneurial potential and start their venture while others do not. Self-efficacy means

self-belief, therefore individuals with high self-belief have shown significant entrepreneurial action to start their venture, as they believe in their ability to cope with environmental stress and pressure (Bullough and Renko, 2013).

4.3 Fear of failure

During crisis, any theory or concept related to entrepreneurial action shifts from mere survival and protection to opportunity identification. With higher chances of opportunity during crisis, one needs perseverance and stay motivated. In such context, if an individual lacks self-efficacy and resilience, one may resort to old methods perceived to be less risky or dangerous (Bullough et al., 2014). Fear of failure is largely related to entrepreneurial action. It is a measure of entrepreneurial attitude toward risk and decision making to invest in entrepreneurial action during crisis (Kihlstrom and Laffont, 1979). Fear of failure creates barrier to entrepreneurial intentions (Ardagna and Lusardi, 2008) if one is strongly averse to failure. The psychological barrier reduces the importance of perceived opportunities (Welp et al., 2012) even if the potential opportunities are present.

5 Research framework

In the past, many crisis including SARS epidemic, and many others, have resulted in big dramatic fall and few of them never rebounded. Few entrepreneurs used crisis to coverup their losses by encashing new opportunities like e-commerce and retail. Lower probability of occurrence of crisis means high unpredictability and less planned strategy to manage change (Hills, 1998). COVID-19 has a widespread impact on economic, social, and environmental factors including health making situation complex and difficult. Therefore, the sentiments related to uncertainty needs to be shifted and managed in a positive manner (Shrivastava, 1993). Researchers assume that entrepreneurial resilience are better equipped to deal COVID-19 pandemic, which in turn predicts entrepreneurial success (Ayala and Manzano, 2014). Entrepreneurial resilience has power to invoke actions that can downturn disaster into gradual positive change (Rose, 2007), usually it reflects any venture's stability (Hmieleski et al., 2015) or survival (Saridakis et al., 2013) and superior economic performance.

P1 Resilience moderate the risk of uncertainty in entrepreneurial actions, serving as a protection for better preparedness, adaptability and entrepreneurial success

The notion is built on how the same entrepreneurs act when disposed to different situations. In other words, the entrepreneurs act different when the society or community have basic unmet needs which are essential to addressed for survival and to bring a sense of normalcy. These needs are, therefore, the antecedents of entrepreneurial intention, that directs individuals to indulge in actions. The entrepreneurial action co-exists with entrepreneurial intentions only when collective community resilience by government, private firms, regions, cities, societies or economies dispose. The manifestation of entrepreneurial activities leading to economic growth is integral and in turn the rate of survival increases when disruptions occur (McIntyre, 2009) at macro-level.

P2 Crisis increase entrepreneurial intention when they generate necessity driven opportunity backed by collective community resilience regions and economies

Individual traits determine the cognitive and behavioural configuration of entrepreneurs. They create a distinct form of entrepreneurial potential that foster the ability to bounce back and adjust to new circumstances. Positive emotions protect resilience and help few to thrive (Fredrickson et al., 2003). Entrepreneurial resilience helped entrepreneurs to live a purpose-driven life after hardship or adversity (Tedeschi and Calhoun, 2004), are focused to actions that minimise problems particularly during crisis. They are aimed to bounce back with the sense of normalcy that seems to be difficult during crisis (Carver et al., 1989). The ability to bring back normalcy and adjust to crisis contributes to long-term sustainability through (Biggs et al., 2010)

P3 Positive emotions shields entrepreneurial resilience and fosters to live a purposeful life with a sense of normalcy during crisis

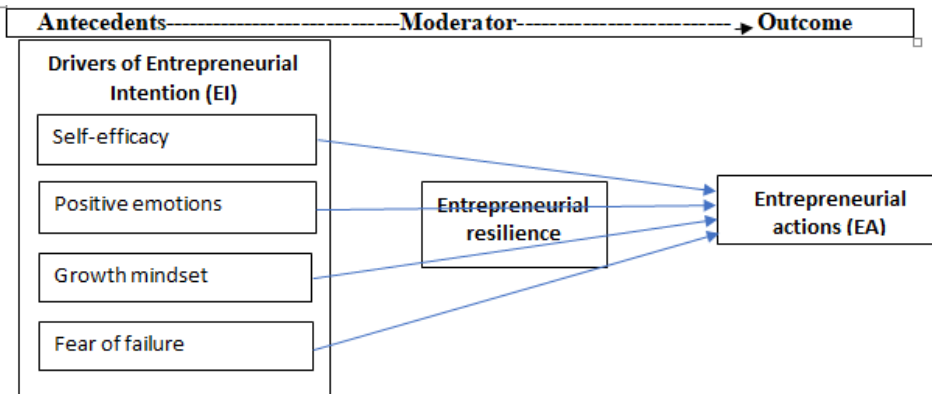
Entrepreneurial ventures play an integral role in capacity building of an economy, scale up the markets and create a chain of opportunities. With the supporting role of stakeholders and proper alignment with necessity driven entrepreneurship, several problems can be converted into opportunities and creating sustainable, long term resilient (Bullough et al., 2014) entrepreneurship after COVID-19. Any ventures established has growth mindset of the entrepreneur to grow and stay for long term. Therefore, a collective growth mindset of entrepreneurial intentions over time, is ultimately by better value creation (Sautet, 2008), more adaptable and better prepared entrepreneurial ventures.

P4 Growth mindset of entrepreneurs bring a drive to recognise better opportunities in crisis with more informed and well-prepared entrepreneurial ventures

These four propositions assist entrepreneurship research with new stimulating questions that how crisis can serve as metamorphosis for entrepreneurial opportunities. Research in the domain may bring new dimensions on importance of entrepreneurship in rebuilding an economy and role of stakeholders in establishing entrepreneurial environment.

Table 1 Propositions effect on entrepreneurship during crisis

<i>Propositions</i>	<i>References</i>
P1 Resilience moderate the risk of uncertainty in entrepreneurial actions, serving as a protection for better preparedness, adaptability, and entrepreneurial success	Ayala and Manzano (2014), Hills (1998), Hmieleski et al. (2015), Rose (2007), Saridakis et al. (2013) and Shrivastava (1993)
P2 Crisis increase entrepreneurial intention when they generate necessity driven opportunity backed by collective community resilience regions and economies	McIntyre (2009)
P3 Positive emotions shields entrepreneurial resilience and fosters to live a purposeful life with a sense of normalcy during crisis	Biggs et al. (2010), Carver et al. (1989), Fredrickson et al. (2003) and Tedeschi and Calhoun (2004)
P4 Growth mindset of entrepreneurs bring a drive to recognise better opportunities in crisis with more informed and well-prepared entrepreneurial ventures	Bulldough et al. (2014), Sautet (2008)

Figure 1 Conceptual framework of EI-EA during crisis (see online version for colours)

6 Discussion

COVID-19 pandemic has created social distress and economic tensions worldwide. It has affected the larger eco-system of economies at macro and micro level. This study explains the role of entrepreneurship in rebuilding the capacity of economy. It explains various unique entrepreneurial traits that drive entrepreneurial intention. It reviews several research papers that review the importance of entrepreneurial resilience during crisis and post crisis. The unprecedented time of global pandemic have forced all stakeholders to think through the alternate sources of entrepreneurship. Hygiene, social distancing, less human interaction, and more machine operated processes have changed the environmental factors for potential entrepreneurs. The study reviews the role of resilience, positive emotion, and growth mindset to formulate a conceptual approach in context of during crisis recovery strategies. Finally, this study formulates four propositions that generates the research questions to build interesting arguments. Consider P1, as the moderating factor between entrepreneurs' behaviour from pre-crisis to during crisis. Resilience builds better adaptability, preparedness and moderates the risk of uncertainty. P1 also reflects that entrepreneurial actions may drive to entrepreneurial success with resilience as a catalyst between two. That may serve as protection to an entrepreneur. Considering P2, crisis as background, during tough times necessity change and any such. These necessity-driven change can only convert into entrepreneurial change if they are backed by community resilience. P3 and P4, further propose importance to the psychological factors that can foster sense of normalcy during crisis, resulting in well informed judgement of opportunities and better preparedness. Entrepreneurs' journey from intention to action, largely demonstrates the combination of cognitive and behavioural actions. Likewise, as explained in The theory of planned behaviour (TPB) by Icek Ajzen (2011), entrepreneurial intentions drive entrepreneurial actions. Entrepreneurship has been largely about taking risk, collecting scarce resources, and converting them profitable opportunities. Their fundamental approach is to identify opportunity, irrespective of crisis or no crisis. Considering this as a contextual, entrepreneurial success is to convert entrepreneurial intention into actions and ultimately establish new ventures. Crisis like COVID-19 is situation, backed with positive emotion

and growth mindset results in recognition of new opportunity. Resilience as a moderator helps to develop a sense of complacency even in worst circumstances and foster a strong motivation to bring life into normalcy.

As mentioned in conceptual framework, entrepreneurship is driven by challenges and each challenge throw larger opportunity in quantum. Historically, every crisis has given rise to new set of entrepreneurs with unique characteristics and distinct entrepreneurial actions. This time too, post COVID-19, new set of entrepreneurs will emerge. Entrepreneurial resilience will act as moderator to bring change.

7 Conclusions

This paper intends to raise understanding of how crisis like COVID-19 can be positively turned to opportunities. Resilience is the moderating variable between intention and action, but with the support of government, local agencies, and others. To sum up, in continuation to conceptual framework, the research study attempts to few research questions. First, to answer RQ1 a criterion-based search of published research articles and thorough review of 51 articles helped to identify relationship between crisis and entrepreneurial actions. For RQ2, the reviewed research articles have been classified into broad categories, and one of the categories highlighted strong influence of entrepreneurial resilience on entrepreneurial action. As a result, it was indicated by scholars that entrepreneurial resilience can be ‘game changer’ during crisis. Third, to response RQ3, three broad categories have been identified after review like entrepreneurial intention, self-efficacy, and fear of failure. To achieve RQ4, all the variables contributing to entrepreneurial intention such as positive emotions and growth mindset were grouped along with factors mentioned in RQ3, to build an integrated conceptual framework. To answer RQ5, a detailed discussion on conceptual framework was undertaken to elaborate the learning drawn from conceptual framework.

Further studies can apply longitudinal studies before COVID-19 and after COVID-19 scenarios to reach a conclusion. Entrepreneurs are the drivers of an economy; thus, it makes a lot of sense to understand how they succeed upon occurrence of a crisis. The research can further state the pull and push factors in entrepreneurial journey of an established as well as aspiring entrepreneur. While what is not addressed in the study, economic factors before the crisis and the trends among these factors. The present approach focuses on necessity-driven and purpose-driven entrepreneurial ventures. The policy makers, researchers and academicians can further study the impact of post crisis on entrepreneurship.

8 Implication and limitations

It will enable policymakers to reshape policies that support and encourage entrepreneurs during crisis and practitioners to build post-pandemic recovery strategies. The work holds a unique perspective and approach that explains entrepreneurial traits motivates entrepreneurial intention these as a result, leads to entrepreneurial actions in crisis. From social perspective, the whole community strength during crisis acts as driver to more entrepreneurial actions. From economic perspective, more purpose-driven entrepreneurial actions foster economy to bounce back and recover fast during crisis. From managerial

perspective, the implication of more need-driven entrepreneurial actions demands more managerial operations and supply that balances socio-economic health. From policy maker perspective, to enable more entrepreneurial action even during tough time policy support and easy access to financial support may be beneficial. Therefore, an integrated collaborative support mechanism may result in rise of entrepreneurial actions even during crisis.

Although the research study has followed a process driven approach in research still it has few limitations. The major limitation is criterion-based selection of research studies. However, the criteria are motivated by the purpose of the research study, but few important studies may have been left out while screening. Second, limitation is the use of four-step research methodology. Third, limitation of conceptual framework, as the model is based on few selected research studies, it may reflect a narrow horizon. Fourth, the dearth of literature in COVID-19 since pandemic is still relevant and affecting most of the countries, the research is ongoing.

References

- Ajzen, I. (2011) 'The theory of planned behaviour: reactions and reflections', *Psychology and Health*, Vol. 26, No. 9, pp.1113–1127.
- Ansell, C. and Boin, A. (2019) 'Taming deep uncertainty: the potential of pragmatist principles for understanding and improving strategic crisis management', *Administration & Society*, Vol. 51, No. 7, pp.1079–1112.
- Ardagna, S. and Lusardi, A. (2008) *Explaining International Differences in Entrepreneurship: the Role of Individual Characteristics and Regulatory Constraints*, Research, N.B.O.E, Cambridge, MA.
- Ayala, J-C. and Manzano, G. (2014) 'The resilience of the entrepreneur. Influence on the success of the business: a longitudinal analysis', *Journal of Economic Psychology*, Vol. 42, pp.126–135.
- Biggs, R., Westley, F.R. and Carpenter, S.R. (2010) 'Navigating the back loop: fostering social innovation and transformation in ecosystem management', *Ecology and Society*, Vol. 15, No. 2.
- Bishop, P. and Shilcof, D. (2017) 'The spatial dynamics of new firm births during an economic crisis: the case of Great Britain, 2004–2012', *Entrepreneurship and Regional Development*, Vol. 29, Nos. 3–4, pp.215–237.
- Brück, T., Llussá, F. and Tavares, J.A. (2011) 'Entrepreneurship: the role of extreme events', *European Journal of Political Economy*, Vol. 27, No. S1, pp.S78–S88.
- Bullough, A. and Renko, M. (2013), 'Entrepreneurial resilience during challenging times', *Business Horizons*, Vol. 56, No. 3, pp.343–350.
- Bullough, A., Renko, M. and Myatt, T. (2014) 'Danger zone entrepreneurs: the importance of resilience and self-efficacy for entrepreneurial intentions', *Entrepreneurship Theory and Practice*, Vol. 38, No. 3, pp.473–499.
- Carver, C.S., Scheier, M.F. and Weintraub, J.K. (1989), 'Assessing coping strategies: a theoretically based approach', *Journal of Personality and Social Psychology*, Vol. 56, No. 2, p.267.
- Cooke, P. (2011) 'Transition regions: regional-national eco-innovation systems and strategies', *Progress in Planning*, Vol. 76, No. 3, pp.105–146.
- Cortez, R. and Johnston, W. (2020) 'The coronavirus crisis in B2B settings: crisis uniqueness and managerial implications based on social exchange theory', *Industrial Marketing Management*, DOI: 10.1016/j.indmarman.2020.05.004.

- Danes, S.M., Lee, J., Amarapurkar, S., Stafford, K., Haynes, G. and Brewton, K.E. (2009) 'Determinants of family business resilience after a natural disaster by gender of business owner', *Journal of Developmental Entrepreneurship*, Vol. 14, No. 4, pp.333–354.
- Das, K. (1998), 'Collective dynamism and firm strategy: study of an Indian industrial cluster', *Entrepreneurship and Regional Development*, Vol. 10, No. 1, pp.33–49.
- De Vries, H. and Shields, M. (2006), 'Towards a theory of entrepreneurial resilience: a case study analysis of New Zealand SME owner operators', *New Zealand Journal of Applied Business Research*, Vol. 5, No. 1, pp.33–43.
- Dimov, D. (2007) 'From opportunity insight to opportunity intention: the importance of personsituation learning match', *Entrepreneurship, Theory and Practice*, Vol. 31, No. 4, pp.561–583.
- Fredrickson, B.L., Tugade, M.M., Waugh, C.E. and Larkin, G.R. (2003) 'What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001', *Journal of Personality and Social Psychology*, Vol. 84, No. 2, pp.365–376.
- Gliedt, T. and Parker, P. (2014) 'Green community entrepreneurship 2.0: collective response or individual adaptation strategy to funding cuts in Canada (2006-2012)', *International Journal of Social Economics*, Vol. 41, No. 7, pp.609–625.
- Gössling S., Scott D. and Hall C.M. (2020). 'Pandemics, tourism and global change: a rapid assessment of COVID-19', *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2020.1758708.
- Gupta, P. and Chauhan, S. (2020). 'Mapping intellectual structure and sustainability claims of sharing economy research – a literature review', *Sustainable Production and Consumption*, Vol. 25, pp.347–362, DOI: 10.1016/j.spc.2020.09.006.
- Hajizadeh, A. and Zali, M. (2016) 'Prior knowledge, cognitive characteristics and opportunity recognition', *International Journal of Entrepreneurial Behavior and Research*, Vol. 22, No. 1, pp.63–83.
- Hills, A. (1998) 'Seduced by recovery: the consequences of misunderstanding disaster', *Journal of Contingencies and Crisis Management*, Vol. 6, No. 3, pp.162–170.
- Hmieleski, K.M., Carr, J.C. and Baron, R.A. (2015) 'Integrating discovery and creation perspectives of entrepreneurial action: the relative roles of founding CEO human capital, social capital, and psychological capital in contexts of risk versus uncertainty', *Strategic Entrepreneurship Journal*, Vol. 9, No. 4, pp.289–312.
- Hota, P.K., Subramanian, B., Narayanmurthy, G. (2017). 'Mapping the Intellectual Structure of Social Entrepreneurship Research: a citation/co-citation analysis', *Journal of Business Ethics*, <https://doi.org/10.1007/s10551-019-04129-4>.
- Humphrey, R.H. (2013) 'The benefits of emotional intelligence and empathy to entrepreneurship', *Entrepreneurship Research Journal*, Vol. 3, No. 3, pp.287–294.
- Irvine, W. and Anderson, A.R. (2004), 'Small tourist firms in rural areas: agility, vulnerability and survival in the face of crisis', *International Journal of Entrepreneurial Behavior and Research*, Vol. 10, No. 4, pp.229–246.
- Johannisson, B. and Olaison, L. (2007) 'The moment of truth—reconstructing entrepreneurship and social capital in the eye of the storm', *Review of Social Economy*, Vol. 65, No. 1, pp.55–78.
- Katz, J. (1992) 'Modeling entrepreneurial career progressions: concepts and considerations', *Entrepreneurship Theory and Practice*, Vol. 19, No. 2, pp.23–39.
- Kihlstrom, R.E. and Laffont, J-J. (1979) 'A general equilibrium entrepreneurial theory of firm formation based on risk aversion', *The Journal of Political Economy*, Vol. 87, No. 4, pp.719–748.
- Kirk, C.P. and Rifkin, L.S. (2020) 'I'll trade you diamonds for toilet paper: consumer reacting, coping and adapting behaviors in the COVID-19 pandemic', *Journal of Business Research*, DOI: 10.1016/j.jbusres.2020.05.028.

- Krueger, N.F. (2000) 'The cognitive infrastructure of opportunity emergence', *Entrepreneurship: Theory and Practice*, Vol. 24, No. 3, pp.5–23.
- Krueger, N.F., Schulte, W.D. and Stamp, J. (2008), 'Beyond intent: antecedents of resilience and precipitating events for social entrepreneurial intentions and...action', *USASBE 2008 Proceedings*, January 25 [online] <http://ssrn.com/abstract=1155264> (accessed 7 September 2020).
- Linnenluecke, M. and Griffiths, A. (2010) 'Beyond adaptation: resilience for business in light of climate change and weather extremes', *Business and Society*, Vol. 49, No. 3, pp.477–511.
- Linnenluecke, M.K. and McKnight, B. (2017) 'Community resilience to natural disasters: the role of disaster entrepreneurship', *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 11, No. 1, pp.166–185.
- McIntyre, N. (2009) 'Rethinking amenity migration: integrating mobility, lifestyle and social ecological systems', *ERDE*, Vol. 140, No. 3, pp.229–250.
- Mcknight, B. and Linnenluecke, M.K. (2016) 'How firm responses to natural disasters strengthen community resilience: a stakeholder-based perspective', *Organization and Environment*, Vol. 29, No. 3, pp.290–307.
- Monllor, J. and Altay, N. (2016) 'Discovering opportunities in necessity: the inverse creative destruction effect', *Journal of Small Business and Enterprise Development*, Vol. 23 No. 1, pp.274–291.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C. and Agha, R. (2020) 'The socio-economic implications of the coronavirus pandemic (COVID-19): a review', *International Journal of Surgery*, Vol. 78, pp.185–193.
- Pantano, E., Pizzi, G., Scarpi, D. and Dennis, C. (2020) 'Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak', *Journal of Business Research*, DOI: 10.1016/j.jbusres. 2020.05.036.
- Ratten V. (2020) 'Coronavirus disease (COVID-19) and sport entrepreneurship', *International Journal of Entrepreneurial Behavior and Research*, Vol. 26, No. 6, pp.1379–1388.
- Rindova, V., Barry, D. and Ketchen, D.J. (2009) 'Entrepreneurship as emancipation', *Academy of Management Review*, Vol. 34, No. 3, pp.477–491.
- Rose, A. (2007) 'Economic resilience to natural and man-made disasters: multidisciplinary origins and contextual dimensions', *Environmental Hazards*, Vol. 7, No. 4, pp.383–398.
- Runyan, R.C. (2006) 'Small business in the face of crisis: identifying barriers to recovery from a natural disaster 1', *Journal of Contingencies and Crisis Management*, Vol. 14, No. 1, pp.12–26.
- Saridakis, G., Mole, K. and Hay, G. (2013) 'Liquidity constraints in the first year of trading and firm performance', *International Small Business Journal*, Vol. 31, No. 5, pp.520–535.
- Sautet, F. (2008) 'Ventures in rebuilding: the role of entrepreneurship in the post-disaster context', *Local Knowledge*. No. 1 [online] <https://ssrn.com/abstract=1263978> (accessed 8 September 2020).
- Shane, S. (2000) 'Prior knowledge and the discovery of entrepreneurial opportunities', *Organization Science*, Vol. 11, No. 4, pp.448–469.
- Shapiro, A. (1982) 'Social dimensions of entrepreneurship', in Kent, C.A., Sexton, D.L. and Vesper, K.H. (Eds): *The Encyclopaedia of Entrepreneurship*, pp.72–90, Prentice-Hall, Englewood Cliffs, NJ.
- Shook, C.L., Priem, R.L. and McGee, J.E. (2003) 'Venture creation and the enterprising individual: a review and synthesis', *Journal of Management*, Vol. 29, No. 3, pp.379–399.
- Shrivastava, P. (1993) 'Crisis theory/practice: towards a sustainable future', *Industrial and Environmental Crisis Quarterly*, Vol. 7, No. 1, pp.23–42.
- Sohrabi C., Alsafi Z., O'Neill N., Khan M., Kerwan A., Al-Jabir A (2020) 'World Health Organization declares global emergency: a review of the 2019 novel coronavirus (COVID-19)', *International Journal Surgeon*, Vol. 76, pp.71–76.

- Stevenson, H.H. and Gumpert, D.E. (1985) 'The heart of entrepreneurship', *Harvard Business Review*, Vol. 85, No. 2, pp.85–94.
- Tedeschi, R.G. and Calhoun, L.G. (2004) 'Posttraumatic growth: conceptual foundations and empirical evidence', *Psychological Inquiry*, Vol. 15, No. 1, pp.1–18.
- Thompson, J. (2009) *Performance Affects: Applied Theatre and the End of Effect*, Springer.
- Toresdahl, B.G. and Asif, I.M. (2020) 'Coronavirus disease 2019 (COVID-19): considerations for the competitive athlete', *Sports Health*, Vol. 12, No. 3, pp.221–224.
- Ucbasaran, D., Shepherd, D.A., Lockett, A. and Lyon, S.J. (2013) 'Life after business failure: the process and consequences of business failure for entrepreneurs', *Journal of Management*, Vol. 39, No. 1, pp.163–202.
- Veil, S.R. (2011) 'Mindful learning in crisis management', *Journal of Business Communication*, Vol. 48, No. 2, pp.116–147.
- Welpel, I.M., Spörrle, M., Grichnik, D., Michl, T. and Audretsch, D.B. (2012) 'Emotions and opportunities: the interplay of opportunity evaluation, fear, joy, and anger as antecedent of entrepreneurial exploitation', *Entrepreneurship Theory and Practice*, Vol. 36, No. 1, pp.69–96.
- Williams, N. and Vorley, T. (2014) 'Economic resilience and entrepreneurship: Lessons from the Sheffield City Region', *Entrepreneurship and Regional Development*, Vol. 26, pp.3–4, DOI: 10.1080/08985626.2014.894129
- Williams, T.A., Gruber, D.A., Sutcliffe, K.M., Shepherd, D.A. and Zhao, E.Y. (2017), 'Organizational response to adversity: fusing crisis management and resilience research streams', *Academy of Management Annals*, Vol. 11, No. 2, pp.733–769.
- Winn, M., Kirchgeorg, M., Griffiths, A., Linnenluecke, M.K. and Günther, E. (2011) 'Impacts from climate change on organizations: a conceptual foundation', *Business Strategy and the Environment*, Vol. 20, No. 3, p.157.
- World Health Organisation (2020) *Coronavirus Disease (COVID-19) Outbreak* [online] <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> (accessed 8 September 2020).