

Shelter from The Storm: A Systematic Review of Entrepreneurial Approach to Crisis

Gautam Huidrom
XLRI Xavier School of Management

Arindam Mondal
XLRI Xavier School of Management

The frequency and severity of disasters have recently increased. Disaster mitigation approaches have gained interest in diverse fields. This review examines entrepreneurial actions during crises from an entrepreneurial perspective, focusing on non-economic crises such as earthquakes, volcanoes, and pandemics. Using a systematic review methodology and PRISMA guidelines, 91 articles were analyzed through narrative synthesis. The results show that building social capital and entrepreneurial activities through social bricolage is crucial for community resilience. This review emphasizes a socially engaged, context-specific approach to disaster mitigation that promotes novel and sustainable interventions.

Keywords: crisis, effectuation, social capital, systematic literature review, resilience

INTRODUCTION

When Coronavirus disease 2019 (COVID-19) became a pandemic, the world changed in just a few weeks. It took center stage in every aspect of our lives, whether domestic, professional, or industrial. Moreover, many businesses, both large and small, had to reorient themselves to the ‘new normal’ and continue producing goods and services, despite the challenges. This situation provided a unique scenario for observing and studying the entrepreneurial actions of small businesses, policymakers, and people in general. COVID-19, being a novel and undeclared external threat, required people to respond uniquely to manage the situation in different countries. This scenario also resulted in an increase in research on COVID-19 and its related issues in different disciplines. Over the last two years, the issue of crises and their management has become a buzzword, prompting considerable research interest. Consequently, the number of articles dedicated to crises and their management has increased.

Considering this, the current review focuses on crisis management and entrepreneurship. The objective of this review is to bring coherence to the study of crises and entrepreneurship. The COVID-19 pandemic has thrust researchers into dealing with various issues (Alvaro et al., 2022; Bressan et al., 2021; Brown & Rocha, 2020; Dai et al., 2021; Duarte Alonso et al., 2021; Giones et al., 2020; Haneberg, 2020; Kuckertz et al., 2020; Prah & Sibiri, 2021; Ratten, 2021; Stephens et al., 2021; Vazirani and Bhattacharjee, 2022). One aspect of research in the crisis field is the contested debate on the definition of crisis. This issue could stem from the fact that there are various crisis types, and each context could give rise to different issues related to a particular crisis context. Therefore, one of the objectives of this review is to categorize crises

by their source or origin. The categorization of the origin of crises will be limited to non-economic crises, such as disasters, earthquakes, volcanic eruptions, and pandemics. Economic factors are excluded from the origin of the crisis because the pre-crisis preparation and post-crisis recovery processes are well-trodden paths. Several studies in this area have highlighted issues related to economic crises (Bagiatis et al., 2020; Bishop, 2019; Bishop & Shilcof, 2017; Bougrine & Rochon, 2015; Cadil et al., 2021; Castaño et al., 2016; Devece et al., 2016; Giotopoulos et al., 2017; Izquierdo et al., 2008; Kapetaniou et al., 2018; Kottika et al., 2020, 2020; Paramita et al., 2022; Peric & Vitezic, 2016; Williams et al., 2013; Williams & Vorley, 2014).

In the case of a crisis that is non-economic in origin, due to the rarity of such incidents and the specificity of the context of each particular crisis, it is important to determine whether there are any commonalities among pre-crisis preparedness and post-recovery strategies. A crisis is unexpected and occurs without a pattern. Therefore, people in the vicinity of the crisis are important stakeholders in preparing for the crisis and during the immediate and long-term recovery processes. Additionally, studies have suggested that entrepreneurs with strong local ties to the community play an important role during a crisis (Berno, 2017; Dimitriadis, 2021; Lee et al., 2019). Therefore, this review examines the role of entrepreneurial actions before and after a crisis and how crises affect the process of entrepreneurship. Furthermore, the context of studying entrepreneurial action usually involves crises such as earthquakes, pandemics and riots (Dimitriadis, 2021; Kirkwood et al., 2017; Vazirani & Bhattacharjee, 2022). It is imperative that scholars examine each of these studies in terms of the commonalities and divergences of crisis planning and response strategies. Therefore, this review examined crises that are external and non-economic in nature.

WHAT IS A CRISIS?

A crisis has been defined as ‘...an extreme, unexpected or unpredictable event that requires an urgent response from organizations and creates challenges for them’ (Doern et al., 2016). The concept of crisis comprises many facets, and the definition of crisis also indicates a diversity of definitions. Hermann (1963) describes a crisis with three main characteristics: he suggested that a crisis has the characteristics of a significant threat, a short decision time and an element of surprise. However, if we consider another type of crisis where people live under an impending threat, the continuous threat could have different characteristics, thus requiring different forms of response. Additionally, Hannah et al. (2009) definition of crisis presents a nuanced understanding of crisis. According to them, a crisis in the context of business consists of two types. The first is an everyday, mundane crisis, such as a computer error or logistics problem, which is a common occurrence. The second is a rarer and extreme event, where the outcomes are unbearable and overwhelm the resources of a business. The term ‘extreme context’ refers to an event that is currently happening or is likely to occur and depletes the physical and psychological resources of the stakeholders of a business. This definition of crisis is consistent with the notion that crises are occurring or likely to occur.

A different approach to examining a crisis is to dissect it into a series of phases (Spillan & Hough, 2003). According to Spillan & Hough (2003), a crisis consists of six sequential phases. The stages are as follows: i) pre-crisis or incubation, ii) event, iii) crisis response management, iv) investigation, v) organizational learning, and iv) implementation. Delineating crises into phases helps businesses and entrepreneurs examine their actions and effectiveness during crises. Most studies on crises and their management typically focus on pre- and post-crisis issues (Doern et al., 2016). This limitation makes it challenging to assess the effectiveness of crisis planning and post-crisis management. The framework of a crisis as a sequence of events presents a manageable picture of crises and crisis management.

There is yet another way of looking at a crisis, which is to examine it in terms of its origin. The origin of a crisis can be internal or external to an organization’s boundaries. The origin of the crisis can be categorized as technical, human, natural, social, or organizational (Gorski, 1998; Mitroff et al., 1987). Studies on crises in management and entrepreneurship have largely centered on issues related to their economic origins, such as the financial crisis of 2008 (Williams & Vorley, 2014, 2015). These studies examine how firms respond after an economic crisis (Bagiatis et al., 2020; Beliaeva et al., 2020; Devece et al., 2016; Peric & Vitezic, 2016). Additionally, they highlighted strategies such as strategic renewal,

innovation, opportunity exploration, diversification of knowledge, and improvement of financial slack. One area of crisis management is categorizing crises based on their origin. This review distinguishes between the origins of crises as either economic or non-economic in nature. Non-economic triggers of crises stem from natural calamities, man-made disasters, pandemics, conflicts, or war situations. These non-economic crises are unstructured by nature. They have the potential to cause bodily harm and differentiate themselves from economic crises by their ability to cause damage, both physically and psychologically, either immediately or in the long run. Therefore, this review examines non-economic crises and how entrepreneurial action can mitigate their consequences. It also investigates the characteristics of non-economic crises and identifies successful entrepreneurial actions that have helped mitigate these crises. Furthermore, it will analyze how non-economic crises have impacted entrepreneurial action.

THE METHODOLOGY OF THE REVIEW

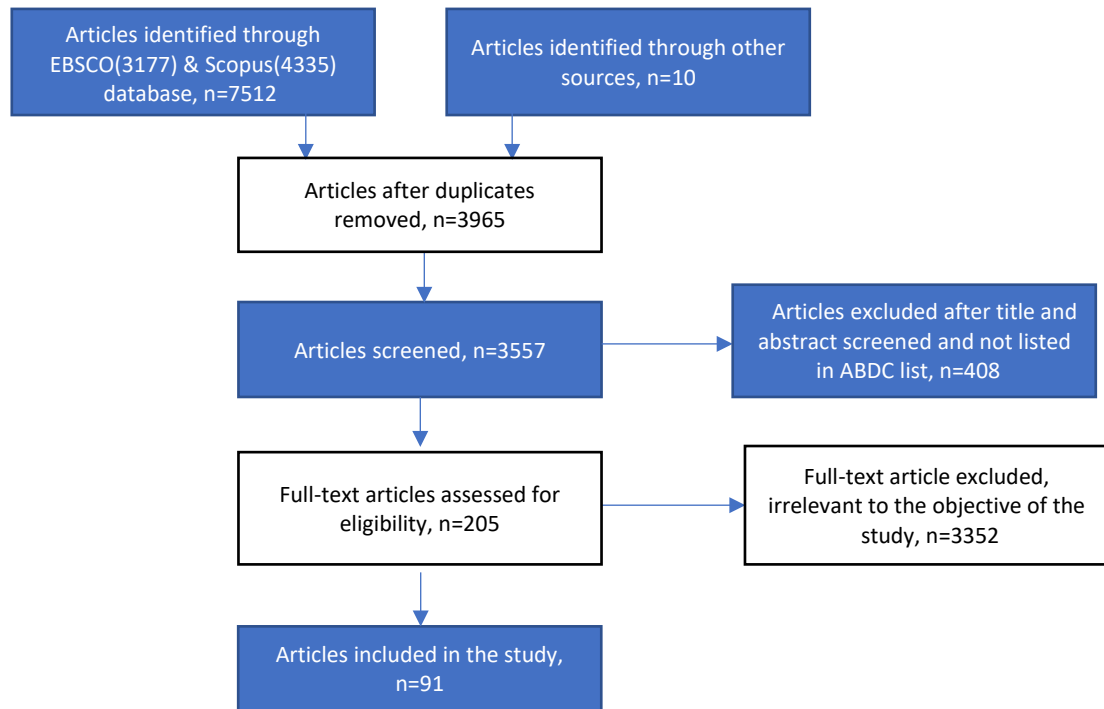
This review examines issues related to crises and entrepreneurship. Additionally, this research aims to highlight two major goals: i) how crises impact entrepreneurial behavior and ii) how entrepreneurial action influences crises. This study adopted a process view of crisis (Buchanan & Denyer, 2013; Doern et al., 2016), which helped us unravel the crisis components and the sequence of events. Through this lens, we gained a better understanding of the role of entrepreneurial action and its impact on crises. The review paper also limited the origin of the crisis. There are numerous sources of crises in the business context. The crisis can stem from internal issues within the organization or from external factors. This study was limited to external factors. Earlier studies have examined the role of crises in entrepreneurship, discussing both internal and external factors of origin. This review distinguishes between the two causes, as they could have different ramifications in terms of crisis planning and management. Some external causes of crises include economic factors, natural calamities, and pandemics. This review focuses on the non-economic factors that contribute to crises. Economic factors, which have been extensively studied in various disciplines, including entrepreneurship, were excluded from this review. Moreover, external factors that are non-economic in origin have received less attention in the field of entrepreneurship. By examining the non-economic causes of crises and their impact on entrepreneurship, this review extends the body of knowledge related to entrepreneurship and crises in new avenues.

This review systematically searched for issues related to crises and entrepreneurship. We followed the guidelines described by Tranfield et al. (2003) for conducting a systematic review in the field of management. The spirit of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) model was adopted while conducting this review (Rojon et al., 2021). Two major databases, EBSCO and Scopus, were used to systematically search the literature. The two databases were chosen because they aggregate content from most of the prominent publishers of journals in the field of entrepreneurship, such as Elsevier, Springer, Emerald, and Sage. Within the EBSCO database, the search was limited to Academic Search Premier, Entrepreneurial Source, American Psychological Association (APA) Psych Articles, and Entrepreneurial Studies Source. In both databases, the field was limited to business, management, economics, psychology, and social sciences, considering the topic of interest. Overall, the search was limited to peer-reviewed journals, published papers, and English-language journals. Journals in press were also excluded from the study. The search was conducted by reviewing selected papers related to crises and entrepreneurship. Subsequently, the keywords used for the search were examined. For example, the keywords shown in Table 1 were used in the study, and the Boolean search term, for example, 'entrepreneur* AND disaster', was adopted during the search. A search for titles, abstracts, and keywords of articles was conducted in the study, which resulted in 7,512 articles from both databases, with 4,335 from Scopus and 3,177 from EBSCO databases. After removing duplicates, the search resulted in 3,965 articles remained. The study also included other relevant articles (n=10) from the Google Scholar database. Next, the articles were screened for eligibility by examining the titles and abstracts based on the scope of the study.

**TABLE 1
DATABASE SEARCH METHOD**

Search Method
TITLE-ABS-KEY (entrepreneur* AND 'natural calamity' OR 'natural-calamity')
TITLE-ABS-KEY (entrepreneur* AND disaster)
TITLE-ABS-KEY (entrepreneur* AND crisis)
TITLE-ABS-KEY (entrepreneur* AND pandemic)
TITLE-ABS-KEY (entrepreneur* AND conflict OR 'post conflict')
TITLE-ABS-KEY (entrepreneur* AND crisis OR 'crisis management' or 'crisis preparedness' or 'post conflict')
TITLE-ABS-KEY (entrepreneur* AND 'business continuity')
TITLE-ABS-KEY (entrepreneur* AND 'organizational resilience' OR resilience)
TITLE-ABS-KEY (entrepreneur* AND crisis)
TITLE-ABS-KEY (entrepreneur* AND 'post conflict')
TITLE-ABS-KEY (entrepreneur* AND 'natural calamities')
TITLE-ABS-KEY (entrepreneur* AND pandemic)
TITLE-ABS-KEY (entrepreneur* AND disaster)
TITLE-ABS-KEY (entrepreneur* AND 'crisis management' OR 'crisis preparedness' OR 'emergency response')

**FIGURE 1
REVIEW PROTOCOL**



The screening was also based on a list of journals included in the Australian Business Deans Council’s (ABDC) journal list. This was done to ensure the quality of the research materials collected for the review. This resulted in 3,557 articles being identified. The list of references to full-text articles on crises and entrepreneurship was further screened to exclude articles based on economic factors. The exercise resulted in 205 articles consisting of crises and entrepreneurship articles that were non-economic in origin. The final list of journal articles included in the study comprised 91 articles relevant to the objectives of the study. A summary of the protocols followed in the systematic review search is presented in Figure 1. The review examined 91 selected papers and used a narrative synthesis approach. This review concentrates on how entrepreneurial behavior affects crises and vice versa. The study also examined the theoretical perspectives adopted by the researchers and the methodologies used in their studies. This framework of analysis has been suggested by other researchers and adopted in their studies (Callahan, 2014; Gregory & Denniss, 2018).

FINDINGS & ANALYSIS

This review covered the period from 2007 to 2022 in terms of the publication year of the selected research papers. The number of research papers examining crises and entrepreneurship, particularly those originating from non-economic factors, has increased significantly over the last two years (Table 2). The pandemic underscored the centrality of this issue for researchers examining entrepreneurial behavior and crisis-related issues.

TABLE 2
NUMBER OF CRISIS-RELATED ARTICLES OF NON-ECONOMIC IN ORIGIN

Year of Journal Publication	No. of Journals
2022	4
2021	21
2020	26
2019	10
2018	4
2017	8
2016	6
2015	1
2014	4
2013	0
2012	1
2011	5
2010	1
2009	0
2008	0
2007	1

Figure 2 provides the diversity of journals in which issues related to crises and entrepreneurship stemming from non-economic factors, such as pandemics, earthquakes, floods, and conflicts, were published. Specialized entrepreneurship journals such as Entrepreneurship and Regional Development, International Journal of Entrepreneurial Behaviour & Research, Journal of Business Venturing Insights, Journal of Enterprising Communities, and Journal of Entrepreneurship in Emerging Economies have published substantial articles on topics relevant to the review’s scope.

**FIGURE 2
MOST RELEVANT JOURNALS**

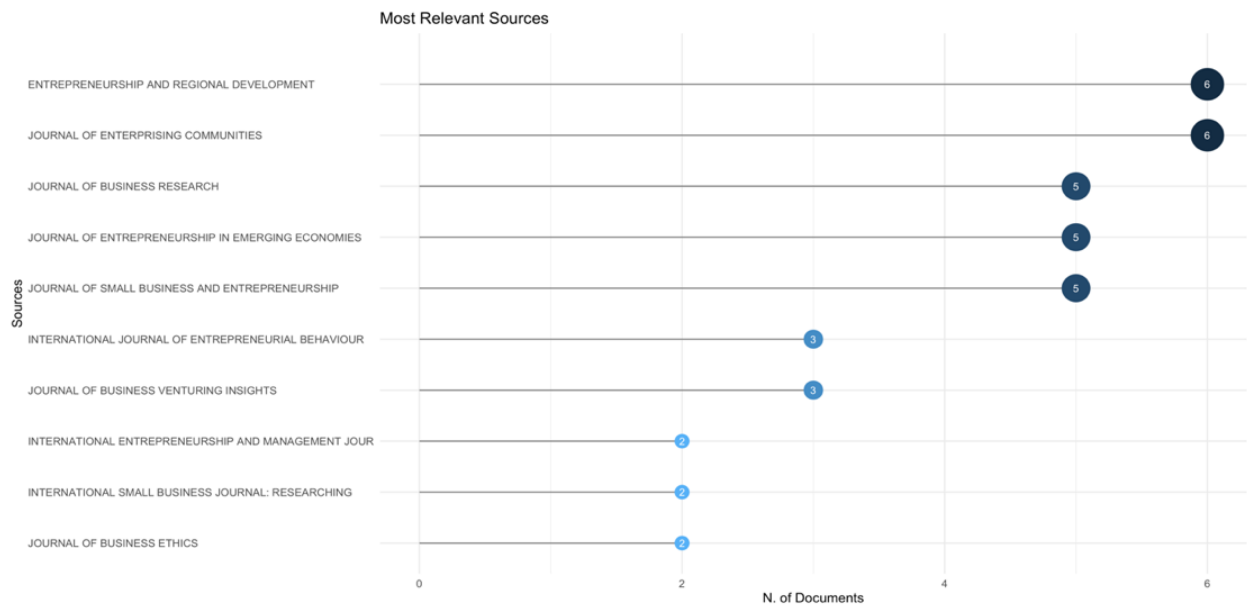


Figure 3 presents the most relevant authors related to crises and entrepreneurship resulting from non-economic factors, and Figure 4 presents a keyword analysis in the field, highlighting the core issues of crisis and entrepreneurship and the major causes of non-economic crises. The overall bibliometric analysis emphasizes the key papers and most relevant authors in the field (Aria & Cuccurullo, 2017). Furthermore, it underscores the main types of crises that are non-economic.

FIGURE 3
LIST OF THE MOST RELEVANT AUTHORS

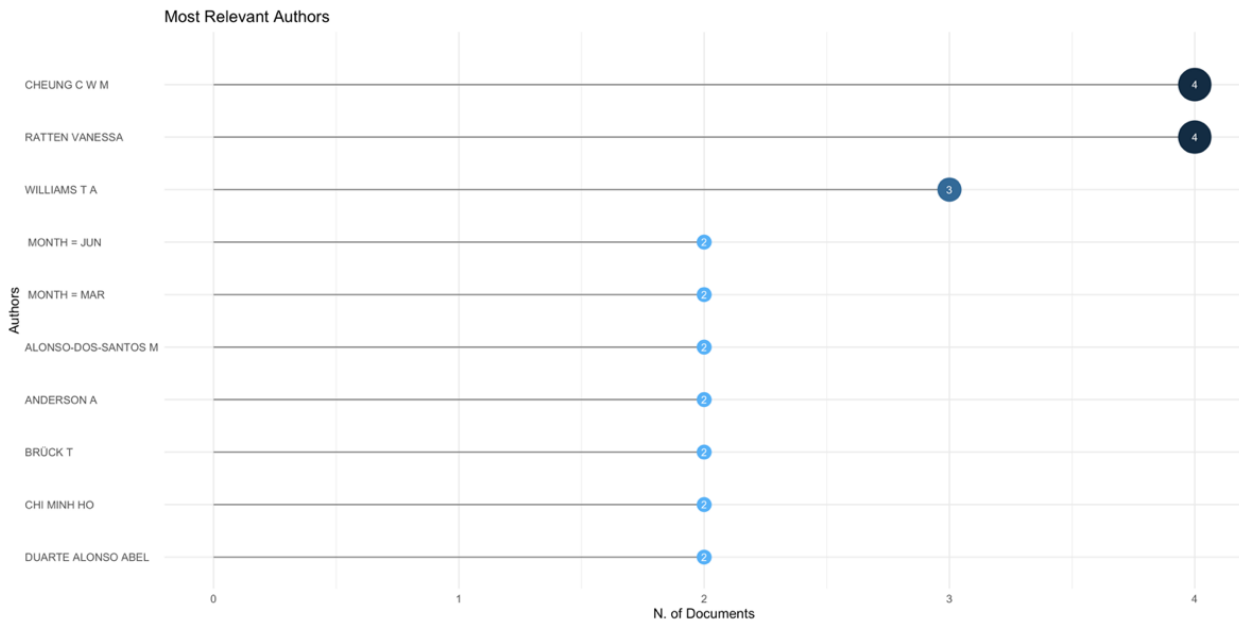
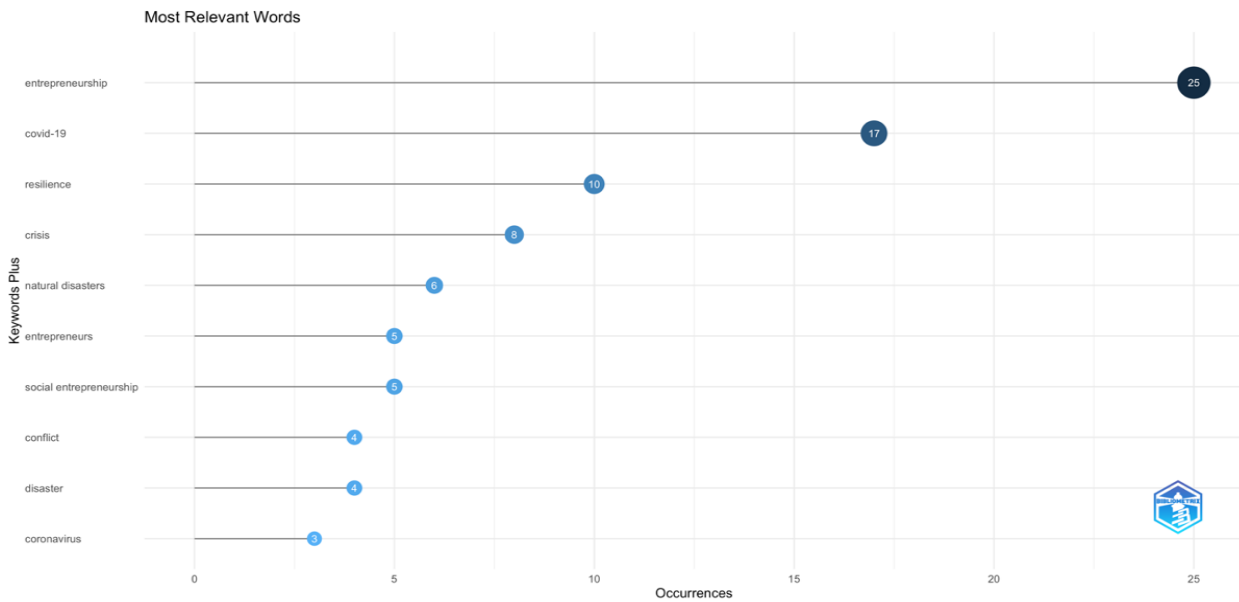


FIGURE 4
MOST RELEVANT KEYWORDS IN THE FIELD



RESULT & DISCUSSION

Crisis and Entrepreneurship

A crisis, whether big or small, potential threat or continuous threat, does not follow a discernible pattern (Doern et al., 2016). The best way to plan for a crisis is to prepare for the unstructured and haphazard nature of crises that are bound to happen in the future. In such a scenario, it is important to bring along the body

of knowledge from the field of entrepreneurship. Entrepreneurship is known for dealing with uncertainty, limited resources, and time (Baker and Nelson, 2005; Shane and Venkataraman, 2000). These similarities hold the promise of offering crisis management and novel and effective pre-crisis planning and post-crisis recovery processes. Earlier studies indicate the potential of entrepreneurship to contribute to the field of crisis and crisis management (Beliaeva et al., 2020; Dimitriadis, 2021; Doern, 2016; Herbane, 2019; Kwong et al., 2019; Linnenluecke & McKnight, 2017; McMullen and Kier, 2016; Nelson and Lima, 2020; Williams and Shepherd, 2016). This review aims to search for and examine articles on how entrepreneurial action helps in dealing with crises. A variety of research on entrepreneurship and crises was found during the search process. To understand the nature of the crisis and its management, it has been argued that the origins of the crisis should be examined closely. Extensive studies have examined entrepreneurial actions during economic crises (Bishop, 2019; Bishop & Shilcof, 2017; Čadil et al., 2021; Deakins et al., 2015; Giotopoulos et al., 2017; Kapetaniou et al., 2018; Kapitsinis, 2017; Kottika et al., 2020a, 2020). It also emphasizes the importance of this phenomenon. However, not all crises are alike, even if the triggers are external in nature.

The Issue of Crises and Their Sources

Crises caused by pandemics, natural calamities, and conflicts have the potential to impact entrepreneurs and their stakeholders differently than economic crises. In a comparative study conducted in China to examine the financing of nascent firms during the COVID-19 period, a downward trend was observed in the financing of emerging firms compared to that of established firms (Brown and Rocha, 2020). Thus, Brown and Rocha (2020) explain the impact of different crisis types on funding among nascent firms. Additionally, non-economic crises have the potential to cause fatalities, and their impact can be acute and immediate (Doern, 2016; Linnenluecke & McKnight 2017). Therefore, by examining crises in this manner, specific crisis response and recovery strategies can be identified based on the type of crisis, as shown in Table 3.

One of the common themes that has emerged during crises resulting from pandemics, natural calamities, and conflicts is the role of entrepreneurs in providing social value to the communities they serve (Aldrich, 2018). Their role becomes the fulcrum around which community building revolves, especially during the post-crisis recovery period. The importance of social embeddedness and the establishment of local ties to rebuild the community is paramount (Chandra & Paras 2020; Dimitriadis, 2021). Studies conducted in the context of conflict and post-conflict situations show that issues such as justice and reconciliation are fundamental building blocks for the post-crisis recovery process (Boudreaux, 2007; Williams & Vorley, 2017).

TABLE 3
CRISIS BY ORIGIN

Source of Crisis	Representative Articles
Pandemic	Adamus, 2020; Alvaro et al., 2022; Batat, 2021; Bressan et al., 2021; Brown & Rocha, 2020; Dai et al., 2021; Giones et al., 2020; Haneberg, 2020; Kuckertz et al., 2020; Prah & Sibiri, 2021; Ratten, 2021; Ratten et al., 2021; Stephens et al., 2021; Vazirani & Bhattacharjee, 2022
Natural Calamity/Disaster	Aldrich, 2018; Alonso-Dos-Santos & Llanos-Contreras, 2019; Cameron et al., 2018; Dinger et al., 2020; Grube & Storr, 2018; Gur et al., 2020; Llanos-Contreras et al., 2020; McMullen & Kier, 2016; Morrish & Jones, 2020; Nelson & Lima, 2020; Žebrytė et al., 2019

THEORETICAL PERSPECTIVES ADOPTED IN THE STUDIES

One important theoretical perspective in the field of entrepreneurship is the theory of entrepreneurial opportunity. Shane and Venkataraman (2000) emphasized that the study of entrepreneurship must be distinguished from other fields by examining the role of entrepreneurial opportunities and related issues in different contexts. Table 4 indicates that several studies have been conducted using the theoretical framework of entrepreneurial opportunities. This review provides an integrative view of entrepreneurial opportunities as both recognition and creation, as highlighted by Alvarez et al. (2010). Gur et al. (2020) examined the entrepreneurial response following the Deepwater Horizon oil spill on the Gulf Coast. The study suggests that entrepreneurial recognition of emerging opportunities, such as financial support, repartition, and new markets, will only occur once psychological healing and active engagement from stakeholders have taken place. Entrepreneurs must satisfy these conditions before recognizing opportunities in extreme situations. McMullen and Kier (2016) examined entrepreneurial action and opportunity recognition in disaster situations. They studied the 1996 Mount Everest avalanche tragedy to understand how the escalation of commitment could contribute to unfortunate incidents in extreme environments. They highlighted the role of self-regulation in moderating the issues of escalating entrepreneurial opportunity recognition, which could help avoid unfortunate events. This study further underscores the negative aspects of entrepreneurial action, unlike other studies that focus on the positive aspects of entrepreneurial endeavors. Vazirani and Bhattacharjee (2022) examined the role of entrepreneurial ventures during the COVID-19 pandemic and found that due to the unstructured nature of environmental uncertainty and the higher cost of business operations, entrepreneurial opportunity recognition was less significant. It was also found that entrepreneurship opportunity recognition became difficult due to the nature of unstructured environmental uncertainty and the cost of doing business, which is influenced by different norms and routines. The study also found that most entrepreneurial ventures were of the necessity type. These studies have examined opportunity recognition, even in extreme situations (Cheung, 2016; Gur et al., 2020; McMullen & Kier, 2016; Vazirani and Bhattacharjee, 2022). It was found that certain antecedents of psychological well-being, self-regulation, and active involvement of stakeholders were prerequisite factors for recognizing entrepreneurial opportunities.

The disaster recovery experience of the 2011 Corregod's Antas mudslide highlighted the contrasting theoretical perspectives of effectuation and bricolage in entrepreneurship (Nelson & Lima, 2020). Effectuation theory, as per Sarasvathy (2001), in the context of venturing using heuristic decision-making, was used by Nelson and Lima (2020) to examine volunteers' decision-making during the disaster recovery process. The study describes that volunteers rely on optimizing the constraints present, such as local resources and social ties, in situations of extreme uncertainty and danger from an implementation perspective, as follows. However, when the situation warranted quick changes in the recovery process, as seen in Baker and Nelson's (2005) bricolage approach to entrepreneurship, new resources were created using local resources and through social connections. In situations of extreme uncertainty, such as war and conflict, scholars have used social bricolage as a framework to understand how entrepreneurs mobilize to survive and thrive. The entrepreneurial action of social bricolage helps us understand the nature of opportunity exploration and exploitation. One commonality among the studies is the use of previous knowledge, skills, and connections to engage in activities congruent with local conditions. Entrepreneurs engage with peers, participate in various activities, and build communities using existing cultural artifacts

and norms to make the most of their limited resources available to them (Kwong et al., 2019; Langevang & Namatovu, 2019).

Entrepreneurial resilience is a commonly adopted theoretical perspective in crisis studies. In conflict situations, local ties and the geographical location of business advisors far from the crisis site positively impact firm performance (Berno, 2017; Branzei & Abdelnour, 2010; Dai et al., 2021; Dimitriadis, 2021; Herbane, 2019; Kirkwood et al., 2017; Linnenluecke & McKnight, 2017; Morrison et al., 2017; Prah & Sibiri, 2021; Žebrytė et al., 2019). Additionally, business advisors located near the crisis site negatively impact firm performance (Dimitriadis, 2021). Two other studies emphasize the significance of local connections and building social capital to create a resilient community (Berno, 2017; Morrison et al. 2017). It was also indicated that the resilience of disaster response depends on the characteristics of local conditions and the type of disaster (Linnenluecke & McKnight, 2017). Similarly, crisis response built at the community level exhibited resilience when dealing with immediate post-earthquake crises related to food security (Berno, 2017). Likewise, Branzei et al. (2010) found that informal entrepreneurs perform better than formal entrepreneurs. However, as violent activities escalate, both entrepreneurs' performances are subdued (Branzei et al., 2010). In another study that examined the nuanced complexity of building resilience in the face of a crisis, a topology of organization was highlighted in terms of crisis response characteristics (Herbane, 2019). The responses varied between attentive interventionists, light planners, rooted strategists, and reliant neighbors. The attentive interventionist was the most resilient, characterized by a high level of formalization in crisis response management and less reliance on neighboring firms and their proximity.

William and Shepard (2016) highlight the importance of restorative coping in the face of a disaster. They emphasized the use of the conservation of resources theory framework. Investing in resources through venture creation during the post-disaster response period lays the foundation for future economic and non-economic value. During the post-disaster recovery period, the authors underscored other aspects of resource conservation theory, which primarily focuses on protecting available resources. The authors further emphasized that, for a comprehensive post-disaster recovery process, investing resources in venture creation is essential for psychological well-being and economic transformation (Williams and Shepherd, 2018).

TABLE 4
SUMMARY OF PUBLICATION BY ENTREPRENEURIAL THEORIES INCORPORATED IN THE STUDIES

Theoretical Perspective	Representative Articles
1. Theory of Effectuation	Nelson & Lima, 2020
2. Resilience Theory	Berno, 2017; Branzei & Abdelnour, 2010; Dai et al., 2021; Dimitriadis, 2021; Herbane, 2019; Kirkwood et al., 2017; Linnenluecke & McKnight, 2017; Morrison et al., 2017; Prah & Sibiri, 2021; Žebrytė et al., 2019
3. Theory of Entrepreneurial Opportunity	Cheung, 2016; Gur et al., 2020; McMullen & Kier, 2016; Vazirani & Bhattacharjee, 2022
4. Entrepreneurial Bricolage Theory	Cheung et al., 2019; Kwong et al., 2019; Langevang & Namatovu, 2019; Nelson & Lima, 2020
5. Conservation of Resources Theory	Williams & Shepherd, 2016

A Process Model of Entrepreneurial Crisis Management

One way to understand a crisis is to view it as a series of phases or sequential events (Buchanan & Denyer, 2013; Doern, 2016). Buchanan and Denyer (2013) proposed six phases of crisis management. The phases include pre-crisis, events, crisis response management, investigation, organizational learning, and implementation. It also provides insights into which type of entrepreneurial action is suitable for specific phases of a crisis. In a study describing crisis management approaches, five strategies were presented: the escaping, solving, reactive, proactive, and interactive approaches (Sahin et al., 2015). Similarly, Spillan (2000) presented a process model for crisis management. The author divided crisis management into two models: reactive and proactive. Each model consists of pre- and post-crisis phases. This parsimonious model provides a clear representation of a crisis management approach without the overlapping characteristics observed by Sahin et al. (2015). By presenting two models of crisis management, Spillan's (2000) study offers a better lens to decipher entrepreneurial actions during a crisis.

Reactive Model of Crisis Management

In the reactive model of crisis management, the emphasis is on pre-crisis planning and establishing procedures to ensure that sufficient resources and personnel are allocated to mitigate the situation (Vašíčková 2020). This model is appropriate when the crisis is an imminent and continuous threat, such as in a crisis management situation for people living near active volcanoes. In contrast, the reactive model of crisis management is mainly a crisis management approach in which the external threat is unexpected and unstructured. This crisis management model is suitable for crisis conditions such as pandemics and riots. This involves establishing a clear set of post-recovery procedures. Another important aspect of the reactive model is organizational learning, so that in the future, organizations can respond to crises more effectively (Spillan, 2000). This review of entrepreneurial action before, during, and after a crisis is based on two models of crisis management. This delineation provides a clearer picture of categorizing entrepreneurial actions related to crisis management. In addition, one objective was to better understand crisis management based on the type of crisis.

Most research related to crisis and entrepreneurship focuses on issues concerning the post-crisis recovery process (Alonso-Dos-Santos and Llanos-Contreras, 2019; Berno, 2017; Boudreaux, 2007; Cameron et al., 2018; Dinger et al., 2020; Djip, 2014; Grube & Storr, 2018; Krasniqi & Mustafa, 2016; Llanos-Contreras et al., 2020; Morrish and Jones, 2020; Tobias and Boudreaux, 2011; Williams & Vorley, 2017). By applying the reactive model of crisis management, this review highlights how entrepreneurial actions were deployed during a crisis. A group of studies examined the entrepreneurial qualities and characteristics that helped individuals cope with the crisis aftermath. It was found that entrepreneurs with self-efficacy qualities showed resilience during the recovery process (Alvaro et al., 2022). In a similar line of studies using the theory of planned behavior, it is posited that proactiveness, support reliance, and resourcefulness were antecedents to post-crisis activities (Bressan et al., 2021). Another study found that human capital in the form of work experience, education, and managerial capacities were reasons for variations in the performance of small businesses in a post-conflict situation (Krasniqi & Mustafa, 2016). The importance of entrepreneurial leadership qualities has been highlighted in post-conflict situations (Brauer, 2014). Resources such as socio-emotional wealth and emotional place attachment are crucial for building a resilient community post-crisis (Alonso-Dos-Santos & Llanos-Contreras, 2019; Cheung & Kwong, 2017).

During a post-crisis situation, resources are an important factor; however, entrepreneurial action truly makes a difference and paves the way for building a new future. Vašíčková (2020) examined the different kinds of entrepreneurial actions taken during a post-crisis situation using a reactive model of crisis management framework. Furthermore, in the aftermath of a major crisis, entrepreneurial actions can play a crucial role in the well-being and coping process of the post-crisis situation. William and Vorley (2016) highlighted the role of entrepreneurs in creating social value through the establishment of new ventures as a post-disaster coping mechanism. Investing in the future and allocating resources contribute to positive functioning. In the case of the 2011 London riots, Doern (2016) applied resource conservation theory. He

stated that businesses protected essential resources by forming alliances with the police and other authorities.

One of the key lessons of entrepreneurial action during the crisis recovery phase, regardless of the type of crisis, is the importance of building that social capital. This is evident from the study by Dai et al. (2021), who examined the spatial agglomeration of SMEs and their performance in an industry cluster. It was found that SMEs with strong ties to their hometown network and closer proximity to the supplier network exhibited better performance following a crisis. Thus, the key to resilience is building social capital (Dimitriadis 2021). In a crisis, it becomes even more important for entrepreneurs to become socially embedded. These ties to the local network become sources of resources, markets, and resilience. One study highlights the importance of tapping into the resources and knowledge of the local entrepreneurship ecosystem (Kuckertz et al., 2020). Moreover, a community's social identity can change after a crisis. Therefore, it is crucial for entrepreneurs to integrate with the community to understand its social dynamics (Aldrich, 2018; Dinger et al., 2020). The issue of building social capital and social embeddedness was further critically examined by categorizing social capital into three distinct types: structural, relational, and cognitive (Lee et al., 2019). Structural social capital refers to the size and diversity of a network. Relational social capital pertains to social trust, reciprocity, and obligations. Cognitive social capital involves perceptual tools and actions in communication. Each of them was found to have a significant relationship with resource acquisition for entrepreneurs operating in deprived areas. Furthermore, some entrepreneurial actions adopted during the post-crisis phase include skill-building, advocacy, resource transformation, and digital transformation. (Dimitriadis, 2021; Langevang & Namatovu, 2019; Morrison et al., 2017; Mu~ Noz et al., 2020; Scheidgen et al., 2021).

When the effects of a post-crisis are unknown, a major entrepreneurial action through effective decision-making is bricolage (Baker & Nelson, 2005; Sarasvathy, 2001). After a disaster, resources are scarce and depleted, and access is usually restricted. Under such circumstances, bricolage becomes a frequently enacted entrepreneurial behavior (Cheung et al., 2019; Kwong et al., 2019; Langevang & Namatovu, 2019; Nelson & Lima, 2020; Tsilika et al., 2020). Kwong et al. (2019) presented a case in their paper of displaced entrepreneurs who adopted the bricolage strategy to rebuild their lives in a post-conflict situation. In a new place, the challenges of being foreign and losing ties in the community, alongside financial concerns, were some of the most significant hindrances. To overcome the liability of foreignness in the host country, they leveraged their repertoire of skills, knowledge, and competencies before the crisis. They started a scaled-down version of the businesses they had operated before the crisis. This strategy was used to establish social embeddedness within the community. Later, they used this social network to transform their businesses. Entrepreneurs used a similar bricolage strategy to build businesses during wartime. When peace was restored, they exploited their learned capabilities to transform their businesses (Cheung, 2016). Similarly, during post-conflict periods, displaced people engage in bricolage to co-create social entrepreneurship initiatives that serve the displaced population (Cheung et al., 2019).

When a threat is unexpected and affects the operation and distribution of goods and services, one of the classic entrepreneurial actions taken by entrepreneurs is to innovate their business models (Bivona & Cruz, 2021). In the study by Bivona and Cruz (2021), a group of Swiss SMEs' responses during the COVID-19 situation were examined, and it was reported that SMEs initially responded by using readily available resources. Subsequently, they optimized production and responded to the short-term opportunities that arose because of COVID-19. Finally, they transformed readily available resources and mobilized distant resources. In another similar study, Alvaro et al. (2022) presented the case of lifestyle tourism entrepreneurs, who were among the most affected groups by the pandemic. One of the responses of these entrepreneurs was to implement non-pharmaceutical interventions that were integrated with local conditions.

Proactive Model of Crisis Management

The key aspect of the proactive model of crisis management is to assess vulnerabilities and establish an early warning system to systematically avert crises. In this case, emphasis is placed on pre-crisis preparation and management. One way to understand the enactment of resilience by entrepreneurs is highlighted in a

study by Herbane (2019). This study introduced a typology of four types of entrepreneurs based on the degree of formalization of crisis planning and management, the use of personal networks for organizational resilience, the proximity of the firm's location in terms of suppliers and logistics, organizational learning from crisis events, and the perception of the firm's ability to prevent crises. The four types are attentive interventionists, light planners, rooted strategists, and reliant neighbors. An attentive interventionist with a high level of formalization in pre-crisis planning and post-crisis recovery processes but less reliance on personal ties indicates the highest level of resiliency. Muñoz et al. (2019), in their study, take us to the aftermath of a volcano eruption in Calbuco, Chile. This is one of the few studies that purposefully examines entrepreneurial crisis preparedness. Examining issues of crisis preparedness lays the foundation for post-crisis recovery in the context of natural disasters. According to Muñoz et al. (2019), entrepreneurial preparedness consists of four distinct elements: anchored reflectiveness, situated experience, breakthrough, and reaching out. Anchored reflectiveness refers to the source of resourcefulness in the face of the volcano's continuous threat. The source of resourcefulness is an emotional place identity. An emotional sense of belonging to a place triggers motivation for resourcefulness. Situated experience refers to the accumulated experiences and learning gained from living near a volcano and how it helps with crisis preparedness. Breaking through is the act of visualizing a positive future for a location. Finally, reaching out refers to building local ties to mitigate the crisis at hand.

Entrepreneurial actions during crisis preparedness are characterized by building community resilience to future crises (Linnenluecke & McKnight, 2017; Morrison et al., 2017). Entrepreneurs are called upon to develop crisis preparedness and recovery strategies at the local level. Immediate and acute needs during and after a crisis require local communities to be resilient.

AGENDA FOR FUTURE RESEARCH

After conducting an extensive review of crises and entrepreneurship, several observations and opportunities for future studies have emerged. This review categorized crises by their origin and focused only on crises originating from natural calamities, disasters, and pandemics. (Alvaro et al., 2022; Boudreaux et al., 2019; Giones et al., 2020; Linnenluecke & McKnight, 2017; Monllor & Murphy, 2017; Vazirani & Bhattacharjee, 2022). One area that researchers have generally paid less attention to is the severity of the crisis. Future studies should examine variations in entrepreneurial actions based on the severity of the crisis and the type of entrepreneurial response in terms of crisis preparedness and post-crisis recovery processes.

Resourcefulness, or the ability to prepare for pre- or post-crisis situations, is a key factor in crisis mitigation (Lee et al., 2019; Williams and Shepherd, 2016). However, little is known about the factors that drive resourcefulness during crises. Do the demographic factors of the actors involved in the crisis play any role? This is one of the questions that future studies can address to better understand the factors leading to resourcefulness. Lee et al. (2019) examined the different types of social capital and their influence on resource acquisitions. Studies can be conducted to explore the role of beliefs and attitudes, such as self-efficacy, in resource acquisition. In delicate situations such as crises, entrepreneurial action must be taken with compassion (Williams & Shepherd, 2018). The role of emotions in pre-crisis preparedness and post-crisis activities presents another opportunity for future studies.

Another related topic is bricolage in entrepreneurial action during crises. Studies have shown that bricolage is key to organizing, resource acquisition, and transformation (Cheung et al., 2019; Kwong et al., 2019; Nelson & Lima, 2020). Most studies have used the theoretical framework of entrepreneurial recognition to identify opportunities through bricolage (Gur et al., 2020; McMullen & Kier, 2016; Scheidgen et al., 2021; Vazirani & Bhattacharjee, 2022). Research on the phenomenon of social bricolage can be further extended by utilizing the entrepreneurial theory of opportunity creation (Alvarez et al., 2010). The theory of entrepreneurial opportunity creation is a socially constructed concept; therefore, it can serve as a lens for analyzing bricolage practices in different contexts and situations.

Organizational learning is a critical element of crisis management (Cheung, 2016; Haneberg, 2020). Further studies must examine the impact of organizational failure during non-economic crises to gain a better understanding of this issue. Studies have been conducted to understand crisis management during

product recalls and internal organizational crises. However, less attention has been paid to entrepreneurial crisis response failures during conflicts, natural calamities, and earthquakes.

CONCLUSION

The objective of this review paper is to examine the issues of crisis and entrepreneurship. The issue of the contested debate on the definition of a crisis was highlighted in the study. Although economic crises constitute an important topic in the study of crises and entrepreneurial action (Bougrine & Rochon, 2015; Castaño et al., 2016; Williams & Vorley, 2014, 2015), much has been written in various fields about economic crises. When COVID-19 became a pandemic, it disrupted our lives in an unexpected manner in terms of scale and severity. The need arose to examine crises of non-economic origin because of their centrality to the issue. Additionally, in recent years, studies related to crises, especially the COVID-19 crisis, and entrepreneurship have increased in number. The aim was to categorize and analyze any commonalities in pre- and post-crisis management practices (Doern, 2016).

The current review adopts a process-oriented view of crises. Examining a crisis as a series of sequential events helps highlight key entrepreneurial actions during pre-crisis planning and the post-crisis recovery process (Buchanan & Denyer, 2013; Vašíčková, 2020).

To better illustrate entrepreneurial actions during a crisis, this study adopted the reactive and proactive models of crisis management (Spillan, 2000; Vašíčková, 2020). Most approaches to crisis management fall under the umbrella of the reactive model (Berno, 2017; Boudreaux, 2007; Grube & Storr, 2018; Llanos-Contreras et al., 2020; Morrish & Jones, 2020; Tobias & Boudreaux, 2011; Williams & Vorley, 2017). In the first part of the review, the entrepreneurial characteristics, skills, and competencies that play an important role in engaging in post-crisis situations are examined. Entrepreneurial characteristics such as human capital, self-efficacy, proactiveness, resourcefulness, and reliability have been found to play important roles (Krasniqi & Mustafa, 2016; Lee et al., 2019; Williams and Shepherd, 2016).

In the next series of studies, the role of social capital in building resilient communities was examined. Social embeddedness is a key entrepreneurial action crucial to the success of the post-crisis recovery process (Langevang & Namatovu, 2019; Nelson & Lima, 2020). These studies emphasize the importance of establishing local ties to acquire resources and rebuild lives after a crisis. Another entrepreneurial action during the post-crisis period is bricolage. The aftermath of a crisis often involves depleted resources and restricted access to them. Under such circumstances, bricolage is a commonly used entrepreneurial strategy across different types of crises. When combined, these entrepreneurial actions are crucial for building a resilient community.

The proactive model of crisis management deals with threats that are imminent or continuous. Here, the focus lies in pre-crisis planning and assessing vulnerability to issuing early warnings. Studies indicate that a high level of formalization of procedures for pre-crisis management is crucial in mitigating crises. The source of resourcefulness during pre-crisis planning is related to emotional place identity (Herbane, 2019; Muñoz et al., 2019). Finally, we listed a few prospects for future studies. Future research could explore entrepreneurial characteristics, such as emotion and self-efficacy, in the context of a crisis. The study also presented how an integrated theory of bricolage and entrepreneurship creation could provide a new perspective in the field of entrepreneurship during crises. Another area highlighted for future studies is related to entrepreneurial crisis response failure and its prospects for organisational learning. Therefore, by conducting this extensive review, we have successfully highlighted some key issues related to entrepreneurship and crises.

REFERENCES

- Adamus, R. (2020). Simplified restructuring proceedings in Poland as an example of anticrisis regulation due to the COVID-19 pandemic. *International and Comparative Law Review*, 20(1), 293–303. <https://doi.org/10.2478/iclr-2020-0014>
- Aldrich, D.P. (2018). A research agenda for disaster entrepreneurship. *Review of Austrian Economics*, 31(4), 457–465. <https://doi.org/10.1007/s11138-017-0393-0>
- Alonso-Dos-Santos, M., & Llanos-Contreras, O. (2019). Family business performance in a post-disaster scenario: The influence of socioemotional wealth importance and entrepreneurial orientation. *Journal of Business Research*, 101, 492–498. <https://doi.org/10.1016/j.jbusres.2018.12.057>
- Alvarez, S.A., Barney, J.B., & Young, S.L. (2010). Debates in entrepreneurship: Opportunity formation and implications for the field of entrepreneurship. In *Handbook of entrepreneurship research* (pp.23–45). Springer. https://doi.org/10.1007/978-1-4419-1191-9_2
- Alvaro Dias, L., Silva, R., Patuleia, M., Estêvão, J., & González-Rodríguez, M.R. (2022). Selecting lifestyle entrepreneurship recovery strategies: A response to the COVID-19 pandemic. *Tourism and Hospitality Research*, 22(1), 115–121. <https://doi.org/10.1177/1467358421990724>
- Aria, M., & Cuccurullo, C. (2017). Bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975.
- Bagiatis, C., Saiti, A., & Chletsos, M. (2020). Entrepreneurship, economic crisis, and the role of higher education: Evidence from Greece. *Industry and Higher Education*, 34(3), 177–189. <https://doi.org/10.1177/0950422219883832>
- Baker, T., & Nelson, R.E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3). Retrieved from <https://www.jstor.org/stable/30037207>
- Batat, W. (2021). How Michelin-starred chefs are being transformed into social bricoleurs? An online qualitative study of luxury foodservice during the pandemic crisis. *Journal of Service Management*, 32(1), 87–99. <https://doi.org/10.1108/JOSM-05-2020-0142>
- Beliaeva, T., Shirokova, G., Wales, W., & Gafforova, E. (2020). Benefiting from economic crisis? Strategic orientation effects, trade-offs, and configurations with resource availability on SME performance. *International Entrepreneurship and Management Journal*, 16, 165–194. <https://doi.org/10.1007/s11365-018-0499-2>
- Berno, T. (2017). Social enterprise, sustainability and community in post-earthquake Christchurch: Exploring the role of local food systems in building resilience. *Journal of Enterprising Communities*, 11(1), 149–165. <https://doi.org/10.1108/JEC-01-2015-0013>
- Bishop, P. (2019). Knowledge diversity and entrepreneurship following an economic crisis: An empirical study of regional resilience in Great Britain. *Entrepreneurship and Regional Development*, 31(5–6), 496–515. <https://doi.org/10.1080/08985626.2018.1541595>
- Bishop, P., & 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*, 29(3–4), 215–237. <https://doi.org/10.1080/08985626.2016.1257073>
- Bivona, E., & Cruz, M. (2021). Can business model innovation help SMEs in the food and beverage industry to respond to crises? Findings from a Swiss brewery during COVID-19. *British Food Journal*, 123(11), 3638–3660. <https://doi.org/10.1108/BFJ-07-2020-0643>
- Boudreaux, C.J., Escaleras, M.P., & Skidmore, M. (2019). Natural disasters and entrepreneurship activity. *Economics Letters*, 182, 82–85. <https://doi.org/10.1016/j.econlet.2019.06.010>
- Boudreaux, K. (2007). The business of reconciliation: Entrepreneurship and commercial activity in post-conflict Rwanda. *Economic Affairs*, 27(2), 6–13. <https://doi.org/10.1111/j.1468-0270.2007.00724.x>
- Bougrine, H., & Rochon, L.-P. (2015). Transformations of entrepreneurial capitalism, crises and the need for a radical change in economic policy. *Review of Keynesian Economics*, 3(2), 181–193. <https://doi.org/10.4337/roke.2015.02.03>

- Branzei, O., & Abdelnour, S. (2010). Another day, another dollar: Enterprise resilience under terrorism in developing countries. *Journal of International Business Studies*, 41(5), 804–825. <https://doi.org/10.1057/jibs.2010.6>
- Brauer, J. (2014). Entrepreneurial leadership for peace: The case of nonstate sovereign entrepreneurs and the nonterritorial sovereign organisations they form. *Business, Peace and Sustainable Development*, (3), 13–30. <https://doi.org/10.9774/GLEAF.8757.2014.ju.00003>
- Bressan, A., Duarte Alonso, A., Chi Minh, H., & Kiat Kok, S. (2021). Confronting the unprecedented: Micro and small businesses in the age of COVID-19. *International Journal of Entrepreneurial Behavior & Research*, 27(3), 799–830. <https://doi.org/10.1108/IJEER-09-2020-0602>
- Brown, R., & Rocha, A. (2020). Entrepreneurial uncertainty during the COVID-19 crisis: Mapping the temporal dynamics of entrepreneurial finance. *Journal of Business Venturing Insights*. <https://doi.org/10.1016/j.jbvi.2020.e00174>
- Brück, T., Naudé, W., & Verwimp, P. (2011). Small business, entrepreneurship and violent conflict in developing countries. *Journal of Small Business and Entrepreneurship*, 24(2), 161–178. <https://doi.org/10.1080/08276331.2011.10593532>
- Buchanan, D.A., & Denyer, D. (2013). Researching tomorrow's crisis: Methodological innovations and wider implications. *International Journal of Management Reviews*, 15(2), 205–224. <https://doi.org/10.1111/ijmr.12002>
- Cadil, J., Ber, M., & Kov, V. (2021). Likely winners and losers in upcoming COVID-19 economic crisis: Lessons learned from the GFC. *Journal of Entrepreneurship in Emerging Economies*, 13(4), 575–587. <https://doi.org/10.1108/JEEE-10-2020-0374>
- Callahan, J.L. (2014). Writing literature reviews: A reprise and update. *Human Resource Development Review*, 13(3), 271–275. <https://doi.org/10.1177/1534484314536705>
- Cameron, T., Moore, K., Montgomery, R., & Stewart, E.J. (2018). Creative ventures and the personalities that activate them in a post-disaster setting. *Creativity and Innovation Management*, 27(3), 335–347. <https://doi.org/10.1111/caim.12270>
- Castaño, M.S., Méndez, M.T., & Galindo, M.Á. (2016). The effect of public policies on entrepreneurial activity and economic growth. *Journal of Business Research*, 69(11), 5280–5285. <https://doi.org/10.1016/j.jbusres.2016.04.125>
- Chandra, Y., & Paras, A. (2020). Social entrepreneurship in the context of disaster recovery: Organizing for public value creation. *Public Management Review*, pp. 1–22. <https://doi.org/10.1080/14719037.2020.1775282>
- Cheung, C.W.M. (2016). Exploitative learning and entrepreneurial opportunity recognition of a family business in Hong Kong during and after the Second World War. *Journal of Entrepreneurship in Emerging Economies*, 8(3), 321–334. <https://doi.org/10.1108/JEEE-06-2015-0035>
- Cheung, C.W.M., & Kwong, C. (2017). Path- and place-dependence of entrepreneurial ventures at times of war and conflict. *International Small Business Journal: Researching Entrepreneurship*, 35(8), 903–927. <https://doi.org/10.1177/0266242617691802>
- Cheung, C.W.M., Kwong, C., Manzoor, H., Rashid, M.U., Bhattarai, C., & Kim, Y.-A. (2019). The co-creation of social ventures through bricolage, for the displaced, by the displaced. *International Journal of Entrepreneurial Behavior and Research*, 25(5), 1093–1127. <https://doi.org/10.1108/IJEER-03-2018-0140>
- Chowdhury, M.J.A. (2011). The determinants of entrepreneurship in a conflict region: Evidence from the Chittagong Hill Tracts in Bangladesh. *Journal of Small Business and Entrepreneurship*, 24(2), 265–281. <https://doi.org/10.1080/08276331.2011.10593538>
- Churchill, S.A., Munyanyi, M.E., Smyth, R., & Trinh, T.-A. (2021). Early life shocks and entrepreneurship: Evidence from the Vietnam War. *Journal of Business Research*, 124, 506–518. <https://doi.org/10.1016/j.jbusres.2020.11.009>
- Cowling, M., Liu, W., & Zhang, N. (2016). Access to bank finance for UK SMEs in the wake of the recent financial crisis. *International Journal of Entrepreneurial Behavior & Research*, 22(6), 903–932. <https://doi.org/10.1108/IJEER-06-2015-0126>

- Dai, R., Mookherjee, D., Quan, Y., & Zhang, X. (2021). Industrial clusters, networks and resilience to the COVID-19 shock in China. *Journal of Economic Behavior & Organization*, 183, 433–455. <https://doi.org/10.1016/J.JEBO.2021.01.017>
- Deakins, D., North, D., & Bensemam, J. (2015). Paradise lost? The case of technology-based small firms in New Zealand in the post-global financial crisis economic environment. *Venture Capital*, 17(1–2), 129–150. <https://doi.org/10.1080/13691066.2015.1021031>
- Devece, C., Peris-Ortiz, M., & Rueda-Armengot, C. (2016). Entrepreneurship during economic crisis: Success factors and paths to failure. *Journal of Business Research*, 69(11), 5366–5370. <https://doi.org/10.1016/j.jbusres.2016.04.139>
- Dimitriadis, S. (2021). Social capital and entrepreneur resilience: Entrepreneur performance during violent protests in Togo. *Strategic Management Journal*, 42(11), 1993–2019. <https://doi.org/10.1002/smj.3292>
- Dinger, J., Conger, M., Hekman, D., & Bustamante, C. (2020). Somebody that I used to know: The immediate and long-term effects of social identity in post-disaster business communities. *Journal of Business Ethics*, 166(1), 115–141. <https://doi.org/10.1007/s10551-019-04131-w>
- Djip, V. (2014). Entrepreneurship and SME development in post-conflict societies: The case of Bosnia & Herzegovina. *Journal of Entrepreneurship and Public Policy*, 3(2), 254–274. <https://doi.org/10.1108/JEPP-09-2012-0048>
- Doern, R. (2016). Entrepreneurship and crisis management: The experiences of small businesses during the London 2011 riots. *International Small Business Journal: Researching Entrepreneurship*, 34(3), 276–302. <https://doi.org/10.1177/0266242614553863>
- Doern, R., Williams, N., & Vorley, T. (2016). Entrepreneurship and crises: Business as usual? *Entrepreneurship and Regional Development*, 28(5), 471–475. <https://doi.org/10.1080/08985626.2016.1198091>
- Duarte Alonso, A., Chi Minh, H., Bressan, V.A., Kiat Kok, S., Sakellarios, V.N., Koresis, A., ... Santoni, L.J. (2021). Facing and responding to the COVID-19 threat—An empirical examination of MSMEs. *European Business Review*, 33(5), 775–796. <https://doi.org/10.1108/EBR-09-2020-0231>
- Giones, F., Brem, A., Pollack, J.M., Michaelis, T.L., Klyver, K., & Brinckmann, J. (2020). Revising entrepreneurial action in response to exogenous shocks: Considering the COVID-19 pandemic. *Journal of Business Venturing Insights*. <https://doi.org/10.1016/j.jbvi.2020.e00186>
- Giotopoulos, I., Kontolaimou, A., & Tsakanikas, A. (2017). Antecedents of growth-oriented entrepreneurship before and during the Greek economic crisis. *Journal of Small Business and Enterprise Development*, 24(3), 528–544. <https://doi.org/10.1108/JSBED-01-2017-0003>
- Gorski, T.A. (1998). A blueprint for crisis management. *Association Management*, 78–79.
- Gregory, A.T., & Denniss, A.R. (2018). An introduction to writing narrative and systematic reviews—Tasks, tips and traps for aspiring authors. *Heart, Lung and Circulation*, 27(7), 893–898. <https://doi.org/10.1016/j.hlc.2018.03.027>
- Grube, L.E., & Storr, V.H. (2018). Embedded entrepreneurs and post-disaster community recovery. *Entrepreneurship and Regional Development*, 30(7–8), 800–821. <https://doi.org/10.1080/08985626.2018.1457084>
- Gur, F.A., Bendickson, J.S., Madden, L., & McDowell, W.C. (2020). Entrepreneurial opportunity recognition in the face of disasters. *International Journal of Entrepreneurial Behavior & Research*, 26(4), 671–693. <https://doi.org/10.1108/IJEER-09-2019-0537>
- Hannah, S.T., Uhl-Bien, M., Avolio, B.J., & Cavarretta, F.L. (2009). A framework for examining leadership in extreme contexts. *The Leadership Quarterly*, 20(6), 897–919. <https://doi.org/10.1016/j.leaqua.2009.09.006>
- Herbane, B. (2019a). Rethinking organizational resilience and strategic renewal in SMEs. *Entrepreneurship and Regional Development*, 31(5–6), 476–495. <https://doi.org/10.1080/08985626.2018.1541594>

- Hermann, C.F. (1963). Some consequences of crisis which limit the viability of organizations. *Administrative Science Quarterly*, 8(1), 61–82. Retrieved from <https://www.jstor.org/stable/2390887>
- Izquierdo, C.C., Carrión, C.H., & Gutiérrez, S.S.M. (2008). Developing relationships within the framework of local economic development in Spain. *Entrepreneurship and Regional Development*, 20(1), 41–65. <https://doi.org/10.1080/08985620701552462>
- Kapetanidou, C., Samdanis, M., & Lee, S.H. (2018). Innovation policies of Cyprus during the global economic crisis: Aligning financial institutions with national innovation system. *Technological Forecasting and Social Change*, 133, 29–40. <https://doi.org/10.1016/j.techfore.2018.02.019>
- Kapitsinis, N. (2017). Firm relocation in times of economic crisis: Evidence from Greek small and medium enterprises' movement to Bulgaria, 2007–2014. *European Planning Studies*, 25(4), 703–725. <https://doi.org/10.1080/09654313.2017.1288703>
- Kirkwood, J., Dwyer, K., & Walton, S. (2017). An ecopreneur's growing resilience after a series of earthquakes. *Journal of Enterprising Communities*, 11(1), 129–148. <https://doi.org/10.1108/JEC-12-2014-0028>
- Kottika, E., Özsoy, A., Rydén, P., Theodorakis, I.G., Kaminakis, K., Kottikas, K.G., & Stathakopoulos, V. (2020). We survived this! What managers could learn from SMEs who successfully navigated the Greek economic crisis. *Industrial Marketing Management*. <https://doi.org/10.1016/j.indmarman.2020.05.021>
- Krasniqi, B.A., & Mustafa, M. (2016). Small firm growth in a post-conflict environment: The role of human capital, institutional quality, and managerial capacities. *International Entrepreneurship and Management Journal*, 12(4), 1165–1207. <https://doi.org/10.1007/s11365-016-0384-9>
- Kuckertz, A., Brühl, L., Gaudig, A., Hinderer, S., Reyes, C.A.M., Prochotta, A., ... Berger, E.S.C. (2020). Startups in times of crisis—A rapid response to the COVID-19 pandemic. *Journal of Business Venturing Insights*. <https://doi.org/10.1016/j.jbvi.2020.e00169>
- Kwong, C.C.Y., Cheung, C.W.M., Manzoor, H., & Rashid, M.U. (2019). Entrepreneurship through bricolage: A study of displaced entrepreneurs at times of war and conflict. *Entrepreneurship and Regional Development*, 31(5–6), 435–455. <https://doi.org/10.1080/08985626.2018.1541592>
- Langevang, T., & Namatovu, R. (2019). Social bricolage in the aftermath of war. *Entrepreneurship and Regional Development*, 31(9–10), 785–805. <https://doi.org/10.1080/08985626.2019.1595743>
- Lee, R., Tuselmann, H., Jayawarna, D., & Rouse, J. (2019). Effects of structural, relational and cognitive social capital on resource acquisition: A study of entrepreneurs residing in multiply deprived areas. *Entrepreneurship and Regional Development*, 31(5–6), 534–554. <https://doi.org/10.1080/08985626.2018.1545873>
- Linnenluecke, M.K., & McKnight, B. (2017). Community resilience to natural disasters: The role of disaster entrepreneurship. *Journal of Enterprising Communities*, 11(1), 166–185. <https://doi.org/10.1108/JEC-01-2015-0005>
- Llanos-Contreras, O., Alonso-Dos-Santos, M., & Ribeiro-Soriano, D. (2020). Entrepreneurship and risk-taking in a post-disaster scenario. *International Entrepreneurship and Management Journal*, 16(1), 221–237. <https://doi.org/10.1007/s11365-019-00590-9>
- McMullen, J.S., & Kier, A.S. (2016). Trapped by the entrepreneurial mindset: Opportunity seeking and escalation of commitment in the Mount Everest disaster. *Journal of Business Venturing*, 31(6), 663–686. <https://doi.org/10.1016/j.jbusvent.2016.09.003>
- Mitroff, I., Shrisvastava, P., & Udvardi, F. (1987). Effective crisis management. *The Academy of Management Executive*, 1(3), 283–292. <http://www.jstor.org/stable/4164770>
- Monllor, J., & Murphy, P.J. (2017). Natural disasters, entrepreneurship, and creation after destruction: A conceptual approach. *International Journal of Entrepreneurial Behavior & Research*, 23(4), 618–637. <https://doi.org/10.1108/IJEER-02-2016-0050>
- Morrish, S.C., & Jones, R. (2020). Post-disaster business recovery: An entrepreneurial marketing perspective. *Journal of Business Research*, 113, 83–92. <https://doi.org/10.1016/J.JBUSRES.2019.03.041>

- Morrison, C., Ramsey, E., & Bond, D. (2017). The role of social entrepreneurs in developing community resilience in remote areas. *Journal of Enterprising Communities*, 11(1), 95–112. <https://doi.org/10.1108/JEC-02-2015-0020>
- Muñoz, P., Naudé, W., Williams, N., Williams, T., & Frías, R. (2020). Reorienting entrepreneurial support infrastructure to tackle a social crisis: A rapid response. *Journal of Business Venturing Insights*. <https://doi.org/10.1016/j.jbvi.2020.e00181>
- Muñoz, P., Kimmitt, J., Kibler, E., & Farny, S. (2019). Living on the slopes: Entrepreneurial preparedness in a context under continuous threat. *Entrepreneurship and Regional Development*, 31(5–6), 413–434. <https://doi.org/10.1080/08985626.2018.1541591>
- Nelson, R., & Lima, E. (2020). Effectuations, social bricolage and causation in the response to a natural disaster. *Small Business Economics*, 54(3), 721–750. <https://doi.org/10.1007/s11187-019-00150-z>
- Paramita, W., Virgosita, R., Rostiani, R., Wibowo, A., Almahendra, R., & Junarsin, E. (2022). “I will not let you die”: The effect of anthropomorphism on entrepreneurs’ resilience during economic downturn. *Journal of Business Venturing Insights*, 17. <https://doi.org/10.1016/j.jbvi.2021.e00300>
- Peric, M., & Vitezic, V. (2016). Impact of global economic crisis on firm growth. *Small Business Economics*, 46(1), 1–12. <https://doi.org/10.1007/s11187-015-9671-z>
- Prah, D., & Sibiri, H. (2021). The resilience of African migrant entrepreneurs in China under COVID-19. *Journal of Entrepreneurship in Emerging Economies*, 13(5), 1119–1133. <https://doi.org/10.1108/JEEE-05-2020-0111>
- Ratten, V. (2021). COVID-19 and entrepreneurship: Future research directions. *Strategic Change*, 30(2), 91–98. <https://doi.org/10.1002/JSC.2392>
- Ratten, V., Braga, V.L.D.S., Marques, C.S., & Marques, E. (2021). Sport entrepreneurship and value co-creation in times of crisis: The COVID-19 pandemic. *Journal of Business Research*, 133, 265–274. <https://doi.org/10.1016/j.jbusres.2021.05.001>
- Rettberg, A., Leiteritz, R.J., & Nasi, C. (2011). Entrepreneurial activity in the context of violent conflict: Business and organized violence in Colombia. *Journal of Small Business and Entrepreneurship*, 24(2), 179–196. <https://doi.org/10.1080/08276331.2011.10593533>
- Rojon, C., Okupe, A., & McDowall, A. (2021). Utilization and development of systematic reviews in management research: What do we know and where do we go from here? *International Journal of Management Reviews*, 23(2), 191–223. <https://doi.org/10.1111/ijmr.12245>
- Sahin, S., Ulubeyli, S., & Kazaza, A. (2015). Innovative crisis management in construction: Approaches and the process. *Procedia – Social and Behavioral Sciences*, 195, 2298–2305. <https://doi.org/10.1016/j.sbspro.2015.06.181>
- Sarasvathy, S.D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243–263. <https://doi.org/10.5465/AMR.2001.4378020>
- Scheidgen, K., Gümüşay, A.A., Günzel-Jensen, F., Krlev, G., & Wolf, M. (2021). Crises and entrepreneurial opportunities: Digital social innovation in response to physical distancing. *Journal of Business Venturing Insights*, 15. <https://doi.org/10.1016/J.JBVI.2020.E00222>
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226. <https://doi.org/10.5465/AMR.2000.2791611>
- Spillan, J.E. (2000). Strategies for successful crisis management.
- Spillan, J., & Hough, M. (2003). Crisis planning in small businesses: Importance, impetus and indifference. *European Management Journal*, 21(3), 398–407. [https://doi.org/10.1016/S0263-2373\(03\)00046-X](https://doi.org/10.1016/S0263-2373(03)00046-X)
- Stephens, S., McLaughlin, C., & McLaughlin, K. (2021). Entrepreneurs responding to the COVID-19 crisis: Evidence from Ireland. *Irish Journal of Management*, 40(2), 143–156. <https://doi.org/10.2478/IJM-2021-0010>
- Thorgren, S., & Williams, T.A. (2020). Staying alive during an unfolding crisis: How SMEs ward off impending disaster. *Journal of Business Venturing Insights*. <https://doi.org/10.1016/j.jbvi.2020.e00187>

- Tobias, J.M., & Boudreaux, K.C. (2011). Entrepreneurship and conflict reduction in the post-genocide Rwandan coffee industry. *Journal of Small Business and Entrepreneurship*, 24(2), 217–242. <https://doi.org/10.1080/08276331.2011.10593535>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review.
- Tsilika, T., Kakouris, A., Apostolopoulos, N., & Dermatis, Z. (2020). Entrepreneurial bricolage in the aftermath of a shock: Insights from Greek SMEs. *Journal of Small Business and Entrepreneurship*, 32(6), 635–652. <https://doi.org/10.1080/08276331.2020.1764733>
- Vašíčková, V. (2020). Crisis management process—A literature review and a conceptual integration. *Acta Oeconomica Pragensia*, 27(3–4), 61–77. <https://doi.org/10.18267/j.aop.628>
- Vazirani, A., & Bhattacharjee, T. (2022). Necessity or opportunity: A case of business venturing decision during COVID-19 pandemic. *Managerial and Decision Economics*, 43(3), 768–778. <https://doi.org/10.1002/mde.3417>
- Williams, N., & Vorley, T. (2014). Economic resilience and entrepreneurship: Lessons from the Sheffield City Region. *Entrepreneurship and Regional Development*, 26(3–4), 257–281. <https://doi.org/10.1080/08985626.2014.894129>
- Williams, N., & Vorley, T. (2015). The impact of institutional change on entrepreneurship in a crisis-hit economy: The case of Greece. *Entrepreneurship and Regional Development*, 27, 28–49. <https://doi.org/10.1080/08985626.2014.995723>
- Williams, N., & Vorley, T. (2017). Fostering productive entrepreneurship in post-conflict economies: The importance of institutional alignment. *Entrepreneurship and Regional Development*, 29(5–6), 444–466. <https://doi.org/10.1080/08985626.2017.1297853>
- Williams, N., Vorley, T., & Ketikidis, P.H. (2013). Economic resilience and entrepreneurship: A case study of the Thessaloniki City Region. *Local Economy*, 28(4), 399–415. <https://doi.org/10.1177/0269094213475993>
- Williams, T.A., & Shepherd, D.A. (2016). Victim entrepreneurs doing well by doing good: Venture creation and well-being in the aftermath of a resource shock. *Journal of Business Venturing*, 31(4), 365–387. <https://doi.org/10.1016/j.jbusvent.2016.04.002>
- Williams, T.A., & Shepherd, D.A. (2018). To the rescue!? Brokering a rapid, scaled and customized compassionate response to suffering after disaster. *Journal of Management Studies*, 55(6), 910–942. <https://doi.org/10.1111/joms.12291>
- Žebrytė, I., Fonseca-Vasquez, F., & Hartley, R. (2019). Emerging economy entrepreneurs and open data: Decision-making for natural disaster resilience. *Journal of Small Business Strategy*, 29(1), 36–47.