

Building business resilience to external shocks: conceptualising the role of social networks to small tourism & hospitality businesses

Le Diem Quynh PHAM^a, Tim COLES^b, Brent W. RITCHIE^c, Jie WANG^a

^aBusiness School – The University of Queensland
Brisbane, QLD 4072, Australia

^bBusiness School – The University of Exeter
Streatham Court, Rennes Drive, Exeter, Devon, EX4 4PU, United Kingdom

^cFaculty of Business, Economics and Law - The University of Queensland
Brisbane, Qld 4072, Australia

Corresponding author:

Ms. Le Diem Quynh PHAM

Le.pham1@uq.net.au

Business School – The University of Queensland
Brisbane, QLD 4072, Australia

Declarations of interest: None

Financial disclosure: None

Building business resilience to external shocks: Conceptualising the role of social networks to small tourism & hospitality businesses

Highlights:

- Examines how small tourism businesses can build resilience to disasters and crises
- Argues social networks deliver vital resources for building small business resilience
- Proposes a conceptual framework and research agenda to facilitate knowledge building
- Highlights need for more research on small business responses to external shocks

Building business resilience to external shocks: Conceptualising the role of social networks to small tourism & hospitality businesses

Micro and small enterprises comprise the majority of the tourism and hospitality businesses globally and contribute heavily to the economic livelihood of many communities. However, their distinctive characteristics also make them among the most vulnerable to the impacts of external shocks. This paper proposes a conceptual model of how social networks may help micro-small tourism and hospitality businesses build resilience to disasters and crises. Informed by concepts of social capital theory, business continuity goals, and the resource-based view, we argue that social networks are a crucial factor in assisting the survival and recovery of micro-small tourism and hospitality businesses after external shocks through the provision of greater access to a multitude of resources (natural, physical, financial, human, social). Drawing on relevant literature on tourism disaster and crisis management as well as small business management and social network research, we develop a series of propositions and an agenda for future studies. In doing so, this paper contributes to currently limited theoretical work in the tourism disaster and crisis management literature while encouraging greater research attention to micro-small tourism and hospitality businesses as a means of helping to foster more resilient businesses in the face of possible future shocks.

Keywords: Social network, resilience, resource, small business, tourism, disaster and crisis

Building business resilience to external shocks: Conceptualising the role of social networks to small tourism & hospitality businesses

1. INTRODUCTION

The global tourism and hospitality industry has been impacted by an increasing number of disasters and crises in recent years. These events vary in nature ranging from naturally-originated (e.g., climatic and weather-related disasters, diseases and epidemics) to human-induced incidents (e.g., terrorist attacks, political unrest, biochemical spillages). In 2019 alone, 396 natural disasters were recorded in the international disaster database – Emergency Events Database (EM-DAT) – resulting in nearly 12,000 deaths and costing US\$103 billion of economic losses (CRED, 2020). Most recently, the global COVID-19 pandemic has almost rendered international travel impossible, creating unprecedented challenges to tourism and hospitality businesses (Gössling et al., 2020). The increasing frequency and severity of these external shocks have jeopardised the viability of businesses as well as the sustainable development of tourism destinations.

Micro and small businesses account for the majority of tourism and hospitality operators. For example, in Australia 95% of tourism and hospitality businesses have fewer than 20 employees (Tourism Research Australia, 2019). In many destinations, the local economy is heavily dependent on the prosperity and resilience of these businesses (Prasad et al., 2015; Thomas et al., 2011). Unfortunately, small tourism and hospitality businesses (STHBs) are often among the most severely impacted during disasters and crises. Their typical characteristics (such as limited personnel, restricted resource reserves, lack of formal disaster management plans) make them particularly susceptible to the negative impacts of external shocks while also limiting their capacity to respond (Biggs et al., 2012; Ha et al., 2020; Hystad & Keller, 2008). With assets damaged by external shocks and inadequate internal resources to draw on, many STHBs may look to their relationships with external stakeholders for additional resources to overcome such adversity. The possible provision of greater resources by social networks is particularly crucial in the business context, because according to the resource-based view of firms (Penrose & Pitelis, 2009) businesses are administrative and organisational units that manage a collection of productive resources for the purpose of capital gain.

This paper aims to foster greater understanding of how STHBs can build their resilience to external shocks. More particularly, we set out to conceptualise the distinctive social networks of STHBs, and the roles these networks may have in helping STHBs survive and recover. Based on a review of both the disaster and crisis management and social capital literatures, we argue

that social networks, access to resources, and business resilience are more interrelated than previous studies concede. To substantiate this view, we propose a series of propositions and develop a novel framework to guide future research in this space.

This paper contributes to the current body of knowledge in three ways. Firstly, it draws on research from various fields such as disaster and crisis management, small business management, and social networks which, although interrelated, have yet to be studied together (to the best of our knowledge). By integrating these elements in a framework, we seek to develop a deeper understanding of business resilience using complementary theoretical perspectives, including social capital theory, the resource-based view of the firm, and business continuity management.

Secondly and connected, the paper adds to the currently limited array of theoretical work in the tourism disaster and crisis management literature (Jiang et al., 2017; Ritchie & Jiang, 2019). Notably, disaster and crisis research has been critiqued for the high proportion of studies that are descriptive or exploratory in nature, that are based on individual cases of single events, and that expose the significant gap between knowledge and practice in the field (Davies et al., 2015; Gaillard & Mercer, 2013; Leiras et al., 2014; Lettieri et al., 2009; Ritchie & Jiang, 2019). By synthesising a single conceptual framework and a series of propositions, the paper addresses this lacuna by offering a strong theoretical foundation and a clear agenda for future empirical investigation in the area of social networks and resilience to shocks among tourism-hospitality businesses.

Thirdly, we specifically focus on STHBs and their unique characteristics when building our propositions. Despite their prominence and importance, STHBs are often not the subject of explicit attention in tourism disaster and crisis studies (Ritchie & Jiang, 2019). Instead, these studies mainly focus on larger organisations, especially accommodation providers (Henderson & Ng, 2004; Henderson, 2005; Ritchie et al., 2011; Wang & Ritchie, 2012). Conversely, distinctive behaviour and challenges among STHBs tend to be overlooked. By directing the gaze towards STHBs, this paper encourages future research to pay closer attention to the particular contexts of these businesses. Subsequently, more appropriate evidence-based interventions may help resilience-building for STHBs.

This paper commences by describing the key characteristics of STHBs that shape their social networks. Based on a narrative review of relevant studies, five propositions are then advanced on links among social networks, access to resources, STHBs resilience (short-term survival and long-term recovery), and contextual factors (environmental and organisational). A conceptual framework is developed to help visualise the relationship among the key elements of the propositions. The paper concludes with an agenda for future studies including recommendations for research topics and methodologies.

2. SOCIAL NETWORKS OF SMALL TOURISM & HOSPITALITY BUSINESSES

A small business is defined as one “financed by one individual or small group and is directly managed by its owner(s), in a personalised manner and not through the medium of a formalised management structure” (Morrison, 1996, p.400). Small businesses in tourism and hospitality possess distinctive characteristics, many of which contribute to their vulnerability and restrain their capacity to respond effectively to external shocks. These include, *inter alia*: limited access to financial and physical resources (Sokolinskaya & Kupriyanova, 2015); constrained human resources and difficulties in staff recruitment and retention (Huang & Brown, 1999; Mensah-Ansah, 2014); relatively short-term horizons for business planning (Page et al., 1999); and a lack of perceived responsibility and participation in disaster planning and management (Flynn, 2007; Harries et al., 2018; Hystad & Keller, 2008). As a result, STHBs tend to suffer profound damage from disasters and crises that they cannot absorb by themselves, thus requiring external support to survive and recover (Torres et al., 2019; Williams et al., 2020). Nevertheless, STHBs also have certain advantages over their larger competitors. For instance, they may have less sunk capital and be more agile or adaptable to respond to demand fluctuations (Brock & Evans, 1989). As they are deeply rooted in their communities, they also possess ‘insider’ knowledge of the destination and enjoy more support from personal and local networks (Prasad et al., 2015).

More generally, stakeholder collaboration and social support have been highlighted as crucial elements of post-event response and recovery in tourism disaster and crisis research (Faulkner, 2001; Hystad & Keller, 2008; Jiang & Ritchie, 2017; Ritchie, 2004). In the case of STHBs, the reliance on networking and collaboration with external organisations may be even more pronounced to compensate for any deficits of internal resources and in disaster management expertise. Their social networks may help STHBs not only to survive disasters and crises in the short term, but also to build greater resilience in the long term. However, to the best of our knowledge, there has been little research studying the role of social networks in building resilience to external shocks for STHBs. Some empirical studies have examined related issues such as stakeholder collaboration (Çakar, 2018; Jiang & Ritchie, 2017; Lu et al., 2017); social support and social capital (Aldrich & Meyer, 2015; Chowdhury et al., 2019; Sadri et al., 2018; Torres et al., 2019); network development (Becken et al., 2014; Cradock-Henry et al., 2018); and knowledge exchange via networks (Akama et al., 2014; Orchiston & Higham, 2016). These studies neither focus on exploring the nature of social networks of businesses and how these inter-organisational relationships can be effectively utilised during external shocks, nor do they target STHBs specifically.

As a starting point to explore this association, some understanding of social networks is necessary. Social networks are “a social phenomenon composed of entities connected by specific ties reflecting interaction and interdependence, such as friendship, kinship, knowledge exchange, and so on” (Carpenter et al., 2012, p.1329). The social networks of STHBs are distinctive because they blend the owner’s personal connections and the

professional connections of the business. Due to their small size, many such businesses are co-proximate with their owners, meaning that the owner’s individual networks also become the networks of the business. As an example of this, in many family businesses the owner’s family circle is often the major recruitment pool (Astrachan, 2010; Tinsley & Lynch, 2008). Beyond informal networking based on the individual actors, small businesses are also embedded in professional networks through their connections to business partners, industry associations, financial institutions, and government bodies. This combination of personal and professional connections broadens the complexity of their social network configuration.

Inspired by the concepts in social capital theory, which has a strong connection to social network studies, we propose that the social networks of STHBs consist of three types: bonding networks, bridging networks, and linking networks. Definitions and examples of these three network types are provided in Table 1.

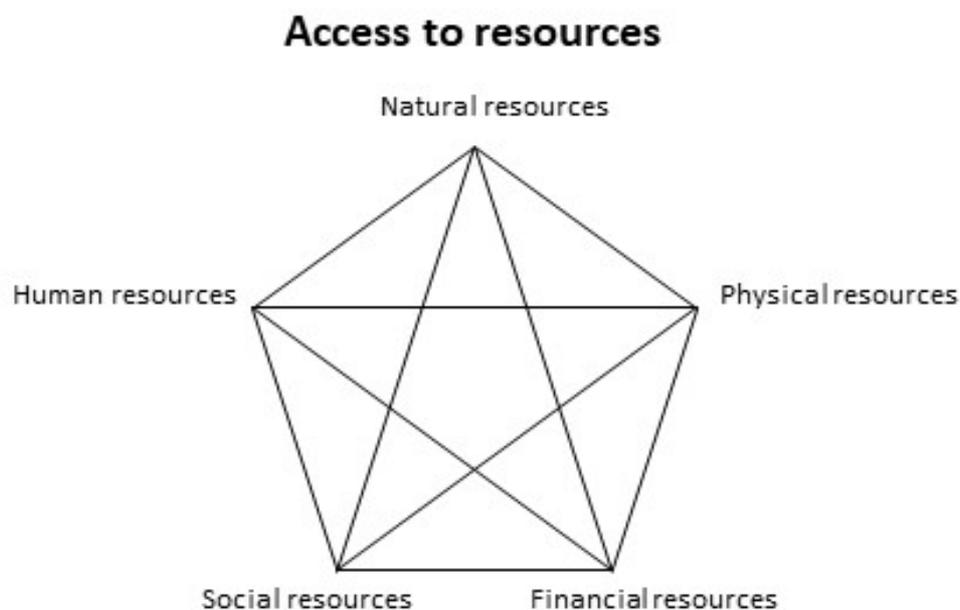
Table 1: Types of social networks possessed by STHBs

Type of social networks	Definitions	Examples in the context of STHBs
Bonding networks	The ‘horizontal ties’ among people who are emotionally close and share similar socio-demographic characteristics (Aldrich & Meyer, 2015; Cai, 2017)	The owner’s personal relationships with family members, relatives, friends and neighbours within the community
Bridging networks	The connections of people across different socio-demographic groups and backgrounds, but somewhat similar in social class and status (Cai, 2017; Szreter & Woolcock, 2004)	Professional relationships and alliances between the business and other actors in the market, particularly its partners and suppliers
Linking networks	The ‘vertical’ relationships between regular citizens and those in power, i.e. those different in social status and power, through “explicit, formal or institutionalised power or authority gradients in society” (Aldrich & Meyer, 2015; Szreter & Woolcock, 2004, p.655)	The business connections to formal institutions (such as banks and insurers) and governmental/ industry bodies (city government, destination marketing organisation, industry associations, etc.)

Source: Authors, guided by the cited literature

Together, these three types of social networks depict the social interactions of STHBs with external actors. Each type has different characteristics and results in different outcomes for the business. Bonding networks reinforce in-group loyalty and homogeneity which results in tight connections among group members yet exclusivity to outsiders (Aldrich & Meyer, 2015). Bridging networks, as the name suggests, act to span between and bring loosely connected social groups in the community together, encouraging collaboration and stronger social cohesion among actors. Finally, linking networks have been found to have strong implications for the welfare and development of communities, particularly disadvantaged ones (Cai, 2017; Szreter & Woolcock, 2004). These three types of social networks will underpin the following sections which now turn to focus on the links between social networks, access to resources, and small business resilience to external shocks.

Figure 1: The inter-relationships of five categories of resources



Source: Authors, adapted from DFID (1999)

3. SOCIAL NETWORKS AND ACCESS TO RESOURCES

Resources are at the core of business operations. The resource-based view, a dominant framework in business strategy literature (Penrose & Pitelis, 2009), asserts that businesses

are administrative units that employ productive resources to gain competitive advantage. The assembly and deployment of valuable, rare, inimitable and non-substitutable resources provide the basis of individual business performance (Lin & Wu, 2014).

Unpacking this further, the resource-based view requires a more careful inspection of the nature of resources a firm can assemble or deploy and the inter-connections among them. For SHTBs and inspired by the Sustainable Livelihood Approach framework (DFID,1999), we would contend that there are five main categories available to the firm, namely: natural resources, physical resources, financial resources, social resources, and human resources (see Figure 1). More specifically in its original context of application, the Pentagon Model depicts five categories of individual assets that may be converted into positive livelihood outcomes (DFID, 1999). Equally, these five categories also effectively capture the diverse resources that a business can utilise to ensure its viability through stable and turbulent conditions. The five categories comprehensively cover the most basic range of resources that any business would need, while also being versatile and widely recognised enough to be applied for businesses of various sectors. In addition, due to the inter-relationships among them, the access and acquisition of one category can lead to the expansion of others (Brown et al., 2018; DFID, 1999; Knutsson & Ostwald, 2006). For instance, with more money from loans or grants (*financial resources*), a business can fund increased staffing (*human resources*) and the reconstruction of facilities (*physical resources*). Alternatively, by possessing a great deal of trust and 'insider' information from the local community (*social resources*), a business can access a large pool of local employees (*human resources*) and negotiate lower-cost local supplies of raw materials (*natural resources*).

The resource-based view adopts an endogenous perspective that focuses on how a firm employs its internal resources and capabilities (Jiang et al., 2019). However, these resources are limited within many small businesses and, during disasters and crises, are at far greater risk of being depleted. Thus, it is not always practicable for SHTBs to rely solely on the (re)organisation of their remaining resources to recover from disasters and crises. Rather, they may need to quickly acquire new resources from external stakeholders in order to repair damage, resume normal operations, and even gain novel forms of competitive advantages by developing new products or attracting new markets (Ritchie, 2009). More crucially, this logic highlights the links between social networks, access to resources and business resilience, and it is in this respect that social capital theory becomes a useful lens to complement the resource-based view. Social capital theory is based on the notion that social networks are a valuable asset providing individuals with access to resources that may not otherwise be available (Field, 2017; Foley & Edwards, 1999; Poder, 2011). Examples at the level of the individual include employment opportunities, educational privilege, financial support, knowledge sharing and emotional support (Bourdieu, 1986; Coleman, 1994).

By extension, we would contend that social networks can provide businesses with greater access to resources. Each of the three types of social networks noted above has a different nature and brings different benefits to STHBs. Table 2 sets out examples of resources that can be accessed through each.

Bonding networks are established between business owners and their small circles of relatives and friends. This means that resources can be transferred quite quickly and informally without complicated requirements (Akama et al., 2014; Sadri et al., 2018); however, the extent of support is rather limited as it depends on other individuals' capacity. Due to the homogeneity and closeness among actors, bonding networks also tend to be the most durable type of networks. They are far less likely to break down after disasters and continue to provide consistent benefits (Islam & Walkerden, 2014). Bridging networks from business alliances and community memberships can provide mutual benefits on a larger scale, resulting from economies of scale, knowledge sharing and marketing synergy (Mair et al., 2016; Torres et al., 2019). Notwithstanding, bridging networks may be volatile and can be weakened by competition or conflicting interests among parties (Islam & Walkerden, 2014). Finally, linking networks help businesses reach the institutions and other bodies which possess much higher levels of power and resources than individual businesses; thus, the support provided is more substantial and longer-lasting (Islam & Walkerden, 2014; Torres et al., 2019). Nevertheless, many linking networks necessitate formal requirements and procedures which can be a huge barrier for small businesses (particularly informal unregistered ones). Given the relative merits of each, it is essential that STHBs develop and maintain a variety of networks to reap their complementary benefits.

Table 2: Examples of resources that STHBs can access through their social networks

<u>Bonding networks</u>	<u>Bridging networks</u>	<u>Linking networks</u>
<ul style="list-style-type: none"> ● Financial resources: Quick loans from relatives & friends ● Human resources: Trusted and easily accessible labour pool ● Social resources: Emotional support 	<ul style="list-style-type: none"> ● Natural resources: Local supply of fresh materials ● Physical resources: Sharing infrastructure and equipment with business partners ● Human resources: Staff training programs by industry associations ● Social resources: Knowledge sharing among business alliance 	<ul style="list-style-type: none"> ● Natural resources: Land use permits, access permits to reserved areas ● Physical resources: Use of public infrastructure ● Financial resources: Grants & relief packages from government, loans from financial institutions, insurance cover

Source: Authors, inspired by Cai (2017) and DFID (1999)

From the above examples, the first proposition that we put forward is:

Proposition 1: Multiple types of social networks (bonding, bridging, linking) can influence access to resources of STHBs.

4. RESOURCES FROM SOCIAL NETWORKS AND BUSINESS RESILIENCE

Resilience is a major concept in disaster and crisis management, yet it is the subject of varied interpretations from multiple disciplines as Annarelli and Nonino (2016) and Bhamra et al. (2011) make clear in extensive reviews. While resilience is widely discussed and examined at community and destination levels, organisational resilience has a more limited history of attention in tourism research, restricted as it has been to the last two decades (Annarelli & Nonino, 2016; Hall, 2018). This creates ample opportunities for tourism researchers to further explore the mechanism of resilience building for STHBs.

Since a business is an economic entity, we choose to work with the definitions of economic resilience proposed by Rose (2007) for which there are two types: static resilience and dynamic resilience. The former refers to the ability of an entity or system, when shocked, to maintain function (continue production) by making the best of remaining resources; the latter focuses on the speed of recovery from a shock by repair and reconstruction of capital stocks (Rose, 2007). From these definitions, it is inferred that the resilience of STHBs comprises two elements: their ability to maintain business continuity through immediate shocks and damages, and their speed of returning to a desired state (back to 'old normal' or establishing a 'new normal'). Put another way, business response and recovery after adverse events require not only access to, but also efficient utilisation of, resources.

Considering the vast array of resources to which STHBs may access through social networks (as noted previously), we contend that these externally-sought resources can influence both the short-term survival and long(er)-term recovery of STHBs in facing external shocks. Some studies have demonstrated that support from social networks significantly assists individuals (Lo & Chan, 2017; Masud-All-Kamal & Hassan, 2018), businesses (Biggs et al., 2012; Chowdhury et al., 2019; Torres et al., 2019; Williams et al., 2020), and communities (Aldrich & Meyer, 2015; Cai, 2017; Guarnacci, 2016; Islam & Walkerden, 2014; Wilkin et al., 2019) in times of disasters and crises. However, to the best of our knowledge, there has been no evidence of research considering the combined social networks of the individual owner and the business.

Building on this existing literature, the following subsections will respectively discuss the key actions needed for STHBs to survive and then recover from external shocks. In the process,

they highlight how these actions can be mobilised by resources from the bonding, bridging and linking social networks of the business.

4.1. Short-term survival

When a disaster or crisis occurs, timely responses to the emergency are needed, not least to sustain businesses and for the continuity of operations. The primary goals are to protect the safety of staff, customers and assets while also trying to limit revenue loss (although in some cases temporary shutdowns of venues may be required). Among the critical actions for businesses to implement are: rescue and evacuation of customers and staff; clean-up and restoration of essential services; and emergency communication (Faulkner, 2001).

The emergency rescue and evacuation of victims in the immediate aftermath of a disaster are humanitarian tasks that require participation not only of the businesses but also of all stakeholders (local residents, government, national/international humanitarian organisations) (Morakabati et al., 2017). Businesses with an existing strong base of social networks and *social resources* (trust, reciprocity, goodwill, membership of social groups) can reach out to more helpers during critical hours thereby receiving ample attention and rescue support. In addition, as tourists may not be able to go back home immediately after a disaster hits, STHBs have a duty of care to find safe locations to accommodate their customers if their premises are physically damaged. In this case, they may need to rely on temporary relief shelters provided by the government and non-governmental (relief) organisations, or contact other businesses in neighbouring regions (Cahyanto et al., 2020). This means a business with wider connections to business partners (*bridging networks*) and government agencies (*linking networks*) can find access to alternative physical shelters (*physical resources*) for their customers more easily.

In order to resume essential operational activities, business owners need to solve problems of clean-up and the immediate restoration of damaged, mission-critical internal assets. Unlike large corporations or international business chains, STHBs have limited internal assets to begin with which may be severely damaged during disastrous events. Fortunately, STHBs possess the advantages of local knowledge and grass-roots connections within the local community (*bonding and bridging networks*) (Prasad et al., 2015). These advantages can help STHBs acquire *natural, physical, and human resources* in the quickest and cheapest ways to assist the clean-up and restoration tasks.

Finally, emergency communication is essential to ensure the dissemination of correct information as well as the coordination of responses among all stakeholders involved (Faulkner, 2001; Hystad & Keller, 2008). Emergency communication is vital in three main areas: from emergency managers (rescue departments, government agencies, destination

management organisations) to tourism stakeholders (businesses included); between tourism stakeholders; and from the destination to tourism markets (Mair et al., 2016). Since STHBs have limited experience and play a more passive role in disaster planning and management, they need to rely heavily on the government and other emergency agencies (*linking networks*) for information and guidance (Hystad & Keller, 2008). In turn, STHBs will be responsible for communication to their customers who are extremely vulnerable during disasters and crises due to their lack of local knowledge (Ritchie, 2008). All of these communication processes require effective partnerships and collaboration to facilitate (Mair et al., 2016; Wayne & Carmichael, 2005), which again points to the importance of social networks and *social resources* of the business.

4.2. Long-term recovery

The impacts of a disaster or crisis on businesses do not end once the emergency state is over. Rather, there can be some lingering effects that can hinder business prosperity, even after they have survived from immediate shocks. Major issues include expensive repair and renovation of damaged assets, reduced consumer confidence, damaged destination image (Faulkner, 2001; Mair et al., 2016). It is therefore imperative for STHBs to possess dynamic resilience which involves speeding the recovery through capacity enhancement and efficient utilisation of resources for repair and reconstruction (Rose, 2007). Key actions for long-term recovery include, *inter alia*: repair of damage and resumption of 'business as usual'; recovery marketing; and review and improvement for future preparedness (Faulkner, 2001).

The repair of wider damage and further resumption of (normal) operations require substantial resources of varying types. Besides staffing for normal operations, there are many labour-intensive tasks involved in asset repair and premises refurbishment, which leads to *human resources* being of critical importance (Lamanna et al., 2012). Micro and small businesses by definition have a much smaller number of staff compared to large corporations, some of whom can be physically or mentally affected by disasters and crises and hence unfit to work. The quickest way for owners of STHBs to make up for staff shortages is to ask for help from their families and friendship circles, or to recruit within local neighbourhoods (*bonding networks*). For time-sensitive recovery tasks, this access to a readily available labour pool as well as the informal recruitment process give STHBs advantages over large companies or international franchises that are bound by stricter recruitment practices (Jameson, 2000).

Secondly, cash flow (*financial resources*) is often reported among the most common concerns of STHBs because purchases and reservations usually drop significantly while cancellations increase following a disaster or crisis (ABS, 2020; Asgary et al., 2012). Apart from personal savings and remaining cash reserves, STHB owners need to quickly acquire additional funding from external sources, either informally such as loans from their *bonding networks* or formally applying for grants and loans from the government and banking institutions (*linking*

networks). In their empirical study, Davlasheridze and Geylani (2017) find that subsidized disaster loans have significant effects on the survival and recovery of small businesses.

Thirdly, the level of damage to *physical resources* can determine the short-term and long-term operating status of small businesses (Sydnor et al., 2017). The repair of both private assets (building, vehicles, furniture) and public infrastructure (road and transportation, telecommunication infrastructure, utility supply) is costly and laborious, which may be unable for STHB owners to handle by themselves without seeking external help. Fourthly, it may not be sufficient for STHBs to rely solely on their pre-disaster suppliers of raw materials if these *natural resources* are depleted due to the effects of disasters on supply chains. Rather, STHBs will need to access other sources of supply, sometimes further afield in which case strong social relations with local suppliers will be extremely advantageous, for instance through word-of-mouth recommendation (Scheyvens & Russell, 2012; Stecke & Kumar, 2009).

To fully recover from external shocks once the repair of damage is finished, one of the most critical tasks for businesses is to regain customers through recovery marketing. The main aim is to signal the 'business as usual' status to the public, as well as to restore an attractive and safe destination image in the perception of potential customers (Mair et al., 2016). Similar to emergency communication, the social networks and *social resources* of the business are particularly important to its recovery marketing efforts. Some empirical studies have pointed out that marketing collaboration among multiple tourism and hospitality businesses (*bridging networks*) and between businesses and destination management agencies (*linking networks*) can be more effective than efforts of individual businesses (Cioccio & Michael, 2007; Orchiston & Higham, 2016).

Furthermore, the strong connection to their local communities (*bonding networks*) means that STHBs are more likely to receive support from local customers. For example, after the impacts of bushfires and COVID-19 in Australia during 2020, several marketing and social campaigns have encouraged residents to "Go Local, Grow Local" (Business Queensland, 2020), that "Queensland is Good to Go" (Tourism and Events Queensland, 2020), and "A short visit goes a long way" according to Visit Victoria (Premier of Victoria, 2020). Since delays in regaining customers can be fatal to firms, especially small ones, support from local residents is imperative to the recovery of STHBs (Zhang et al., 2009).

The final step of organisational disaster and crisis management is the evaluation of the post-event state and to improve preparations for future shocks (Faulkner, 2001; Ritchie, 2009). More often than not, external shocks will lead to substantial changes in both the demand- and supply-sides of tourism and hospitality markets. For instance, the provision and uptake of nature-based activities may be restricted following natural disasters; a terrorist attack will be followed by stricter safety procedures and a drop in inbound travel; and perhaps most

obviously, the COVID-19 pandemic has redefined global mobility. It is therefore imperative for STHBs to modify and/or innovate to better adapt to new operating environments. We would observe that resources from social networks can assist STHBs in their transformation process (Kofler et al., 2018). For instance, STHBs can develop new products and attract new markets through insurance, loans and grants (*financial resources*), improved infrastructure and amenities (*physical resources*), and new cost-effective supply of raw materials (*natural resources*) (Ritchie, 2009). In addition, they may also gain new knowledge and experience (*human resources*) through disaster training programs provided by emergency departments, government agencies and industry associations. Not only able to fully recover from the shock, STHBs can have the potential to ‘bounce back better’ if they can effectively utilise these resources.

The discussion above has set out many of the main actions and approaches that STHBs may implement in order to successfully survive and recover from an external shock. To reiterate, our key argument is that these strategies and actions require a substantial amount of resources which STHBs may not be able to acquire without sourcing them from their social networks. This leads to our second and third propositions:

Proposition 2: Resources gained from social networks can assist the short-term survival of STHBs in the event of external shocks.

Proposition 3: Resources gained from social networks can assist STHBs in their long-term recovery from external shocks.

5. THE FEEDBACK LOOP BETWEEN BUSINESS RESILIENCE AND SOCIAL NETWORKS

In their review of social network research in management studies, Carpenter et al. (2012) suggest that social networks may be read as either a predictor or a consequence of social phenomena. Applied here, this implies that the social networks of STHBs can influence other factors pertaining to the respective businesses (e.g., access to resources and resilience to external shocks), and conversely may be influenced by those factors.

Some recent studies have observed changes in social networks within local communities following disasters or crises. For instance, Misra et al. (2017) examined the changing patterns in social networks of an Indian village throughout the phases of a cyclone. The disaster triggered the formation of new ties in the immediate aftermath of the disaster but the network density (an indication of the community cohesiveness) gradually reduced in the latter phases of the cyclone. In addition, there were different central actors (important persons or institutions within the network) in different disaster phases. Karunarathne and Lee (2020) demonstrated empirical evidence of evolutionary changes in the social networks of flood-inundated households in rural Sri Lanka throughout the disaster phases (in terms of

network size, density, centrality, cohesiveness). From the perspective of a business community or ecosystem, Becken et al. (2014) examined inter-organisational networks of tourism businesses after the Christchurch earthquakes. They reported differences in business networks before and after the disaster, in particular as the City Council, the Earthquake Commission and insurance companies emerged as particularly prominent in helping local businesses to respond to the episodes.

Findings of this nature emphasise that the resilience level of a STHB after a disaster or crisis (i.e., how well the business can cope with those lasting impacts of the shock) may lead to changes in the social networks of the business. More particularly, these changes can be in the network actors (persons/organisations that the business has connection with) or in the network ties (strength of connection); and they can be either positive or negative. In an effort to deal with a disaster or crisis, STHBs may need to form relationships with stakeholders with whom they do not ordinarily interact in 'everyday' operations. As the Christchurch case demonstrates, among those whose importance is (temporarily) elevated from their usual roles and status in daily operations, are: governmental emergency committees, humanitarian organisations, insurance companies, and even philanthropists (Becken et al., 2014). Meanwhile, other (parts of) networks may be diminished if other stakeholders succumb to events (e.g., usual suppliers close down or an association disbands).

Depending on their actions and experiences during the disaster phases, the existing social networks of STHBs may also be strengthened or weakened. It has been found that past experience of collaboration may influence the level of trust and the continuity of relationship among tourism stakeholders (Jiang & Ritchie, 2017). This means if the business owner has a positive interaction with a person or organisation when facing with adverse conditions (e.g., help from a neighbour to fix infrastructure damages, easy application to the local government for grants, timely damage audit and reimbursement from the insurer, effective marketing efforts from business alliance), it is likely that they will maintain and continue to invest in these beneficial networks. By contrast, ineffective responses of the businesses and other stakeholders involved to the external shock can lead to distrust and competition, thus weakening their social networks (Hystad & Keller, 2008; Jiang & Ritchie, 2017).

The post-shock changes in the social networks of STHBs will in turn have consequential effects on their future access to resources and resilience to future disasters and crises. This circular nature of the relationship among social networks, access to resources and business resilience also represents the continuous transformation of businesses under changing environmental conditions. From the above discussion our fourth proposition is:

Proposition 4: Post-shock resilience of STHBs can lead to consequential changes in their social networks.

6. THE IMPACTS OF CONTEXTUAL FACTORS

The nexus between social networks and business resilience cannot be examined in isolation; rather, many contextual factors can potentially influence the association between social networks, access to resources, and business resilience. These factors can be divided into the environmental and the organisational, with some prominent examples discussed as follows.

6.1. Environmental factors

Environmental factors refer to features of the external environment in which the business operates. Within the scope of this paper, our attention is drawn to two main factors: the impacts of external shocks, and the socio-cultural norms regarding business practices of networking.

Firstly, as introduced above, STHBs are increasingly vulnerable to external shocks. Different types of shocks vary in terms of nature and magnitude of impacts which, in turn, will dictate the level of support that businesses need to call upon (Backer & Ritchie, 2017; Laws & Prideaux, 2006; Ritchie & Jiang, 2019). If the shock happens at a local scale, the impacted area can receive support from neighbouring regions as well as the national government. If it is a nationwide emergency state, international disaster assistance will have to be involved, thus expanding the network of support that affected businesses can draw on. In addition, the frequency and probability of occurrence can also play a part, as they can determine the overall vulnerability level of businesses. For instance, an unprecedented event such as the current global pandemic has rendered many tourism and hospitality operators paralysed, requiring exceptional measures to be implemented (Gössling et al., 2020). Meanwhile, businesses in areas prone to frequent disasters are much better equipped with experiences and precautions. Examples include earthquake-resistant hotels in Japan (Nishitani & Inoue, 2001), Australian businesses taking extra precautions to prevent bushfires during the dry seasons (Cioccio & Michael, 2007), and tourism operators in coastal destinations building tolerance to repeated climate-related disasters (Becken, 2005; Biggs et al., 2012).

The socio-cultural norms concerning networking practices can be another factor dictating business practices (Klyver & Foley, 2012; Kwek & Lee, 2015). Different cultures can assign varied connotations to the same business practice. For example, the act of gift-giving during corporate networking activities is important and expected in East Asian cultures, yet it can also be considered as bribery and unethical practice by other cultures (Kwek & Lee, 2015). Power distance between businesses and the authorities can also affect how businesses develop and utilise their linking social networks (Saito & Ruhanen, 2017). The positive or negative socio-cultural norms can either be an enabling or inhibiting factor for businesses in the process of building networks and reaping benefits from them.

While these external influences are out of the business owner's control, they can have a significant impact on how the business interacts with its social networks, and in turn affecting the resources it can access from these networks. Therefore, we propose the external environment as part of the contextual factors affecting the nexus between social networks, access to resources and business resilience.

6.2. Organisational factors

It is important to also consider organisational factors when conceptualising business resilience. These factors include inherent characteristics of the businesses (sub-sector, formal versus informal, age, size) as well as individual attributes of the business owners, which can determine the composition of the business social networks and the nature of these relationships.

As a form of economic activity, tourism requires complementarity of services and co-operation from a complex array of businesses across multiple sub-sectors; including tour operators, transportation, accommodation, food and beverage among others. Businesses in each type have their own distinctive characteristics that can differentiate the way they form and interact with their social networks (Akbaba, 2012). For example, food and beverage providers tend to develop strong partnerships with local suppliers in order to source fresh produce at reduced costs (Roy et al., 2017), while transportation companies and tour operators have to find partners in multiple regions alongside their routes to deliver their itineraries. Among accommodation providers, hotels are often good at developing strategic alliances among themselves in the form of many hotel associations (Jayawardena et al., 2013). By contrast, the nature of their services requires travel agencies to foster cross-sectoral collaboration with businesses from other fields (Chen & Hsu, 2012). These differences across various sub-sectors of tourism and hospitality businesses should clearly impact upon, and hence should be part of the consideration of, the benefits of social networks.

In addition, the distinction between formal and informal businesses is worth noting. Biggs et al. (2012) note that informal businesses comprise a considerable proportion in developing countries and generate significant employment and income for residents. Emerging market trends (such as the introduction of disruptive technologies or the growth of the sharing economy) make it easier than ever, in tourism as in other sectors, to engage in informal business activities in tourism and hospitality. AirBnB, Uber, home-cooked food delivery, local tour-guide networks have become an integral part of tourism in many destinations. However, it seems that small businesses in the informal economy in developing countries continue to be neglected in current tourism research (Ritchie & Jiang, 2019; Thomas et al., 2011). Due to their unregistered status, many informal businesses can miss out on a large portion of support from formal networks such as with government agencies, financial institutions, industry

associations. This may lead to the owner being even more reliant on their closed informal social networks, such as those with relatives, friends and neighbours.

Apart from the business characteristics, the personal attributes of owner-managers have the potential to impact on the nature and contribution of STHB social networks. In their empirical study, Jiang et al. (2017) found that personality and attitudes were among the most influential factors in effective collaboration between tourism stakeholders. Another study by Chell and Baines (2000) also demonstrates an association between the type of small firm owners (on a scale of entrepreneurial orientation) and their networking activities. Characteristics of owners are especially important in the context of micro-small businesses where they have almost complete control over every aspect of operations (Pham, 2018). As a result, their networking and communication skills, personality traits, leadership style, willingness to network and even personal reputation, can play a part in determining what type of networks the business can have and how these networks are developed and maintained.

From the arguments above, a fifth proposition follows:

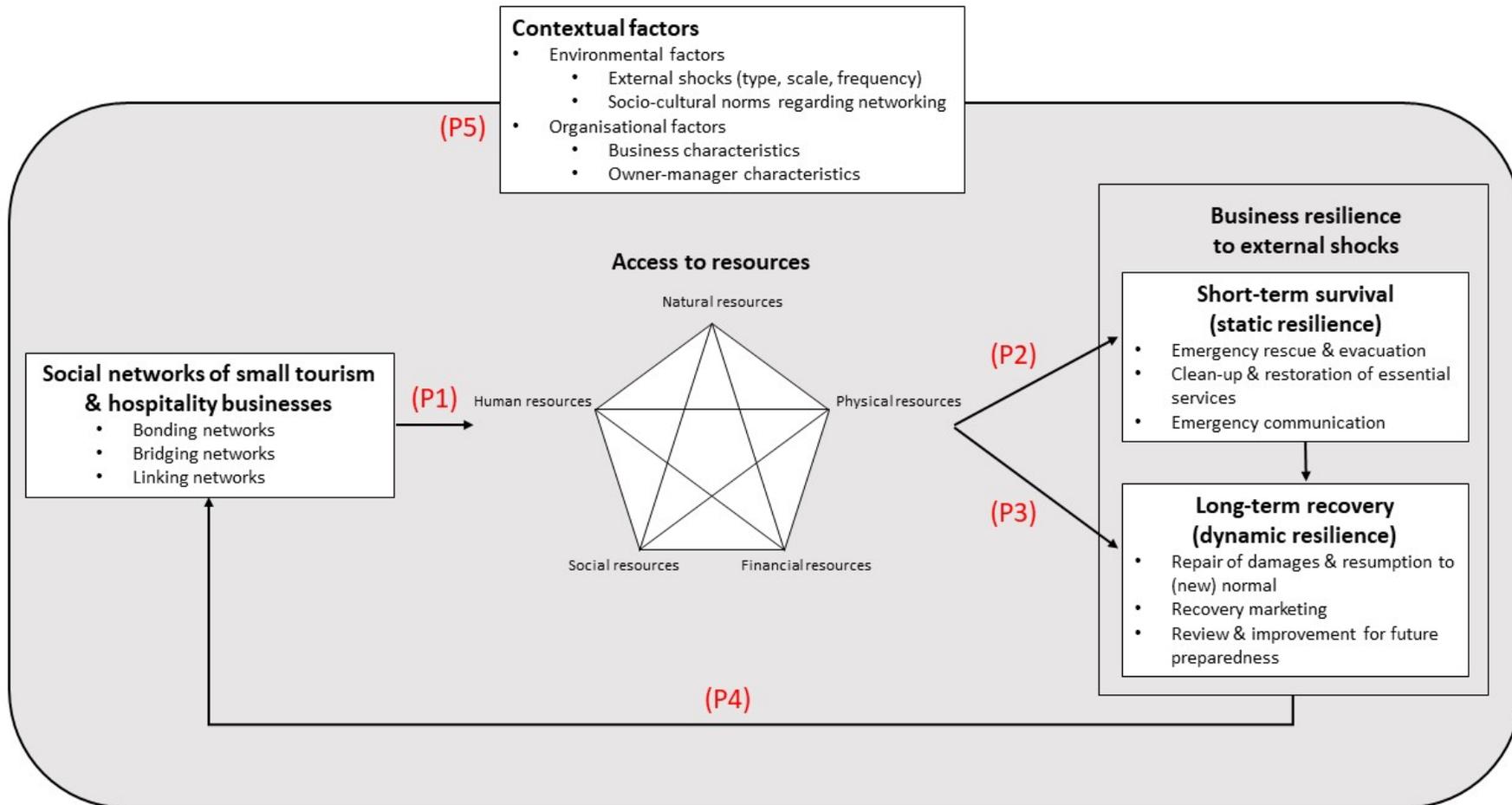
Proposition 5: Contextual factors (both external and internal) can impact on the relationships between social networks, access to resources and business resilience of STHBs to external shocks.

7. CONCEPTUAL FRAMEWORK AND SUGGESTED AGENDA FOR FUTURE RESEARCH

To summarise, to this point this paper has presented five propositions in an attempt to conceptualise the role of social networks in building resilience to external shocks among and within STHBs. As Figure 2 makes clear, which draws on and develops ideas from the Sustainable Livelihoods framework (DFID, 1999), these propositions both postulate, and function because of, the connections between social networks, access to resources, business resilience and contextual factors.

In view of the scope of the paper, we have presented the propositions in a conceptually broad manner based on a largely inductive review of existing work in several bodies of knowledge. We are acutely aware, from our detailed reading of the literature, that these propositions are yet to be investigated or verified empirically. Not only does this prompt epistemological questions of how we may research these propositions and produce knowledge about them, but also more functionally it raises the issue of what a future research agenda may look like in this distinctive intellectual space. Table 3 examines the latter, providing as it does an indicative rather than exhaustive set of potential research questions as well as a series of key 'elements' that might feature in empirical observation. We use this term advisedly: we may

Figure 2: Conceptual framework of the relationships among social networks, access to resources, business resilience and contextual factors



Source: Authors, inspired and adapted from DFID (1999)

just as well have written ‘constructs’ or ‘components’ but both terms have particular connotations to and within quantitative studies. Moreover, Figure 2 appears reminiscent of a path diagram. Yet, a central aspect of the future research agenda is that it will not be adequately addressed solely by quantitative or qualitative approaches alone, and instead a blend of data will be required in either mixed or multiple methods research strategies.

Beyond the need for plural approaches to knowledge production, Table 3 demonstrates a diverse thematic range of research questions related to social networks and STHB resilience. As a first consideration, there needs to be a clearer understanding of the nature of social networks in which STHBs participate, including the identification of beneficial networks to these businesses (Proposition 1, 2 & 3). Some recent studies have revealed the types and benefits of social networks to small businesses (Torres et al., 2019; Williams et al., 2020); however deeper insights into the structural and relational dimensions of these networks (i.e. with whom and how STHBs interact) are yet to be explored. Existing studies using Social Network Analysis provide useful guidance (Carpenter et al., 2012; Varda et al., 2009), although ethnographic and (auto)biographical approaches may equally yield rich qualitative data from the business owner’s perspective (Fillis, 2006; LeCompte & Schensul, 2010). Furthermore, social capital theory (Bourdieu, 1986; Coleman, 1994; Field, 2017; Putnam, 1993) and resource-based view (Jiang et al., 2019; Lin & Wu, 2014; Penrose & Pitelis, 2009) can provide useful theoretical lenses to be employed by future studies.

Propositions 2, 3 and 4 call for more longitudinal and comparative studies, in order to track changes in resource needs in parallel to the transformation of social networks among STHBs (i.e. throughout different phases of an event). A large proportion of published work in the tourism disaster and crisis management literature focuses on a single phases in (much longer and more complex) episodes, with few studies examining the differences between pre-post disaster phases (Jiang et al., 2017; Meyer, 2018; Ritchie & Jiang, 2019; Smith et al., 2018). Thus, more studies considering multiple phases of disaster and crisis management similar to those by Hystad and Keller (2008), Karunaratne and Lee (2020) and Misra et al. (2017) are imperative.

Table 3: Potential research questions suggested for future studies

Propositions	Potential research questions	Key elements
<p>Proposition 1: Multiple types of social networks (bonding, bridging, linking) can influence access to resources of STHBs</p>	<p>What are the social networks possessed by STHBs?</p>	<ul style="list-style-type: none"> ● Network composition <ul style="list-style-type: none"> ○ Categories of individuals/organisations having connection with the business (bonding, bridging, linking networks) ○ Position of the business within the network (network centrality) ● Network strength <ul style="list-style-type: none"> ○ Level of trust ○ Frequency and intimacy of interaction ○ Reciprocity and mutual interests
	<p>Do social networks provide STHBs with greater access to resources?</p>	<ul style="list-style-type: none"> ● Asset (resource) audit <ul style="list-style-type: none"> ○ Pre-post disaster comparison ● External sourcing of resources ● Enablers and inhibitors of effective utilisation of social networks
	<p>Which type of social networks is most beneficial to STHBs in the aftermath of a disaster/crisis?</p>	<ul style="list-style-type: none"> ● Rating of networks' value based on <ul style="list-style-type: none"> ○ Accessibility (i.e. is it quick and easy for the business to approach the other parties and ask for help?) ○ Scale of assistance ○ Value of assistance
<p>Proposition 2: Resources gained from social networks can assist the short-term survival of STHBs in the event of external shocks</p>	<p>What resources do STHBs need to survive through an external shock and how do they access those resources?</p>	<ul style="list-style-type: none"> ● Resources required for survival ● Point of contact for assistance in the immediate aftermath of the disaster/crisis
	<p>Do externally-sought resources affect the survival rate of STHBs after a disaster/crisis? (i.e. are businesses with more resources from their social</p>	<ul style="list-style-type: none"> ● Resources acquired through the social networks of the business ● Survival indicators <ul style="list-style-type: none"> ○ Continuity of operation

	networks more likely to survive?)	<ul style="list-style-type: none"> ○ Damage audit (minimal loss of persons and assets)
<p>Proposition 3: Resources gained from social networks can assist STHBs in their long-term recovery from external shocks</p>	<p>What resources do STHBs need to recover from an external shock and how do they access those resources?</p>	<ul style="list-style-type: none"> ● Resources required for recovery ● Point of contact for assistance during the extended period after a disaster/crisis
	<p>Do externally-sought resources affect the recovery of STHBs after a disaster/crisis? (i.e. do businesses with more resources from their social networks recover more quickly?)</p>	<ul style="list-style-type: none"> ● Resources acquired through the social networks of the business ● Recovery indicators <ul style="list-style-type: none"> ○ Resumption of normal operation ○ Recovery of revenue level ○ Tourist perception of the destination as safe to return
<p>Proposition 4: Post-shock resilience of STHBs can lead to consequential changes in their social networks</p>	<p>Are there any changes in STHBs' social networks after the experience of an external shock?</p>	<ul style="list-style-type: none"> ● Pre-post comparison of network composition and strength <ul style="list-style-type: none"> ○ New networks ○ Diminished networks ○ Strengthened relationships ○ Weakened relationships
	<p>How can STHBs maintain beneficial networks after a disaster/crisis?</p>	<ul style="list-style-type: none"> ● Identification of beneficial networks ● Enablers and inhibitors to maintain relationship with beneficial networks
<p>Proposition 5: Contextual factors (both external and internal) can impact on the relationships between social networks, access to resources and business resilience of STHBs to external shocks</p>	<p>How do different types of external shocks affect the social networks of STHBs?</p>	<ul style="list-style-type: none"> ● Specific nature of the disaster/crisis <ul style="list-style-type: none"> ○ Type ○ Frequency ○ Scale of impact ● Changes in the composition & strength of business social networks under the impact of specific disaster/crisis
	<p>How do socio-cultural norms affect the social networks of STHBs?</p>	<ul style="list-style-type: none"> ● Socio-cultural norms regarding business practices of developing & maintaining social networks

		<ul style="list-style-type: none"> ● Enablers and inhibitors of effective social network development
	<p>How do social networks vary among different sub-categories of STHBs?</p>	<ul style="list-style-type: none"> ● Business characteristics <ul style="list-style-type: none"> ○ Industry subsectors (tour operators, hotels, restaurants, travel agencies, etc.) ○ Formal vs informal ○ Age ○ Size (non-employing, micro, small) ● Network composition & strength ● Cross-sectional comparison
	<p>How do personal characteristics of the owner affect the social networks of STHBs?</p>	<ul style="list-style-type: none"> ● Owner's personal characteristics <ul style="list-style-type: none"> ○ Personality traits ○ Leadership style ○ Communication & networking skills ● Network composition & strength

Source: Authors

Proposition 5 directs our attention to the need to consider contextual factors when examining the relationships among the researched elements. More specifically, it is necessary to understand the nature of disasters and crises (i.e. unique characteristics and impacts of different disaster/crisis categories) in future research, which is still limitedly incorporated in existing case studies of tourism disaster and crisis management (Ritchie & Jiang, 2019). In addition, many scholars have called for the need to dissect small businesses as a research object, arguing that there are multiple sub-categories of small businesses and that a one-size-fits-all approach to resilience building is insufficient (Herbane, 2019; Sullivan-Taylor & Branicki, 2011). More cross-sectional comparative studies can further explore the impact of these external and internal contextual factors on the social networks and resilience building of STHBs.

8. CONCLUSION:

Micro and small businesses play a critical role in providing tourism and hospitality services in many destinations, and it is imperative that their resilience to external shocks should be brought into much closer focus. This paper has attempted to conceptualise the role of social networks in building short-term and long-term resilience among STHBs. We have argued that social networks can provide STHBs with greater access to various types of business resources, which may influence their chances of survival and recovery from disasters and crises. Greater resilience among STHBs leads to changes in their social networks creating feedback loops of learning and transformation to cope, in turn, with the constant potential of turbulence in the external environment. The relationship among social networks, access to resources and resilience of STHBs cannot be examined in isolation without examining contextual factors, in particular the impacts of environmental circumstances and organisational characteristics. The conceptual framework and the connected research agenda provide a clear and compelling blueprint to advance our understanding further of small businesses in future studies of tourism disaster and crisis management.

REFERENCES

- ABS. (2020). *Business indicators, business impacts of COVID-19*. Retrieved from <https://www.abs.gov.au/statistics/economy/business-indicators/business-indicators-business-impacts-covid-19>
- Akama, Y., Chaplin, S., & Fairbrother, P. (2014). Role of social networks in community preparedness for bushfire. *International Journal of Disaster Resilience in the Built Environment*, 5(3), 277-291.
- Akbaba, A. (2012). Business performance of small tourism enterprises: A comparison among three sub-sectors of the industry. *Anatolia*, 23(2), 177–195.

- Aldrich, D. P., & Meyer, M. A. (2015). Social capital and community resilience. *American Behavioral Scientist*, 59(2), 254-269.
- Annarelli, A., & Nonino, F. (2016). Strategic and operational management of organizational resilience: Current state of research and future directions. *Omega*, 62, 1-18.
- Asgary, A., Anjum, M. I., & Azimi, N. (2012). Disaster recovery and business continuity after the 2010 flood in Pakistan: Case of small businesses. *International Journal of Disaster Risk Reduction*, 2, 46-56.
- Astrachan, J. H. (2010). Strategy in family business: Toward a multidimensional research agenda. *Journal of Family Business Strategy*, 1(1), 6-14.
- Backer, E., & Ritchie, B. W. (2017). VFR travel: A viable market for tourism crisis and disaster recovery?. *International Journal of Tourism Research*, 19(4), 400-411.
- Becken, S. (2005). Harmonising climate change adaptation and mitigation: The case of tourist resorts in Fiji. *Global Environmental Change*, 15(4), 381-393.
- Becken, S., Scott, N., & Ritchie, B. W. (2014). The development of new tourism networks to respond to and recover from the 2011 Christchurch earthquake. In B. W. Ritchie & K. Campiranon (Eds.), *Tourism crisis and disaster management in the Asia-Pacific* (pp. 190–205). UK: CABI.
- Bhamra, R., Dani, S., & Burnard, K. (2011). Resilience: The concept, a literature review and future directions. *International Journal of Production Research*, 49(18), 5375-5393.
- Biggs, D., Hall, C. M., & Stoeckl, N. (2012). The resilience of formal and informal tourism enterprises to disasters: Reef tourism in Phuket, Thailand. *Journal of Sustainable Tourism*, 20(5), 645-665.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). Westport, CT: Greenwood.
- Brock, W. A., & Evans, D. S. (1989). Small business economics. *Small Business Economics*, 1(1), 7-20.
- Brown, N. A., Orchiston, C., Rovins, J. E., Feldmann-Jensen, S., & Johnston, D. (2018). An integrative framework for investigating disaster resilience within the hotel sector. *Journal of Hospitality and Tourism Management*, 36, 67-75.
- Business Queensland. (2020). *Go local, grow local*. Retrieved from <https://www.business.qld.gov.au/starting-business/advice-support/support/small-business/go-local>
- Cahyanto, I. P., Liu-Lastres, B., & Edwards, C. (2020). Developing a resilience-based adaptive co-management framework: Public sectors' insights on the role of tourism. *Journal of Policy Research in Tourism, Leisure and Events*, 1-18.
- Cai, Y. (2017). Bonding, bridging, and linking: Photovoice for resilience through social capital. *Natural Hazards*, 88(2), 1169-1195.

- Çakar, K. (2018). Critical success factors for tourist destination governance in times of crisis: A case study of Antalya, Turkey. *Journal of Travel & Tourism Marketing*, 35(6), 786-802.
- Carpenter, M. A., Li, M., & Jiang, H. (2012). Social network research in organizational contexts: A systematic review of methodological issues and choices. *Journal of Management*, 38(4), 1328-1361.
- Centre for Research on the Epidemiology of Disasters (CRED). (2020). *Natural disaster 2019*. Retrieved from https://cred.be/sites/default/files/adsr_2019.pdf
- Chell, E., & Baines, S. (2000). Networking, entrepreneurship and microbusiness behaviour. *Entrepreneurship & Regional Development*, 12(3), 195-215.
- Chen, W. Y., & Hsu, C. Y. (2012). Assessing travel business partners using the critical incident technique and the analytic hierarchy process. *Tourism Economics*, 18(2), 295-310.
- Chowdhury, M., Prayag, G., Orchiston, C., & Spector, S. (2019). Postdisaster social capital, adaptive resilience and business performance of tourism organizations in Christchurch, New Zealand. *Journal of Travel Research*, 58(7), 1209-1226.
- Cioccio, L., & Michael, E. J. (2007). Hazard or disaster: Tourism management for the inevitable in Northeast Victoria. *Tourism Management*, 28(1), 1-11.
- Coleman, J. S. (1994). *Foundations of social theory*. Cambridge: Belknap Press.
- Cradock-Henry, N., Fountain, J., & Buelow, F. (2018). Transformations for resilient rural futures: The case of Kaikōura, Aotearoa-New Zealand. *Sustainability*, 10(6), 1952.
- Davies, T., Beaven, S., Conradson, D., Densmore, A., Gaillard, J. C., Johnston, D., ... & Robinson, T. (2015). Towards disaster resilience: A scenario-based approach to co-producing and integrating hazard and risk knowledge. *International Journal of Disaster Risk Reduction*, 13, 242-247.
- Davlasheridze, M., & Geylani, P. C. (2017). Small business vulnerability to floods and the effects of disaster loans. *Small Business Economics*, 49(4), 865-888.
- Department for International Development (DFID). (1999). *Sustainable livelihoods guidance sheets*. Retrieved from <https://www.livelihoodscentre.org/documents/114097690/114438878/Sustainable+livelihoods+guidance+sheets.pdf/594e5ea6-99a9-2a4e-f288-cbb4ae4bea8b?t=1569512091877>
- Faulkner, B. (2001). Towards a framework for tourism disaster management. *Tourism Management*, 22(2), 135-147.
- Field, J. (2017). *Social capital* (3rd ed.). New York: Routledge.
- Fillis, I. (2006). A biographical approach to researching entrepreneurship in the smaller firm. *Management Decision*, 44(2), 198-212.

- Flynn, D. T. (2007). The impact of disasters on small business disaster planning: A case study. *Disasters, 31*(4), 508-515.
- Foley, M. W., & Edwards, B. (1999). Is it time to disinvest in social capital?. *Journal of Public Policy, 19*(2), 141-173.
- Gaillard, J. C., & Mercer, J. (2013). From knowledge to action: Bridging gaps in disaster risk reduction. *Progress in Human Geography, 37*(1), 93-114.
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism, 1-20*.
- Guarnacci, U. (2016). Joining the dots: Social networks and community resilience in post-conflict, post-disaster Indonesia. *International Journal of Disaster Risk Reduction, 16*, 180-191.
- Ha, S., Childs, M., Kim, Y. K., & Fairhurst, A. (2020). After the fire: An assessment of small business preparedness and recovery in Gatlinburg, Tennessee. *International Journal of Hospitality & Tourism Administration, 1-26*.
- Hall, C. M. (2018). Resilience theory and tourism. In J. Saarinen & A. M. Gill (Eds.), *Resilient destinations and tourism* (pp. 34-47). London: Routledge.
- Harries, T., McEwen, L., & Wragg, A. (2018). Why it takes an 'ontological shock' to prompt increases in small firm resilience: Sensemaking, emotions and flood risk. *International Small Business Journal: Researching Entrepreneurship, 36*(6), 712-733.
- Henderson, J. C. (2005). Responding to natural disasters: Managing a hotel in the aftermath of the Indian Ocean tsunami. *Tourism and Hospitality Research, 6*(1), 89-96.
- Henderson, J. C., & Ng, A. (2004). Responding to crisis: Severe acute respiratory syndrome (SARS) and hotels in Singapore. *International Journal of Tourism Research, 6*(6), 411-419.
- Herbane, B. (2019). Rethinking organizational resilience and strategic renewal in SMEs. *Entrepreneurship & Regional Development, 31*(5-6), 476-495.
- Huang, X., & Brown, A. (1999). An analysis and classification of problems in small business. *International Small Business Journal, 18*(1), 73-73.
- Hystad, P. W., & Keller, P. C. (2008). Towards a destination tourism disaster management framework: Long-term lessons from a forest fire disaster. *Tourism Management, 29*(1), 151-162.
- Islam, R., & Walkerden, G. (2014). How bonding and bridging networks contribute to disaster resilience and recovery on the Bangladeshi coast. *International Journal of Disaster Risk Reduction, 10*, 281-291.
- Jameson, S. M. (2000). Recruitment and training in small firms. *Journal of European Industrial Training, 24*(1), 43-49.

- Jayawardena, C. C., McMillan, D., Pantin, D., Taller, M., & Willie, P. (2013). Trends in the international hotel industry. *Worldwide Hospitality and Tourism Themes*, 5(2), 151–163.
- Jiang, Y., & Ritchie, B. W. (2017). Disaster collaboration in tourism: Motives, impediments and success factors. *Journal of Hospitality and Tourism Management*, 31, 70-82.
- Jiang, Y., Ritchie, B. W., & Benckendorff, P. (2017). Bibliometric visualisation: An application in tourism crisis and disaster management research. *Current Issues in Tourism*, 22(16), 1925-1957.
- Jiang, Y., Ritchie, B. W., & Verreynne, M. L. (2019). Building tourism organizational resilience to crises and disasters: A dynamic capabilities view. *International Journal of Tourism Research*, 21(6), 882-900.
- Karunaratne, A. Y., & Lee, G. (2020). The geographies of the dynamic evolution of social networks for the flood disaster response and recovery. *Applied Geography*, 125, 102274.
- Klyver, K., & Foley, D. (2012). Networking and culture in entrepreneurship. *Entrepreneurship & Regional Development*, 24(7-8), 561-588.
- Knutsson, P., & Ostwald, M. (2006). A process-oriented Sustainable Livelihoods Approach: A tool for increased understanding of vulnerability, adaptation and resilience. *Mitigation and Adaptation Strategies for Global Change*.
- Kofler, I., Marcher, A., Volgger, M., & Pechlaner, H. (2018). The special characteristics of tourism innovation networks: The case of the Regional Innovation System in South Tyrol. *Journal of Hospitality and Tourism Management*, 37, 68-75.
- Kwek, A., & Lee, Y. S. (2015). How “face” matters: Chinese corporate tourists in Australia. *Journal of Travel & Tourism Marketing*, 32(1-2), 120-140.
- Lamanna, Z., Williams, K. H., & Childers, C. (2012). An assessment of resilience: Disaster management and recovery for greater New Orleans’ hotels. *Journal of Human Resources in Hospitality & Tourism*, 11(3), 210-224.
- Laws, E., & Prideaux, B. (2006). Crisis management: A suggested typology. *Journal of Travel & Tourism Marketing*, 19(2-3), 1-8.
- LeCompte, M. D., & Schensul, J. J. (2010). *Designing and conducting ethnographic research: An introduction (Vol. 1)*. California: AltaMira Press.
- Leiras, A., Brito Jr, I. d., Peres, E. Q., Bertazzo, T. R., & Yoshizaki, H. T. Y. (2014). Literature review of humanitarian logistics research: Trends and challenges. *Journal of Humanitarian Logistics and Supply Chain Management*, 4(1), 95-130.
- Lettieri, E., Masella, C., & Radaelli, G. (2009). Disaster management: Findings from a systematic review. *Disaster Prevention and Management*, 18(2), 117-136.

- Lin, Y., & Wu, L. Y. (2014). Exploring the role of dynamic capabilities in firm performance under the resource-based view framework. *Journal of Business Research*, 67(3), 407-413.
- Lo, A., & Chan, F. (2017). Preparing for flooding in England and Wales: The role of risk perception and the social context in driving individual action. *Natural Hazards*, 88(1), 367-387.
- Lu, Y., Xu, D., Wang, Q., & Xu, J. (2018). Multi-stakeholder collaboration in community post-disaster reconstruction: Case study from the Longmen Shan Fault area in China. *Environmental Hazards*, 17(2), 85-106.
- Mair, J., Ritchie, B. W., & Walters, G. (2016). Towards a research agenda for post-disaster and post-crisis recovery strategies for tourist destinations: A narrative review. *Current Issues in Tourism*, 19(1), 1-26.
- Masud-All-Kamal, M., & Hassan, S. M. M. (2018). The link between social capital and disaster recovery: Evidence from coastal communities in Bangladesh. *Journal of the International Society for the Prevention and Mitigation of Natural Hazards*, 93(3), 1547-1564.
- Mensah-Ansah, J. (2014). Small tourism accommodation business owners in Ghana: A factor analysis of motivations and challenges. *African Journal of Hospitality*, 3(1), 1-17.
- Meyer, M. A. (2018). Social capital in disaster research. In H. Rodríguez, W. Donner & J. E. Trainor (Eds.), *Handbook of disaster research* (pp. 263-286). Cham, Switzerland: Springer.
- Misra, S., Goswami, R., Mondal, T., & Jana, R. (2017). Social networks in the context of community response to disaster: Study of a cyclone-affected community in Coastal West Bengal, India. *International Journal of Disaster Risk Reduction*, 22, 281-296.
- Morakabati, Y., Page, S. J., & Fletcher, J. (2017). Emergency management and tourism stakeholder responses to crises: A global survey. *Journal of Travel Research*, 56(3), 299-316.
- Morrison, A. (1996). Marketing the small tourism business. In A. V. Seaton, & M. Bennett (Eds.), *Marketing tourism products: Concepts, issues, cases* (pp. 399-418). London: International Thomson Publishing.
- Nishitani, A., & Inoue, Y. (2001). Overview of the application of active/semiactive control to building structures in Japan. *Earthquake Engineering & Structural Dynamics*, 30(11), 1565-1574.
- Orchiston, C., & Higham, J. E. S. (2016). Knowledge management and tourism recovery (de)marketing: The Christchurch earthquakes 2010–2011. *Current Issues in Tourism*, 19(1), 64-84.
- Page, S. J., Forer, P., & Lawton, G. R. (1999). Small business development and tourism: Terra incognita?. *Tourism Management*, 20, 435-459.

- Penrose, E. T., & Pitelis, C. (2009). *The theory of the growth of the firm* (4th ed., Rev. ed.). Oxford: Oxford University Press.
- Pham, L. D. Q. (2018). *Service quality from managers' perspective in small tourism and hospitality businesses* (Unpublished Honour's thesis). The University of Queensland, Australia.
- Poder, T. G. (2011). What is really social capital? A critical review. *The American Sociologist*, 42(4), 341.
- Prasad, S., Su, H. C., Altay, N., & Tata, J. (2015). Building disaster-resilient micro enterprises in the developing world. *Disasters*, 39(3), 447-466.
- Premier of Victoria. (2020). *Road to bushfire recovery leads to Regional Victoria*. Retrieved from <https://www.premier.vic.gov.au/road-bushfire-recovery-leads-regional-victoria>
- Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, N.J.: Princeton University Press.
- Ritchie, B. W. (2004). Chaos, crises and disasters: A strategic approach to crisis management in the tourism industry. *Tourism Management*, 25(6), 669-683.
- Ritchie, B. W. (2008). Tourism disaster planning and management: From response and recovery to reduction and readiness. *Current Issues in Tourism*, 11(4), 315-348.
- Ritchie, B. W. (2009). *Crisis and disaster management for tourism*. Channel View Publications.
- Ritchie, B. W., & Jiang, Y. (2019). A review of research on tourism risk, crisis and disaster management: Launching the annals of tourism research curated collection on tourism risk, crisis and disaster management. *Annals of Tourism Research*, 79, 102812.
- Ritchie, B. W., Bentley, G., Koruth, T., & Wang, J. (2011). Proactive crisis planning: Lessons for the accommodation industry. *Scandinavian Journal of Hospitality and Tourism*, 11(3), 367-386.
- Rose, A. (2007). Economic resilience to natural and man-made disasters: Multidisciplinary origins and contextual dimensions. *Environmental Hazards*, 7(4), 383-398.
- Roy, H., Hall, C. M., & Ballantine, P. W. (2017). Trust in local food networks: The role of trust among tourism stakeholders and their impacts in purchasing decisions. *Journal of Destination Marketing & Management*, 6(4), 309-317.
- Sadri, A. M., Ukkusuri, S. V., Lee, S., Clawson, R., Aldrich, D., Nelson, M. S., ... & Kelly, D. (2018). The role of social capital, personal networks, and emergency responders in post-disaster recovery and resilience: A study of rural communities in Indiana. *Natural Hazards*, 90(3), 1377-1406.
- Saito, H., & Ruhanen, L. (2017). Power in tourism stakeholder collaborations: Power types and power holders. *Journal of Hospitality and Tourism Management*, 31, 189-196.

- Scheyvens, R., & Russell, M. (2012). Tourism and poverty alleviation in Fiji: Comparing the impacts of small-and large-scale tourism enterprises. *Journal of Sustainable Tourism*, 20(3), 417-436.
- Smith, E. C., Burkle, F. M., Aitken, P., & Leggatt, P. (2018). Seven decades of disasters: A systematic review of the literature. *Prehospital and Disaster Medicine*, 33(4), 418-423.
- Sokolinskaya, N. E., & Kupriyanova, L. M. (2015). Evaluation of small business support's effectiveness. *Asian Social Science*, 11(7), 98-110.
- Stecke, K. E., & Kumar, S. (2009). Sources of supply chain disruptions, factors that breed vulnerability, and mitigating strategies. *Journal of Marketing Channels*, 16(3), 193-226.
- Sullivan-Taylor, B., & Branicki, L. (2011). Creating resilient SMEs: Why one size might not fit all. *International Journal of Production Research*, 49(18), 5565-5579.
- Sydnor, S., Niehm, L., Lee, Y., Marshall, M., & Schrank, H. (2017). Analysis of post-disaster damage and disruptive impacts on the operating status of small businesses after Hurricane Katrina. *Journal of the International Society for the Prevention and Mitigation of Natural Hazards*, 85(3), 1637-1663.
- Szreter, S., & Woolcock, M. (2004). Health by association? Social capital, social theory, and the political economy of public health. *International Journal of Epidemiology*, 33(4), 650-667.
- Thomas, R., Shaw, G., & Page, S. J. (2011). Understanding small firms in tourism: A perspective on research trends and challenges. *Tourism Management*, 32(5), 963-976.
- Tinsley, R., & Lynch, P. A. (2008). Differentiation and tourism destination development: Small business success in a close-knit community. *Tourism and Hospitality Research*, 8(3), 161-177.
- Torres, A. P., Marshall, M. I., & Sydnor, S. (2019). Does social capital pay off? The case of small business resilience after Hurricane Katrina. *Journal of Contingencies and Crisis Management*, 27(2), 168-181.
- Tourism and Events Queensland. (2020). *Good To Go campaign factsheet*. Retrieved from <https://cdn1-teq.queensland.com/~media/9f721d42bf674539883cd433d7a4fe02.ashx?vs=1&d=20200607T081116>
- Tourism Research Australia. (2019). *Tourism businesses in Australia*. Retrieved from <https://www.tra.gov.au/ArticleDocuments/185/Tourism-Businesses-full-report.pdf.aspx>

- Varda, D. M., Forgette, R., Banks, D., & Contractor, N. (2009). Social network methodology in the study of disasters: Issues and insights prompted by post-Katrina research. *Population Research and Policy Review*, 28(1), 11-29.
- Wang, J., & Ritchie, B. W. (2012). Understanding accommodation managers' crisis planning intention: An application of the theory of planned behaviour. *Tourism Management*, 33(5), 1057-1067.
- Wayne, W., & Carmichael, B. (2005). Canadian seasonality and domestic travel patterns: Regularities and dislocations as a result of the events of 9/11. *Journal of Travel & Tourism Marketing*, 19(2-3), 61-76.
- Wilkin, J., Biggs, E., & Tatem, A. J. (2019). Measurement of social networks for innovation within community disaster resilience. *Sustainability*, 11(7), 1943.
- Williams, C., You, J. J., & Joshua, K. (2020). Small-business resilience in a remote tourist destination: Exploring close relationship capabilities on the island of St Helena. *Journal of Sustainable Tourism*, 28(7), 937-955.
- Zhang, Y., Lindell, M. K., & Prater, C. S. (2009). Vulnerability of community businesses to environmental disasters. *Disasters*, 33(1), 38-57.
-