ACCEPTED FOR PUBLICATION AT *JOURNAL OF SUSTAINABLE TOURISM*

Small-Business Resilience in a Remote Tourist Destination:

Exploring Close Relationship Capabilities on the Island of St Helena

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ABSTRACT

We investigate how small businesses in a very remote island tourist destination are able to cope with shocks and disruptions they face, that is, their resilience. Given their size and resource limitations as well as disadvantages due to lack of accessibility and remoteness, we expect resilience in these types of firms to be underpinned by their close relationships with other local stakeholders. Drawing on concepts from Instrumental Stakeholder Theory (IST), we explore how close relationship capabilities with stakeholders affect small business resilience on the remote tourist destination of St Helena. Through in-depth interviews with the owner-managers of seven case firms on the island we identify how aspects of IST are relevant to resilience, while also uncovering emerging variables of interest. To make sense of these variables we use a Fuzzy Cognitive Mapping (FCM) approach, capturing respondents' mental models in graphical form. The result supports IST by reinforcing the positive effects of valuable partners and mutually beneficial interaction with valuable partners, as well as a negative impact of the cost of managing relationships. However, negative impacts of logistical costs and, surprisingly, the role of government policy on resilience are also identified. Implications for research and policy are discussed.

Key words: resilience; small firms; remote islands; stakeholder theory; sustainable economic development; St Helena

Introduction

Small remote islands are often heavily dependent on the tourism sector, offering unique and intriguing experiences that attract and fascinate tourists (Mountz, 2015; Scheyvens & Momsen, 2008). Small remote islands offer exoticism and diversity in natural capital not available elsewhere (Kurniawan et al., 2016) as well as cultural, historic and social attractiveness (Croes, 2006; Mountz, 2015). Their isolation can even enhance the appeal of the place (Scheyvens & Momsen, 2008). Nevertheless, there has been a narrative of vulnerability in the literature on small remote islands. Such islands are not only vulnerable to natural hazards (Adger et al., 2005; Becken et al., 2014), they are also sensitive to economic shocks due to their size and lack of accessibility. Their sheer distance from sources of materials, services and capital add to their sense of isolation (Brugiglio, 1995; Encontre, 1999; Hall, 2012), particularly when faced by adversity. Such islands often implement policy and set up infrastructure to boost the tourism sector, but may suffer consequences of environmental degradation as a consequence (Kurniawan et al., 2016), with government-led investments sometimes even being seen as 'destabilizing events' (Hamzah & Hampton, 2013). Encontre (1999: 269) collectively referred to these issues as 'handicaps of islandness'.

Despite this narrative, scholars also note a more optimistic view, highlighting positive development paths and even arguing that the emphasis on vulnerability has been over-stated (Scheyvens & Momsen, 2008). Moreover, scholars have pinpointed the role of the private sector in helping to alleviate vulnerability and promote economic sustainability on small islands (Becken et al., 2014). Indeed, practical business knowledge has been cited as an important factor in revitalizing and supporting local island communities in times of shock (Hamzah & Hampton, 2013). Economic development on small islands is underpinned in no small part by the

entrepreneurial endeavor of private businesses – not just governments - seeking to benefit through trade opportunities (Encontre, 1999).

But how do small private-sector businesses on small remote tourist destination islands sustain themselves when confronted with disruptions and shocks? At the heart of this question is the concept of organizational resilience, the dependent variable in our study. Consistent with extant resilience literature (Burnard & Bhamra, 2011; Linnenluecke, 2017; Ortiz-de-Mandojana & Bansal, 2015; Sutcliffe & Vogus, 2003), we use a definition of organizational resilience as "the capacity for an enterprise to survive, adapt, and grow in the face of turbulent change" (Fiksel, 2006: 16). Resilience is inextricably linked to the notion of coping with disruptive events and shocks and a resilience-based approach is highly relevant to understanding sustainability in tourist islands (Holladay & Powell, 2013). Small private-sector businesses on small remote islands are limited in terms of the resources they possess. Too small to possess a global reputation, they depend to a large extent on the brand of the destination in which they are located (Croes, 2006). What internal resources they do possess are likely to be very specialized, but, being located in such small and remote places adds to their insularity and isolation (Briguglio, 1995; Selwyn, 1978). This means they are also limited in where they can seek outside help when they need to deal with disruption. Scholars have not adequately addressed this situation, despite the importance of the small business community to the development of the tourism industry on remote islands. Literature does address resilience capabilities in communities confronted by external disturbances on small remote islands, including the trade-offs they face (Lauer et al., 2013) and the social processes they go through to build collective resilience (Schwarz et al., 2011). However, these types of studies focus at a level of general system resilience, rather than resilience in at the level of small businesses.

We address the research question by honing in on stakeholder relationships available to small business owner-managers as they attempt to deal with disruption and shock in small remote islands that have embarked on a sustainable economic development plan based on tourism. Studies highlight the importance of stakeholder relationships in remote locations (Guo et al., 2018). Adger et al.'s (2005) study of two cases of how communities responded to shocks in coastal areas puts a spotlight on networks and social capital in the communities that enabled assets to be mobilized in order to deal with major disruptions. Croes (2006) highlights the importance of governments on small islands to facilitate cooperation and trust, i.e., to develop relational assets amongst the many small businesses involved in offering tourism experiences, the delivery of which is complex in nature. Schwarz et al. (2011) highlight community cohesion. Given the preponderance of this theme of social and stakeholder relationships, we choose Instrumental Stakeholder Theory (IST) (Jones et al., 2018) to anchor our study. IST argues that relational contracts, joint wealth creation, mutual trust and cooperation all combine to create a Close Relationship Capability (CRC). Importantly, this CRC is a pre-cursor to eventual sustainable competitive advantage (Jones et al., 2018).

We elicit ten key variables of interest derived from IST to guide a Fuzzy Cognitive Mapping (FCM) (Özesmi & Özesmi, 2004) exercise conducted face-to-face during interviews with owner-managers of seven small businesses on the Island of St Helena in the South Atlantic. St Helena is an ideal setting to conduct an explorative study of small business resilience on a small remote island. It is one of fourteen British Overseas Territories (BOTs) and had established a sustainable economic development plan based on growth in tourism largely on the back of a newly built airport. Importantly, it is both remote (2000km from the nearest landfall on Africa and being served only by two weekly flights at the time of our study) and small (having a population of under

5000 inhabitants and a size of 16km by 8km). These characteristics mean the island is disadvantaged geographically (Briguglio, 1995; Selwyn, 1978). The FCM approach used in an explorative way allowed us to capture the mental models of small business owner-managers concerning the IST variables, as well as identifying new variables and how they inter-relate with each other and with resilience. Following the method described in Özesmi and Özesmi (2004), we produced an aggregated map showing a constellation of inter-related variables and their effects on resilience. We find that, while having access to valuable partners and having mutually beneficial interaction with those partners positively influence resilience, the cost of managing relationships, logistical costs and, surprisingly, government policy all have negative effects on resilience. We also note a rather complex picture in which different variables influence other variables independently of resilience.

Our study contributes to the literature on resilience in small remote islands that have embarked on an economic development plan based on tourism. Firstly, we focus on resilience at a small-firm level rather than a general system level (Adger et al., 2005; Briguglio et al., 2009) or community member level (Holladay and Powell, 2013). This focus sheds light on the role of entrepreneurs and small businesses in the private sector in developing capabilities to deal with external shocks and disruptions. The case of St Helena tells us that, underneath a 'negative' narrative of vulnerability on a small remote tourist destination island lies an important 'positive' narrative of resourcefulness and close relationship capability by an island's small business people who work together to survive in the face of adversity. Secondly, we find IST to be a valuable tool for analyzing determinants of resilience in tourist destinations. While the IST tradition has centered on explaining broader notions of sustainable competitive advantage (Jones et al., 2018), our study shows the ability of firms to cope with adversity can also be seen as a stakeholder-driven outcome.

Thirdly, FCM is a very useful and practical research tool in remote tourist destinations to explore the mental models and world views of entrepreneurs seeking to survive and grow despite resource shortcomings and other 'handicaps of islandness'.

Small remote islands and resilience

The small remote island is characterized by a lack of accessibility and unfavorable location – it is disadvantaged from the outset due to its geographical position (Selwyn, 1978) as well as with disadvantages attributable to size. Indeed, as Selwyn (1978: 1) notes, such places are almost entirely dependent on the outside world: "Island countries which are remote, lacking in resources *and* small will be dependent in many respects – especially on imports and exports, and on decisions taken abroad" (emphasis added). He identifies three classes of geographical disadvantage: (1) location, incurring high transport costs (see also Briguglio, 1995); (2) resources deficiency (e.g., land, climate, water, minerals, tourist beaches), and (3) size, in terms of population, area or gross domestic product. Because of these features, small remote islands are vulnerable to adversity; external shocks contribute to their economic marginalization (Encontre, 1999). These shocks include climate change, environmental degradation and proneness to natural disasters (Briguglio, 1995) the effects of which will create more harm per unit of area or per capita compared to larger countries (Briguglio, 1995). However, shocks also include economic shocks of a non-natural origin, such as changes in commodity prices, changes in exchange rates and decreases in foreign tourist demand (Encontre, 1999). Due to resource deficiency on a small remote island (Selwyn, 1978), these economic shocks are also acutely felt.

While a policy for tourism may intend to benefit small remote islands, such a policy is itself not without risk. Briguglio et al. (2009) point out that dependence on the "outside", i.e.,

strategic imports and specialization in one main sector (such as tourism), can contribute to the risk that an island's economy will be adversely affected by shocks. Scheyvens and Russell (2012) show that tourism sector development may do little to help the economic status of local indigenous communities on islands. Also, upscale tourism can also intensify damage to natural capital. For instance on Samui Island in the Gulf of Thailand, Yeemin et al. (2013) examine coral reef degradation, highlighting how pollution and sediment from land runoff have damaged coral communities to the point that they cannot recover or recover sub-optimally. Samui Island had transitioned from a backpacker resort to an upscale one. Lauer et al. (2013), on the other hand, discuss a paradox in remote pacific islands attributable to broader globalization. Globalization can aggravate small remote islands' vulnerability to natural disasters by altering habitat characteristics but it also can improve educational capabilities and experiences, including how to manage information and execute recovery processes (Lauer et al., 2013).

When small firms exist within this disadvantaged context, the question of their resilience arises. Resilience refers to an organization's ability to positively adjust to disruptions and shocks (Sutcliffe and Vogus, 2003; Ortiz-de-Mandojana and Bansal, 2015). The question of resilience is important because it is the key ability by which firms "sustain competitiveness and remain viable within uncertain environments" (Burnard and Bhamra, 2011: 5581). While resilience has been conceptualized and operationalized differently across several fields (psychology, engineering, economics)[1], there is conceptual overlap and a view that sees resilience as an ability: "…of a person, group, or system to adapt to stress – such as any sort of disturbance – so that it may continue to function, or quickly recover its ability to function, during and after stress" (National Research

[1] These include organizational responses to external threats, organizational reliability, employee strengths, and the adaptability of business models and design principles of supply chain resilience (Linnenluecke, 2017).

Council, 2011)[2]. Importantly for our study, organizational resilience at a micro level in small firms can underpin different types of resilience at a macro level, including both economic and social resilience (Herbane, 2019; Holladay & Powell, 2013; Perrings, 2006). Herbane (2019), for instance, sees entrepreneurs as agents of social change in the wake of disasters. Indeed, resilience is a crucial component of overall sustainability in tourist destinations, allowing firms and the wider economy to remain in a desirable state when confronted with disruption or disturbance (Holladay and Powell, 2013).

According to Schwarz et al. (2011), small remote islands exist as social-ecological systems and their ability to cope with external shocks depends to a large extent on the social processes that play out within island communities (Schwarz et al., 2011). These social processes allow knowledge and information that can be used to deal with disruptions to be shared across different levels in a social hierarchy, e.g., between local actors such as farming and fishing communities, national level actors such as governments and international actors such as disaster relief and aid agencies (Adger et al., 2005). According to Adger et al. (2005), disaster management in social-ecological systems requires multi-level social networks that act promptly and have a capacity for learning and adaptation amongst community members. These networks are effective when there is an established base of social capital and cross-level interactions between actors. However, as noted by Schwarz et al. (2011), communities are not homogeneous; there are often large differences in terms of how people adapt to shocks, with the implication that this can adversely affect an island's response to adversity.

[2] In this vein, the definition we use is "the capacity for an enterprise to survive, adapt, and grow in the face of turbulent change" (Fiksel, 2006: 16).

Instrumental Stakeholder Theory (IST) and resilience

A focus on social-ecological systems and stakeholder relationships in the "relational" approach (Adger et al., 2005; Guo et al., 2016; Schwarz et al., 2011) has strong resonance with stakeholder theory (Bridoux & Stoelhorst, 2016; Jones & Wicks, 1999; Phillips et al., 2003). Stakeholder theory differs from the transactional approach by emphasizing fairness, community and consensus, rather than arms-length contracts and self-interest served through the price mechanism (Bridoux & Stoelhorst, 2016). Various strands and branches of stakeholder theory exist (Phillips et al., 2003), including the role of social identity and stakeholder identification (societal constituencies in self-defined groups rather than market segments or economic actors) (Crane & Ruebottom, 2011) and the fact that different stakeholders have different motives (some caring about fairness, others more self-regarding) (Bridoux & Stoelhorst, 2014). The key point for Instrumental Stakeholder Theory (IST) is that it provides a basis on which to analyze value creation and competitive advantage through relationships with stakeholders (Jones et al., 2018). There is a link between means and ends; it is not simply descriptive (a picture of reality) or normative (how things should be) (Freeman, 1999). This is important for our focus on resilience in small firms in small remote islands because we want to identify the ways in which key variables inspired by stakeholder thinking (i.e., the means) will impact resilience (i.e., the ends).

The central idea of IST is that a firm's ground rules for managing stakeholder relations can lead to the development of a Close Relationship Capability (CRC) and that this can be a source of Sustainable Competitive Advantage (SCA). Jones et al. (2018) point out that a CRC can help firms co-create economic value with stakeholders as such capability is rare and difficult to imitate. Specifically, Jones et al. (2018: 372) assert that a CRC is developed by means of a communal sharing relational ethics (CSRE) strategy: "an intention to rely on relational contract, joint wealth

creation, high levels of mutual trust and cooperation, and communal sharing of property". There are, however, incremental costs associated with developing and maintaining a CRC and the costs vary, depending on the existing stakeholder culture of the firm. Jones et al. (2018) posit a continuum of ethical orientations toward stakeholders, ranging from completely 'self-regarding' to completely 'other-regarding'.

Using Jones et al. (2018) as our theoretical anchor, we identify ten salient variables of interest. We chose these variables for three reasons: (1) they reflect the central elements of the IST model, translating a CRC into a more (or less) valuable capability, which then can become the basis of potential sustained competitive advantage; (2) they reflect both value and cost logics, and in equal amounts (five value variables and five cost variables) such that we were not biased towards either value or cost in our empirical work, and (3) they could be translated (with relabeling and explanation) into a form that could be explained and discussed during the empirical fieldwork. These are summarized in Table 1.

Insert Table 1 Here

A CRC is posited to have real incremental value in helping a small firm on a small remote island to cope with disruptions and achieve resilience. Firstly, a CRC facilitates a rapid transfer of goods, information and cash among organizations that may enable a disruption-hit firm to recover quickly. Secondly, a CRC developed through a CSRE strategy is built on mutual trust among stakeholders, as opposed to an arm's-length relationship ethic (ALRE) strategy that maximizes each firm's selfish interests. Thirdly, Bridoux and Stoelhorst (2016) suggest that communal sharing relationships are efficient in environments with high task and outcome interdependence, such as in industries with long and complicated value chains involving multiple stakeholders to participate in the process of wealth creation. The more interdependence there is between task and

outcome, the greater the reciprocal coordination and associated transaction costs. A CRC in this context is more valuable, not only facilitating reciprocal coordination among multiple stakeholders, but also reducing transaction costs by resolving any disputes through cooperation as opposed to litigation.

Methodology

Research setting

We used the Island of St Helena in the South Atlantic as the research setting, one of the most remote inhabited islands in the world. St Helena was chosen because it satisfies the criteria of being both remote (and relatively inaccessible compared to other distant islands such as Honolulu) and small (with under 5000 inhabitants and a size of 16km by 8km). It had published a new sustainable economic development plan (SEDP) based on tourism 6 years before our study but it was still in an economically vulnerable state, dependent on a £30m per annum subsidy payment from the UK government. Its economic openness and dependence on strategic imports made it highly economically vulnerable (Briguglio et al., 2006) and its limited landmass made it vulnerable from the perspective of resource consumption (Hall, 2012). Discovered in 1502, St Helena was a British Overseas Territory (BOT) that was unlike many other island tourism destinations in that it did not have a sustainable and self-reliant economy. While traditional industries based on maritime services and flax production were long-gone, there was a small amount of coffee, Tungi spirit and fish production and exporting. After many years of consultation and analysis, the SEDP was published in 2012, titled: "A Tourism Driven Economy: Small Footprint Huge Step Forward" (SEDP, 2012). This centered on the construction of the island's first ever airport (a £285m investment by the UK government) and a projected influx of 30,000 tourists per year (SEDP, 2012). However, the discovery of hazardous wind shear upon completion of the airport

construction in 2017 meant a delay in opening the airport and a reduced-size plane and a less-frequent air service from Johannesburg. Half year numbers for 2019 indicated 2,091 passenger arrivals by air, of which only 811 were non-St Helenian tourists. Tourists arriving by sea (yachts) remained broadly unchanged following the airport construction (St Helena Independent, 2019). This fledgling tourist economy had small, private-sector enterprise at its heart. As stated in the 2012 plan:

> *"Only the private sector will build and run hotels, provide good quality restaurants and provide tourism experiences. The delivery of the Sustainable Economic Development Plan ("SEDP") requires the private sector to grow modestly but with a very substantial increase in on-island private sector jobs."* (SEDP 2012: 1).

During two visits the lead author gained access to small private-sector firms on the island and conducted an interview and mind mapping exercise with the principal owner-manager of each of seven small firms in the island's capital, Jamestown. One other co-author worked for a government agency on St Helena at the time of the data collection and facilitated access, data collection and interpretation. We also conducted numerous follow-up calls to validate our findings. The criteria we used for participating firms was: (1) they were founded and physically based on St Helena (i.e., not a franchise or subsidiary of an enterprise located off-island), making them purely local firms that were vulnerable to pressures from outside (Croes, 2006); (2) tourism was important to their revenue and survival, making them economically vulnerable to shocks in this sector (Briguglio et al., 2006), (3) they could give examples of shocks and disruptions they had faced (Burnard & Bhamra, 2011) and how they had used stakeholder relationships (Jones et al., 2018) to support their resilience, (4) they were small in size and dependent strategically on imports (Briguglio et al., 2006). On the last point, an initial size threshold of 10 employees was used to enable us to focus on micro-businesses that were likely to suffer the resource constraints typically

felt by micro-businesses, i.e., businesses less than 10 employees (Gherhes et al., 2016). However, in one of our cases we relaxed this size criterion as it provided useful insight into the phenomenon of interest. It did have a key characteristic of micro-business in terms of still being owner-manager centric (Gherhes et al., 2016). The seven case firms are shown in Table 2.

Insert Table 2 Here

The enterprise agency on St Helena estimated there to be around 150 small businesses on the island, and around 200 others who were self-employed at the time of our data collection. There were 3 jewelry businesses, 6 hotel/restaurants and 10 supermarkets. Despite the small sample size, we arrived at a sample that is heterogeneous and representative of small private sector businesses on St Helena that have needed to be resilient during the implementation of the island's economic development plan based on tourism.

Fuzzy Cognitive Mapping (FCM)

Hall (2012: 177) notes that "the field of island research is often clouded by fuzzy conceptualization". In other words, there is a possibility that the variables in Table 1 have different effects, are inter-related or that other variables related to CRCs are present in the research setting. Consequently, we adopted an exploratory approach using Fuzzy Cognitive Mapping (FCM) with the seven case firms on St Helena. The FCM approach is useful in modeling complex social systems, constructed from peoples' perceptions on how the world around them works (Johnson-Laird, 1983) and is useful in situations of high complexity (including feedback loops), poor data and soft knowledge (Özesmi & Özesmi, 2004). It also allows abstract and aggregate variables to be used and the modelling of relationships between variables which cannot be predicted or known with any certainty. While all of these were consideratoins for us, we also considered an interactive

FCM approach, working directly with respondents to 'build' their cognitive maps, would be a novel way of obtaining their engagement and cooperation. Indeed, we found this to be the case. In FCM, the researcher constructs a map containing salient variables and how they inter-relate in terms of the causal relationships and strength of the relationships (Özesmi & Özesmi, 2003). Important in using FCM in our case is that owner-manager respondents participate and provide their input on (1) which variables matter to resilience, (2) why they matter, (3) how they are inter-related.

Our interview format included two segments. The first segment was a warm-up and discussion on resilience and the nature of disruptions faced by small firms on St Helena. In this segment there were three sections: (1) we shared our working definition of resilience (noted above) and asked respondents for their comment, (2) we asked respondents to give us examples of the impact of any disruptions they had faced on their business operation, and as well as (3) how they have coped with disruption from a stakeholder perspective. The second segment involved the generation of the FCM with the respondent. For this we used a portable magnetic white board, cards with the labels of IST variables of interest and blank cards to write any newly emerging variables, and different coloured marker pens to draw causal relationships of positive and negative effects, as well as the perceived strength of each relationship on a scale of [-1 to +1] (Özesmi & Özesmi, 2004). We approached map generation in a systematic and consistent way across all of the sample: (1) we asked the respondents to consider the ten IST variables (Table 1) and select those cards they deemed to be relevant to their firm's resilience to be placed onto the white board, (2) we asked the respondents to draw lines both between each variable and the resilience variable as well as any relationships between the IST variables, (3) we asked the respondent to consider any other aspects which mattered to their resilience (which we captued on new cards), (4) we

placed these new variables on the white board and asked respondents to draw effects between the new variables and existing variables on the white board where appropriate, and (5) we reviewed all indicated relationships and asked respondetns to indicate the perceived strength of each relationship on the scale [-1 to +1]. During this process we also asked respondents to provide reasons and examples for each of the indicated relationships.

Following completition of the seven FCM maps, we followed the procedure described by Özesmi and Özesmi (2004) and produced a combined 'social cognitive map' which is created by super-imposing all maps together. We also coded each individual FCM into an adjacency matrix in the form A(D)= [aij] (Harary et al., 1965) and calculated variable centrality coefficients based on indegree (the cumulative strength of arrows entering each variable) and outdegree (the cumulative strength of arrows exiting each variable). These coefficients are calculated at the level of each variable; they are attributes of the variables in the cognitive map and are useful to help us understand the nature of all the variables in the system. Finally, we produced a condensed social cognitive map by grouping related variables together. This is essentially a simplifying step and is done in order to reduce complexity of complex cognitive maps in order to make sense of them (Özesmi & Özesmi, 2004). We used quantitative aggregation (Özesmi & Özesmi, 2004: 53), which involves replacing sub-graphs on the map with a single unit and maintaining the connections between the new single unit and other variables. We also re-labelled the new single unit in each case with a meaningful label.

Interviews ranged between one and two hours and we also conducted follow up calls and held discussions with some of the participants after producing versions of the social and condensed cognitive maps. The purpose of the follow up calls and discussions were twofold: (1) to act as a way of validating both the social and condensed cognitive maps, checking they were an accurate

representation of respondents' experiences and opinions on the question of CRCs and resilience on St Helena, and (2) to give the respondents an opportunity to comment further on the final model and to give additional thought to relationships between variables that may not have been mentioned by a particular respondent in the original interviews. We received broad support for the final maps during the follow up exercise.

Results

Nature of disruptions

All respondents recognized the concept of resilience and appreciated its importance to small businesses on St Helena. They all were able to describe disruptions they had encountered and the effect the disruption had / or could have had (without resilience) on the firm. Typical comments included:

> *"It's easy to start a business on St Helena…but to keep it going?" (Owner-Manager A)*
>
> *"It's a wonder that we're still here" (Owner-Manager D)*
>
> *"You have to be resilient on an island like this" (Owner-Manager B)*
>
> *"Isolation is the biggest problem we face" (Owner-Manager E)*

Table 3 provides examples of disruptions faced by respondents. In most cases, multiple respondents mentioned the same type of disruption. For instance, all firms were reliant on imports and were vulnerable to import costs, delays, and problems with shipments. According to one respondent:

> *"If I want something from the UK it will take 3 months to arrive…I have to think 3 months ahead" (Owner-Manager B)*

Disruptions were also mentioned in terms of delays and challenges related to the new airport construction and the assumptions of the SEDP, infrastructure issues related to water and telecom utilities, and the role of the government in supporting competition or making other policy changes that would cause an adverse effect on the firm. In terms of the airport construction issues, one person made a comment that echoed a groundswell of opinion:

> *"We've had several setbacks…but when the airport was delayed it was a crushing defeat" (Owner-Manager F)*

Insert Table 3 Here

Understanding resilience - FCM results

Seven separate FCM maps were produced. Across the maps all of the ten IST variables were used at least once. However, there was a large degree of difference in the frequency of variable usage. Also, twelve emerging themes were captured, leading to a total of twenty-three variables, including resilience. The emerging variables were all deemed to be conceptually different to the ten initial IST variables. Table 4 shows the variable connectivity aggregated across all seven maps; all of the ten initial variables as well as the twelve emerging ones (indicated with an *). The centrality coefficient shows the relative contribution (indegree + outdegree) of each variable across the sample. We see that the most important ones derive clearly from the positive aspects of CRCs, including knowledge sharing, supportive coordination, trustworthy partners, and long-term partners (centrality > |1.0|). Making a slightly lower contribution (|0.1| < centrality <= |1.0|) we see a mix of initial IST variables (respectful partners, cost of maintaining relationships, relationship breakdown, fear of ending relationships, cost of developing relationships, unfair distribution of value) and emerging variables (quality of suppliers, access to partners outside St Helena, cost of poor quality relationships, relationships not meeting expectations, government decision making,

government funded competition, credibility). As expected, resilience has a tendency towards being a 'receiver' variable (indegree > outdegree) and the strongest variables in the map (higher levels of centrality) tending towards being 'transmitter' variables.

Insert Table 4 Here

Figures 1 and 2 show the detailed aggregate FCM (i.e., the social cognitive map) and the condensed FCM respectively. The numbers on each arrow represent the sum of all scores for that arrow across the cases. A positive number represents an overall positive effect, and vice versa for a negative number. We can interpret that the larger the number, the stronger the effect and the greater importance it has in the aggregated view. Firstly, we see a rather complex picture with multiple causal paths, causal paths between independent variables, and some feedback paths from the dependent variable (resilience) to the independent variables. Secondly, the condensing step is performed by collating variables with similar attributes and ties in sub-graphs into higher order variables (Özesmi & Özesmi, 2004). This resulted in five condensed variable groupings (Figure 2). Three variables (unfair distribution of value, credibility (of the focal firm) and knowledge sharing with competitors) could not be grouped and remain as independent variables. In the condensed map we see the positive aspects of CRCs decomposing into two main factors: (existence of) valuable partners and mutually beneficial interaction with those partners. In accordance with IST, these both have strong positive impacts on resilience and are seen to mutually reinforce each other. We also see a group representing the negative effect of elements of IST on resilience, which we label: cost of managing relationships. We note that this is positively impacted by valuable partners as well as by logistical costs and unfair distribution of value. Having long-term partners and quality suppliers comes with a cost in terms of time and money of maintaining relationships with those partners and suppliers over time (Figure 1). If the firm is confronted by unforeseen

logistical costs, however, it needs to incur additional costs to form new relationships rather than maintain existing ones (Figure 1). In situations where there is a perceived unfair distribution of value, a relationship breakdown can ensue (Figure 1). Overall, cost of managing relationships is then seen to have a negative influence on resilience because it takes time and attention away from dealing with disruptions; it can lead to mutually beneficial interaction with partners (Figure 1) but not in every situation, and it is conceptually not the same as actual mutually beneficial interaction.

In addition to these factors that clearly have resonance with IST we see two new groups emerging. The first of these relates to logistical costs (made up of delays and import costs). This has a negative impact on resilience because the firm is directly impacted financially. By having a sudden and direct financial impact on cash flow, less resource is available to boost capacity to cope with disruptions more broadly or to invest in CRCs to cope with other disruptions. As one respondent noted:

> *"When someone says 'there's not so much potatoes on the ship' you need to know how to cope" (Owner-Manager C)*

We find a small positive impact of logistical costs on cost of managing relationships, because of the need to spend time to seek out and form new relationships as a consequence of the sudden logistical costs. Existing partner relationships play less of a role – they have not been adequate to buffer against the logistical disruption occurring.

Finally, four emerging variables are grouped into local island government policy (government decision making, enterprise agency loans, unsupportive government mindset and government funded competition). This is seen to have a negative impact on resilience and mutually beneficial interaction with partners, and a positive impact on unfair distribution of value. On the one hand, respondents were critical of the government's role in encouraging private sector

entrepreneurship and creating a dependency on the government through various support mechanisms (including loans) while not sharing information about the status of the airport operation and SEDP tourist numbers. Illustrative quotes include:

"We were told to invest…" (Owner-Manager D)

"There's no other forms of support" (Owner-Manager A)

"Information was not forthcoming…[the government] was controlling what was said" (Owner-Manager A)

"People have a big reliance on the government" (Owner-Manager E)

A noteworthy aspect of government policy was government-funded competition. Respondents expressed concern that direct competition had grown on the island through direct support from the government, including tourist business operations with a government stake. This was perceived to undermine the resilience of firms in the sample because, as a new type of disruptive force, they were ill-prepared for countering with new products or services and they witnessed a negative impact on revenue because the overall size of the tourist 'pie' was not increasing as originally forecast by the government. Related comments included:

"Government supports monopolies on the island…if something is not working out you try and find something different…a different supplier…but with the government supported monopolies there's no competition" (Owner-Manager G)

"People started to get nasty because they are seeing the government backed hotel" (Owner-Manager B)

Insert Figures 1 and 2 Here

Discussion

The proposition that vulnerability on small remote islands is 'negative' (Encontre, 1999; Hamzah & Hampton, 2013; Scheyvens & Momsen, 2008; Selwyn, 1978) has implications for a fledgling tourism industry in such destinations. Any economic development plan based on tourism will need

to account for the fact that external disruptions and unforeseen shocks can be especially hard felt due to the combination of inaccessibility and geographic size. Indeed, these shocks are more likely to amplify the sense of frustration and helplessness amongst the business community on a small remote island (like St Helena) than a larger and easily accessible one (like Honolulu). Having ways to cope with disruptions to small firms' business operations is critical to the sustainability not only of the individual small businesses themselves but also of the overall economic development plan for the island's economy.

There has been little work on understanding resilience in small firms on small remote islands with new tourism-based sustainable economic development plans. Our explorative approach allowed us to capture the mental models of a selection of representative small businesses on the Island of St Helena, and to uncover how the close relationship capabilities (CRCs) espoused by IST can inform our thinking on this issue. The approach is different to related works in the literature in a number of key respects. Firstly, in terms of setting, we chose a single isolated location (St Helena) rather than an island set in a region of competing and closer destinations, as is common in Caribbean Island studies (Holladay & Powell, 2013; Jayawardena & Ramajeesingh, 2003). This allowed us to control for extreme remoteness and inaccessibility as well as smallness in size as contextual factors impinging on owner-managers in small firms (Selwyn, 1978). Secondly, we captured the mental models of the actual owner-managers in our data collection and analysis. Prior work on resilience in island communities has examined social resilience and broad system level dynamics through case studies (Adger et al., 2005) as well as overall economic resilience at the system level (Briguglio et al., 2009). We believe it is important to understand the mental models of small business owner-managers because of the importance of these business people to the actual delivery of tourism experiences and eventually to the resilience of the

economic system on a small remote island. Thirdly, we did not just focus on one type of disruptive event, such as a tsunami (Lauer et al., 2013), hurricane (Adger et al., 2005) or financial crisis (Biggs et al., 2012). We encouraged our respondents to consider all types of disruptions that impact on their operational strategy, and indeed, we found a range of disruptive forces facing the St Helenian business community. These did not just relate to the well-known situation surrounding the airport and the disappointing tourist numbers, but also to power cuts, sudden changes in costs and charges including duties and taxes, new forms of competition, and even a negative impression of the effects of government policy.

Our findings provide support for a more 'positive' stance on vulnerability in isolated locations, reinforcing Scheyvens and Momsen's (2008) proposition that highlights strengths of small island states. Indeed, Scheyvens and Momsen (2008) conduct a literature review and reflection of this narrative, and derive six areas of strength for small islands: (1) smallness being enticing, (2) small islands perform well economically, (3) high cultural, social and natural capital, (4) respect for tradition and the past, (5) strong international linkages, and (6) political strength. While our experience on St Helena would cast doubt on (2) above, our main findings offer a seventh source of strength for small islands, namely the resilience of their small business community that is underpinned by CRCs with other local stakeholders. This seventh source of strength complements those discussed by Scheyvens and Momsen (2008) and points unequivocally to the role of the private sector as a key agent in *collective* action to confront crisis (Adger et al., 2005).

Our study lends support to IST (Jones & Wicks, 1999; Jones et al., 2018) in that there are both positive factors (the existence of valuable partners and the actual mutual interaction with those partners) and negative factors (the cost of managing partner relationships) within a

stakeholder perspective that will determine the sustainability of small businesses. However, our study also extends this view by identifying new factors that are worthy of reflection and future research (Table 4). The results suggest that while a 'negative' narrative on vulnerability in small remote islands is understandable, underneath the surface of the tourism economy in such a destination lies a more 'positive' narrative based on long held island resourcefulness emanating through inter-linked small private sector firms. As noted by Croes (2006: 461): "The quality of the brand of a destination…depends on the input of these many small businesses". It is here we find a CRC (the core of IST) coalescing in times of need in order to provide this input and sustain the viability of the new economic development plan. Indeed, without this social glue existing on the Island of St Helena, one could even cast doubt on the whether the island would be able to continue along its current path[3].

In addition to these points, we believe IST is a valuable tool for analyzing resilience of small firms in small remote islands. IST is useful for understanding resilience (Burnard and Bhamra, 2011; Linnenluecke, 2017), not just more traditional forms of sustainable competitive advantage in the resource-based theory tradition (Freeman, 1999; Phillips et al., 2003). Our working definition of resilience was the "the capacity for an enterprise to survive, adapt, and grow in the face of turbulent change" (Fiksel, 2006: 16). We find that adversity manifests as a multitude of disruptive events (Table 3), many of which were unexpected, and all of which unsettle the operational strategy of the business. Importantly, we connect IST to resilience and find that – in the setting of a small remote island – CRCs with stakeholders have a powerful influence on resilience. To understand resilience fully requires not only a framework for capturing events, detection, response and learning by an organization (Burnard and Bhamra, 2011) but also how

[3] It is noteworthy that a discourse of CRCs is not visible in the original 2012 SEDP for St Helena

these phases will unfold in the presence of a plethora of stakeholders, the relationships from which a focal organization will depend. Burnard and Bhamra (2011) do mention organizational systems and their ability to "cope, adapt, recover and advance from disruptive events" (Burnard and Bhamra, 2011: 5589), but little is said of the specific attributes of relationships with stakeholders in a focal organization's immediate environment. Similarly, in her highly-cited review of the field of resilience[4], Linnenluecke (2017) notes only a limited about of research on the role of stakeholders in determining organizational resilience; a narrow focus on public-private partnerships. We contend IST provides a number of variables relating to CRCs that can be used to understand resilience within an isolated business community seeking long-term sustainability. These variables are indeed themselves quite distinct (e.g., trust, knowledge sharing, respect, fear, unfair value distribution), but can be split into two camps of positive impacts and negative impacts on outcomes. We find that CRCs matter to resilience in this setting, and we see how they matter.

One clear point here is that the emerging model is different than that put forward by Jones et al. (2018). While all of the ten variables elicited from IST resonate with our respondents, they do so to different degrees (Table 4). This suggests that IST variables should not be treated with equal weight by researchers and theorists when dealing with real-world business phenomena. Also, there are reinforcing causal links between them, some of which are positive and some of which are negative. IST theorists can move the theory forward by factoring in the possibility that these links exist in different magnitudes or intensities. The way they reinforce each other is likely to change from setting to setting and more could be done theoretically to deal with the nature of external disruptive forces and how they moderate the relationship between CRCs and sustainable

[4] Based on a review of 339 research works between 1977 and 2014

competitive advantage as espoused in stakeholder theory more generally (Bridoux & Stoelhorst, 2014, 2016; Freeman, 1999; Phillips et al., 2003).

This notwithstanding, we also identify a whole range of other context-specific CRC-related variables that are not that explicit or forthcoming in IST. These include access to distant partners off island, the cost implications of poor quality suppliers, unsupportive prevailing government mindsets and government decision making (Table 4). These emerging variables are largely idiosyncratic to the research setting. Nevertheless, IST could be developed by incorporating elements of physical location, size and isolation as well as institutional and competitive dynamics and behaviors that shape the nature of expectations and actual competition in its model.

Thirdly, our study shows the usefulness of using FCM as a research tool for studying organizations in remote and small tourist destinations. As noted by scholars, the process of production and delivery of tourism on a small island is complex in nature, requiring a fuzzy conceptualization (Croes, 2006; Hall, 2012). Add in the factors of isolation and remoteness (Selwyn, 1978) and we can reasonably expect there to be differences between the way small business owner-managers perceive and confront disruption in these destinations, compared to more usual settings where researchers have focused. However, while theory may provide us with a list of candidate variables, it does not really guide us on what to expect in terms of the causal relationships between variables of interest. FCM, used in a participative way with respondents, allows us to determine world views of entrepreneurs (i.e., their cognitive maps) in their setting in a way that permits both the testing of candidate variables as well as the generation and inclusion of new variables, specific to the setting.

Our study also has implications for government policy and small business managers on small remote islands. In terms of government policy, we provide support to Croes' (2006: 462)

point that "The government must understand that rewards are crucial in the *encouragement of cooperation*" (emphasis added). This area of implication is on the 'softer' side; it is about encouraging effective relational norms between people. Clearly, government loans and financial incentives at the forming of a new small business are important to stimulate entrepreneurship in an emerging tourist location. However, governments on small remote islands can use our findings (Figures 1 and 2) to consider ways to encourage cooperation and support relational capabilities between stakeholders on the island. Training and coaching sessions could be run with various stakeholders to share awareness explicitly of the importance of knowledge sharing and supportive coordination. The island's enterprise agency could offer free assistance to small business owners to help them identify partners – especially off-island - who are likely to be trustworthy, respectful and who have the profiles to become long-term partners (Figure 1). Following Croes' (2006) comment that rewards can encourage cooperation, we recommend the government gives cash or other symbolic prizes as a visible recognition to stakeholders who have helped other small businesses at times of disruption and need. Our study does reveal, that it is possible for a negative effect of government policy to be perceived by small firms in this setting. Governments should be aware that their mindset and policy decisions can inadvertently impinge on the resilience of small private sector businesses on a small remote island and that this can act as a counterweight to initiatives to nurture the private sector for tourism. Governments could involve representatives from the island's small business community during policy formulation to be involved in discussions around decisions that explicitly shape resilience as a policy outcome.

Another area where government can have a positive impact on resilience is on the 'harder' side, through encouraging use of the latest technology in the island's small businesses. Technology, such as blockchain applications, can play an important role in anticipating and

responding to unforeseen disruptions and can complement the 'softer' side of trust-building through CRCs (Min, 2019). This is especially salient for St Helena which had plans to become connected through an international fiber optic cable in the time period following our study. Faster and less expensive connectivity would make it possible that internet-based applications with non-local stakeholders can be used to improve order fulfilment (Min, 2019), share knowledge and information more timely with suppliers and customers off-island and minimize the effects of disruption. It is important to note that small business owners' perceptions and embracing of technology is not always positive, especially when entrepreneurs have low levels of awareness of what is possible through technology (Croes & Tesone, 2004). It would be incumbent on the local government to share an awareness of what might be possible through technology and enhanced connectivity for small businesses on St Helena.

For small business owner-managers on small remote islands, our findings highlight the importance of being able to anticipate the timing and nature of disruptions that may impact the business's operational strategy. A scenario planning approach could be taken alongside initial business planning and yearly budgeting in order to map out potential disruptive scenarios and ways that close relationships with stakeholders can be used to address those scenarios. Owner-managers should meet together in a communal setting with other stakeholders in order to share concerns about potential disruptions and ways of dealing with them in a mutually beneficial way. Identifying, developing and exploiting close relationships with external stakeholders are critical to ongoing resilience and should be seen as core business activities. Future risks for St Helena could include an 'exhaustion of the product' scenario (Croes, 2006: 458). This happens after an initial successful implementation of a tourist strategy for an island that then entails a revision or adaptation of the strategy. On a small remote island, options will be limited and the learning that

has been gained by small private sector firms working collaboratively together will be useful to government policy changes as its assessment of product exhaustion is made.

The current study comes with a number of limitations and raises fresh questions for future research. Firstly, we only conducted our work on one small remote island and researchers should be careful when generalizing our findings to other islands or remote destinations. A location such as Hawaii is indeed relatively remote, but it is not small or inaccessible: it has over 800 flights a day and 20 million passenger arrivals per year. Also, there are certain characteristics of St Helena that make it unique from a sustainable tourism point of view, including the fact that it holds BOT status, that it does not lie in a region of other islands, that its SEDP is fairly new and untested, and that it has a dependency on another country (South Africa) for air connectivity. Applying our findings to other destinations will require careful consideration to aspects of the location that share similarity with St Helena. Secondly, our sample of firms for the FCM exercise was fairly small and possibly biased. However, we did achieve heterogeneity in the sample and respondents all fit our selection criteria. We also note saturation was reached on the main variables of interest and post FCM interviews with respondents gave us confidence in the final FCM maps. Thirdly, FCMs are not substitutes for statistical techniques, as they do not provide real-value parameter estimations or inferential statistical tests (Özesmi & Özesmi, 2004). Unlike Structural Equation Modelling (SEM), for instance, FCMs are not concerned with parameter estimation (i.e., estimating the strength of the relationships between model components using a large sample size). Fourthly, we took an external stakeholder view of the question of small firm resilience in this setting. Other theoretical platforms (Herbane, 2019), including the internal resource-based view or diversification theory could also yield interesting insights.

Conclusion

The present study shows how aspects of close relationships with external stakeholders determines the resilience of small firms in a small remote island tourism destination. This provides support for a positive view of such firms in such locations and a counterweight to the negative narrative of vulnerability within the tourism and economic development literature. While their inaccessibility and resource deficiency may mean they suffer acutely from a 'handicap of islandness' they survive through various aspects of close relationships within their stakeholder set. Nevertheless, only some aspects of Instrumental Stakeholder Theory (IST) are reflected in their perceptions (these being aggregated into the existence of valuable partners and the mutually beneficial interaction with those partners). Indeed, certain negative factors are also at play, including the role of government policy that are not predicted by IST.

Future research can address the limitations highlighted above while also seeking to answer new questions that arise from our study. Why are there perceptions that government policy leads to an unfair distribution of value on small remote islands? Are the effects suggested in our emerging model consistent for other outcome variables, including financial performance, growth rates, and learning, all of which feed into a bigger picture of the impact of the private sector to economic sustainability in these types of destinations? How do the results compare to contexts that are remote or small, as opposed to remote and small? We hope future research can address these questions and build on the present work to provide new insights into the challenging problem of overcoming severe disadvantages in small remote islands in order to create a sustainable tourism experience driven by small business people.

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Table 1. CRC variables of interest derived from IST

Variable	Definition (derived from Jones et al., 2018)	Reason for inclusion (value vs. cost)
Trustworthy partners	Mutual trust and trustworthiness to maintain reciprocal loyalty and nurture desire for mutual gain	Incremental value of CRC
Long-term partners	Valuable relationships with partners over a long time frame, overcoming risks of indeterminate outcomes	Incremental value of CRC
Respectful partners	Partnerships governed by norms of traditional ethics	Incremental value of CRC
Knowledge sharing	Information sharing from partners that has the potential to allow the focal firm to cope with adverse events; shared vocabularies and subtle tacit knowledge	Incremental value of CRC
Supportive coordination	Reciprocal coordination – a two-way process – where contributions do not depend on plans, rules and contracts; responding quickly to adverse events	Incremental value of CRC
Cost of developing relationships	Transaction costs associated with identifying partners, negotiating, and establishing new relationships	Incremental cost of CRC
Cost of maintaining relationships	Transaction costs associated with ongoing relational contract enforcement	Incremental cost of CRC
Relationship breakdown	Potential non-reciprocation – looking for other stakeholders to engage with; risk that stakeholder may exploit firm	Incremental cost of CRC
Fear of ending relationships	Unprofitable loyalty – being afraid to end relationship in any situation	Incremental cost of CRC
Unfair distribution of value	Overly generous bargaining leading to perceived unfair distribution of jointly created value	Incremental cost of CRC

Note: CRC = Close Relationship Capability

Table 2. Participating firms

Case	Type of Business	Year established	Number of Employees*	Location
1	Jewelry	2010	3-4	Jamestown
2	Hotel / restaurant	1988	8-10	Jamestown
3	Supermarket	1900s	20-30	Island - rural
4	Crafts – cards/gifts	2008	3	Jamestown
5	Drinks industry	2006	1	Island - rural
6	Retail outlet	1995	10	Jamestown
7	Guest house	2018	1	Island - rural

*changes in employee numbers due to seasonal and part-time employment

Table 3. Examples of disruptions (not in same order as firms in Table 2)

Nature of disruption	Implication for the firm
Airport disruptions leading to partners in the business deciding to pull out	Loss of knowledge; loss of risk-sharing
Sugar tax suddenly placed on grape juice	Increased cost of raw material; pressure on profits
Excise duty suddenly increasing on spirits	Lower sales; pressure on profits
New cargo ship replacing the RMS more difficult to use	Increased cost of exporting
New competitors funded by the government	Lower market share; negative mindsets
Some imported goods being syphoned from boats by staff members	Restricted options for menu – reduced competitiveness – staff mistrust
Constant increase in prices of imported goods; freight costs, utilities costs	Pressure on profits
Turnover of staff – staff leaving for Ascension Island and the Falkland Islands	Increased search and training costs; owner having to be more involved in day-to-day operations
Flight delays due to weather conditions once new airport was up and running	Disrupting supplies of goods to sell; disrupting number of tourists arriving
Partners suddenly setting up in competition	Increased competitive hostility, lower market share, relationship breakdown
Fresh fruit and vegetables selling out very quickly after new shipments	Restrictions on options to offer customers
Delays in airport readiness	Anticipated number of tourists not materializing
Wrong products and goods being imported – different to what was ordered	Cost implication – not worth returning with 4 months round shipment from UK; delays in making new products
Defects in goods being imported	Cost implication – not worth returning with 4 months round shipment from UK; delays in making new products
Power cuts	Operations put on hold – backlog of work builds up
Internet going down	Communications and work on websites to the outside world put on hold – adding to backlog
Cut in government spending	Less revenue from non-tourism segment meaning less re-investment in services for tourists
Closure of runway on Ascension Island for repairs	Decreased access to export markets
Needing to be evacuated off-island to South Africa for medical care	Unable to oversee business operation for a period of time

Table 4. Variable connectivity

Variable	Centrality	Indegree	Outdegree
Resilience	1.34	1.23	0.11
Knowledge sharing	1.60	0.53	1.07
Supportive coordination	1.27	0.21	1.06
Trustworthy partners	2.05	0.69	1.36
Long-term partners	1.40	0.61	0.79
Respectful partners	0.28	0.07	0.21
Quality of suppliers*	0.43	0.00	0.43
Access to partners outside of SH*	0.29	0.10	0.19
Cost of poor quality relationships*	-0.14	0.00	-0.14
Relationships not meeting expectations*	-0.14	0.00	-0.14
Cost of maintaining relationships	0.31	0.20	0.11
Relationship breakdown	-0.48	0.06	-0.54
Fear of ending relationships	-0.40	-0.14	-0.26
Cost of developing relationships	0.15	0.04	0.11
Delays*	-0.03	0.00	-0.03
Import costs*	-0.01	0.00	-0.01
Enterprise agency loans*	-0.07	0.00	-0.07
Government decision making*	-0.29	0.00	-0.29
Unsupportive government mindset*	-0.07	0.00	-0.07
Government funded competition*	-0.13	0.00	-0.13
Unfair distribution of value	0.14	0.14	0.00
Credibility*	0.10	0.10	0.00
Knowledge sharing with competitors*	-0.09	-0.09	0.00

Note: *indicates the 12 emerging themes

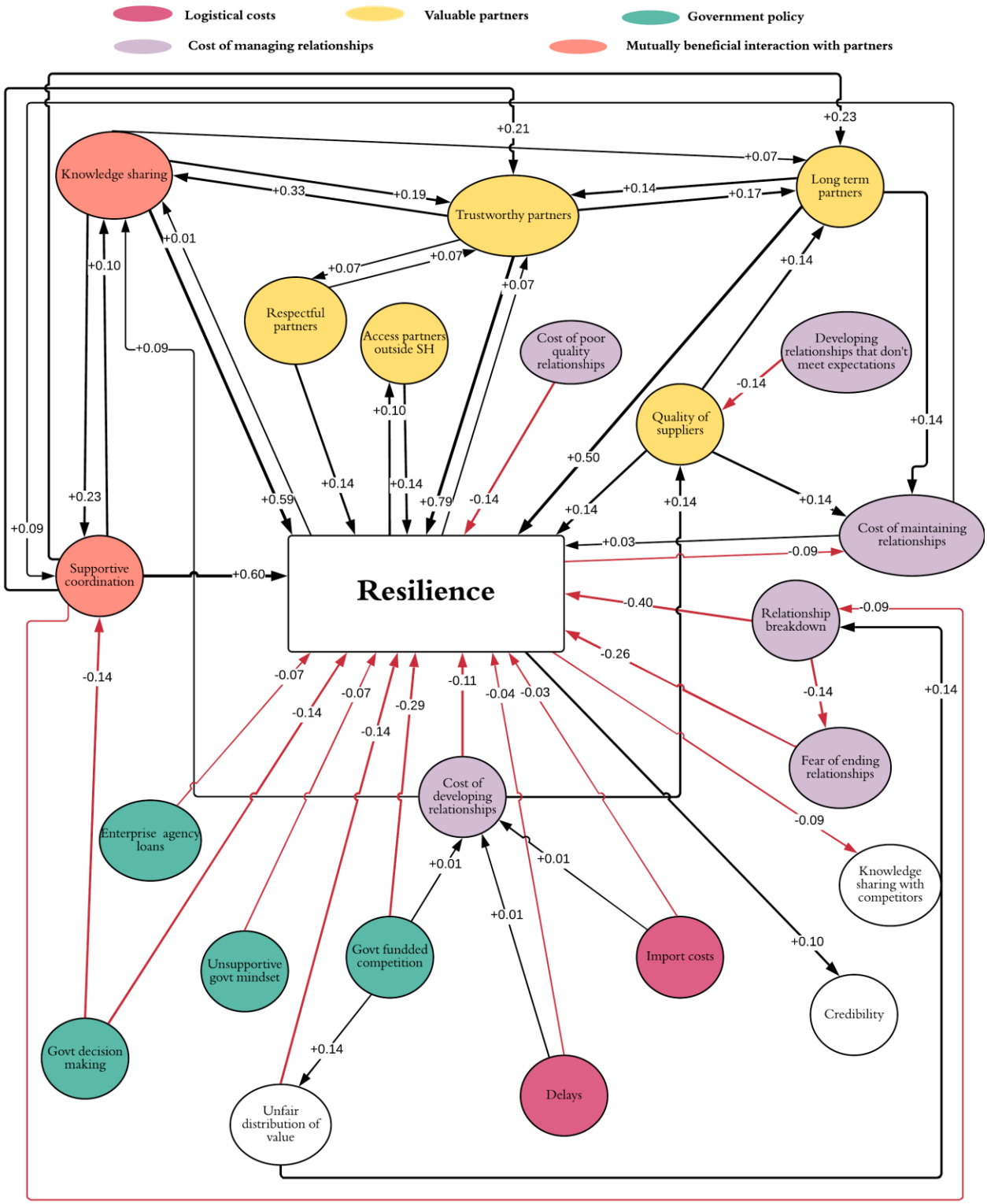

Figure 1. Social cognitive map

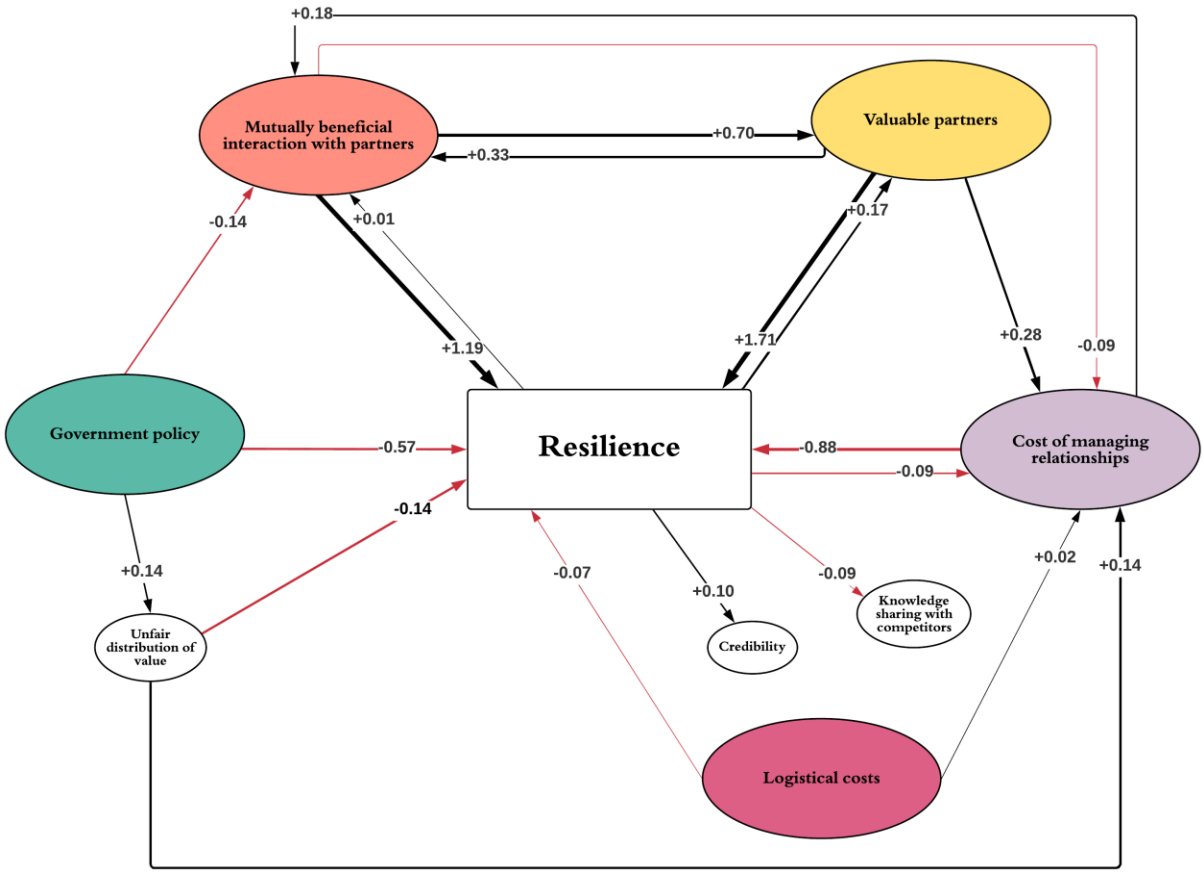

Figure 2. Condensed cognitive map