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How entrepreneurial resilience generates resilient SMEs

Resilient SMEs

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Abstract

Purpose – The purpose of this paper is to investigate how entrepreneurial behaviors support small and medium-sized enterprise (SME) resilience, refine the concept of entrepreneurial resilience, and identify how SME resilience might be promoted.

Design/methodology/approach – Qualitative data were collected in the UK via 11 focus groups which provided a sub-sample of 19 SME participants.

Findings – Because of their experience operating in uncertain environments, their direct experience of adversity, and the informal organizational settings they inhabit, entrepreneurs are often highly resilient and possess capabilities that enable SMEs to be resilient. Entrepreneurial resilience provides a basis for SME resilience that differs significantly from best practices as understood in larger firms.

Research limitations/implications – Exploratory qualitative research on a small sample ($n = 19$) limits the generalizability of this work. Further research could quantitatively test the paper's findings and/or examine the link between entrepreneurial resilience and the resilience of larger firms.

Practical implications – Rather than encouraging formal planning and redundancy, policy and practice designed to promote the resilience of SMEs should pay greater attention to building capacities to cope with uncertainty, generating and leveraging personal relationships, and activating the ability to experiment and think creatively in response to crises.

Originality/value – This paper draws on organizational psychology research to refine understanding of entrepreneurial resilience and to empirically examine and inductively theorize the multi-level relationships between entrepreneurial resilience and SME resilience.

Keywords SME, Entrepreneurship, Organizational resilience, Entrepreneurial resilience

Paper type Research paper

Introduction

It is widely believed that small and medium-sized enterprises (SMEs) lack resilience and that they are disproportionately impacted by a wide range of external shocks (Battisti and Deakins, 2012; Ingirige *et al.*, 2008). This characteristic is worrying, given the social and economic significance of SMEs (Ates and Bititci, 2011; de Vries and Shields, 2006; Lewis and Cassells, 2010) and the recent scale and diversity of extreme events. Severe weather, terrorist attacks, ransomware, global pandemics, and geo-political instability create significant challenges to SME structure, success, and survival (Linnenluecke *et al.*, 2012; May and Koski, 2013). It is thought that the ability of SMEs to exhibit resilience – the capacity to “rebound or bounce back from adversity, conflict, and failure” (Luthans, 2002, p. 702) – is reduced because of a lack of planning for crises (Paton *et al.*, 2010), limited internal resources, narrow customer base, and low bargaining power (Smallbone *et al.*, 2012).

However, recent empirical evidence has demonstrated significant resilience among SMEs in the context of extreme events. For example, in the aftermath of the 2010 Christchurch earthquakes, Battisti and Deakins (2012) noted that the absence of written crisis management plans did not undermine resilience in SMEs. They explained this possibly counter-intuitive finding by observing that, “[...] they [SMEs] are more flexible and better



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able to respond quickly to changing environments. This adaptive capability is crucial to improve resilience to crises such as natural disaster” (Battisti and Deakins, 2012, p. 6). Graham (2007, p. 304) also found evidence suggesting that after the 9/11 terrorist attack in the USA, a “common response among [small] business owners to the terrorist attack was a renewed commitment to Lower Manhattan as a place to do business.” This suggests that some SMEs can demonstrate “underlying resilience” (Smallbone *et al.*, 2012, p. 1).

The contrast between the received wisdom and recent empirical evidence in relation to SME resilience suggests the need for greater study of how SMEs achieve resilience and of the role of entrepreneurs in these processes. Entrepreneurial resilience is defined as, “as a form of emotional and cognitive ability that is useful for the entrepreneur, particularly when bouncing back after failures connected to their entrepreneurial initiative” (Bernard and Barbosa, 2016, p. 89). Kantur and İşeri-Say (2012, p. 772) argue that there is an important, but unspecified, relationship between “entrepreneurial activities and resilience strategies,” suggesting that additional research examining links between entrepreneurial behavior and SME resilience is likely to be fruitful. Entrepreneurs exhibit many of the characteristics commonly associated with resilience, as they tend to excel in the face of ambiguity and change (Ayala and Manzano, 2014), identify previously unexploited opportunities (Hitt *et al.*, 2001), view “dire circumstances” as opportunity (Bullough and Renko, 2013, p. 345; Bullough *et al.*, 2014), persist during times of adversity (Holland and Shepherd, 2013), and proactively take initiative (Krueger and Brazeal, 1994). However, despite the theoretical and practical significance of this topic, it has received remarkably little attention in the literature (Bullough *et al.*, 2014; Powell and Baker, 2011). A focus on theoretically and empirically exploring the role of entrepreneurial resilience in promoting SME resilience is likely to be productive because the behaviors and personality attributes of entrepreneurs have been found to have a strong direct impact on SME structure, strategy, and performance (Miller, 1983; Miller and Toulouse, 1986). Additionally, a focus on entrepreneurial resilience and SME resilience is important because much of the research on resilience focuses on large firms and their characteristics (e.g. Sullivan-Taylor and Wilson, 2009).

Conceptually, there is a need to generate a more nuanced understanding of entrepreneurial resilience and to more concretely theorize the processes that promote SME resilience. In part, this is necessary because the literature on entrepreneurial resilience has developed largely in isolation from wider resilience research and is disconnected from theories concerning multi-level resilience (e.g. see, Lengnick-Hall *et al.*, 2011; van der Vegt *et al.*, 2015). Advancing understanding of entrepreneurial resilience requires a multi-level appreciation of how entrepreneurial behaviors shape SME resilience. Empirically, “there is little research on how crises affect entrepreneurship” (Doern, 2016, p. 278); more generally, there is limited evidence of how SMEs plan for and respond to extreme events (Herbane, 2010). Thus, there is a need for more empirical research that examines how entrepreneurial resilience generates SME resilience.

Considering these gaps, the authors present a qualitative study of how entrepreneurial behaviors contribute to the creation of resilient SMEs. This study makes three key contributions to the entrepreneurship and resilience literatures. First, a novel multi-level approach is developed from the extant literature to examine the relationship between the individual level of analysis, (i.e. resilient entrepreneurs and individual resilience) and the organizational level of analysis, (i.e. resilient SMEs). This approach affords insight into precisely how and when entrepreneurial resilience might support the development of SME resilience while also informing the study’s boundary conditions. The paper also integrates two previously disparate bodies of literature, thereby providing a more fully developed conceptual basis for entrepreneurial resilience in practice. Second, this study empirically examines the nature and impact of entrepreneurial resilience. The findings indicate that participants from the SMEs in the sample attribute their ability to cope with uncertainty and crisis to characteristics commonly associated with individual resilience, such as self-efficacy,

social connections, and well-being. These findings emphasize an untheorized connection between entrepreneurial and individual resilience. Finally, an inductive multi-level model of the relationship between entrepreneurial resilience, SME resilience processes, and mechanisms and SME resilience outcomes is developed. The model directly contributes to the theorization of entrepreneurial resilience, as it identifies that entrepreneurial behaviors and/or individual resilience characteristics can provide an alternative basis for SMEs to cope, or thrive, under conditions of extreme uncertainty and crisis.

This paper begins by distinguishing between entrepreneurs, SME managers, and entrepreneurial behaviors. Next, the micro-foundations of organizational resilience are unpacked, and prior research from the entrepreneurship and entrepreneurial resilience literatures is synthesized with wider research on resilient individuals and organizations. Subsequently, the methods applied are introduced and the empirical findings discussed. An inductive model of the impact of entrepreneurial resilience on the organizational resilience of SMEs is presented in the discussion, after which the implications of the research and the conclusions of the study are drawn.

Entrepreneurs, entrepreneurial behaviors, and SME resilience

This study explores how organizational resilience is developed in the context of SMEs and investigates the role of entrepreneurs and entrepreneurship in shaping the resilience of small and medium-sized organizations. This is an inherently multi-level approach to understanding SME resilience because it focuses on the role of individual actors (entrepreneurial behaviors) in shaping a key organization-level outcome (resilience).

Before discussing and problematizing existing conceptions of organizational resilience and its antecedents, it is important to recognize the contested and often conflated (Chiles *et al.*, 2007; Roininen and Ylinenpää, 2009) relationships between small business owner-managers and entrepreneurs, and entrepreneurship. Research has emphasized that not all SME managers are entrepreneurs and that not all entrepreneurship occurs in the setting of SMEs (Messegem, 2003). Entrepreneurship is characterized and defined by behaviors, chiefly proactivity in identifying and exploiting opportunity, innovativeness, and novelty in introducing new processes and products/services and risk-taking (Covin and Slevin, 1989). In contrast, SMEs are defined and characterized by their size and their relative lack of formal structural artifacts when compared to larger organizations. At the conceptual level, SMEs are recognized as distinctive organizational settings, owner-managers as formal roles/positions, and entrepreneurs and entrepreneurship as reflecting distinctive attitudes, behaviors, and activities. This paper follows much of the extant literature in characterizing the leadership/management behaviors observed in the context of SMEs as constituting “entrepreneurial behavior” or “entrepreneurship,” not least because SMEs have structural characteristics that most call for entrepreneurial behaviors (Mintzberg, 1989).

Micro-foundations – organizational resilience

Resilience at the organizational level of analysis is defined as an organizational “ability to quickly recognize and seize opportunities, change direction, and avoid collisions” (McCann, 2004, p. 47), or as “moving quickly, decisively, and effectively in anticipating, initiating and taking advantage of change” (Jamrog *et al.*, 2006, p. 5). Linnenluecke and Griffiths (2010) argue that organizational resilience is best defined as “the amount of disturbance the organization can absorb before it loses its structure and function” (p. 19). Organizational resilience in the context of extreme events has been theorized as a form of positive organizing in anticipation of extreme events (e.g. natural disasters, pandemic disease, and terrorism) “that can contain, repair and transcend vulnerability in organizational systems” (Waldman *et al.*, 2011, p. 941). Herbane *et al.* (2004, p. 437) conceptualize organizational resilience as an on-going capability “that underpins organizational development in

complex environments.” Weick and Sutcliffe (2007) suggest that resourcefulness, technical, organizational, and rapidity capabilities are necessary for resilience in high reliability organizations.

Identifying the influences on organizational resilience requires more than a capability check-list approach because resilience “arises from a complex interplay of many factors at different levels of analysis” (van der Vegt *et al.*, 2015, p. 977). Research on large organizations has emphasized that relative resource abundance is a significant driver of resilience and that resources of various kinds (financial resources, stock, inventory, raw materials, etc.) can contribute significantly to resilience if significant shocks or challenges are experienced. Financial resources can act to provide a buffer in the face of crisis, and the scope to redeploy financial assets to various uses makes them especially important sources of resilience (Gittell *et al.*, 2006). Similarly, physical resources such as stocks of final goods and inputs can be especially important in providing resilience in the face of disruptions to supply chains or production downtime (Sheffi, 2007).

Prior research has also emphasized that planning and highly developed formal operating processes and practices can endow organizations with considerable resilience. Studies have highlighted the value of formal planning processes that proactively identify emergent risks and points of vulnerability, establish contingency plans to assign roles and responsibilities if crises emerge – which are supported by broad participation and engagement of staff throughout the organization in exercises, simulations, and scenarios modeling potential shocks – practice responses, and validate plans (Pal *et al.*, 2014). Research has highlighted that the discipline and processes associated with fully mapping the activities, roles, and systems associated with techniques such as total quality management, continuous process improvement, and lean operating processes endows organizations with the robustness and knowledge to effectively address unanticipated crises (Christopher and Rutherford, 2004; Tang, 2006). Another operational strategy associated with resilience in the context of large companies is the strategic investment in redundancy in the form of multi-skilling, unused capacity in physical resources, and multiple sourcing in supply relationships (Sheffi, 2007; Sheffi and Rice, 2005).

Thus, planning, resource abundance, highly developed formal processes and systems, and redundancy are keys to developing resilience in the context of large organizations. However, given that these are, almost by definition, areas in which SMEs are likely to face significant deficiencies, it is important to consider an alternative set of resilience micro-foundations in the context of SMEs.

Micro-foundations – entrepreneurship and individual resilience

Having outlined the concept of organizational resilience, and problematized the applicability of much of the research concerned with developing it to the context of SMEs, this paper now turns to exploring alternative mechanisms for building resilience in SMEs. In developing a novel foundation for SME resilience, entrepreneurial characteristics are considered before exploring contributions from positive organizational psychology that highlight the influences on resilience at the individual level. Subsequently, the paper examines how entrepreneurial behaviors and individual resilience drivers might support SME resilience.

Successful entrepreneurs possess well-established survival instincts, as they have a positive attitude toward risk (Hedner *et al.*, 2011), remain positive in the face of setbacks (Baron and Markman, 2000), and sometimes view failure as an opportunity to renew or re-start (Hayward *et al.*, 2010). Additionally, entrepreneurs tend to exhibit a “need for achievement, generalized self-efficacy, innovativeness, stress tolerance, need for autonomy, and proactive personality” (Rauch and Frese, 2007, p. 353). Key characteristics of entrepreneurs are summarized in Table I. High levels of motivation, or “passion for the business,” appear to be key to how entrepreneurs overcome adversity (Fraccastoro, 2011, p. 5).

The relative strength of SMEs may therefore be in the entrepreneurial mindset of their owners, which in turn enables SMEs to be flexible, adaptive, and innovative (Vossen, 1998). If, as de Vries and Shields (2006) argue, resilience is a key trait of the entrepreneur, it is important to understand both the basis for an entrepreneur's resilience and how resilient entrepreneurs might contribute to SME resilience.

Entrepreneurial resilience is often presented as synonymous with individual resilience (see, Adnan *et al.*, 2016; Bullough and Renko, 2013). In the entrepreneurship literature, resilience tends to be presented as either "a personality trait of the entrepreneur" (Bernard and Barbosa, 2016, p. 89) or as an outcome of entrepreneurial life experiences (de Vries and Shields, 2006). Sources of resilience at the level of the entrepreneur have been identified as "experience, focusing on the positive, containing negative emotions, asking for help, actively mobilizing resources, persistence and determination" (Doern, 2016, p. 295). The resilience of individuals has been extensively conceptualized and examined outside of the context of entrepreneurship. Positive organizational psychology (Bardoel *et al.*, 2014) conceptualizes resilience as an individual attribute or characteristic and focuses on how employees develop and sustain resilience in the face of daily workplace stressors (King *et al.*, 2015; Zagelmeyer and Gollan, 2012). More specifically, individual resilience is associated with a range of positive individual attitudes and behaviors (Fredrickson, 2004; Sommer *et al.*, 2016). Through a combination of "resilience resources" and "protective factors," resilience helps individuals to outperform their peers even when under stress and to maintain well-being in high-pressure environments (Avey *et al.*, 2011). Individual resilience has been demonstrated to increase work performance and job satisfaction, improve psychological well-being, and raise organizational commitment and citizenship (Avey *et al.*, 2011). Table II compares key sources of individual and organizational resilience as identified in the extant literature.

Consideration of individual resilience alone offers only a partial explanation of entrepreneurial resilience because entrepreneurial resilience crosses over individual resilience and organizational resilience without falling neatly into either category. Additionally, it is important to note that individual resilience and entrepreneurial resilience are adjacent and potentially complementary concepts rather than synonyms. Ayala and Manzano (2014) found that individual resilience both helped to predict entrepreneurial success and was critical in determining organizational outcomes for SMEs. A key component of entrepreneurial resilience is therefore the impact the entrepreneurs' resilience, or non-resilience, has on the SME and wider economic system (Huggins and Thompson, 2015).

Notwithstanding the emergence of the literature on entrepreneurial resilience, the received wisdom in entrepreneurial research is that SMEs lack resilience and that this is a significant social and economic issue. SMEs are even more important at times of economic recession (Stokes, 2002), as they provide opportunity for renewal and re-employment. In fact, it can be argued that potential entrepreneurs are a key source of long-term societal resilience (Krueger and Brazeal, 1994). Storey (1994, p. 78) argues that "the fundamental

Characteristics	Key literature
Stress tolerance	Rauch and Frese (2007)
Comfort with failure	Baron and Markman (2000), Hayward <i>et al.</i> (2010)
Comfort with risk and uncertainty	Hedner <i>et al.</i> (2011)
Generalized self-efficacy	Rauch and Frese (2007)
Innovativeness/creativity	Rauch and Frese (2007)
"Making do"	Baker and Nelson (2005)
Need for autonomy	Rauch and Frese (2007)
Opportunity-seeking	Bullough and Renko (2013), Bullough <i>et al.</i> (2014), Hitt <i>et al.</i> (2001)
Proactivity	Fraccastoro (2011), Rauch and Frese (2007)

Table I.
Entrepreneurial characteristics

Sources	Key literature
<i>Organizational resilience</i>	
Resources	Financial resources Physical resources Resourcefulness Gittell <i>et al.</i> (2006), Sheffi (2007), Weick and Sutcliffe (2007)
Slack	Redundancy Multi-skilling Unused physical capacity Multiple sourcing strategies Sheffi (2007), Sheffi and Rice (2005)
Planning	Business process mapping Christopher and Rutherford (2004), Tang (2006), Weick and Sutcliffe (2007)
Expertise	Task specialization External consultants Weick and Sutcliffe (2007)
<i>Individual resilience</i>	
“Protective factors”	Locus of control and self-determination Bimrose and Hearne (2012)
	Self-esteem and subjective well-being Bimrose and Hearne (2012)
“Resilience resources”	Adaptation/flexibility Bimrose and Hearne (2012), Chen and Lim (2012), London (1997)
	Capacity for learning Youssef and Luthans (2007)
	Social connections Shin <i>et al.</i> (2012), Bimrose and Hearne (2012), Jackson <i>et al.</i> (2007), Kossek and Perrigino (2016), Powley (2009), Stephens <i>et al.</i> (2013)

Table II.
Comparison of individual and organizational resilience

characteristic, other than size per se, which distinguishes small firms from large is their higher probability of ceasing to trade.” The ability to adapt to an uncertain, and potentially hostile, future increases the requirement for resilience (Ates and Bititci, 2011). However, entrepreneurs and SMEs can be disproportionately impacted by extreme events as they have fewer resources “to plan, respond and recover” (Ingirige *et al.*, 2008, p. 583). Resource constraints experienced by SMEs include lack of access to finance (Storey, 1994), lack of technological resources, and constraints related to human resources (Vossen, 1998). Resource scarcity is therefore a key issue for SMEs seeking to be resilient, as “best practice is [typically] identified in resource rich large enterprise contexts” (Herbane, 2010, p. 44). However, Baker and Nelson (2005, p. 359) argue that entrepreneurs are not constrained by resources to the degree that the resource-orientated school would suggest and that entrepreneurs are particularly well suited to “making do with what is at hand” (i.e. Strauss’s concept of bricolage). They define “entrepreneurial bricolage” as “[...] the pursuit of opportunity through close regard to the resources at hand,” and they emphasize that entrepreneurs can be “alert to resources” in the same way that they are alert to opportunity (Baker and Nelson, 2005, p. 359).

Resource-oriented research tends to suggest that SMEs lack resilience; conversely, behavioral research emphasizes some advantages SMEs possess that promote resilience. This is perhaps reflected in the fact that SMEs “are less concerned with formal systems” (Storey, 1994, p. 74), display an informality to the working environment (Storey and Sykes, 1996), and demonstrate a higher tolerance for ambiguity and adaptation (de Vries and Shields, 2006, p. 41). SMEs have relative advantages (Vossen, 1998), such as “flexibility” and “adaptive capacity” (Battisti and Deakins, 2012). These established SME characteristics may shorten chains of decision making or speed up response times should a crisis unfold. The extent to which SMEs are exposed to crisis might also explain how a positive attitude to

crisis is developed, as entrepreneurs inherently cope with sustained high levels of stress and external uncertainty in their environment (Storey, 1994; Sullivan-Taylor and Branicki, 2011). SME actors, including entrepreneurs, must often “invent solutions in order to survive” (Zahra *et al.*, 2006, p. 932). Paradoxically, although direct and disproportionate experience of crisis might contribute to the low SME survival rate, it might also enhance “flexibility and responsiveness” (Stokes, 2002, p. 18) and produce comfort with uncertainty (Storey, 1994). Gunasekaran *et al.* (2011) suggest that SMEs should play to their strengths.

The wider literature has also examined the role of individual behavior in promoting organizational resilience. A direct link has been identified between the individual resilience of leaders and employees and organizational resilience (Lengnick-Hall *et al.*, 2011; van der Vegt *et al.*, 2015). It is also found that leaders play an important role in building the resilience of employees (Sommer *et al.*, 2016). The impact of individual resilience on organizational resilience is often attributed to the importance of social connections (van der Vegt *et al.*, 2015), social capital (Lengnick-Hall *et al.*, 2011), and relational reserves (Gittel *et al.*, 2006; Powley, 2009; Weick, 1993). SMEs may also be able to access further sources of resilience, such as a strong sense of organizational purpose (Lengnick-Hall *et al.*, 2011), decentralized or team-based organizational structures (Lengnick-Hall *et al.*, 2011; Weick and Sutcliffe, 2007), and accessing broad resource through extended networks (Lengnick-Hall *et al.*, 2011; van der Vegt *et al.*, 2015). At the same time, other research finds that organizational resilience is not simply the sum of individual capabilities (Alliger *et al.*, 2015). The relationship between individual and organizational resilience is complex (Lengnick-Hall *et al.*, 2011), and even though the possible interdependencies across levels of analysis have been considered, Jaaron and Backhouse (2014) argue that a gap in the literature persists.

Summary: integrating framework

Having contrasted the micro-foundations of resilience as understood in large firms and developed an analysis of the possible routes to resilience within SMEs, an integrating framework is proposed in the form of Figure 1, which grounds this empirical enquiry by articulating how entrepreneurial behaviors might contribute to generating resilient SMEs and contrasting this with the traditional view of individual and organizational resilience. The top panel of Figure 1 integrates studies from entrepreneurship and entrepreneurial resilience that characterize the behaviors of successful entrepreneurs with studies from positive organizational psychology that establish the attributes of resilient individuals, typically in contexts other than entrepreneurship (Linnenluecke, 2017; Youssef and Luthans, 2007). While there is some overlap in the attributes and behaviors identified in these two literatures, there is also considerable divergence suggesting that not all entrepreneurial behaviors contribute to resilience and not all resilient behaviors are distinctively entrepreneurial. The bottom panel of Figure 1 considers the traditional sources of organizational resilience established in the literature and the relationship between organizational resilience and SME resilience. By bringing these commonly disparate literatures together in a synthetic conceptual framework, the authors contrast the traditional view of how resilience is generated with a proposed alternative view (i.e. entrepreneurial resilience).

Figure 1 recognizes a key distinction between individual entrepreneurs and the organizational contexts (the SMEs) in which entrepreneurial behaviors contribute to resilience. Building on this distinction, Figure 1 also explores linkages between the resilience of entrepreneurs and that of the SMEs that are the contexts in which they practice their entrepreneurship. Despite some limited research (e.g. Ayala and Manzano, 2014; Huggins and Thompson, 2015) identifying linkages between entrepreneurial resilience and resilience at higher units of analysis (e.g. the SME, the

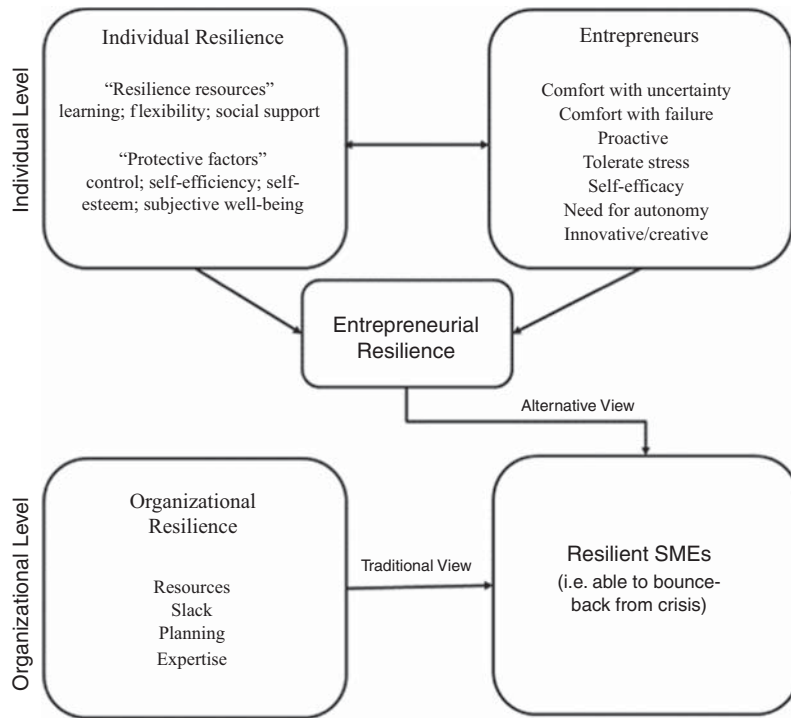


Figure 1.
Synthetic conceptual
framework

regional economic system), there remains a limited understanding of both how it is enacted in practice, and the nature of the inter-relationship between levels of analysis. Hence, this paper proposes the following research question:

RQ1. How does entrepreneurial resilience generate resilient SMEs?

Research approach

As this paper aims to illuminate a nascent and little understood phenomenon, organizational resilience in the context of SMEs, and to theorize regarding the micro-processes at the individual level of analysis that encourage the development of resilient SMEs, an exploratory research design that enhances the validity and reliability of findings is used (Creswell and Clark, 2007; Punch and Punch, 1998). To do this, the research focused upon SMEs operating in the UK, a context where SMEs make up approximately 99 percent of all private business (BIS, 2015).

Sample

The sample analyzed in this study is a sub-sample of data collected for a larger study of resilience in UK private and public-sector organizations. The full data set comprised 11 focus groups ($n = 161$), 20 semi-structured interviews, non-participant observation, and documentary analysis. For this paper, the authors created a sub-sample of the wider data set to focus on 19 SME owner managers/senior managers who attended the focus groups. The data were separated when it became apparent that SME participants had a unique perspective compared to larger organizations' managers. SMEs are often defined as "businesses with zero to 249 employees" (Williams and Cowling, 2009, p. 7). Here, the focus

is on smaller scale SMEs (i.e. with 2-50 employees), because they tend to be entrepreneur centric and represent a comparatively under-researched category of organization (Gherhes *et al.*, 2016). The sample is summarized in Table III.

Resilient SMEs

Research design

An exploratory qualitative approach was selected for this study because it is well suited to producing rich data about the experiences, thoughts, and behaviors of participants (Short *et al.*, 2010). Focus groups were selected as the key method because they have the capacity to generate data and insights that would be less accessible without the social interaction of a group (Morgan, 1997). This approach enabled “respondent triangulation,” whereby “the inferences drawn from a set of data sources will be checked by collecting data from others” (Hill and McGowan, 1999, p. 15), thus, mitigating against the critique that qualitative research in the field of entrepreneurship lacks rigor (Short *et al.*, 2010).

In the most basic terms, a focus group is “an informal discussion among selected individuals about specific topics” (Beck *et al.*, 1986, p. 73), and “although there are many possible variations on the basic method, centrally it involves one or more group discussions, in which participants focus collectively upon a topic selected by the researcher” (Wilkinson, 1998, p. 182). Each data collection event lasted approximately three hours and included a brief talk by the session chair (usually a senior representative from industry or government), an ice-breaking exercise, 1.5-2 hours of core data capture (i.e. the core focus group component) led by the research team using a semi-structured schedule, and concluded with a short de-brief presentation from the research team. This event structure was designed to attract senior decision makers to attend the focus groups and to improve the conditions for

Organization	Role	Sector	Size
Business consultancy	Managing director/owner	Private	Sole trader
Consultancy	Middle manager	Private	Sole trader
Business network	Senior manager	Private	Micro
Business network	Chairman/owner	Private	Micro
Business consultancy	Director	Private	Micro
IT and communications	Managing director	Private	Micro
Technology consultancy	Director/owner	Private	Micro
Business network	Head strategy and planning	Private	Small
Food and drink	Owner	Private	Small
Technology	Owner	Private	Small
Think tank	Senior manager	Private	Small
Housing	Director health and safety	Private	Small-to-medium
Manufacturing	Director engineering	Private	Small-to-medium
Manufacturing	Managing director	Private	Small-to-medium
Security consultancy	Senior manager	Private	Small-to-medium
Technology manufacture	Director	Private	Small-to-medium
Tourism and leisure	Director	Charity	Small-to-medium
Tourism and leisure	Commercial director	Charity	Small-to-medium
Tourism and leisure	Commercial director	Private	Small-to-medium
Category	Employees		
Sole trader	1		
Micro	2-9		
Small	9-20		
Small-to-medium	20-50		

Table III.
Sample summary

group interaction. Although a semi-structured schedule was used, time was allowed for participants to engage with each other (Morgan, 1997). The full duration of each event was digitally recorded and professionally transcribed. The research team also took and transcribed contemporaneous field notes that captured observations such as inter-group behavior. Additionally, during the focus groups, participants completed a printed workbook that asked open and closed questions about the resilience of their organization. Participants were also encouraged to record additional thoughts.

Data analysis

All focus groups were recorded and professionally transcribed, and any additional field notes were typed up. Textual data were then imported into the qualitative software package NVivo for analysis and coding. The analytical approach involved a general inductive strategy (Glaser and Strauss, 1967). A grounded approach was selected to avoid forcing the data into pre-generated categories (Bryant and Charmaz, 2007). However, analysis did not proceed with a complete blank slate as it was informed by the authors' pre-existing knowledge of the relevant extant literature (see Figure 1 for summary). Data were initially organized by asking simple questions of the complete data set, which in turn enabled the authors to identify core categories that would help to link the actions, events, and responses shared by participants (Glaser and Strauss, 1967). Data were coded by multiple research team members to enable inter-rater reliability and to guard against omitting novel insights. Having established an overarching thematic coding of the data, themes were assessed for external heterogeneity and internal homogeneity (Patton, 2002). External heterogeneity (i.e. clear difference between concepts) was identified through iterative reading of all the themes for conceptual distinctiveness, and internal homogeneity (i.e. coherence of data within each concept) was assessed by reading and re-reading for coherence. To avoid being overwhelmed by inductive codes, where appropriate, data were combined with a suitable theme or sub-theme. By using this procedure, it was possible to "develop a framework of the underlying structure of experiences and processes that are evident in the raw data" (Thomas, 2006, p. 238). The authors then began to theorize from the materials generated. Using a visual mapping strategy (Huberman and Miles, 1994), a model of key behavioral themes was developed to visually illustrate distinct conceptual relationships. This allowed the authors to integrate themes into a model grounded in the original data that is developed and presented in the following sub-sections.

Findings

This sub-section reports the study's findings in two parts. First, data in relation to the fundamental nature of resilience in the context of SMEs are unpacked. This enabled the research to contrast how entrepreneurs conceive of resilience in this context with the wider literature on the micro-foundations of resilience in larger companies. This analysis encourages a more nuanced and informed discussion in relation to what constitutes SME resilience. Second, how entrepreneurial resilience unfolds in practice is examined; in doing so, new evidence on how entrepreneurs' behaviors shape SME resilience is provided. This analysis subsequently provides an alternative basis for understanding how resilience can be developed and sustained by SMEs.

Constraints on SME resilience

The data indicate that the processes and practices of managing resilience are directly influenced by the characteristics of SMEs. For example, it was found that SMEs reported that they are often walking a "knife edge" between success and failure due to limited

resources and that small, even trivial, events could present significant risk to firm survival. **Resilient SMEs**
Two different participants reported:

I would classify an extreme event as any event which causes catastrophic or traumatic loss to the business[...] This can take the form of a major non-payment of an invoice through to flooding of our electronic facilities in the workshop.

An extreme event can be a small one [...] what happened to us was just a day with no power in the office, which hurt us because ours is a small organization.

Another common theme identified in the data related to SME structure and task management, as participants reported that they had very plural roles and responsibilities that dynamically unfolded in response to events. As a result, SME managers reported being time poor and under significant day-to-day pressures. One respondent characterized this theme as follows:

They're trying to run a business. The point I'm making is that these small business people are the managing director; they do the drains, they deal with the car parking issues and customers, and then you can't have a plan. There's not the sophistication because you're battling day to day.

At the same time, not all characteristics of SMEs tend to undermine resilience. There is a connection between managers and the success of SMEs that is absent, or at least significantly diluted, in the context of larger businesses. SME managers tend to have "more skin in the game," and this heightened the salience of resilience because of the personal impacts associated with business failure. As one SME manager put it, "we are the business [...] If we lose our house, we've lost our business."

Despite the strong affective and financial ties between SME managers and their firms, participants reported that the costs of resilience were potentially prohibitive for SMEs, or as put bluntly by one participant, "that the cost of being prepared is not worth it." Additionally, participants expressed a lack of motivation in preparing for, and expending energy thinking about crisis:

Yeah, I mean let's be honest about it. I mean certainly if you're looking at a lot of the SME sector, the reality is it's, what's the minimum we can do and get away with it?

Superficially, it might appear that a lack of motivation, investment, and preparation would undermine resilience in SMEs; however, it was clear from participants that this was not the full picture. The reactive approach to crisis described by participants was often equated with an emergent philosophy of managing and strategizing, rather than a lack of resilience. Participants tended to either be critical of the assumption that all SMEs lacked resilience, or to question whether resilience is a salient concept in the context of SMEs:

People don't understand – if one of my businesses is impacted by a crisis, it might not survive because I was already considering moving on to something new. Maybe the business wasn't making a profit anyway, or the demand wasn't there, or I just wanted to start something new or try somewhere else. The individual business matters less in that way than is suggested by these 80% failure rates that are thrown around.

This quote indicates that for some SMEs, resilience must be about more than organizational survival to be a relevant concept.

The nature and impact of entrepreneurial resilience

The last set of themes identified in the evidence concerned how individual entrepreneurs promoted the resilience of their SMEs. Thus, these findings address the linkages between resilience at the individual and organizational levels of analysis. How the behavior and characteristics of entrepreneurs might create an alternative basis for SME resilience is now

considered, and through this the analysis examines the practice of entrepreneurial resilience. As summarized in Table IV, participants reported four key sources of SME resilience.

First, participants emphasized the importance of social connections in producing informal support mechanisms. This finding is significant because social connection is often understood to be a type of “resilience resource” that supports individual resilience (see Table II for a literature summary). In the context of the SME sample, resilience was understood to be in part produced by the social embeddedness of the entrepreneur within the business, and by the social support provided by employee and secondary stakeholder relationships:

It’s more like a family, i.e. they support each other. And that’s actually very important, especially in an SME where it’s not just the employee/manager relationship; it’s obviously a very long-term relationship. We have a lot of people who’ve been there 30 years, 25 years. So, it’s a different sort of scenario. There are unofficial support mechanisms.

These relationships tended to both have a personal dimension and exhibit mutual understanding that in turn provided a source of support to SMEs during crisis. Participants also reported a cultural component of SME resilience, as well as the role of trust, involvement, and collaboration among organizational members. In these processes, managers played an active role in promoting resilience by championing an inclusive culture and establishing and enforcing norms of devolved responsibility: “It’s an organizational culture so that everybody knows what their role is within that bouncing back.” Relationship management was therefore seen as critical to achieving SME resilience.

Second, as previously discussed, participants were reticent to emphasize planning and investment as a basis for resilience, instead emphasizing the value of autonomy and a high locus of control:

So, you can then stand back and say well I don’t have to do anything, I don’t have to plan for anything because if it happens I know what I’ve got to do.

They sort of know what they should do most of the time.

Themes	Link to the literature	Indicative quotations
Employee relationships as “unofficial support mechanism”	Individual resilience “resilience resource”	It’s more like family Look after staff everything else follows I am totally dependent on the people Every member of your staff is crucial to your business, your organization, that’s one of your assets [...] is your resilience based around the fact?
Need for autonomy	Individual resilience “protective factors” and entrepreneurial characteristic	If it happens I know what I’ve got to do I mean frankly they can have all the regulation, accreditation and structures in the world, but if you haven’t got the resources to do it, you’ll ignore it
Comfort uncertainty and failure See silver linings	Entrepreneurial characteristic	They’d make it up on the run I just wanted to start something new, or try somewhere else Spot the opportunities that exist in the situation
Making do and muddling through	“Entrepreneurial bricolage”	I haven’t got a formal business continuity plan for my own [business] because it doesn’t merit it. So, I will take a practical pragmatic view that I will muddle through as best I can, because I know what to do

Table IV.
Entrepreneurial
resilience in practice

This finding resonates with both the individual resilience literature, where locus of control is noted as a key “protective factor” by Bimrose and Hearne (2012), and with the literature about characteristics of entrepreneurs (e.g. Rauch and Frese, 2007). This finding is notable as it suggests that the ability to control how resilience is approached in an SME may in turn contribute to SME resilience.

Third, a clear theme in the data related to the role of entrepreneurial characteristics, such as comfort in uncertainty, in producing SME resilience. Participants reported that they were not preoccupied with crisis and that they felt confident that they would not only be able to cope with challenging events but also would look for the “silver lining” within these challenging events. This opportunity-centric view is very typical of entrepreneurial behavior (Hedner *et al.*, 2011), and it is interesting to note this participant’s explanation of the impact this has upon SME resilience:

But it’s also being able to take the opportunity to actually spot the opportunities that exist in the situation, so you could actually go on a step further from going back to normal, because it will be a different normal when you come back anyway. So, it’s actually being able to make the most of the opportunities.

Finally, “muddling through” appeared to enable SMEs to respond to the dynamic, uncertain, unfolding, nature of external threats as circumstances demanded, rather than as plans would have dictated. Thus, the evidence suggests that “entrepreneurial bricolage” (Baker and Nelson, 2005) is used in the production of SME resilience. The following exchange from a focus group exemplifies both the significance participants attached and the preference they exhibited for a “make do strategy”:

Participant: How resilient is it? I’d actually say it’s pretty resilient. Why would I say it’s pretty resilient? Because actually a lot of the people are very capable [...] so I think they could respond pretty quickly and pretty effectively.

Facilitator: But do you have evidence? Has it been tested?

Participant: No evidence, it’s not been tested. But if you ask me instinctively I would say it would be more resilient than the degree of preparedness would lead you to expect.

Facilitator: How prepared are the organization’s systems and processes?

Participant: They’re not, but how fast could they evolve? I suspect it’s actually pretty quick because they’d make it up on the run.

Facilitator: You mean they’d muddle through?

Participant: Don’t underestimate muddling through because it might be more effective for a small organization than doing a hell of a lot of planning.

Discussion

This paper has conceptually and empirically examined entrepreneurial resilience to explain how the attributes and behavior of entrepreneurs shape SME resilience. Findings show that the sources of resilience available to SMEs tend to be relational, contextual, attitudinal, and behavioral, rather than structural and resource intensive. The research highlights the critical role that individual entrepreneurs play in promoting these alternative sources of resilience through their attitudes and behaviors. The processes and mechanisms that participants associated with resilient SMEs are most commonly found in the literature associated with individual resilience (i.e. social connections and locus of control), entrepreneurial behavior (autonomy, comfort with uncertainty, opportunistic), and “entrepreneurial bricolage” (“making do” and “muddling through”).

Based on these findings, in Figure 2, a model is developed of the relationships between the resilience attributes of individual entrepreneurs, the organizational processes/routines and mechanisms these provoke and encourage, and SME resilience.

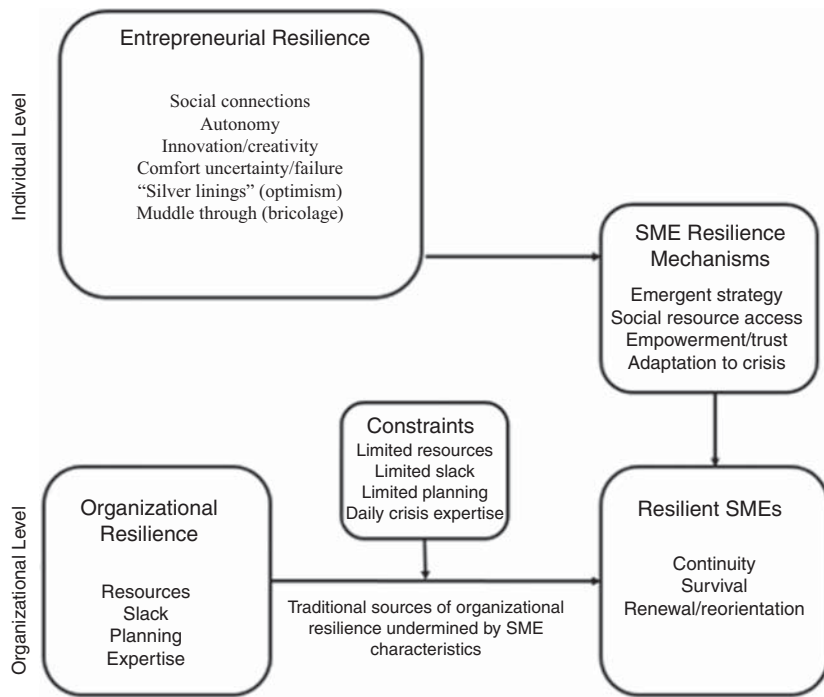


Figure 2.
Summary of
key findings

The resilience of SMEs, or their ability to cope with significant external threats and shocks, is featured as the dependent variable in the model. The model suggests that SME resilience is both directly and indirectly influenced by the resilience attributes of individual entrepreneurs. The indirect pathway recognizes the role of entrepreneurs in creating a culture or climate within SMEs that fosters resilience beyond their direct influence.

Conclusions

There are several significant implications of this study, with benefits reaching practice and policy. Findings draw into question traditional approaches to understanding and promoting SME resilience. Specifically, this research suggests that one-way communication, which emphasizes the sensitization of SMEs to the need for crisis planning, is unlikely to foster resilient SMEs. Instead, the research suggests several alternative strategies.

The model, presented as Figure 2, indicates that both entrepreneurial and individual resilience characteristics contribute both directly and indirectly to SME resilience. As such, schemes that promote the individual resilience of entrepreneurs or entrepreneurial approaches to small business could have an impact on SME resilience. Additionally, the evidence suggests that policymakers must take a more nuanced perspective on what resilience means in the entrepreneurial context and to consider the implications this has for supporting SMEs. The authors suggest this interpretation because the entrepreneurs in the study did not equate entrepreneurial resilience with the survival of a single business; instead, they observed opportunities for renewal and reinvention as an equally important

component of resilience. These findings suggest three key interventions that government or SME networks could use to promote entrepreneurial resilience:

- (1) the introduction of guidance and/or regulation that recognizes that SMEs routinely access alternative sources of resilience;
- (2) local SME events that indirectly build “social connection” (a key individual “resilience resource”); and
- (3) supporting entrepreneurs in determining how to best approach resilience within their own organization via consultation, rather than guidance/regulation, thus increasing “protective factors” via improved locus of control.

Findings also indicate potential value in several future research directions. First, the resilience of SMEs – revealed in this study – coupled with the existing evidence on the resilience of large firms suggests that there might be a significant problem with resilience in relation to medium-sized firms. Medium-sized companies lack the political, financial, and human resources of large firms and the agility, flexibility, informality, and embeddedness of SMEs, possibly leaving them particularly exposed to external shocks. This is a phenomenon that future research could substantiate and parameterize. Second, this new evidence of unique forms of resilience among SMEs opens avenues of exploration to examine whether similar capabilities might be developed and sustained in large organizations, thereby further promoting their resilience in relation to extreme events. A developing literature concerned with corporate entrepreneurship has begun to examine how large organizations sustain cultures of enquiry, innovativeness, dynamism, autonomy, and creativity (Corbett *et al.*, 2013). Future research could explore the contributions of these cultures to resilience, and examine the interdependencies and complementarities between “orthodox” approaches to developing resilience at the organizational level (e.g. planning, exercises, slack resources), and alternatives that promote organizational resilience by encouraging a devolved capacity for individual resilience.

This study has several limitations that also suggest fruitful avenues for future research. First, the empirical analysis builds on a relatively modest evidence base. Future research could extend this research by evaluating whether conclusions are robust in studies that involve increased sample sizes, as well as variation in context (industry, country). Additional corroborative research would help confirm core conclusions that SMEs are, in general and largely because of the resilience of individual entrepreneurs, more resilient than previous studies have generally assumed. More work also needs to be conducted to clarify and validate the concept of entrepreneurial resilience and to develop instruments for its measurement in large-scale quantitative research. Large-scale research would enable light to be shed on the antecedents and implications of entrepreneurial resilience and additional clarification of the contextual and other contingencies that influence these factors.

The accepted wisdom is that SMEs lack resilience to external shocks and setbacks because they lack the resources (financial, human resources, political) required to be resilient. This study challenges this conventional wisdom through a detailed conceptual and empirical analysis of how entrepreneurs contribute to SME resilience. Drawing on a qualitative examination of UK-based SMEs, the authors employ a novel multi-level approach to examining the nature and impacts of entrepreneurial resilience in practice. The study found that many of the attributes identified in the positive psychology literature as creating individual resilience are exhibited both by entrepreneurs and SMEs. This finding suggests that entrepreneurial behaviors directly and indirectly impact SME resilience, as they shape both SME approaches to resilience and SME resilience outcomes. This paper demonstrates how SMEs can cope, or thrive, under conditions of extreme uncertainty and crisis despite lacking the resources traditionally associated with resilience.

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