



Understanding SME Resilience: A Bibliometric and Thematic Review of Empirical Research

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Abstract

Small and medium enterprises (SMEs) are a compelling unit of analysis to understanding the construct of resilience, given their heterogeneity, their importance in the global economy, and exposure to shocks. This systematic literature review (SLR) surfaces the need to reframe resilience as an equifinal measurement outcome emerging through the interplay of what firms have (resources), what they do (processes), and what they can become. The review highlights that the construct resilience remains congested with definitional ambiguity and methodological fragmentation. Following a bibliographic coupling technique, this review identifies 22 empirical articles that meet strict quality standards for inclusion. This review adopts a novel structured approach combining bibliographic coupling to identify shared knowledge foundations with reflexive, citation-led thematic analysis of those foundations. By examining how foundational citations are applied within clustered studies, the review identifies recurring conceptual frameworks, enabling traits, and theoretical anchors of SME resilience. The findings of this structured review reveal that resilience should be understood as a bridging construct situated between survival and success. Resilience is shaped by context, culture, the entrepreneur firm-nexus, and temporal phases of readiness, response, and recovery. The methodology and structured process applied in this review surfaces key conceptual patterns that may enable future researchers to build on shared knowledge foundations, offering a replicable approach for future structured literature reviews.

Keywords

Resilience; SME; Entrepreneur; Bibliometric analysis; SLR

Declaration

I (Brendon Darroll) declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy (Evidence Based management) at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Brendon Darroll

29 June 2025

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Section 1: Introduction

Resilience has become an important construct in management research, particularly within the study of small and medium-sized enterprises (SMEs) (Saad et al., 2021). It refers to a firm's ability to withstand, adapt to, and recover from adverse conditions (Williams et al., 2017). With SMEs often operating in unstable and resource constrained environments (Saad et al., 2021), understanding how resilience is formed, theorised, and measurably demonstrated is increasingly important (Alexander, 2013). Despite its growing use, the concept of resilience remains congested with definitional ambiguity and methodological fragmentation (Herbane, 2019; Hillmann & Guenther, 2021; Saad et al., 2021). Understanding how resilience is framed, the attributes it encompasses, and the theoretical perspectives that underpin it is essential for clarifying both its meaning and practical application in future SME research. To address this gap, my review offers new conceptual clarity by systematically tracing how past knowledge has been used to frame resilience.

The concept of resilience traces back to the Latin *resilire* or *resilio*, meaning “to bounce,” and entered the English scientific lexicon through Sir Francis Bacon (1627), who likened the reflection of sound to light bouncing off mirrors (Alexander, 2013). While this origin suggests a simple rebound, contemporary usage of the term has evolved.

Although the conceptual lineage of the term has a long history (Alexander, 2013), resilience in contemporary usage is widely applied and defined in different ways (Saad et al., 2021). Resilience has been scholarly defined as a firm's “capability endowments to interact with the environment in a way that positively adjusts and maintains functioning prior to, during, and following adversity” (Williams et al., 2017, p. 742). Still, most scholars recognise it as a capability or capacity to recover from crisis or disruption. However, while generalisable, the construct remains definitionally unsettled (Hillmann & Guenther, 2021).

SMEs are positioned as a compelling unit of analysis to understand resilience. As a heterogeneous group operating across diverse sectors, SMEs are embedded across all economies and account for 99% of all businesses globally (Eggers, 2020). They remain central to employment generation and local livelihoods, particularly in developing contexts

(ILO, 2020). Yet, highly stressful events, exogenous shocks, can severely disrupt their operations and threaten their survival (Miklian & Hoelscher, 2022). Thus, building SME resilience to enhance SME survivability has attracted growing interest from academic scholars (Saad et al., 2021).

As Miklian & Hoelscher (2022) observe, SME vulnerability and resilience are not fixed attributes, but are shaped through the interplay of internal characteristics, the nature of the shock encountered, the strategies employed in response, and the broader institutional context in which they operate. Thus, the nature of the business, the shock, and the firm's response all interact in complex ways to demonstrate resilience. This complexity is further amplified in today's volatile, uncertain, complex, and ambiguous (VUCA) environment (Taskan et al., 2022), where disruption is not an exception but a recurring feature of the business landscape.

In such an environment, resilience cannot be reduced to a simple "bounce back" measurement to a previously observed state. Rather, its trajectory is often non-linear and transformative. Much like how an echo refracts and reshapes the original sound (muffling, distorting, or amplifying it) the path to resilience alters firms in ways that may either hinder or enhance recovery, rather than simply restoring it to what once was.

1.1 Framing the Review

This review contributes to clarifying how resilience is framed in SME literature and offers perspectives on how it might be enacted, shaped, and sustained across different contexts and types of disruption. It begins with the recognition that resilience is increasingly relevant to SME survival in turbulent times. It also acknowledges that resilience itself is an unsettled construct (Hillmann, 2021). This review highlights that resilience is not simply a capacity, capability or trait, but a composite outcome emerging through the interplay of what firms have (resources), what they do (processes), and what they can become (capabilities) (Bhamra et al., 2011; Conz & Magnani, 2020; Meyer, 1982; Saad et al., 2021; Williams et al., 2017). Thus, resilience can be more simply understood as the way firms apply and transform their available resources, however limited, through distinct internal processes to build capacity for adaption, adjustment, to operate effectively within their specific business contexts.

To better understand how resilience is conceptualised in the SME literature, this review adopts a novel structured and methodologically integrative approach that combines both bibliographic coupling with reflexive, citation led thematic analysis. It contributes to new knowledge by providing a method for the systematic literature review (SLR) process by integrating bibliometric techniques with passage level coding to trace shared knowledge across high quality empirical studies. By examining how foundational citations are applied within clustered studies (Braun & Clarke, 2021; Marzi et al., 2024), this review identifies recurring conceptual frameworks, enabling traits, and underlying theoretical anchors of SME resilience. As a useful and adaptable approach, this method demonstrates potential for future literature reviews on other constructs.

1.2 Theoretical perspectives and the complexity of resilience

This review highlights three interconnected theoretical perspectives that feature prominently in the SME resilience literature. These findings echo and expand on the contributions of Saad et al. (2021), serving as both confirmatory and complementary. First, a Resource-Based View (RBV) highlights the critical role of tangible and intangible assets. These include, but are not limited to, assets such as financial slack, networks, and human capital (Barney, 1991). Second, Dynamic Capabilities theory reflects how firms adjust and reconfigure resources to sense, seize, and transform in the face of change (Teece et al., 1997; Teece, 2012). Third, the literature emphasises a systems-based perspective, which frames resilience as an outcome of the interaction between internal organisational structures and external environmental feedback, shaped by embedded operational and organisational practices (Burnard & Bhamra, 2011; Herbane, 2013; Miklian & Hoelscher, 2022). Resilience in SMEs should be understood as a multidimensional capability (Miklian & Hoelscher, 2022) that develops over time (Saad et al., 2021), marked by key phases, rather than as a separate or isolated trait broken into disconnected parts.

Given their size and structure, SMEs are often owner-managed, blurring the distinction between the entrepreneurial or the firm's resilience. I have termed this the entrepreneur–firm nexus, where the founder's decisions, a firm's habitus, learning capacity, and bricolage practices become inseparable from resilience outcomes (Ates & Acur, 2022; Baier-Fuentes

et al., 2023). The close integration between decisions, culture, learning capacity and entrepreneurial attitudes suggests that resilience cannot be considered solely from an organisational perspective. SME firms vary widely in size but share a defining characteristic of 'smallness,' (Eggers, 2020) that influences how resilience is conceptualised within different research contexts and settings.

1.3 Temporal dimension of SME resilience

Temporal landmarks can serve as pivotal moments that shape a firm's development path. It is thus postulated that moments of stress, exceptionally high-impact events, serve as temporal landmarks in the path to greater resilience. Much like how Dai et al. (2014) indicates a 'fresh start effect,' providing renewed clarity of purpose and a sense of forward momentum, I suggest that each temporal (shock) period presents a jolt to the business that effects their developmental change. Examining these incremental steps and their role in resilience development provides valuable academic insights into how resilience evolves (Saad et al., 2021). It is within the crisis management literature where three core dimensions become critical for understanding resilience: readiness and preparation, response and adaptation, and recovery or adjustment (Bhamra et al., 2011)

1.4 Research question and motivation

The motivation for this review is therefore both scholarly and methodological. It aims to build on scholarly knowledge of SME resilience (Saad et al., 2021) and develop new insights for the construct. This review introduces a novel methodological approach by applying citation-passage thematic synthesis to bibliographically coupled papers. This method proved effective in navigating a complex, multidimensional, and interdisciplinary construct by identifying the most cited papers in each cluster and examining how authors drew on past knowledge. In doing so, it responds to calls for more integrative theory-building and greater methodological reflexivity in management research (Hillmann, 2021; Krlev et al., 2025; Marzi et al., 2024).

The review objectives and questions are explicitly framed to interrogate the structure of existing knowledge, asking:

RQ1: How is SME resilience conceptualised and investigated across bibliographically clustered studies, in terms of research focus, methodological design, and shared foundational citations?

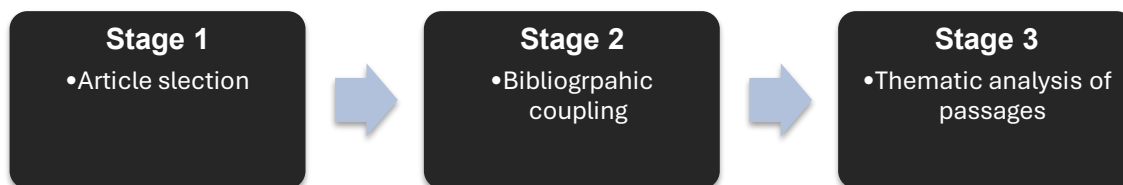
RQ2: What are the conceptual themes, enablers and theoretical foundations of SME resilience?

Section 2 outlines the methodology and approach adopted for this review. Section 3 presents the key findings, while Section 4 offers a synthesis of how resilience is understood in the context of SMEs. Finally, Section 5 provides the conclusion and proposes questions to guide future research. The methodology applied in this review complements existing work and represents a meaningful contribution, offering a valuable and replicable approach for future structured literature reviews.

Section 2: Method and Analysis

The Systematic Literature Review (SLR) (Marzi et al., 2024) employs a structured, multi-stage process to ensure methodological rigour and systematic analysis. I followed a structured three-stage literature review process to examine how the construct, resilience, is conceptualised and empirically grounded within the context of SME empirical research. The review has examined shared citations across bibliographically coupled papers to focus on antecedent shared knowledge. Stage one involved a multi-step process to systematically select the relevant literature. Stage two analysed the selected literature, identifying antecedent and shared knowledge through citation analysis of identified shared authors from the bibliographically coupled articles. Stage three thematically evaluated the shared citations across the identified empirical papers to categorise shared themes.

Figure 1: SLR stages



The review draws on a deductive thematic lens (Gale et al., 2013), appropriate for analysing a multidimensional construct such as resilience (Law et al., 1998). This approach enables the clarification of conceptual areas, supports theoretical parsimony, and situates resilience within a broader conceptual framework (Hillmann & Guenther, 2021).

The review acknowledges that researchers may interpret cited texts differently based on their disciplinary background, theoretical knowledge, and contextual experience. Employing a reflexive thematic analysis (Braun & Clarke, 2021) to review cited passages, using the deductive framework outlined below I argue that this approach is strengthened by the systematicity, and transparency outlined in this section, enabling future researchers to evaluate and build upon the findings.

2.1 Article Selection and Screening

Using the Web of Science (WOS) database keyword selection for the review was intentionally straightforward, focusing on the singular construct of “resilience”. The search strategy identified articles explicitly addressing resilience in the context of SMEs or entrepreneurs. It required “SME” to be included in article searches. The term “entrepreneur” was optionally included using an “or” condition in the Boolean search. The database inquiry included all published years and focuses on the categories of management or business in the search. The search generated 336 manuscripts in the WOS database¹. Using the Australian Business Deans Council (ABDC) and Academic Journal Guide (AJG) as recognised quality independent benchmarking authorities only papers published in journals ranked C or above in ABDC and 2 and above in AJG have been considered for inclusion in the analysis, ensuring rigorous selection process based on established academic quality standards. Using EXCEL VLOOKUP function, matching journals by name, the database from WOS was screened with a supplied database of AJG and ABDC ranking accessed from the GIBS business school library services. This generated a cleaned dataset of 101 articles, see PRISMA flow diagram, Figure 2 (Haddaway et al., 2022).

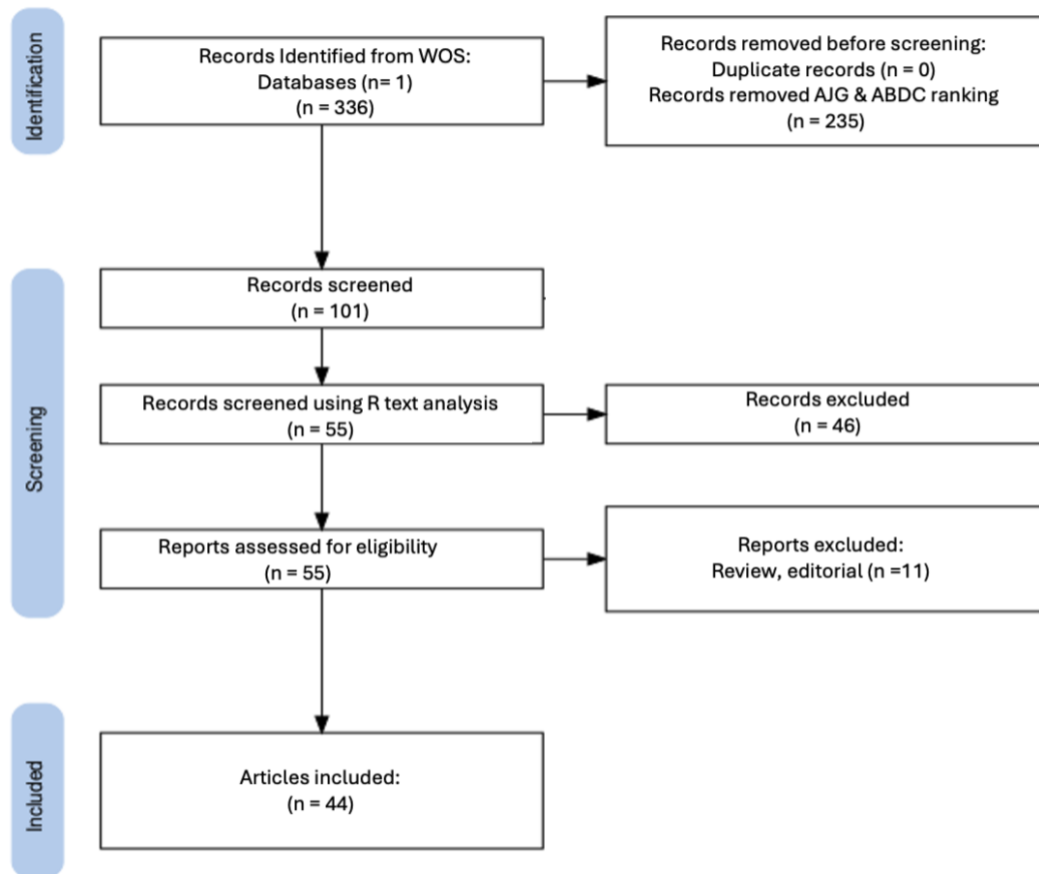
A further cleaning method using the statistical computing and data analysis tool R to further refine the database was conducted. Automated screening was applied by reviewing the author key words, key word plus, title and abstract for the term “resilien” — denoting an identifier for resilience or resilient. This generated a cleaned database of 55 articles. These were subsequently manually screened to identify any reviews, editorial commentary that may have been missed from the prior steps applied. Subsequently 11 further articles were removed, and a final dataset of 44 empirical academic articles were identified for inclusion in the following steps.

Using the dataset of 44 articles, a text file was prepared for bibliometric (Jan van Eck & Waltman, 2022) analysis employing VOSviewer (van Eck & Waltman, 2010) to identify papers with shared citation backgrounds — bibliographically coupled. To ensure meaningful clustering in VOSviewer, a minimum citation threshold of 10, following Hillmann (2021) approach is applied, which uses the Local Citation Score to enhance comparability of

¹ Note: this search was conducted at the end of April 2025 and subsequently new articles may be identified at a later date.

references across databases. This step ensures the co-occurrence analysis of articles, identified via bibliographic coupling and with at least 10 citations, share cited documents and enabled focused thematic analysis of common antecedent themes.

Figure 2: PRISMA diagram



2.2 Bibliographic Coupling

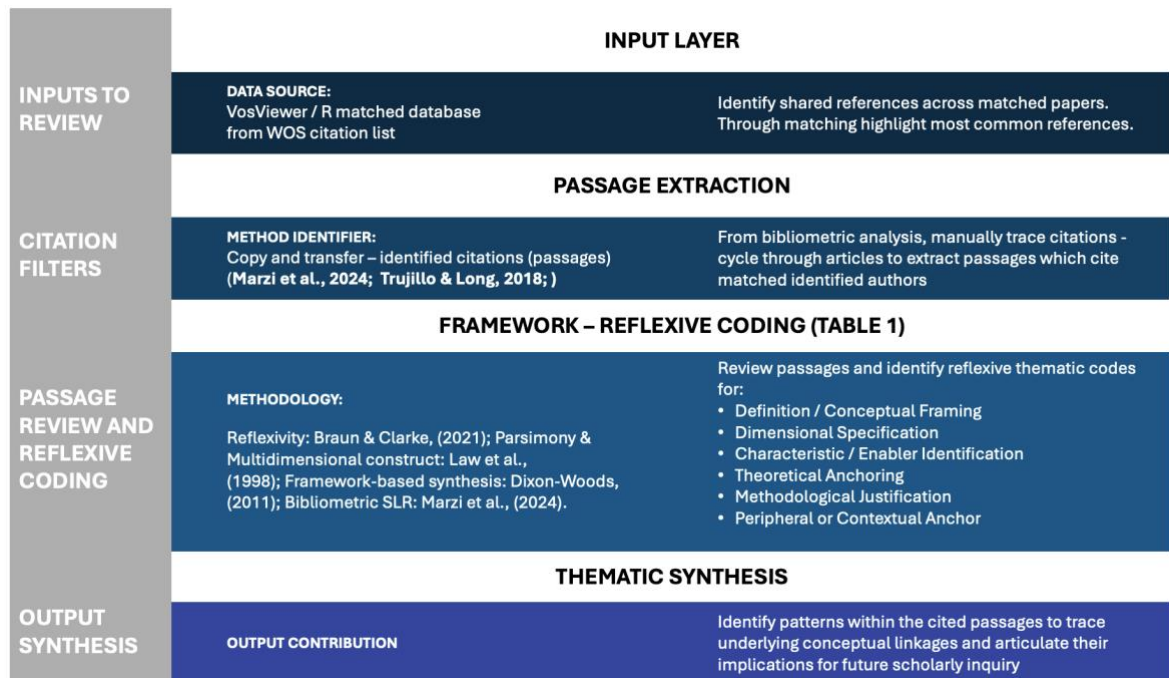
Bibliographic coupling reveals emerging literature trends and scientific directions by linking documents that cite a common third source, indicating a shared knowledge base (Zupic & Čater, 2015). This method is particularly effective for detecting emerging research trends, especially in studies published over shorter time frames (Trujillo & Long, 2018).

Once papers were grouped through bibliographic coupling, their full reference list were downloaded from the WOS database to manually identify shared citations. The resulting dataset is cleaned, and using R, extracted shared citations across the papers creates a

matched citation database. This database guides the subsequent thematic analysis of cited passages to uncover shared themes in empirical SME resilience research. Categorising the most prominently identified papers and reviewing abstracts a reflexive category was determined for each paper identifying the research area and study focus. To improve the analysis of the visual graphic generated by VOSviewer, the matched dataset is additionally processed using R to calculate the Jaccard Similarity, a widely used metric for normalising co-occurrence (van Eck & Waltman, 2010), and indexing identified papers.

2.3 Coding and Thematic Analysis

Figure 3: Analytical Framework for Methodology



To support the review’s theoretical contribution, each bibliographically coupled paper was parsimoniously analysed (Law et al., 1998) to identify passages citing shared references, integrating bibliometric mapping with conceptual exploration for enhanced rigour and scope (Marzi et al., 2024). This involves cycling through papers to locate passages with targeted coupled citations, reflecting shared knowledge. These passages were thematically analysed to create a dataset of prominent articles containing these citations. The integration of bibliometric clustering and passage-level thematic synthesis follows recommended practice for mixed-method systematic reviews (Marzi et al., 2024), enabling examination of the

conceptual lineage of the resilience construct. This dataset supports the thematic analysis and enables future research to examine the field’s foundational basis.

The passage-level analysis adopts a framework-based synthesis approach (Dixon-Woods, 2011), adapting principles of a reflexive (Braun & Clarke, 2021) ‘best fit’ framework synthesis to extract and categorise meaning from passage segments extracted from the empirical papers.

Table 1: Framework based synthesis classification

| Best fit category | Reasoning |
|---|---|
| Definition / Conceptual Framing | The extracted cited passage clarifies resilience or distinguishes it from related concepts. |
| Dimensional Specification | The extracted cited passage describes types or components of resilience |
| Characteristic / Enabler Identification | The extracted cited passage lists behaviours, traits, or capabilities to support resilience |
| Theoretical Anchoring | The extracted cited passage refers to a theoretical construct |
| Methodological Justification | The extracted cited passage references how resilience was studied (SME) |
| Peripheral or Contextual Anchor | The extracted cited passage provides background context |
| Unclear | The extracted cited passage is unclear on relationship to resilience |

Passages were categorised using the classification framework, which is designed to reflexively reflect how the citation is used within the citing paper (see Table 1), rather than to evaluate the source document itself. Importantly, no analysis is conducted on the cited paper — only on how it is represented in the extracted passage from the citing manuscript.

This framework (Table 1) allowed for each passage to be coded based on its conceptual role in the citing paper. This technique enhances transparency, replicability, and analytical scope (Fan et al., 2022) beyond the bibliographic analysis, balancing deductive rigour with flexibility and the parsimonious passage-level thematic analysis. The approach acknowledges that cited material is often used in varied and sometimes indirect ways, such

as definitional anchoring, methodological justification, or theoretical alignment. However, this analysis proceeds from an *a-priori* assumption that the use of cited material reflects peer-reviewed attributions and conveys generalisable insights derived from the cited authors' original contributions. This is reinforced by only including high quality journals in the review.

Using these classifications, a thematic synthesis was undertaken to identify patterns emerging across the cited “shared knowledge” attributions within the empirical studies, drawing on principles of framework-based synthesis (Dixon-Woods, 2011). This step provided a foundation for the subsequent analysis of the identified papers and strengthened the conceptual identification of the resilience construct and research investigation. It also acknowledges the depth and historical lineage of the literature, recognising that many of the reviewed empirical studies are grounded in years of prior research and intellectual effort. By tracing the cited antecedent works, this review seeks to honour the scholarly investment behind these studies through a systematic and concise investigation of their shared conceptual foundations.

The synthesis focuses solely on antecedent themes, ensuring that the literature review is directly attributing commonly cited authors who represent the shared knowledge base of the resilience literature. This enabled a robust understanding of how resilience is conceptualised in SMEs research. Analysing the full content of clustered articles is beyond the scope of this review, both due to practical constraints and because the primary aim is to surface shared conceptual anchors, not generate new theory from full-text synthesis. Instead, this review traces the use of shared citations across bibliographically coupled studies to uncover how key ideas around resilience have been applied, framed, and interpreted within empirical SME research. It follows academic guidance of parsimony (Law et al., 1998) and contributes new knowledge through reflexive (Braun & Clarke, 2021) interpretation.

2.4 Narrative Framing

By situating this review at the intersection of bibliometric mapping and thematic synthesis, this review directly responds to methodological recommendations by Marzi et al. (2024). The review applies mixed methods in conducting the SLR and addresses Hillmann's (2020) call for clarity in resilience research. This dual method analysis enables both a systematic and

interpretive contribution, providing scholars with a transparent methodological contribution to how resilience has evolved and is currently conceptualised in the SME domain.

In accordance with the prescribed reading in the Indigo Pages, I have made use of generative AI, specifically ChatGPT, to assist with refining the review. While it has supported parts of the process for grammatical support, the ideas, decisions, and interpretations presented remain my own. I have led the analysis, made all coding decisions, and developed the overall narrative. The tool has been useful in helping organise and express parts of the work more clearly, but it has not generated the content or shaped the findings. The tool has been most effective in assisting with the development of coding instructions for R analysis in generating datasets and analysing them. This reflects the kind of deliberate and critical engagement with the review process and represents transparency to authorship that Krlev et al. (2025) identify as essential in strong review articles. Where the researcher plays an active role in making sense of the material, not just reporting it. In that way, this review remained grounded in my own reading and interpretation of the literature, supported rather than substituted by technology.

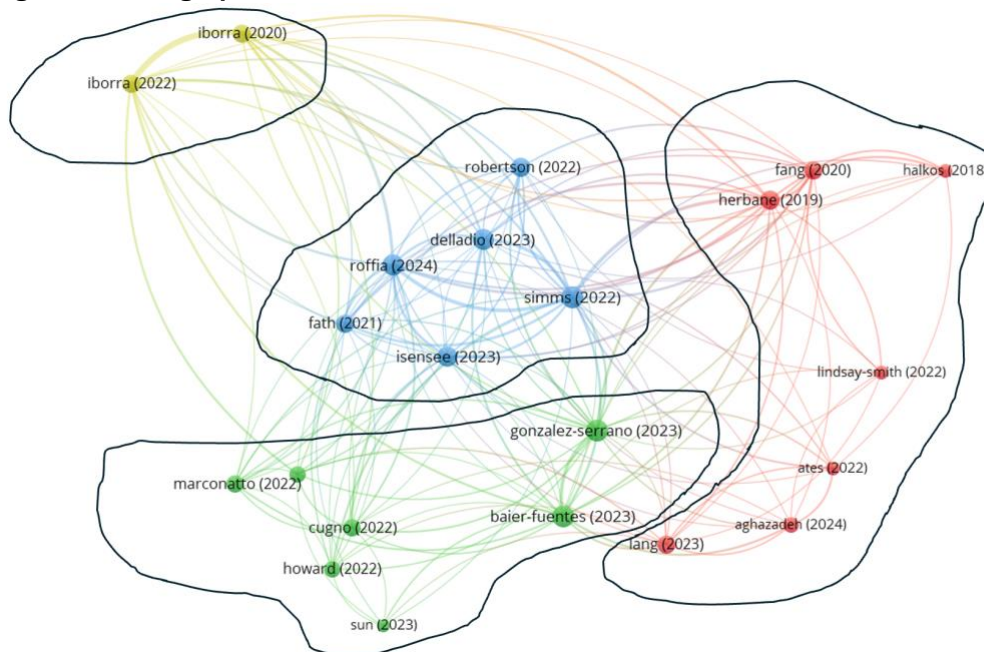
In developing this SLR, I have drawn on available methodological tools not only to ensure rigour, but also to preserve the integrity of the story and context (Shepherd & Suddaby, 2017). My aim has been to present findings in a way that is accessible and grounded in a structured narrative, tracing my philosophical understanding of the construct, resilience, within a narrative framework.

Section 3: Findings from the Literature Review

3.1 Mapping the literature

This section presents the findings of the systematic review, beginning with a description of the selected empirical papers and the bibliographic clustering process (RQ1). These findings offer contextual foundations for the thematic synthesis that follows, which addresses RQ2. The 44 manuscripts are grouped into four bibliographic clusters (22 papers) based on shared coupling patterns, each representing a shared thematic focus in the empirical resilience literature. These clusters, presented in Figure 4, offer a basis for interpreting conceptual commonalities across the field.

Figure 4: Bibliographic Clusters



Notably, of the 44 articles analysed using VOSviewer, only 22 empirical studies were found to be interlinked through shared foundations, having drawn on prior scholarly contributions and showing bibliographic coupling. Although the screening process was thorough, only a small number of high-quality articles met the inclusion criteria. This suggests that the field is still emerging, with many aspects of the topic remaining conceptually and empirically emergent. Stronger linkage or overlap in the sample frame, along with a larger pool of manuscripts, would have established a more mature and settled body of theory and practice

on the subject. While the immaturity of the field allows space for new contributions, it may also pose challenges for emerging scholars by encouraging narrow dimensions of inquiry and research pathways that offer limited advancement for the field.

□ **3.1.1 SME resilience and distribution (Cluster 1)**

Cluster 1 comprises 7 papers - (Aghazadeh et al., 2024; Ates & Acur, 2022; Fang et al., 2020; Halkos et al., 2018; Herbane, 2019; Lang et al., 2023; Lindsay-Smith et al., 2022). The papers in this cluster examine SME resilience across a range of disruption types, including digital transformation and technological change (Aghazadeh et al., 2024; Ates & Acur, 2022; Lang et al., 2023), climate-related shocks (Fang et al., 2020; Halkos et al., 2018), and psychological stressors (Lindsay-Smith et al., 2022) during crisis. Despite their diversity, these studies frame SMEs as actors whose resilience depends on how capabilities are developed and applied in uncertain environments. Several studies implicitly or explicitly adopt a temporal framing of resilience across readiness, response, and recovery phases. For instance, Aghazadeh et al. (2024) and Lang et al. (2023) emphasise readiness through the development of digital capabilities and maturity while (Fang et al., 2020) and (Lindsay-Smith et al., 2022) examine response and recovery through psychological capital and mental health coping mechanisms. Halkos et al. (2018) highlight structural barriers that limit SMEs adaptive response to environmental shocks and Herbane (2019) presents resilience as the ability to prepare and adapt strategically, with SMEs grouped by how formalised their planning and crisis engagement is. Across the cluster, resilience is treated not as a static quality, but as a context-sensitive outcome shaped by how SMEs cultivate and apply capabilities in response to digital/technology disruption, environmental shocks, and internal behavioural challenges related to leadership, wellbeing, and planning.

□ **3.1.2 SME resilience and distribution (Cluster 2)**

Cluster 2 comprises 7 papers – (Baier-Fuentes et al., 2023; Cugno et al., 2022; González-Serrano et al., 2023; Howard et al., 2022; Marconatto et al., 2022; Miocevic & Srhoj, 2023; Sun et al., 2023), most of which examine how SMEs responded to the disruptions brought about by the COVID-19 pandemic. An exception is Howard et al. (2022) who adopt a systems perspective focused on sustainable practices and the circular economy, with only a peripheral reference to the pandemic period. While the papers differ in scope and setting,

they include studies on sports entrepreneurship during crisis (González-Serrano et al., 2023), supply chain fragility (Sun et al., 2023), Industry 4.0 adoption in manufacturing (Cugno et al., 2022), innovation performance in Latin American SMEs (Baier-Fuentes et al., 2023), and place-based circular economy practices (Howard et al., 2022). Despite this diversity, they share a concern with how SMEs navigate disruption. Across the cluster, the studies highlight several adaptation mechanisms. These include working capital management (Marconatto et al., 2022) and diversification strategies (Marconatto et al., 2022; Miocevic & Srhoj, 2023). Other central themes are absorptive and innovation capabilities (Baier-Fuentes et al., 2023; Cugno et al., 2022), as well as learning through relational support and community-embedded networks and systems linkages (González-Serrano et al., 2023; Howard et al., 2022).

□ 3.1.3 SME resilience and distribution (Cluster 3)

Cluster 3 comprises 6 papers – (Delladio et al., 2023; Fath et al., 2020; Isensee et al., 2023; Robertson et al., 2022; Roffia & Dabić, 2024; Simms et al., 2022) that explore SME resilience through a systems, decision-making, and organisational lens. These studies are linked by their shared emphasis on how internal managerial practices, organisational systems, and in some cases entrepreneurial decision-making interact with external disruptions to influence resilience outcomes. Roffia & Dabić (2024) highlight the role of management control tools, intended use of Enterprise Resource Planning (ERP) systems, and financial buffers in shaping firm-level resilience. Robertson et al. (2022) show that digital maturity, particularly digital leadership, enhances SME adaptability during crises by improving situational awareness and reducing vulnerabilities. Resilience is explored through a strategic focus on decision-making logics, where causation fosters preparedness, and effectuation promotes agility in navigating uncertainty. Both are identified as enablers of resilience, though they tend to be deployed at different temporal stages of a crisis response process (Delladio et al., 2023). Simms et al. (2022) further build on this by tracing the process of entrepreneurial learning and adaptation, showing how SMEs move from exploratory experimentation (effectuation) toward goal-directed coordination (causation) as a form of dynamic resilience building during a crisis. Extending beyond internal strategy, resilience is also influenced by the relational context, where established networks support adaptation, learning, and business model transformation during disruption (Fath et al., 2020). Finally, Isensee et al. (2023) highlight how human and structural social capital underpin digital sustainable

entrepreneurship, showing that orientation and organisational learning not only support resilience but also enable sustainability focused strategic responses in SMEs.

□ **3.1.4 SME resilience and distribution (Cluster 4)**

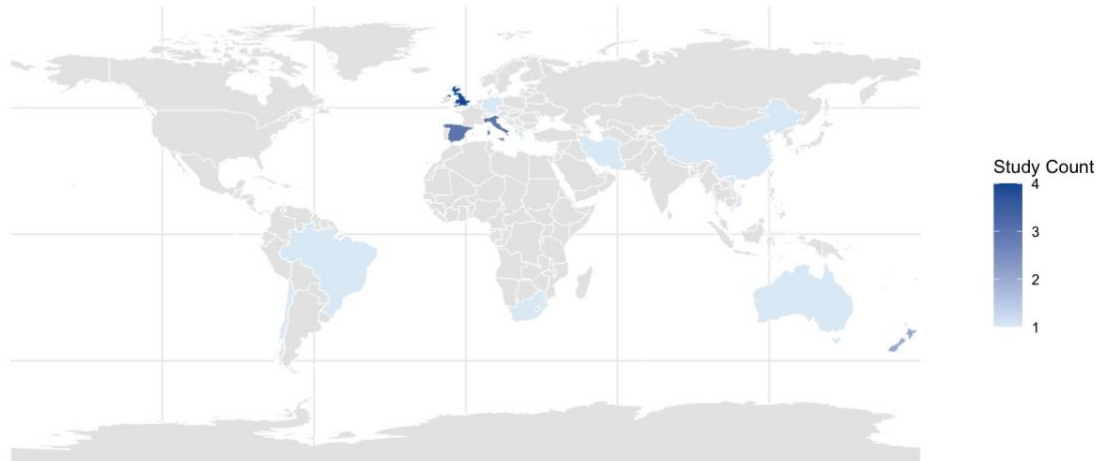
Cluster 4 comprises 2 papers – (Iborra et al., 2020, 2022), both exploring how ambidexterity and strategic consistency help SMEs stay resilient during crises. Ambidexterity means balancing exploration, which involves trying new ideas or entering new markets, with exploitation, focusing on using existing strengths and resources. Strategic consistency refers to keeping this balance steady over time. The 2020 study looks at how these factors support survival and recovery. The 2022 paper builds on this by showing that resilience is strongest when strategic consistency in ambidexterity is maintained at moderate levels. Iborra et al. (2022) furthermore highlight that organisational slack helps improve resilience, but its benefits decrease when strategic consistency becomes too rigid. Together, the papers show that steady (but flexible), balanced strategies and resource buffers help SMEs respond more effectively to disruption.

3.2 Geographical Mapping of the Studies

Identifying where the reviewed papers have applied their research helps highlight potential gaps in the literature and informs where further studies may be needed. However, this analysis is limited to bibliographically clustered papers and may not represent the full body of literature on the resilience construct. Figure 5 presents the geographic distribution of the studies, grouping them by the regions in which they were conducted. These visuals highlight the concentration of research in Europe and the United Kingdom, with noticeably fewer studies conducted in Africa, Latin America, and parts of Asia and the Pacific regions. This uneven spread reveals a geographic gap in the literature, particularly in emerging and developing economy contexts where SME resilience may take on distinct forms and challenges.

Figure 5: Map and regions of empirical studies (identified clusters)

Empirical Study Locations by Country
Resilience-focused SME Research



Journals - Journal of Enterprise Information Management (2); Journal of Business Research (3); Tourism Management Perspectives (2); Business Strategy and the Environment; Entrepreneurship & Regional Development an International Journal; International Journal of Physical Distribution & Logistics Management; Technovation; Technological Forecasting & Social Change; Management Decision (3); International Journal of Operations & Production Management; critical perspectives on international business; International Journal of Retail & Distribution Management; Review of Managerial Science; Industrial Marketing Management; Long Range Planning; Journal of Small Business Management.

| Region | Number | Country | Study Authors |
|--------------------------|----------|--|---|
| Africa | (n = 1) | South Africa | (Robertson et al., 2022) |
| Asia | (n = 3) | China; Iran; Vietnam | (Aghazadeh et al., 2024; Lang et al., 2023; Sun et al., 2023) |
| Australia-Pacific | (n = 3) | Australia; New Zealand | (Fang et al., 2020; Fath et al., 2020; Lindsay-Smith et al., 2022) |
| Europe | (n = 13) | Croatia; Germany; Greece; Italy; Spain; United Kingdom | (Ates & Acur, 2022; Cugno et al., 2022; Delladio et al., 2023; González-Serrano et al., 2023; Halkos et al., 2018; Herbane, 2019; Howard et al., 2022; Iborra et al., 2020, 2022; Isensee et al., 2023; Miocevic & Srhoj, 2023; Roffia & Dabić, 2024; Simms et al., 2022) |
| South America | (n = 2) | Brazil; Chile | (Baier-Fuentes et al., 2023; Marconatto et al., 2022) |

3.3. Mapping Methodologies: Insights from Clusters

To complement this geographic representation, Table 2 summarises the methodological and analytical characteristics of the selected studies identified in the bibliographic clusters. The studies vary considerably in their research designs, approach and methods with both quantitative and qualitative approaches used to study resilience in SMEs

In reviewing the empirical manuscripts, the analysis considered several key dimensions: country of study, methodological design, temporal focus, level of analysis (macro, meso, or micro), research tools, and analytical methods. This has highlighted several points for reflection.

Among the studies reviewed, a notable subset attempts to explore resilience, or in the case of Ates & Acur (2022), its long-term antithesis, obsolescence, over extended timeframes. While these are not in the majority, they represent an important shift toward understanding resilience as a developmental process rather than a static condition captured at a point in time by cross-sectional surveys. A longitudinal perspective arguably offers a more suitable lens for examining how resilience evolves and strengthens over time (Saad et al., 2021). Furthermore, the path to resilience is unlikely to be linear or characterised by easily identifiable antecedent traits. Instead, resilience may emerge in unexpected ways following disruption, shaped by internal dynamics that are not immediately visible. This raises important questions about equifinality² within organisational systems and entrepreneurs, where different histories, experiences, or internal conditions can lead to similarly resilient outcomes through distinct and different pathways.

² Equifinality refers to situations where multiple factors can lead to the same outcome, with no single factor providing a complete or direct causal path. It suggests that the same result can be achieved through different starting points or pathways (Wolfschwenger & Young, 2021).

Table 2: Bibliographically coupled papers methods, design, temporal focus, and level of analysis

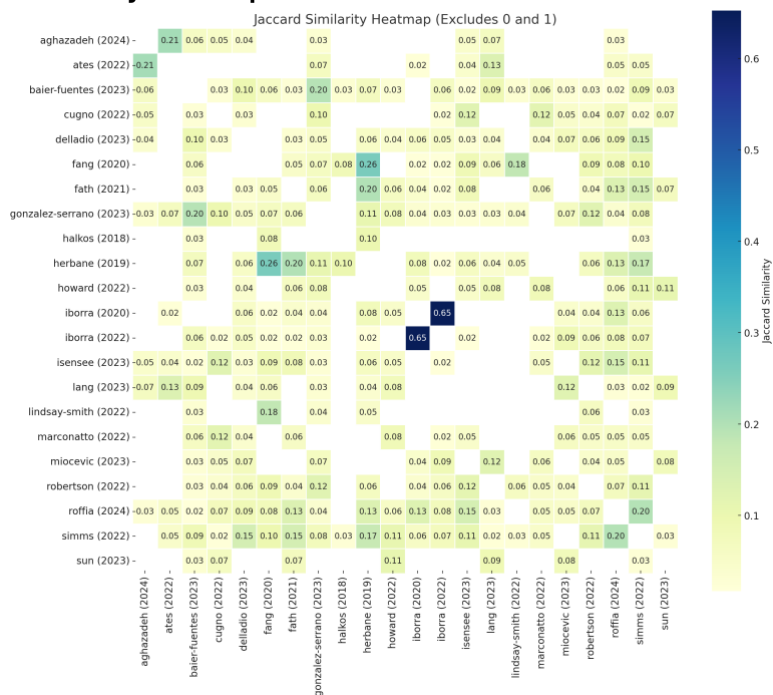
| Author(s) & Clusters* | Country | Method / Design | Temporal Focus | Level of Analysis (Macro–Meso–Micro) | Research Tool | Analytical Method |
|------------------------------------|----------------|-------------------------|--|---|-------------------------|---|
| C1 (Aghazadeh et al., 2024) | Iran | Quantitative | COVID-19 (during inferred) | Micro – Firm level technology sector (SME) digital readiness | Survey | PLS-SEM |
| C1 (Ates & Acur, 2022) | United Kingdom | Qualitative | Technology Disruption (long-term obsolescence) | Micro – manufacturing (SME) Internal strategic processes | Case study | Thematic analysis |
| C2 (Baier-Fuentes et al., 2023) | Chile | Quantitative | COVID-19 / Political unrest (during) | Micro – Innovation through bricolage at the firm level (SME) | Survey | PLS-SEM and fsQCA (Fuzzy-set Qualitative Comparative Analysis) |
| C3 (Delladio et al., 2023) | Italy | Quantitative | COVID-19 (during) | Micro – Decision-making within hospitality sector (SME) | Survey | Structural Equation Modelling (SEM); Necessary Condition Analysis (NCA) |
| C2 (Cugno et al., 2022) | Italy | Quantitative | COVID-19 (recovery trajectory 2021-2023) | Micro – Firm (SME) production recovery in manufacturing, industry 4.0 | Survey | Mediation analysis (OLS and probit regression) |
| C1 (Fang et al., 2020) | New Zealand | Qualitative | Natural disaster (Kakatoa) | Micro – Entrepreneurial psychological capital in tourism SMEs | Case study | Thematic analysis |
| C3 (Fath et al., 2020) | New Zealand | Qualitative | COVID-19 (early & during) | Micro/Meso – Firm (SME) resilience through international networks | Longitudinal case study | Thematic, inductive analysis |
| C2 (González-Serrano et al., 2023) | Spain | Quantitative | COVID-19 (during) | Micro – Sports firm (SME) responses | Survey | fsQCA (Fuzzy-set Qualitative Comparative Analysis) |
| C1 (Halkos et al., 2018) | Greece | Quantitative | Environmental shocks (not specified) | Macro – National firm survey and ecological policy framing | Survey | Multivariate analysis (OLS and Probit regression) |
| C1 (Herbane, 2019) | United Kingdom | Conceptual/Quantitative | General/Various | Micro/Meso – SME resilience shaped by planning and contextual factors | Survey | Cluster analysis with ANOVA |
| C2 (Howard et al., 2022) | United Kingdom | Qualitative | Peripheral to COVID-19 (pre and during) | Meso – Place-based circular economy systems | Case study | Narrative synthesis and interpretive thematic analysis |

| | | | | | | |
|--|----------------|---------------------------|---|---|---|--|
| C4 (Iborra et al., 2020) | Spain | Quantitative | GFC (2001–2004 baseline; 2005–2008 pre; 2009–2012 during) | Micro – Strategic consistency within SMEs | Panel data | OLS and logistic regression |
| C4 (Iborra et al., 2022) | Spain | Quantitative | GFC (2001–2004 baseline; 2005–2008 pre; 2009–2012 during) | Micro – Ambidexterity and performance in SMEs | Panel data | Quadratic and moderated regression (OLS) |
| C3 Isensee et al., 2023 | Germany | Qualitative | COVID-19 (during) | Micro – Success factors in sustainable digital entrepreneurship | Typological qualitative design | Inductive thematic coding |
| C1 (Lang et al., 2023) | Vietnam | Quantitative | COVID-19 (during) | Micro – Human and structural social capital in SME digital transformation | Survey | PLS-SEM |
| C1 (Lindsay-Smith et al., 2022) | Australia | Quantitative /Qualitative | COVID-19 (during) | Micro – SME owner psychological resilience and mental health | Longitudinal interviews and survey | Thematic analysis and stepwise linear regression |
| C2 (Marconatto et al., 2022) | Brazil | Quantitative | COVID-19 (2018–2019 for pre) and (2020 during) | Micro – Working capital structure and SME cashflow configuration | ERP system | fsQCA (Fuzzy-set Qualitative Comparative Analysis) |
| C2 (Miocevic & Srhoj, 2023) | Croatia | Quantitative | COVID-19 (during) | Micro – Diversification and performance (SME) | Survey | Moderated regression (PROCESS macro) |
| C3 (Robertson et al., 2022) | South Africa | Quantitative /Qualitative | COVID-19 (during) | Micro – Digital leadership SME response in crisis | Survey and interviews | Structural Equation Modelling (SEM), t-tests and thematic analysis |
| C3 (Roffia & Dabić, 2024) | Italy | Quantitative | COVID-19 (2020 and 2021 during) | Micro – SME managerial, digital and financial practices | Survey (2 waves) | Multivariate OLS regression and exploratory factor analysis |
| C3 (Simms et al., 2022) | United Kingdom | Qualitative | COVID-19 (2020 to 2021 during) | Micro – SME business model adaptation and resilience | Interviews (3 waves 16 months – longitudinal) | Deductive thematic analysis (temporal periods) |
| C2 (Sun et al., 2023) | China | Quantitative | COVID-19 (toward end) | Micro/Meso – SME performance through supply chain dynamics | Survey | PLS-SEM, and ANN (Artificial Neural Networks) |

* Clusters indicated by C numerical

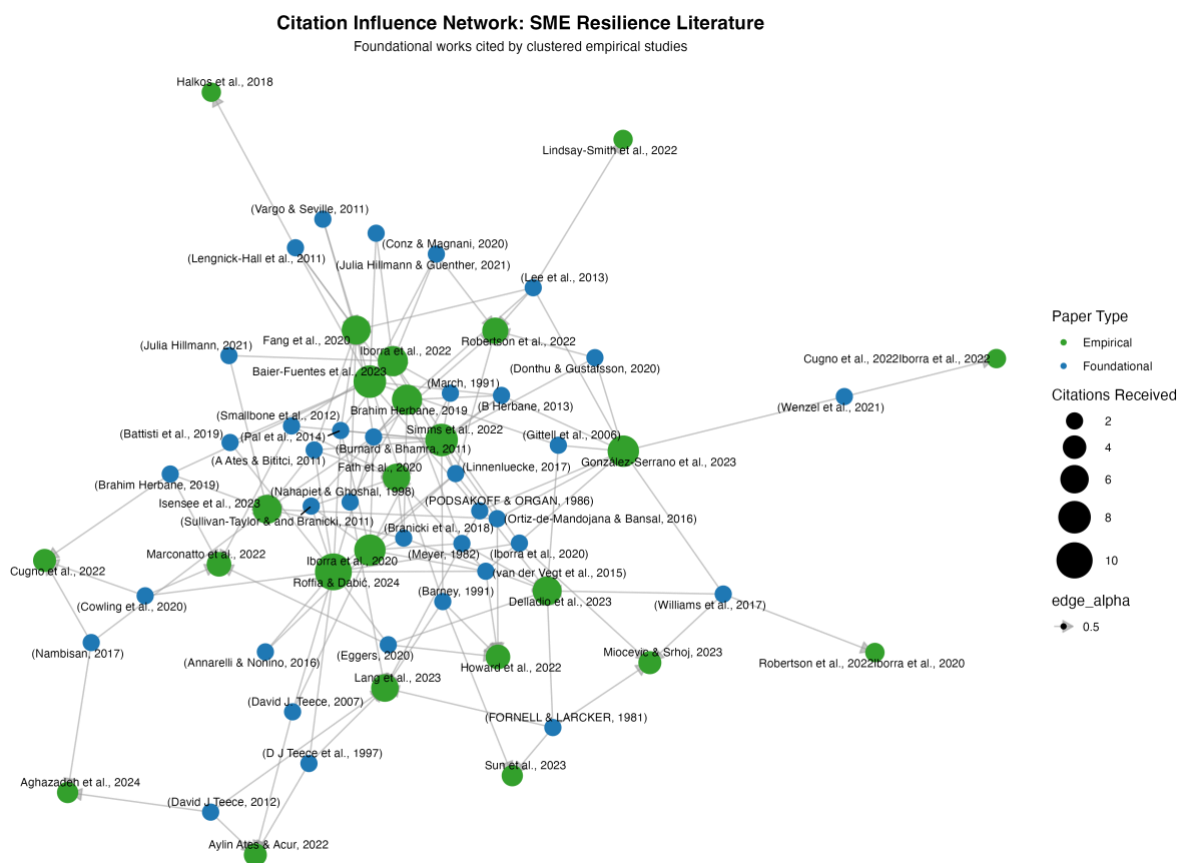
The preceding cluster and regional analysis provide a descriptive overview of the clustered SME resilience literature, highlighting geographic concentration, research design, and analytical orientation across bibliographically coupled papers. Collectively, the findings point to a relatively limited body of literature that is predominantly micro-level in focus, methodologically diverse, and largely situated within crisis contexts, most notably the COVID-19 pandemic. This suggests that current resilience research is more aligned with the demands of crisis management and trait-based perspectives than with academic inquiry into the cultivation of long-term adaptive capacity or strategic renewal. An exception to this is the paper by Herbane (2019) that conceptualised typological of planners and Ates & Acur's (2022) longitudinal study of obsolescence. However, the clustering alone does not fully reveal the strength or nature of conceptual overlap between articles. To advance this analysis, the review introduces visual representations of Jaccard similarity and citation networks, which illustrate the degree of shared citations among coupled papers. The Jaccard heatmap, Figure 6, offers a more granular view of citation commonality and structure, shedding light on the extent to which empirical studies draw upon shared foundational literature, both within and across clusters. Figure 6 illustrates the relationships across the literature by presenting Jaccard similarity scores for matched articles, highlighting the degree of citation overlap among studies.

Figure 6: Jaccard Similarity Heatmap



The most prominent feature in Figure 6 is the strong link between Iborra et al. (2022) and Iborra et al. (2020). These two papers represent close conceptual alignment between the two studies, with the latter building directly on the former's exploration of the relationship between strategic consistency and resilience, using the same panel data from the Global Financial Crisis (GFC) period, and similar methods. Beyond this, the next notable connection is between Fang et al. (2020) and Herbane (2019), sharing focus on the role of the entrepreneur in responding or preparing for crisis conditions. Both highlight the importance of place-based linkages and community-embedded networks, displaying how proximity and local relationships act as vital enablers of resilience through the facilitation and access to support, information, and adaptive capabilities during crises (Fang et al., 2020; Herbane, 2019).

Figure 7: Citation Influence network



Building on the Jaccard similarity visualisation, the citation influence network Figure 7 provides a complementary lens through which to trace the flow of foundational knowledge

through the clustered empirical studies. Whereas the Jaccard map highlights a shared reference heat map among empirical papers, the citation network explicitly maps directional relationships between frequently cited foundational works and the clustered paper identified through VOSviewer³. This visualisation step adds depth to the identification of key papers and highlights a traceable pattern in how certain theoretical contributions serve as conceptual anchors within the literature. These papers have been classified and captured into relevant themes for future reading and are presented in Table 3 which captures the most prominent papers and shared citations targeted for the thematic analysis that follows. These papers represent the commonly cited manuscripts identified in the SME empirical clustered research papers.

Having established the structure and influence of shared citations across the empirical research base, the review now shifts focus to a qualitative thematic analysis of how these shared references are themed within the texts. Next, I address RQ2 by examining passage-level excerpts from the clustered papers that cite foundational or commonly referenced works.

3.4 Definition / Conceptual Framing & Dimensions

The study of resilience in SMEs is largely framed around the relationship between organisational responses to crisis and the actions of individuals involved (within firms), highlighting their interdependence and mutual influence in navigating disruption (Baier-Fuentes et al., 2023; Lengnick-Hall et al., 2011). These firms are generally small with few employees and are often characterised as structurally susceptible to external shocks, with limited forward planning for crisis events (Herbane, 2013) and few buffers to absorb disruption (Eggers, 2020; Smallbone et al., 2012). Their limited resources notwithstanding (Eggers, 2020), the literature highlights that SMEs have shown abilities to adapt quickly and maintain continuity during disruption (Smallbone et al., 2012). Resilience, therefore, highlights the capacity of entrepreneurs and their teams (the firm) to respond effectively, often demonstrating situational awareness and instinctive adaptability in the immediate aftermath of disruption (Simms et al., 2022).

³ It is important to note that over 100 references were identified to be shared across the matched dataset. Only most cited works identified have been included in the citation cluster network and thematic analysis that follows.

Table 3: Themed Antecedent cited papers

| Author | Article Title | Research area / Study type (focus) | Cited By |
|------------------------------------|---|---|---|
| (Williams et al., 2017) | Organizational response to adversity: Fusing crisis management and resilience research streams | Resilience Studies / Review Article | (González-Serrano et al., 2023) (Miocevic & Srhoj, 2023) (Delladio et al., 2023) (Robertson et al., 2022)(Iborra et al., 2020) |
| (Pal et al., 2014) | Antecedents of organizational resilience in economic crises-an empirical study of Swedish textile and clothing SMEs | Resilience Studies / Empirical (SME) | (Iborra et al., 2022) (Iborra et al., 2020) (Fang et al., 2020) (Simms et al., 2022) (Roffia & Dabić, 2024) |
| (Lee et al., 2013) | Developing a Tool to Measure and Compare Organizations' Resilience | Resilience Studies / Methods (Survey) | (González-Serrano et al., 2023) (Robertson et al., 2022) (Fang et al., 2020) (Lindsay-Smith et al., 2022) (Herbane, 2019) |
| (Linnenluecke, 2017) | Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda | Resilience Studies / Review Article | (Delladio et al., 2023) (Robertson et al., 2022) (Roffia & Dabić, 2024) (Simms et al., 2022) (Iborra et al., 2022) (Iborra et al., 2020) |
| (Sullivan-Taylor & Branicki, 2011) | Creating resilient SMEs: Why one size might not fit all | Resilience Studies / Empirical (SME) | (Iborra et al., 2020) (Herbane, 2019) (Roffia & Dabić, 2024) (Fath et al., 2020) |
| (Eggers, 2020) | Masters of disasters? Challenges and opportunities for SMEs in times of crisis | Resilience Studies / Review (SME) | (Howard et al., 2022) (Marconatto et al., 2022) (Delladio et al., 2023) (Roffia & Dabić, 2024) |
| (Burnard & Bhamra, 2011) | Organisational resilience: development of a conceptual framework for organisational responses | Resilience Studies / Conceptual Framework | (Isensee et al., 2023) (Robertson et al., 2022) (Roffia & Dabić, 2024) (Simms et al., 2022) (Fang et al., 2020) (Herbane, 2019) (Iborra et al., 2020) |
| (Barney, 1991) | Firm resources and sustained competitive advantage | Competitive Advantage / Resource Based View | (Baier-Fuentes et al., 2023) (Howard et al., 2022) (Lang et al., 2023) (Sun et al., 2023) (Simms et al., 2022) |
| (Ates & Bititci, 2011) | Change process: a key enabler for building resilient SMEs | Resilience Studies / Empirical (SME) | (Fath et al., 2020) (Isensee et al., 2023) (Roffia & Dabić, 2024) (Simms et al., 2022) (Fang et al., 2020) |
| (van der Vegt et al., 2015) | Managing risk and resilience | Resilience Studies / Editor's Note | (González-Serrano et al., 2023) (Howard et al., 2022) (Fath et al., 2020) (Roffia & Dabić, 2024) (Iborra et al., 2020) |
| (Herbane, 2013) | Exploring Crisis Management in UK Small- and Medium-Sized Enterprises | Resilience Studies / Empirical (SME) | (Baier-Fuentes et al., 2023) (González-Serrano et al., 2023) (Fath et al., 2020) (Herbane, 2019) (Simms et al., 2022) |
| (Branicki et al., 2018) | How entrepreneurial resilience generates resilient SMEs | Resilience Studies / Empirical (SME) | (Delladio et al., 2023) (Fath et al., 2020) (Isensee et al., 2023) (Roffia & Dabić, 2024) (Herbane, 2019) |

| | | | |
|-------------------------------------|---|--|--|
| (Lengnick-Hall et al., 2011) | Developing a capacity for organizational resilience through strategic human resource management | Resilience Studies / Framework Human Resources | (Baier-Fuentes et al., 2023) (Fang et al., 2020) (Halkos et al., 2018) (Herbane, 2019) |
| (Herbane, 2019) | Rethinking organizational resilience and strategic renewal in SMEs | Resilience Studies / Empirical (SME) | (Baier-Fuentes et al., 2023) (Cugno et al., 2022) (Marconatto et al., 2022) (Isensee et al., 2023) |
| (Smallbone et al., 2012) | Small business responses to a major economic downturn: Empirical perspectives from New Zealand and the United Kingdom | Resilience Studies / Empirical (SME) | (Marconatto et al., 2022) (Fath et al., 2020) (Simms et al., 2022) (Iborra et al., 2022) |
| (Ortiz-de-Mandojana & Bansal, 2016) | The long-term benefits of organizational resilience through sustainable business practices | Resilience Studies / Social and Environmental | (González-Serrano et al., 2023) (Howard et al., 2022) (Isensee et al., 2023) (Simms et al., 2022) |
| (Meyer, 1982) | Adapting to environmental jolts | Crisis Management / Experimental | (Delladio et al., 2023) (Herbane, 2019) (Iborra et al., 2020) |
| (Wenzel et al., 2021) | Strategic responses to crisis | Crisis Management / Journal Special Review | (Cugno et al., 2022)(Iborra et al., 2022) (González-Serrano et al., 2023) |
| (Gittel et al., 2006) | Relationships, Layoffs, and Organizational Resilience Airline Industry Responses to September 11 | Resilience Studies / Empirical (Airline Industry) | (Baier-Fuentes et al., 2023) (González-Serrano et al., 2023) (Delladio et al., 2023) |
| (Teece, 2012) | Dynamic Capabilities: Routines versus Entrepreneurial Action | Resilience Studies / Note (Dynamic capabilities) | (Lang et al., 2023) (Ates & Acur, 2022) (Aghazadeh et al., 2024) |
| (Donthu & Gustafsson, 2020) | Effects of COVID-19 on business and research | Crisis Management / Editorial Note | (González-Serrano et al., 2023) (Robertson et al., 2022) (Simms et al., 2022) |
| (Podsakoff & Organ, 1986) | Self-reports in organizational research - problems and prospects | Methodological Guidance / Research Methods | (Lang et al., 2023) (González-Serrano et al., 2023) (Baier-Fuentes et al., 2023) |
| (Hillmann, 2021) | Disciplines of organizational resilience: contributions, critiques, and future research avenues | Resilience Studies / Review (Definition and Measurement) | (Isensee et al., 2023) (Iborra et al., 2022) |
| (Battisti et al., 2019) | Surviving or thriving: The role of learning for the resilient performance of small firms | Resilience Studies / Empirical (SME) Methods | (Baier-Fuentes et al., 2023) (Roffia & Dabić, 2024) |
| (Fornell & Larcker, 1981) | Evaluating structural equation models with unobservable variables and measurement error | Methodological Guidance / Statistical Methods (SEM) | (Lang et al., 2023) (Miocevic & Srhoj, 2023) (Sun et al., 2023) (Delladio et al., 2023) |

| | | | |
|-----------------------------|--|---|---|
| (Annarelli & Nonino, 2016) | Strategic and operational management of organizational resilience: Current state of research and future directions | Resilience Studies / Review (Definition) | (Iborra et al., 2020) (Roffia & Dabić, 2024) |
| (Teece et al., 1997) | Dynamic capabilities and strategic management | Dynamic Capabilities / Foundation | (Lang et al., 2023) (Roffia & Dabić, 2024) (Ates & Acur, 2022) |
| (Nambisan, 2017) | Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship | Digital Transformation / Research Agenda | (Cugno et al., 2022) (Isensee et al., 2023) (Aghazadeh et al., 2024) |
| (Teece, 2007) | Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance | Dynamic Capabilities / Framework (Micro foundations) | (Iborra et al., 2020) (Ates & Acur, 2022) (Roffia & Dabić, 2024) |
| (Iborra et al., 2020) | What explains the resilience of SMEs? Ambidexterity capability and strategic consistency | Resilience Studies / Ambidexterity (SME) | (Miocevic & Srhoj, 2023) (Roffia & Dabić, 2024) (Iborra et al., 2022) |
| (Nahapiet & Ghoshal, 1998) | Social capital, intellectual capital, and the organizational advantage | Organisational Studies / Competitive Advantage (Social Capital) | (Lang et al., 2023) (Fang et al., 2020) (Herbane, 2019) |
| (Hillmann & Guenther, 2021) | Organizational Resilience: A Valuable Construct for Management Research? | Resilience Studies / Review (Measurement Methods) | (Iborra et al., 2022) (Robertson et al., 2022) (Baier-Fuentes et al., 2023) |
| (Cowling et al., 2020) | Did you save some cash for a rainy COVID-19 day? The crisis and SMEs | Resilience Studies / Slack Resources (SMEs and cash) | (Cugno et al., 2022) (Marconatto et al., 2022) (Roffia & Dabić, 2024) |
| (March, 1991) | Exploration and exploitation in organizational learning | Organisational Studies / Competitive advantage | (Simms et al., 2022) (Iborra et al., 2022) (Iborra et al., 2020) |
| (Conz & Magnani, 2020) | A dynamic perspective on the resilience of firms: A systematic literature review and a framework for future research | Resilience Studies / Framework & Definition | (Iborra et al., 2022) (Baier-Fuentes et al., 2023) |
| (Vargo & Seville, 2011) | Crisis strategic planning for SMEs: finding the silver lining | Resilience Studies / Leadership & Strategy (Adaptation) | (Baier-Fuentes et al., 2023) (Fang et al., 2020) |

Resilience and its organisational dynamics have been defined in various ways across the literature, reflecting a range of perspectives (Hillmann, 2021) and polysemous conceptualisation — having multiple meanings or interpretations (Herbane, 2019).

Figure 8 presents a conceptual synthesis of how organisational resilience is defined in the reviewed literature passages. Figure 8 positions resilience as an outcome at the intersection of three foundational elements: capability, process, and resource. This structure reflects the thematic tensions and convergences observed in how resilience is framed. While some authors highlight resilience as a set of dynamic capabilities (Aghazadeh et al., 2024; Ates & Acur, 2022; Herbane, 2019; Ortiz-de-Mandojana & Bansal, 2016) that enable adaptation and learning, others foreground the process nature of resilience, unfolding in stages such as anticipation (Herbane 2019), response, and recovery (Burnard & Bhamra, 2011). A third perspective emphasises resource-based interpretations, where the focus is on absorptive capacity and structural buffers or slack (Cowling et al., 2020; Iborra et al., 2022; Marconatto et al., 2022). The overlap of these domains suggests that resilience is best understood as a composite construct (the outcome). Resilience formulates because of the interplay between what a firm has (resources), what it does (processes), and what it can become (capabilities).

Figure 8: Conceptual Dimensions Underpinning Resilience



Building on the Figure 8 above, Table 4 outlines the core dimensions supporting the multidimensional resilience construct, summarising definitional emphasis and indicative framing from the passages reviewed. It reinforces the idea that resilience is not a singular concept, but an emergent outcome shaped by interlinked capabilities, processes, and resource configurations (Williams et al., 2017). This supports resilience enablement through multiple interactions, shaped through different pathways and configurations depending on organisational and contextual conditions, reinforcing its equifinal nature.

Table 4: Dimension contributing to resilience findings

| Dimension | Emphasis | Example Authors identified passages | Indicative Framing |
|------------|--|---|---|
| Resilience | The result or state of having adapted or recovered from adversity – “bounce back”. | (Annarelli & Nonino, 2016; Conz & Magnani, 2020; Linnenluecke, 2017; Ortiz-de-Mandojana & Bansal, 2016; van der Vegt et al., 2015; Williams et al., 2017) | “The ability to maintain functioning despite adversity or scarcity.” |
| Capability | Abilities that enable adaptation, improvisation, and renewal. | (Gittell et al., 2006; Linnenluecke, 2017; Ortiz-de-Mandojana & Bansal, 2016; van der Vegt et al., 2015; Vargo & Seville, 2011; Williams et al., 2017; Teece et al., 2012; Meyer, 1982) | “The use of internal strengths and culture, to respond and evolve.” |
| Process | A temporal sequence of internal processes that involve phases like anticipation, absorption, and recovery. | (Conz & Magnani, 2020; Gittell et al., 2006; Lee et al., 2013; Linnenluecke, 2017; Meyer, 1982; Ortiz-de-Mandojana & Bansal, 2016; van der Vegt et al., 2015; Vargo & Seville, 2011; Williams et al., 2017) | “Unfolding through anticipatory and reactive phases or stages.” |
| Resource | Slack or structures that allow shock absorption (e.g., redundancy, routines and buffers). | (Conz & Magnani, 2020; Gittell et al., 2006; Lee et al., 2013; Lengnick-Hall et al., 2011; Meyer, 1982; Ortiz-de-Mandojana & Bansal, 2016; Simms et al., 2022) | “The ability to absorb shocks and re-establish performance by activating assets.” |

3.5 Characteristics / Enabler Identification

Across the literature passages reviewed, SMEs are portrayed to rely on a mix of internal strengths such as leadership practices, planning routines, digital skills, and external networks as well as support systems. The resilience of SMEs is often supported by specific behaviours, traits, and capabilities that help them respond and adapt to disruption. These enabling factors are not stand-alone attributes and characterise the processes in which organisations evolve, or not, through crisis. They are shaped by how the firm operates, how decisions are made, and how they interact with their environment (Herbane, 2019; Simms et al., 2022). Although commonly linked to successful firm performance, these attributes also

serve as important contributors for resilience. These enablers play different roles depending on the nature of the disruption and the stage of the crisis encountered. Rather than pointing to a single path, the literature passages confirm that resilience develops through different combinations of these characteristics, shaped by each firm's context and how the firm chooses to deploy them.

□ 3.5.1 Capability: Learning, Innovation and Experimentation

A recurring enabler across the passages reviewed is the role of learning and innovation in fostering resilience. SMEs that are able to experiment, reflect, and adapt their decision-making, resource use, and customer engagement strategies are more likely to sustain performance during disruption (Ates & Bititci, 2011; Lee et al., 2013; Simms et al., 2022). These learning capabilities are often expressed through iterative problem-solving, the trial-and-error development of new approaches (Williams et al., 2017), and the ability to extract lessons from prior shocks (Fath et al., 2020). Embedding these lessons in the culture of the firm through strategies, structures, and routines that support adaptive or resilient responses, as discussed by Meyer (1982), helps shape what can be understood as the firm's habitus. This refers to a set of learned behaviours and shared practices, shaped by past experiences and used to guide future action, as described by Ates & Acur (2022). In several references, this process is framed as part of a dynamic cycle, where firms explore options, test responses, and institutionalise effective routines over time (Ates & Acur, 2022; Herbane, 2019; Iborra et al., 2020; Meyer, 1982). This form of capability is closely linked to innovation under pressure (Barney, 1991; Lee et al., 2013; Wenzel et al., 2021), particularly where formal R&D is limited but improvisation is high such as in the case of bricolage⁴ (Baier-Fuentes et al., 2023). Resilience, in this view, emerges through accumulated experience and the flexible application of insights under constrained conditions (Ates & Bititci, 2011; Barney, 1991; Lee et al., 2013; Meyer, 1982; Pal et al., 2014; Teece et al., 1997; Teece, 2012; Williams et al., 2017).

⁴ "make the most of the available resources to solve problems and recognize opportunities through rapid actions" (Baier-Fuentes et al., 2023, p. 2)

□ 3.5.2 Capability: Management Control (driving process)

Management control practices, particularly cultural capital (*habitus*) structure (Ates & Bititci, 2011; Ates & Acur, 2022), are identified as central enablers of resilience, particularly where SMEs face complex or prolonged disruptions. These practices include a mix of strategic and operational tools such as long-term planning, scenario development, rapid decision-making, performance monitoring, and clear communication flows (Ates & Bititci, 2011; Herbane, 2019)). Monitoring sales forecasts, for example, enables SMEs to anticipate demand patterns and undertake informed planning (Ates & Bititci, 2011; Pal et al., 2014; Simms et al., 2022). Control mechanisms also play a critical role in guiding firm's strategic behaviour, helping them tighten focus and prioritise opportunities under pressure (Branicki et al., 2018), while simultaneously professionalising internal culture to reduce over-reliance on founders (Branicki et al., 2018). Moreover, management control plays a central role in formalising resilience by enabling SMEs to institutionalise structured practices such as business continuity planning, staff training, and risk monitoring systems (Herbane, 2019; Lengnick-Hall et al., 2011). As resilience planning becomes more embedded in daily routines, it is increasingly difficult to isolate which practices are uniquely resilience-enabling and which are simply indicators of effective management. This raises a methodological/measurement challenge: how do we measure resilience as a distinction from managerial competence? In highly uncertain environments, the capacity to monitor contextual signals, interpret evolving conditions, and act decisively becomes a defining characteristic of resilient firms (Iborra et al., 2022; Robertson et al., 2022; Sullivan-Taylor & Branicki, 2011). By contrast, in more stable settings, these same practices are likely to be viewed simply as examples of good management practice.

□ 3.5.3 Market Access, Networks & Resources

In the context of crisis, the primary function of a firm to generate revenue through market transactions is typically the first to come under pressure. Disruptions can rapidly constrict demand, sever access to customers, or undermine established sales channels. As such, access to markets becomes a critical enabler of resilience. These markets are the driving purpose of a firm. When disrupted, they threaten not only revenue but also the broader ability to sustain operations. In such contexts, resilience depends on how well a firm can access, preserve, and reconfigure key resources. These include financial capital, customer

relationships, and operational capacity (human capital), which are essential to maintaining continuity and adapting under pressure.

Firms that are embedded in dense networks or that maintain diversified revenue streams are better positioned to absorb shocks and pivot their offerings when core markets contract (Marconatto et al., 2022; Smallbone et al., 2012), and return to normal. This is particularly relevant for SMEs, which are often closely integrated with their customers, allowing resilient firms to respond quickly to shifting needs and market conditions (Burnard & Bhamra, 2011). Responsive engagement, the process of resilience adaption, supports resilient outcomes by enabling firms to retain clients, adjust their value propositions, and sustain revenue under pressure.

These capabilities often depend not only on formal organisational systems but also on the strategic use of relational assets. Personal and professional ties, within the value chain and beyond, become especially valuable during disruption, particularly when grounded in trust, mutual recognition, and shared norms (Fang et al., 2020). Such networks help firms identify new opportunities, maintain customer relationships, and reconfigure offerings in response to disruption (Branicki et al., 2018; Herbane, 2019; Lengnick-Hall et al., 2011). The strength and effectiveness of these networks, both customer-facing and professional, are supported by social capital. The literature highlights that it is not only the structure of network ties but also the quality of relationships that matter. More precisely, it is not just how connections are arranged or how many there are, but also the degree of trust, shared understanding, and mutual respect that gives them value (Lang et al., 2023; Nahapiet & Ghoshal, 1998). Strong, pre-existing collaboration networks improve a firm's ability to access external support and coordinate an effective response (van der Vegt et al., 2015). This presents a challenge for measurement: how can we meaningfully assess these network-based capabilities/resources and their relationship to market performance and survival during disruption?

Networks do more than help firms reach markets. They also shape how firms adapt, adjust, and maintains continuity during disruption (Baier-Fuentes et al., 2023; Vargo & Seville, 2011). These networks can likely be regarded as a key resource to the entrepreneur and the firm, offering both social capital and access to material or informational support (Baier-Fuentes et al., 2023; Fang et al., 2020). This reinforces the resource-based dimension of

resilience. Resilience emerges not only through capabilities or processes, but also from resource depth and the flexibility with which those resources are applied. Firms that can reallocate working capital and manage resource constraints effectively are better equipped to transition from immediate coping to long-term rebuilding (Ates & Acur, 2022). Human capital further anchors this feature, with qualities such as commitment, leadership, and innovation enabling rapid adaptation (Lee et al., 2013). These traits link the firm’s capabilities to the strategic processes required to effectively deploy available resources. These resource-based factors, whether financial, relational or human, are not passive assets in the development or enactment of resilience. Their value lies in how they are mobilised, combined, and sustained during disruption, underscoring their central role in the resilience construct. Figure 9 presents a resilience trait phase matrix that maps enabling characteristics across the three temporal stages of crisis: readiness, response, and recovery (Bhamra et al., 2011). The diagram organises key behaviours, capabilities, and resources based on how they support firms at different stages of disruption. It highlights how resilience is not a static trait but emerges through dynamic combinations of learning, control, and resource mobilisation. This visual synthesis reinforces the earlier framing of resilience as an outcome shaped by what firms have, what they do, and how they adapt over time.

Figure 9: Temporal Alignment of Resilience Traits and Capabilities in SMEs

| Resilience Domain | Readiness | Response | Recovery |
|--------------------------------------|---|--|--|
| Learning & Innovation | Institutional learning from past events- Culture of experimentation | Trial-and-error adaptation- Reflective sensemaking | Embedding lessons learned- Adaptive routines institutionalised |
| Management Control | Scenario planning- Early signal detection- Culture building | Rapid decision-making- Monitoring key metrics- Coordination routines | Process integration- Reassessment of priorities- Continuity plans |
| Resources & Market Access | Financial buffers- Workforce capacity- Network depth | Resource reallocation- Client retention- Supplier reconfiguration | Human capital redeployment- Market repositioning- Resource renewal |

3.6 Theoretical Anchoring

Across the reviewed passages, three primary theoretical lenses underpin the understanding of resilience in SMEs: the Resource-Based View (RBV), Dynamic Capabilities (DCs), and a systems-oriented perspective rooted in organisational and crisis management theory. These perspectives do not appear in isolation but reflect overlapping interpretations of how firms navigate disruption, adapt, and recover over time.

The Resource-Based View positions internal resources, particularly human capital, social capital, and organisational assets, as core enablers of competitive advantage and thus resilience (Barney, 1991). This is especially prominent in the study of SMEs, where resource constraints are common and strategic resource deployment becomes critical for survival. The review highlights that resilience emerges not only from what resources a firm possesses, but how these are preserved, reconfigured, and leveraged under pressure. Secondly, Dynamic Capabilities theory builds on RBV by explaining how firms renew and adapt their resource base in response to rapidly changing environments (Teece et al., 1997). In this view, resilience stems from a firm's ability to integrate knowledge, experiment with new practices, and adjust internal routines to match external demands. Capabilities such as sensing, seizing, and transforming are central to adaptive capacity and recovery trajectories (Teece, 2012). A third theoretical stream draws from systems thinking, particularly in the crisis and continuity management literature. In this view, resilience depends on how the firm is connected to its wider environment, with its vulnerability and ability to adapt shaped by planning, feedback, and awareness of external conditions (Burnard & Bhamra, 2011; Herbane, 2013; Herbane, 2019). This perspective highlights the need for SMEs to develop system-wide readiness and anticipatory planning, beyond internal operations alone.

Lastly, the reviewed passages reveal a recurring conceptual tension in the resilience literature regarding the relationship between the entrepreneur and the firm. Especially in smaller or family-owned enterprises, the entrepreneur's personal resilience, decision-making, and outlook are often inseparable from the firm's resilience outcomes (Baier-Fuentes et al., 2023; Branicki et al., 2018). This overlap complicates attempts to disentangle firm-level capabilities (in SMEs) from individual traits, suggesting the need for an integrated lens that acknowledges this interdependence in SME research especially at the micro level.

Figure 10: Theoretical Foundations of SME Resilience

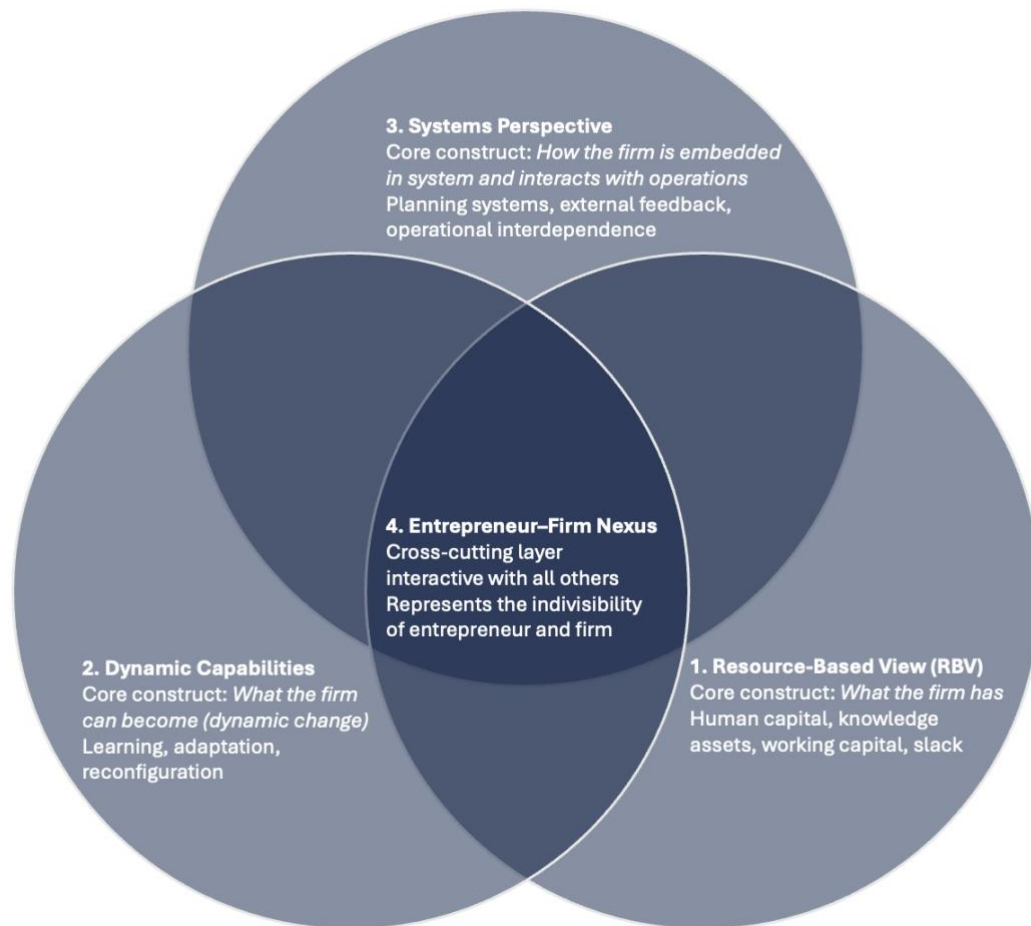


Figure 10 presents the core theoretical lenses that shape how resilience is understood in SMEs. The Resource-Based View (RBV) focuses on what the firm has, its internal assets such as human capital, knowledge, and financial resources. Dynamic Capabilities emphasise what the firm can become, highlighting its ability to learn, adapt, and reconfigure in response to change. The Systems Perspective looks at how the firm interacts with its environment, including planning processes, feedback mechanisms, and external dependencies. At the intersection of these domains is the entrepreneur-firm nexus, reflecting the close connection between the entrepreneur and the firm. In SMEs, the entrepreneur often plays a central role in shaping how these theories translate into practice, influencing how the firm prepares for, responds to, and recovers from disruption.

It is at this nexus point that two theoretical concepts become particularly salient: bricolage and habitus. The historical shaping of organisational culture, what a firm has, how it acts, and how it develops, offers a valuable theoretical lens for understanding resilience. Habitus highlights how resilience may be embedded in the firm's accumulated practices, routines, and predispositions, shaped over time through experience (Ates & Acur, 2022). In parallel, bricolage, the practice of "making do with what is at hand," captures the entrepreneurial improvisation and resourcefulness often necessary in navigating disruption (Baier-Fuentes et al., 2023). Together, these constructs provide a deeper view of the interplay between resources, capabilities, and processes, and offer useful ways to understand and measure resilience as something that grows out of experience, culture, and everyday practice.

Section 4: Synthesis of the Literature Review

This section brings together the insights from the review to make sense of what has been found, and where future work may be attempted. At the start of this process, I have made a conscious decision to focus on the foundational, shared knowledge, that many newer studies draw from. As someone new to the field, I wanted to better understand the core ideas that shape how resilience is discussed and researched in the SME context. Looking for concepts and ideas that make up the foundation of the subject. Rather than evaluating individual studies in isolation, I have applied a systematic review process that examines the foundational literature across clusters, tracing how shared ideas, references, and concepts reveal common themes and perspectives on the subject. This approach has helped uncover patterns, tensions, and areas where thinking is still evolving, as the subject remains conceptually unsettled and under active development (Alexander, 2013; Herbane, 2019; Hillmann, 2021). However, some emerging themes and tensions are beginning to stabilise, as discussed in this section, which concludes with a set of generalisable context positions for scholars to reflect on in future research. By bringing these themes together systematically, this review contributes to the academic discussion on the subject.

What follows is a reflection on those patterns, how different concepts connect, where there are gaps, and how the field might move forward. The aim is to provide a refreshed view of the field as it stands, and to support more thoughtful questions for future research.

The synthesis is structured around the two guiding research questions that have shaped this review. The first focuses on the characteristics of SME resilience studies, where the studies are conducted, how they are designed, what levels of analysis they use, and how they engage with different temporal periods. These aspects reveal not only where scholarly attention has been placed, but also where blind spots may exist. The second question delves deeper into the substance of the field, exploring the conceptual and shared foundations that underpin the bibliographically coupled empirical studies. This includes how resilience is defined, which dimensions are emphasised, and what characteristics are seen to enable it. I have also examined the most evident theories drawn upon to explain the construct from the passages reviewed. Through this, the aim is not only to clarify what is known, but to surface possible tensions and gaps in current knowledge. The synthesis is therefore intended to support further exploration of the subject by offering a grounded understanding of the foundational knowledge that can inform more critical future engagement with the subject.

4.1 Core Themes and Conceptual Tensions

□ 4.1.1 Overview of Patterns and Gaps

The first research question guiding this review sought to understand how resilience in the context of SMEs has been empirically studied. By analysing bibliographically coupled empirical papers, the review examined where studies have been conducted, how they have been designed, and which analytical levels and temporal lenses have been applied.

The findings highlight an emerging and conceptually unsettled field, characterised by divergent approaches to both the framing and measurement of resilience. Many of the empirical studies reviewed tend to align resilience with trait-based perspectives, often identifying mediating factors observed during crisis periods. This crisis-centric orientation is noteworthy, as resilience is most studied in the context of disruption, when a crisis creates an observable moment for measurement and analysis. While this presents a valuable research opportunity, it also places a burden on the construct by narrowly linking resilience to a temporal period of acute stress. As a result, such approaches may overlook the micro-level, developmental processes through which resilience gradually emerges and is built within a firm, system, or individual entrepreneur over time. The emphasis on measuring observable and measured traits also presents challenges for the theoretical development of

the construct. Many of the quantitative studies reviewed prioritise trait-based measurement, often relying on Likert-scale items to indicate the presence or absence of specific characteristics. While useful for capturing static attributes, this approach risks overlooking the adaptive changes and dynamic interactions that unfold between actors and their contexts over time. It also raises the risk of common method bias, as many surveys rely on responses from a single individual within the firm, potentially overlooking other perspectives and missing key aspects of the organisation's adaptive process. While some studies attempt to address these limitations by applying statistical techniques and recognising resilience as a multidimensional construct, the continued reliance on static trait indicators poses challenges. This approach likely could overlook the multiple, and other equally valid pathways through which resilience can emerge and develop longitudinally. This trait-based measurement could obscure the construct's relational and transformational development which shapes how resilience evolves over temporal periods of adjustment.

However, captured in the sample of studies reviewed are a noteworthy subset that recognise the developmental process. Foremost among these is Ates & Acur's (2022) study of obsolescence, which highlights vulnerability and decline in dynamic environments over time. Resilience, in this context, can be viewed as the counterforce that enables adaptation and continuity despite such risks. This study has highlighted an important contextual factor which is difficult to measure through cross sectional approaches. Thus, I would argue, measuring resilience requires framing it as a developmental construct that is best understood through longitudinal investigation. Cross-sectional studies may surface static traits or immediate responses, under acute stress, but they often fail to capture how resilience is cultivated over time within the firm–entrepreneur relationship. At this intersection, resilience emerges not simply from isolated characteristics, but through accumulated routines, adaptive learning, and resourcefulness in practice. Capturing this process requires attention to how firms evolve and respond over time, pointing to the importance of context-sensitive environmental conditions and temporally aware research designs.

Some important gaps are highlighted in the findings. Chief among these is the limited sample size for inclusion in the bibliographic coupling analysis. This may be partly due to the deliberately narrow inclusion criteria I applied, which, while effective in ensuring clarity and consistency, may have been too restrictive. As a result, certain relevant contributions may have been excluded. Notably, of the 44 articles analysed using VOSviewer, only 22 empirical

studies demonstrated sufficient bibliographic coupling to be included in the cluster analysis. This limited sample suggests that the field remains conceptually and empirically emergent. While such diffusion opens space for further exploration and theoretical development, it also signals that consensus on core theoretical foundations is still under development. Furthermore, the paucity of developing nation empirical studies presents an opportunity to examine the cultural practices of different communities and nations, as resilience may take shape in distinct ways across these markets. Notably, lower-income countries are absent from the sample identified in this review. This gap invites future analysis in emerging lower income markets, where local cultural practices, habitus, may differ from developed markets and shape new insights into how firms and entrepreneurs respond to complex challenges in environments where scarcity and disruption are more pervasive.

□ 4.1.2 Polysemous conceptualisation

It is necessary to discuss the multiple definitional domains of resilience. The review and reading have highlighted numerous references to the construct. Resilience has often been broken into separate parts and not considered as a whole. As a result, it tends to be framed under different topical sub-dimensions such as “strategic resilience,” “digital resilience,” “adaptive resilience,” “organisational resilience,” and “entrepreneurial resilience,” to name just a few identified in the literature. This is problematic for a construct that is inherently multidimensional, where resilience can be better understood as an equifinal outcome, shaped by multiple causal pathways and mediated by various factors (Wolfschwenger & Young, 2021). Likewise, the relationship between the entrepreneur and the firm must be understood within the broader system in which the firm operates (Miklian & Hoelscher, 2022). Economic systems are often shaped by scarcity, disruption, and local context, and these factors need to be considered before making meaningful judgments about resilience. What emerges from this review is that resilience cannot be assessed in isolation from its context. It is shaped through the interaction of processes, resources, and capabilities across the individual, firm, and wider system.

Researching resilience within narrow areas of focus allows scholars to develop targeted contributions, but it can also hinder the development of shared theory and consistent approaches to measurement. When the concept is broken into separate parts, it becomes harder to understand how its dimensions (traits, characteristics and process) connect. For a construct that reflects complex, dynamic processes, this creates challenges for both

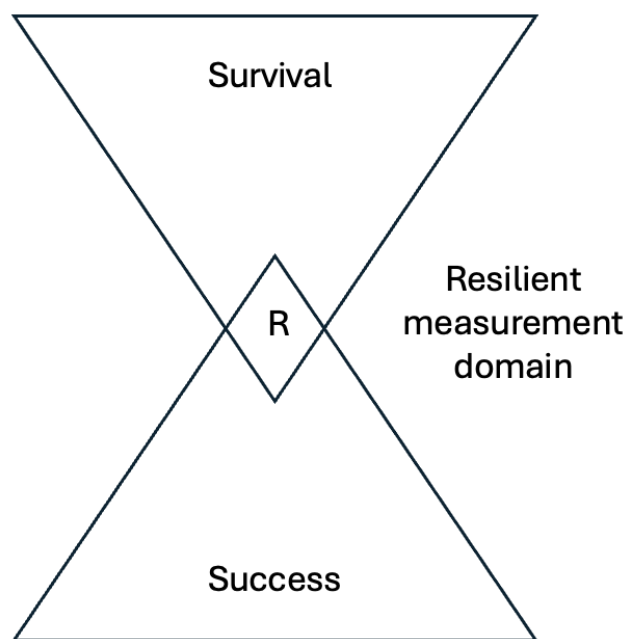
conceptual clarity and practical application. For instance, resilience can be mistakenly equated with survival, with the terms used interchangeably in measurement rather than recognising resilience as a distinct and broader construct. It can also be associated with narrow trait-based attributes, which can lead to a static understanding of the concept. This can lead to a restrictive conceptualisation of resilience overlooking the dynamic changes and adaptive processes that support its development over time. While survival following a crisis may serve as a convenient proxy, framing resilience in this way limits theoretical advancement of its process development and poses challenges for developing more robust and comprehensive measures. What emerges most clearly from the review is that resilience necessarily involves the interplay of processes, resources, and capabilities. However, this interplay is likely to manifest in distinctive ways depending on the context and the subject of analysis — whether a person, firm, or system. When considering resilience in the context of SMEs, all three levels may be relevant.

The reviewed literature and passages also suggest that resilience in SMEs should not be defined from a single perspective but rather understood as emerging from the intersection of multiple practical, day-to-day interactions in an ever evolving and changing environment. It is best portrayed as a dynamic outcome shaped by the interplay between what firms possess (resources), how they act (processes), and what they have the potential to become (capabilities). This multidimensional view is reflected in the conceptual structure presented in Figures 8 & 10.

This also creates a tension around which traits, characteristics, and processes can be specifically attributed to resilience, as opposed to those that contribute more broadly to success or competitive advantage. This ambiguity is likely to persist as the conceptual development of resilience continues, given the overlap between these constructs and their interplay. What is needed in the field is a more deliberate focus on resilience itself, clarifying how it forms and functions in relation to, but distinct from, broader success frameworks. In this light, resilience can be understood as sitting at the intersection of two dimensions: survival and success (see Figure 11). It reflects a firm's capacity to maintain continuity and adapt while navigating competitive markets shaped by scarcity and disruption, not only in an acute highly disruptive setting. Likewise, at this intersection, a closer examination of the entrepreneur–firm nexus and its interplay with resources, capabilities, and processes is necessary to improve how resilience is measured. This requires moving beyond trait-based

indicators and instead focusing on how routines are embedded in a firm's learning, culture, and "trait" resilient behaviours. Bringing these practices and their measurement into focus within everyday operations is essential. As discussed earlier, these practices are likely to differ across contexts and firms, forming uniquely based on specific attributes and local conditions. Given the inherent heterogeneity of SMEs, this adds further complexity to the study of resilience. However, with more targeted research at the contextual, firm, regional, and industry levels, clearer insights are likely to emerge over time. I would argue, however, that resilience should be measured as a holistic construct, rather than fragmented into isolated components such as 'digital resilience'.

Figure 11: Resilience as a mediating construct within the survival/success domain



Resilience should be acknowledged as a bridging construct that connects survival and success, enabling firms, individuals, and systems to adapt and sustain themselves in the face of acute disruption and shifting conditions. At the macro and meso levels, it may relate to broader systems or institutional environments. At the firm level, it reflects organisational resources, practices and capabilities. At the micro level, it concerns the actions and experiences of individual entrepreneurs. Framing resilience across these analytical boundaries allows for a more nuanced understanding, as each presents distinct implications

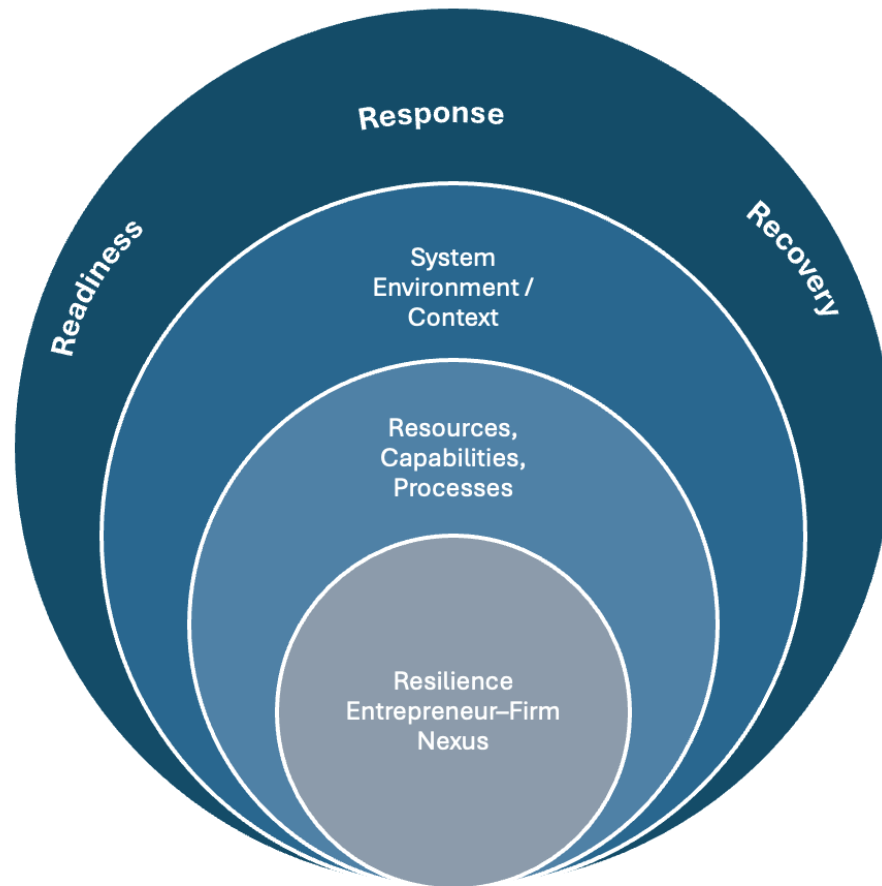
for how resilience is measured or applied in practice. Caution is needed when dividing resilience into overly narrow theoretical subdimensions. Doing so risks diluting its conceptual integrity, reducing the focus to isolated components rather than recognising it as a cohesive, multidimensional whole.

□ 4.1.3 Generalised context positions

Building on the recognition that resilience is a bridging construct between the survival and success measurement domain, a more layered picture of the subject begins to emerge. This reflects its inherent definitional and measurement complexity, which is expected for a multidimensional construct such as resilience (Law et al., 1998). However, a central question remains: is resilience best understood as a dynamic process that evolves over time, or as a static outcome observed at specific points of acute stress? This ambiguity highlights the need for new conceptual and methodological approaches in measuring the construct.

This question draws attention to the temporal, interdependent and evolving nature of resilience. To move beyond static or siloed understandings, Figure 12 offers a synthesised conceptual representation of resilience as a layered and evolving phenomenon. At the centre of the model is the entrepreneur–firm nexus, where processes such as bricolage, learning, decision-making, and habitus influence how resilience takes shape in smaller firms. This core is surrounded by the firm’s resources, capabilities, and internal processes, which interact with the broader system environment. That environment is defined by local constraints and opportunities, which can either support or limit a firm’s chances of survival or success. Understanding resilience requires close attention to the specific context in which a firm operates (Miklian & Hoelscher, 2022). Encompassing all of this is a temporal lens of readiness, response, and recovery, which highlights resilience as a process that unfolds over time. Together, these elements show that resilience is shaped by both internal dynamics and external conditions, and must be understood as a context-dependent, evolving phenomenon.

Figure 12: Resilience as a multilevel construct across temporality (Readiness, Response and Recovery)



Section 5: Formulated Research Questions for Future Research and Conclusion

This review began with a simple yet ambitious goal: to apply a systematic and transparent methodology grounded in shared citation analysis, with the aim of tracing the common intellectual foundations that underpin empirical studies of resilience in SMEs over the last two decades. This effort has been developed with an appreciation for the academic labour, prior knowledge, that underpins all scholarly inquiry. Accordingly, the review focused on identifying well-regarded journals (highly rated AJG & ABDC) that have published empirical studies exploring resilience in the context of SMEs. From this base, I traced patterns of shared knowledge by applying bibliographic coupling to uncover commonly cited manuscripts across the database identified. These shared citations were then extracted,

organised, and examined through reflexive thematic synthesis, enabling me to offer a view on the conceptual foundations that may shape how resilience is theorised and applied within the SME literature. I sought to respect and build upon the foundational contributions of those who have come before. Thus, the aim of this systematic and structured literature review has been to contribute something useful, even if in a small way, to an ongoing conversation.

The structured, methodologically novel, approach used in this review, which included rigorous article selection, bibliometric mapping, and reflexive thematic coding, made it possible to surface conceptual patterns that might otherwise remain fragmented across the literature. In doing so, I have aimed to honour the complexity of the resilience construct while offering a new perspective on how it might be theorised, measured, and applied in the SME context. This work aims to advance a collective understanding of resilience by drawing attention to shared conceptual foundations and clarifying potential directions for future research. It builds on existing scholarship while seeking to provide a more integrated view of how resilience is understood and applied within the SME context.

What emerges most clearly is that resilience is an inherently multidimensional construct, shaped by the interaction of processes, resources, and capabilities across individuals, firms, and broader systems. However, across the literature, resilience is frequently broken into narrower conceptual categories “strategic resilience,” “digital resilience,” “adaptive resilience,” among others which, while analytically useful, risk fragmenting the construct and obscuring its integrated nature.

This fragmentation presents two key concerns. First, it limits theoretical coherence by treating resilience as a set of discrete subdimensions rather than a dynamic and holistic construct. Second, it complicates measurement, especially when trying to measure resilience as more than just the sum of individual parts. Traits, behaviours, and processes attributed to resilience are often difficult to distinguish from those associated more generally with firm success or effective management. In doing so, resilience risks being reduced to either a proxy for survival or an inventory of attributes, rather than being recognised as a context-dependent process that unfolds over time.

This review instead affirms the value of understanding resilience as an equifinal outcome, namely an adaptive capacity that emerges through multiple pathways shaped by contextual

factors. Particularly in SMEs, where heterogeneity is high and resource constraints are common, resilience, therefore, cannot be understood or measured in isolation from operating environments. This analysis positions the entrepreneur–firm nexus as central, where resources, processes, and capabilities interact with decision-making, bricolage, learning, and habitus to shape resilience within a system. These resilience dynamics are embedded in routines, shaped by culture, and expressed through context-specific practices. They are not always easily observable or measurable, but they are fundamental to understanding how resilience forms and functions.

Accordingly, resilience should not be disaggregated into standalone subdimensions without considering the broader conceptual structure in which it operates. Rather, resilience is best understood as a bridging construct situated between survival and success, enabling individuals, firms, and systems to absorb disruption, adapt, and sustain themselves under conditions of uncertainty or stress. Figures 8, 9, 10, 11 and 12 presented in this review illustrate how resilience manifests at the intersection of internal dynamics and external constraints, operating across temporal dimensions of readiness, response, and recovery.

This review highlights the need for more deliberate theorisation and methodological precision in resilience research. Conceptual development should move beyond isolated trait-based indicators and engage more deeply with the embedded processes that sustain firm continuity at the intersection of survival and success. Greater attention to context, sector, region, institutional environment, and to longitudinal measurement frameworks will be necessary to better capture the developmental and dynamic nature of resilience in practice.

To advance this agenda, future research should place greater emphasis on in-depth case studies that can capture the lived realities of how resilience emerges within firms over time. While survey instruments using Likert-scale items are useful for capturing perceptions, they may fall short if limited to a single respondent. Engaging with multiple members of a firm's leadership team (rather than just the owner-manager) would offer deeper insights into the shared routines, norms, and decision-making logics that constitute the firm's habitus. This collective habitus, I suggest, holds a central position in shaping resilience, echoing Meyer (1982) finding that responses to sudden shocks are better explained by underlying ideologies, strategies, and internal orientations than by structure or resources alone. This is particularly important given the potential intersection between bricolage and habitus, which

this review identifies as promising lenses for understanding how firms navigate disruption. These insights move beyond trait-based capacities by framing resilience as a collective and embedded practice shaped through shared routines and contextual responses.

Future research should therefore consider:

- How can resilience be measured holistically without diluting its multidimensional nature?
- In what ways do firm-level routines and decision-making processes embed resilience over time?
- How does the entrepreneur–firm nexus shape resilience differently across sectors, regions, or firm types?
- What are the implications of treating resilience as an equifinal outcome in empirical research design?
- How can resilience be identified in measurement frameworks that account for temporal variation (readiness, response and recovery) and contextual complexity?
- What is the role of shared leadership, distributed efforts, and collective habitus in shaping firm-level resilience?
- How might the interaction between bricolage practices and emergent habitus inform our understanding of resilience?

In sum, this review has aimed to surface the conceptual foundations and measurement tensions that define resilience in SME scholarship. It does not claim to resolve them, but rather to contribute to an evolving dialogue. One that recognises the value of shared intellectual foundations, while also opening new perspectives and supporting a more context-sensitive research agenda for the future. Understanding resilience becomes especially important when we reflect on what constitutes a return to stability and how that process is measured and interpreted. Like an echo that may distort, soften, or amplify its original sound, the path to resilience is rarely a simple return to where things stood before. More often, it reshapes outcomes in ways that can re-form what we consider recovery, depending on the circumstances. This reinforces the need for research approaches that are grounded in real-world evidence that consider temporal periods, context, and how resilience is experienced and expressed across different entrepreneurial, organisational, and context settings.

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