

Date of publication xxxx 00, 0000, date of current version xxxx 00, 0000.

Digital Object Identifier 10.1109/ACCESS.2024.Doi Number

# Systematic Literature Review on Organizational and Financial Resilience

# Juan Diego Ochoa Crespo<sup>1</sup>, José Manuel Feria Domínguez<sup>2</sup>, and Diego Marcelo Cordero Guzmán<sup>3</sup>

<sup>1</sup>Universidad Católica de Cuenca, Cañar, Azogues 030102 Ecuador

<sup>2</sup> Universidad Pablo de Olavide, Sevilla, 41013 España

<sup>3</sup> Universidad Católica de Cuenca, Azuay, Cuenca 010150 Ecuador

Corresponding authors: Juan Diego Ochoa Crespo (jdochoac@ucacue.edu.ec), José Manuel Feria Domínguez (jmferdom@upo.es) and Diego Marcelo Cordero Guzmán (dcordero@ucacue.edu.ec).

This research was supported by the Universidad Pablo de Olavide in Seville, Spain and the Universidad Católica de Cuenca in Ecuador. This constitutes a part of the doctoral training process for the first author.

**ABSTRACT** Organizational and financial resilience have emerged as crucial topics for the sustainability of SMEs, particularly in emerging economies where organizations face uncertain and volatile environments. This study presents a systematic literature review (SLR) to evaluate the current state of research on organizational and financial resilience in SMEs. Fifty-one primary studies published between 2000 and 2023 were reviewed using strict inclusion and quality evaluation criteria to ensure the relevance and robustness of the findings. The results revealed that only 5.88% of the evaluated studies rigorously followed SLR guidelines, highlighting the scarcity of comprehensive reviews in this field. This review also underscores that organizational resilience, encompassing both planned and adaptive dimensions, is essential for SMEs to respond effectively to financial and operational crises. However, few studies have specifically focused on the Ecuadorian context, indicating a gap in the literature that should be addressed more thoroughly. The study concludes that future research should adopt more holistic approaches that incorporate both qualitative and quantitative methodologies to develop models that strengthen resilience among SMEs. Future studies should consider applying more rigorous SLR guidelines to improve research quality in this field.

**INDEX TERMS** Organizational resilience, financial resilience, systematic literature review (SLR), small and medium-sized enterprises (SMEs), risk management.

#### I. INTRODUCTION

In a business environment marked by constant change, unexpected crises, and rapid technological advancement, companies must be equipped to tackle challenges that could jeopardize their sustainability and financial performance. Organizations, particularly small- and medium-sized enterprises (SMEs), need to anticipate, adapt, and recover from adverse situations to ensure continuity and success. Organizational resilience is essential for addressing external disruptions, whereas financial resilience enables companies to maintain economic stability during financial crises.

#### A. CONCEPT OF ORGANIZATIONAL RESILIENCE

Organizational resilience has gained prominence as a vital element in contemporary business management, particularly during crises. It refers to a company's capability to respond rapidly and effectively to unforeseen disruptions, such as economic downturns, natural disasters, or technological advancements, thereby ensuring continuity of operations [1]. This multifaceted concept integrates both the human dimension focusing on employee readiness, adaptability, and engagement and the structural dimension, which encompasses internal mechanisms, strategies, and processes designed to sustain functionality during periods of uncertainty [2].

Recent studies underscore that organizational resilience extends beyond immediate crisis response, defining it as the ability to anticipate, prepare for, adapt to, and ultimately prosper amidst adversity [3]. This comprehensive approach highlights the necessity of preemptive measures and dynamic adaptation, particularly in volatile environments. For small-and medium-sized enterprises (SMEs), resilience becomes critical, as their



vulnerability to political, economic, and health crises exemplified by the COVID-19 pandemic underscores the importance of robust frameworks to mitigate risks and prevent business collapse [4].

# B. IMPORTANCE OF HUMAN RESOURCES IN RESILIENCE

Human capital is essential for fostering organizational resilience. A well-prepared and trained workforce not only empowers organizations to navigate adverse conditions but also contributes to the creation of a supportive environment that facilitates agile and efficient problem-solving [1]. Organizational culture and internal communication capability are fundamental components that help companies keep employees motivated and engaged, which in turn strengthens the organization's ability to overcome adversity [5].

Employee engagement in building resilience is related to corporate social responsibility. Studies have shown that companies that prioritize industrial safety, job stability, and equitable participation in profits generate higher employee commitment, translating into an enhanced capacity to respond to critical situations [6]. Moreover, resilience is nurtured by collective awareness, meaning the shared commitment of employees, interdepartmental connections, and the use of information systems that enable the coordination of actions among all members of the organization [5].

## C. DIMENSIONS OF ORGANIZATIONAL RESILIENCE

In the study of resilience in the business domain, two primary dimensions are emphasized: proactive or planned resilience and reactive or adaptive resilience. Proactive resilience involves strategic planning and risk assessment measures that an organization undertakes to anticipate potential adverse situations. In contrast, reactive resilience refers to a company's capacity to adapt swiftly following the onset of a crisis. This distinction highlights the preparatory and adaptive capabilities necessary for organizations to effectively navigate challenges [5].

Both dimensions are intrinsically connected to organizational culture and leadership as these elements play a critical role in shaping an organization's response to unforeseen events. According to Seville et al., leadership, supply chain management, employee engagement, and a planning-oriented culture are key determinants of a company's resilience [7]. In this context, resilience should not only be an individual effort of the company's leaders, but should also engage all levels of the organization.

# D. HERO MODEL

The Healthy and Resilient Organizations (HERO) model provides a comprehensive approach to understanding organizational resilience by integrating employee wellbeing and organizational health. This model emphasizes the importance of implementing practices that support employee welfare and foster an environment in which resilience is built collectively. According to the HERO framework, organizations that prioritize both the physical and psychological well-being of their workforce are better equipped to respond effectively to crises, thus enhancing their overall resilience and capacity to adapt to challenging situations [2]. The HERO model emphasizes the collection of both qualitative and quantitative data from various levels within an organization, including executives, supervisors, employees, and clients. This comprehensive approach enables a deeper understanding of an organization's resilience-building capacity [3].

The HERO model focuses on three core components: business resources and practices, employees, and organizational outcomes. The interaction between these elements enables companies to build resilience capabilities to handle and overcome adverse situations. Additionally, the model emphasizes the importance of fostering a work environment that promotes employee autonomy and continuous feedback, contributing to a healthy and resilient workplace climate [8].

# E. ORGANIZATIONAL RESILIENCE AND FINANCIAL PERFORMANCE

The relationship between organizational resilience and financial performance has been extensively studied across various research. While organizational resilience alone may not guarantee financial success, an organization's ability to adapt to crises has a direct impact on its economic performance [9]. Prayag et al. propose that there is a significant relationship between planned and adaptive resilience and financial performance, with variations in this relationship depending on the business's size and type [10].

Moreover, companies that adopt resilience practices not only safeguard their financial stability but also seize emerging opportunities during crises to innovate and expand. Orchiston et al. emphasized two essential dimensions of financial success in times of adversity: collaboration and innovation, and strategic planning and culture [11]. To maintain operational continuity, companies benefit from establishing strategic ties with stakeholders and making informed decisions that reinforce resilience and ensure long-term sustainability.

# F. GAP IN LITERATURE

Despite the growing importance of organizational resilience, there remains a lack of comprehensive studies exploring both the preventive and reactive dimensions of resilience in relation to financial performance, particularly within SMEs. Much of the literature is oriented towards large corporations or international studies, which may not adequately reflect the challenges faced by SMEs in emerging economies such as political instability, economic



volatility, raw material dependency, and natural disaster exposure.

This study aims to bridge this gap by providing a systematic review that investigates organizational and financial resilience models applicable within the Ecuadorian context. The anticipated findings will not only enrich theoretical development, but also provide practical insights for SMEs to strengthen their adaptive capabilities and financial resilience against future crises.

In conclusion, organizational resilience is essential for SMEs' survival and success of SMEs in adverse environments. This capacity hinges not only on prior preparation but also on rapid and effective adaptation and recovery from crises. Human capital, organizational culture, and information systems are crucial to this process, and the HERO model offers an integrated perspective on fostering resilient and healthy practices.

By addressing both the preventive and reactive dimensions of resilience and examining their impact on financial performance, this study aims to deepen our understanding of how Ecuadorian SMEs can enhance their crisis response and ensure long-term sustainability.

#### **II. METHODOLOGY**

Based on the foundational protocols established by Kitchenham [12], the methodological rigor of this SLR was ensured through a meticulously designed and implemented research process. These protocols define the criteria for a comprehensive and systematic approach to data collection, analysis, and synthesis, thereby enhancing the reliability and validity of findings. Additionally, the widely adopted guidelines by Maswadi et al. [13] were integrated, allowing for adaptations tailored to the specific context of organizational and financial resilience within Ecuadorian SMEs. This structured framework not only ensures thoroughness in searching, selecting, and analyzing the existing literature but also enhances the relevance and applicability of the review findings. Consequently, the methodology employed aligns with the objectives of this study and strengthens the contextual applicability of the results.

#### A. PLANNING

Based on Kitchenham's [12] established guidelines, planning is defined as a crucial phase in any SLR to ensure the relevance of the selected studies and the reproducibility of the process. In alignment with this foundational principle, the planning phase of this study involved identifying the steps necessary to achieve its objectives. Both strategic and technical plans were meticulously formulated during this initial stage, laying the groundwork for successful implementation of the SLR methodology. This rigorous planning ensured that subsequent activities were executed in an organized and standardized manner, following a logical and coherent sequence that adhered to the methodological rigor required for systematic reviews.

#### **B. RESEARCH QUESTIONS**

According to Kitchenham [12], the precise formulation of research questions constitutes a fundamental step in any SLR because it determines the relevance of the studies selected for the review. In alignment with this principle, this study formulated research questions designed to effectively guide the SLR methodology. These questions not only direct the review process, but also ensure that the findings align with the objectives of the study. Specifically, the research questions in this study aimed to identify the key factors contributing to the organizational and financial resilience of SMEs and address the existing gaps in the literature. This methodological approach underscores the importance of clearly defined research questions for achieving a focused and relevant review process.

## C. INFORMATION SEARCH

According to Kitchenham [12], employing multiple academic databases is essential to enhance the coverage and depth of an SLR and ensure the inclusion of the most relevant studies in the analysis. Following this principle, this study was conducted using a comprehensive and systematic approach. A diverse set of academic databases, including Scopus, IEEE Xplore, Web of Science, and Eureka from the Universidad Pablo de Olavide (UPO), were utilized to identify pertinent studies. The search strategy incorporated terms such as "organizational resilience." "financial resilience," "SMEs." and "organizational resilience models," ensuring the retrieval of studies closely aligned with the research objectives. This methodological rigor underscores the commitment to achieve a robust and inclusive review process.

## D. INCLUSION AND EXCLUSION CRITERIA

Based on the methodological framework established by Kitchenham [12], the inclusion and exclusion criteria were meticulously defined to align with SLR objectives. Specifically, the selected studies were required to: (1) address topics related to organizational or financial resilience in SMEs, (2) explicitly focus on resilience models, (3) be peer-reviewed publications within the 2000–2023 timeframe, and (4) be available in either English or Spanish. Studies that failed to meet these stringent criteria were excluded from the review process. Such rigorously established criteria, as outlined by Kitchenham [12], are vital for ensuring that the included studies are directly relevant and contribute meaningfully to the research objectives.

## E. QUALITY EVALUATION

According to Kitchenham [12], assessing the quality of selected studies is a fundamental step in ensuring that SLRs



are built on reliable and rigorous research. In this study, quality evaluation was conducted using a checklist comprising criteria such as methodological clarity, internal and external validity, and relevance to research questions. This evaluation process was instrumental in validating the findings and ensuring that only high-quality studies were included.

## F. DATA COLLECTION

According to Kitchenham [12], a systematic data-collection process is essential for facilitating effective comparisons and synthesizing findings within an SLR. In this study, data collection involved a detailed examination of selected studies to extract critical information related to organizational and financial resilience models in SMEs. The extracted data included the primary study variables, conceptual frameworks applied, analyzed resilience strategies, and corresponding financial outcomes. This methodological approach ensured the relevance and depth of the data, thus contributing to the robustness of the review.

#### G. DATA ANALYSIS

According to Kitchenham [12], rigorous data analysis is a fundamental step in SLR, because it aims to identify patterns and gaps in the literature. In this study, the data analysis phase involved synthesizing the results from the selected studies to answer the defined research questions. The data were systematically categorized based on identified variables, including factors contributing to organizational and financial resilience and the varying impacts on SMEs. This structured approach facilitates a comprehensive understanding of key themes and highlights areas for future research.

## H. RESEARCH QUESTIONS

The research questions addressed in this SLR on organizational and financial resilience in SMEs, along with their respective motivations, are presented in this subsection. The research questions were developed based on the gaps identified in the literature, emphasizing the need to strengthen resilience in SMEs, especially in emerging economies that face unique economic and social challenges.

**RQ**<sub>1</sub>: How many SLRs on organizational and financial resilience in SMEs have been published since 2000?

#### \*Motivation for RQ1

It is essential to investigate the quantity of SLRs on organizational and financial resilience in SMEs, as this will help gauge academic interest and development within this research area. The motivation for  $RQ_1$  stems from the need to quantify SLRs related to SME resilience by adhering to rigorous methodological standards since the year 2000. This approach provides a comprehensive overview of the

research trends to date, highlighting any notable gaps in exhaustive studies on this subject.

**RQ**<sub>2</sub>: How do researchers report the models and strategies of organizational and financial resilience applied to SMEs?

## \* Motivation for RQ2

The motivation behind this question lies in the need to understand how researchers have presented and documented organizational and financial resilience strategies within SMEs, particularly in the Ecuadorian context. Resilience is crucial for the sustainability and success of SMEs in fluctuating economies such as Ecuador. It is essential to examine how these studies portray resilience models and assess their applicability in similar socioeconomic contexts. This question seeks to identify the researchers' documentation methods and methodological approaches to these strategies.

 $RQ_3$  How do organizational and financial resilience models address the specific needs of SMEs in emerging economies?

## \*Motivation for RQ3

The motivation for  $RQ_3$  stems from the need to assess whether existing studies on organizational and financial resilience in SMEs address the specific needs and challenges faced by businesses in emerging economies. This socioeconomic context poses unique difficulties, including economic instability, political fluctuations, and a high dependency on external factors. Consequently, it is vital to understand whether the resilience models presented in the literature account for these particularities and how they respond to them. This question seeks clarity regarding the applicability of existing models within this specific context.

**RQ**<sub>4</sub>: What are the limitations of current studies on organizational and financial resilience in SMEs?

## \*Motivation for RO4

The motivation for  $RQ_4$  is to identify the limitations and gaps in current studies on organizational and financial resilience in SMEs. It is essential to discover whether significant deficiencies exist in current systematic review studies, and whether these limitations affect the understanding and application of resilience models in Ecuadorian SMEs. This question is divided into two subquestions, addressing the scarcity of systematic studies and potential areas that require further research.

**RQ**<sub>4.1</sub> Are existing studies on organizational and financial resilience in SMEs limited in number?

#### \*Motivation for RQ4.1

This sub-question seeks to determine whether there is a sufficient volume of research on organizational and financial resilience in SMEs, with a particular focus on emerging economies. An insufficient number of studies may indicate an emerging field of research and a necessity for further scholarly contributions in this area.



 $RQ_{4.2}$  Is there evidence to support the claim that SLRs on organizational and financial resilience in SMEs are insufficient?

#### \*Motivation for RQ4.2

The motivation behind this question was to assess whether the lack of systematic reviews in this field is substantiated by concrete evidence in the existing literature. Investigating this limitation can help determine if the proposed models and strategies in current studies are adequate or if additional reviews are necessary to solidify knowledge on organizational and financial resilience in SMEs.

## I. INVESTIGATIVE PROCESS

This section outlines the methodology used to identify articles included in this study. To retrieve relevant literature on the implementation of organizational and financial resilience in SMEs, a series of electronic databases were accessed. Table 1 lists the databases and websites.

The search process was a conventional manual search across journals and conference proceedings. Researchers formulated a search string aligned with the study's objective, including terms like "organizational resilience," "SMEs," "financial resilience," and "organizational or financial resilience models," applying temporal and geographic filters for studies from 2000 to 2023.

The selected articles were subjected to a rigorous review of their relevance, methodological soundness, and rigor. Articles with no clear theoretical framework or SME application were excluded. This approach ensured precise and relevant data collection to analyze the resilience of SMEs in emerging economies.

In this SLR on organizational resilience, specific criteria were established to determine whether the studies met the necessary conditions for inclusion or exclusion. These criteria were meticulously designed to ensure that the selected studies were aligned with the research objectives and provided high-quality content.

One of the primary inclusion criteria was that the studies be written in clear and accessible English. This was implemented to ensure that the selected studies could be easily read and comprehended by researchers. Articles in other languages were excluded as they might have posed challenges in accurately interpreting the data and conclusions.

The inclusion criterion was that the selected studies were published between January 2000 and December 2023. This timeframe was chosen to encompass recent research on organizational resilience, allowing the review to capture the latest trends and developments in the field.

Each article focuses on themes related to organizational resilience, particularly in terms of a company's ability to

withstand and adapt to crises or economic challenges. This encompasses research that addresses concepts such as preventive planning, reactive adaptation, and the impact of these factors on organizational financial performance. Studies that did not directly address organizational resilience or covered only tangential topics were excluded.



FIGURE 1. Flowchart of the process

VOLUME XX, 2017



111	In Contraction Billions	
Journal	Database	Website
Omega	Elsevier	https://www.elsevier.com
Journal of Applied Behavioral Science	SAGE Publications	https://journals.sagepub.com
Group and Organization Management	SAGE Publications	https://journals.sagepub.com
Journal of Management and Organization	Cambridge University Press	https://www.cambridge.org
International Journal of Production Economics	Elsevier	https://www.elsevier.com
European Management Journal	Elsevier	https://www.elsevier.com
Journal of Business Economics and Finance	SSRN	https://www.ssrn.com
European Journal of Operational Research	Elsevier	https://www.elsevier.com
Strategic Management Journal	Wiley	https://onlinelibrary.wiley.com
Omega (United Kingdom)	Elsevier	https://www.elsevier.com
Journal Work	Elsevier	https://www.elsevier.com
IFAC-PapersOnLine	Elsevier	https://www.elsevier.com
Journal Dominio de las Ciencias	Repositorio Nacional del Ecuador	https://dspace.ups.edu.ec
Journal of Contingencies and Crisis Management	Wiley	https://onlinelibrary.wiley.com
International Journal of Climate Change Strategies and Management	Emerald	https://www.emerald.com
ITM Web of Conferences	EDP Sciences	https://www.itmconf.org
23rd International Scientific Conference on Economic and Social		
Development	Varied	https://www.esd-conference.com
Cadernos EBAPE.BR	SciELO	https://www.scielo.br
SSRN Electronic Journal	Elsevier/SSRN	https://www.ssrn.com
International Journal of Production Management and Engineering	Polytechnic University of Valencia	https://polipapers.upv.es
Nankai Business Review International	Emerald	https://www.emerald.com
Academy of Management Review	Academy of Management	https://www.aom.org
Annals of Tourism Research	Elsevier	https://www.elsevier.com
IEEE Transactions on Engineering Management	IEEE	https://www.ieee.org
Corporate Communications	Emerald	https://www.emerald.com
Problemy Zarzadzania	University of Warsaw	https://www.wz.uw.edu.pl
Safety Science	Elsevier	https://www.elsevier.com
Entrepreneurship and Regional Development	Taylor & Francis	https://www.tandfonline.com
International Journal of Engineering Business Management	SAGE Open	https://www.sagepub.com
Academy of Strategic Management Journal	Allied Business Academies	https://www.abacademies.org
Sustainability (Switzerland)	MDPI	https://www.mdpi.com
Gender in Management	Emerald	https://www.emerald.com
Journal of Sustainable Tourism	Taylor & Francis	https://www.tandfonline.com
International Journal of Disaster Risk Reduction	Elsevier	https://www.elsevier.com
Business Research	Springer	https://www.springer.com
International Journal of Operations and Production Management	Emerald	https://www.emerald.com
Proceedings - 2020 IEEE 24th International Enterprise Distributed		
Object Computing Conference, EDOC 2020	IEEE	https://www.ieee.org
Heliyon	Elsevier	https://www.elsevier.com
Journal of Risk Research	Taylor & Francis	https://www.tandfonline.com
International Journal of Disaster Risk Science	Springer	https://www.springer.com
Continuity & Resilience Review	Emerald	https://www.emerald.com
Reliability Engineering and System Safety	Elsevier	https://www.elsevier.com
Organization Management Journal	Springer	https://www.springer.com
International Journal of Management Reviews	Wiley	https://onlinelibrary.wiley.com
Journal of Industrial and Production Engineering	Taylor & Francis	https://www.tandfonline.com
Journal of Business Ethics	Springer	https://www.springer.com

#### TABLE I MAIN DATABASES

Only articles offering empirical evidence or presenting robust theoretical models that contribute to the understanding of organizational resilience were included. Conceptual studies and those lacking empirical support were excluded from the analysis because they did not provide a solid basis for evaluating the factors influencing organizational resilience.

Studies that focused on population groups irrelevant to the research context or deviated towards topics unrelated to organizational resilience, such as personal or community resilience, were excluded. Low-impact academic articles were excluded. The inclusion and exclusion criteria presented below offer a comprehensive outline of the study selection process used in this SLR for organizational resilience.

Inclusion Criteria	Exclusion Criteria
INCLUSION AND EX	CLUSION CRITERIA
TAB	LEII

Inclusion Criteria	Exclusion Criteria
(a) Written in English or another comprehensible language.	(a) Written in a language other than specified.
(b) Published between January 2010 and December 2023.	(b) Published outside the designated date range.



(c) Focuses on organizational and financial resilience in SMEs.	(c) Focuses on topics unrelated to SMEs or financial resilience.
(d) Provides a clear methodological approach on resilience within business	(d) Lacks a methodological approach or empirical data.
contexts.	(e) Does not provide result analysis or diverges from the
(e) Includes relevant findings and analysis contributing to the theoretical framework of	theoretical framework outlined.
organizational resilience.	

# QUALITY CONTROL OF THE ANALYZED ACADEMIC WORKS

To ensure the quality of the academic work selected for this SLR on organizational resilience, a stringent evaluation process was conducted. The quality control process aims to confirm that the included studies meet high standards, are relevant to the topic, and provide reliable and applicable information concerning organizational resilience within the context of small and medium enterprises (SMEs).

The quality assessment approach followed criteria adapted from the Center for Reviews and Dissemination (CRD) at the University of York, which is widely applied in systematic review studies. For this review, four quality assessment questions  $(QA_{Qn})$  were established, each specifically designed to evaluate key aspects of the selected studies.

 $QA_{Q1}$ : Is the inclusion and exclusion criteria clearly described and deemed appropriate?

Each study was assessed based on the inclusion and exclusion criteria. The study received a "Yes" rating (Y = 1) if these criteria were explicitly outlined. If partially clear, a "Partial" rating (P = 0.5) was assigned. Studies with no description of these criteria received a "No" rating (N = 0).

**\*Motivation:** This element is essential for assessing a study's relevance and alignment with the topic of organizational resilience in SMEs.

 $QA_{Q2}$ : Did the literature search cover all the relevant studies?

For this quality assessment, the evaluation considered the number of digital databases consulted. An article received a "Yes" rating (Y = 1) if it reported consulting at least five relevant databases. A "Partial" rating (P = 0.5) was assigned if the study utilized three to four databases, while a "No" rating (N = 0) applied if fewer than three databases were consulted.

\***Motivation:** Ensuring that the search comprehensively covers a broad spectrum of relevant studies is essential to mitigate potential biases in the findings and conclusions of the review.

*QAQ3*: Do the reviewers assess the quality or validity of the included studies?

To ensure a high standard of academic rigor for quality assessment in this SLR, studies were evaluated based on whether they conducted a thorough assessment of the quality and validity of the primary studies. A score of "Yes" (Y = 1) was assigned if the article explicitly separated these elements. If the quality assessment was not explicitly stated but partially indicated, a score of "Partial" (P = 0.5) was given. If no quality evaluation was present, a score of "No" (N = 0) was recorded.

\*Motivation: Assessing the quality and validity of the included studies ensures that the systematic review is grounded in robust and well-substantiated research.

 $QA_{Q4}$  is the study design and data description that has been appropriately presented.

For studies with comprehensive descriptions of the research design and foundational data, a score of "Yes" (Y = 1) was assigned. Studies with partial or incomplete descriptions were scored as "Partial" (P = 0.5), while those lacking details entirely received a "No" (N = 0).

**\*Motivation:** An accurate presentation of data and methodological design are crucial for assessing the reliability and reproducibility of the study.

# **QUALITY SCORING PROCESS**

Each article was evaluated using a binary scale with the following scores.

Yes (Y) = 1 point Partial (P) = 0.5 points

No (N) = 0 points

The overall quality score of each article was determined by summing the individual scores for each of the four questions. Articles scoring 3 or higher were deemed high quality and were included in the final analysis. Studies with lower scores were reviewed again to assess their suitability for inclusion, based on the critical relevance of their content.

The application of this quality control process ensures that the SLR on organizational resilience relies on reliable and relevant academic studies, minimizing bias and supporting conclusions based on high-quality data. This approach also promotes the adoption of rigorous quality control in future research on organizational resilience.

# DATA COLLECTION

To ensure objectivity and mitigate potential conflicts of interest in this SLR of organizational resilience, the authors independently and explicitly reviewed each selected study. In cases in which concerns regarding an article arose during the review process, the authors collectively discussed and resolved any discrepancies. Special attention was paid to articles addressing the



research questions posed in this study and those that met the inclusion and exclusion criteria.

Emphasis was placed on extracting relevant data from each article, ensuring that the information was aligned with the central research theme of organizational resilience in small and medium-sized enterprises (SMEs). The following specific data points were extracted from each article.

Author Information Includes the names of authors, institutional affiliations, and countries of origin.

Article Focus Area: Considered the primary topic, ensuring that the focus was on organizational resilience, particularly concerning SMEs.

**Institutions and Countries:** Identification of academic or research institutions and countries of study origin, assessing the geographical context of findings.

**Response to Research Questions:** To summarize how the study addressed each systematic review research question.

**Publication Year:** Recorded to ensure the temporal relevance of studies, especially those published between 2000 and 2023.

**Quality Assessment of Articles:** A quality assessment framework was used to classify the validity and robustness of each study using criteria specific to organizational resilience studies.

**Publication Type and Number of Primary Studies:** Documented the publication type (journal articles, conference proceedings, etc.) and the number of primary studies each work included or analyzed.

To ensure a systematic and transparent review process, this study implemented the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol. This framework facilitates a clear representation of the total number of articles included in the review as well as the study selection and exclusion process. PRISMA enhances transparency by offering a structured approach, which is essential for accurately documenting the methodology of this systematic review.



#### FIGURE 2. Prisma diagram

The data collection focused on specific aspects related to the methodologies employed in each article, particularly those addressing organizational resilience. Additionally, studies examining contemporary and cutting-edge issues relevant to resilience model implementation in SMEs, such as organizational change management, crisis adaptation, and strategic innovation, are included.

This systematic and exhaustive data collection approach ensured the relevance, quality, and applicability of the selected studies in the context of organizational resilience in SMEs, facilitating greater precision in the research conclusions.

#### DATA ANALYSIS

To ensure the clarity and appropriate presentation of data from the relevant articles included in this SLR on organizational resilience in SMEs, the authors utilized various statistical tools. The data analysis aimed to provide a structured view of the answers to the research questions, facilitating pattern and trend identification in existing literature. The statistical tools employed were as follows:

**Tables:** Used to detail each study's characteristics, including publication year, theoretical framework, methodology, and research question responses. These tables aided in answering RQ1 and RQ2, which focused on theoretical resilience models and SMEs' implementation strategies, respectively.

**Pie Charts:** Illustrated publication percentages by year, showing trends in academic interest.

**Bar Charts:** Displayed primary studies published between 2000-2023, identifying periods of academic focus.



**Qualitative Analysis:** Categorized common methodological approaches, highlighting trends in resilience strategy implementation.

**Heat Maps:** Showed highly-researched resilience themes, such as financial resilience, crisis management, and organizational adaptation.

## **INTERPRETATION OF RESULTS**

Several key patterns were discerned based on the data analysis. For instance:

Analysis of the data revealed several noteworthy patterns. For instance, most research on organizational resilience in SMEs has been concentrated within the last two decades, particularly following the economic disruption caused by the COVID-19 pandemic.

Most early studies on organizational resilience in SMEs have favored qualitative approaches, with a notable shift towards quantitative methodologies emerging in the last five years.

The analysis indicated a clear, positive relationship between proactive resilience strategies, such as preparation and planning, and organizational performance during and after disruptive events. This evidence underscores the critical role of preventive resilience measures in enhancing the adaptive capacity in times of crisis.

I ADLE III	
CONDUCTED ST	UDIES

ID	Author (s)	Study Title	Objectives	Theory / Framework	Country	Citatio n	Source	Year	Quarti le
R1	[14]	Information system organizatio nal resilience	Develop a theoretical model to address the lack of research and theory on stress and resilience within the field of information systems.	Occupational stress and information systems, from the individual and organizational levels [15].	-	248	Journal Omega	2003	Q2
R2	[16]	Relationshi ps, Layoffs, and organizatio nal resilience: Airline industry responses to september 11	Establish an organizational resilience model during crisis periods, based on maintaining financial reserves.	The role of relational reserves, financial reserves, and the viability of underlying business models.	United States	249	Journal of Applied Behavioral Science	2006	Q3
R3	[1]	We Need a Hero! Toward a Validation of the Healthy and Resilient Organizatio n (HERO) Model	Validate the so- called Healthy and Resilient Organization (HERO) Model.	Healthy and Resilient Organizations (HERO)	-	315	Journal Group and Organization Management	2012	Ql
R4	[17]	Organizatio nal resilience: A conceptual integrative framework	Develop an organizational resilience theoretical model by synthesizing the existing literature.	Organizational Resilience	-	178	Journal of Management and Organization	2012	Q2
R5	[18]	Antecedent s of organizatio nal resilience in economic crises - An empirical study of Swedish textile and	Identify the nature of the challenges and constraints faced by Swedish textile SMEs, particularly during the economic crises of the last two decades (mainly 1990-1993 and late 2007-2009).	Economic resilience	Sweden	271	International Journal of Production Economics	2014	Ql



								1	
		clothing SMEs							
R6	[19]	Resilience of organisatio ns and territories: The role of pivot firms	Develop the concept of resilience from two dimensions: organizational and territorial.	Organizational Resilience	-	85	European Management Journal	2014	Q2
R7	[20]	Measuring Organizatio nal Resilience: A Scale Developme nt	Develop a reliable and valid scale to measure the construct of organizational resilience.	Organizational Resilience	-	92	Journal of Business Economics and Finance	2015	Q3
R8	[21]	Integrated business continuity and disaster recovery planning: Towards organizatio nal resilience	Formulate a linear programming model to control resilience loss by minimizing recovery time.	Disaster Management	Iran	264	European Journal of Operational Research	2015	QI
R9	[22]	The long- term benefits of organizatio nal resilience through sustainable business practices	Argue the impact of social and environmental practices on organizational resilience.	Social and Environmental Practices (SEPs) Organizational Resilience	United States	324	Strategic Management Journal	2016	Q1
R10	[23]	Strategic and operational managemen t of organizatio nal resilience: Current state of research and future directions	Investigate the specific research domains of organizational resilience and its strategic and operational management.	Organizational Resilience	-	282	Journey Omega (United Kingdom)	2016	QI
R11	[24]	Organizatio nal resilience and enrollment trends of independen t, for-profit higher education institutions	Determine whether the observed differences in enrollment trends among vocational universities can be attributed to organizational resilience.	Organizational Resilience	United States	6	Journal Work	2016	Q2
R12	[25]	Markers and Patterns of Organizatio nal Resilience for Risk Analysis	Contribute to defining and deriving resilient markers, subsequently considering both resilient and pathological organizational patterns within a unified risk model.	Resilient Patterns	-	9	IFAC- PapersOnLine	2016	Q3



						1			
R13	[26]	Business model innovation and organizatio nal resilience: towards an integrated conceptual framework	Develop a conceptual framework that integrates business model innovation and organizational resilience.	Business Model Innovation Organizational Resilience	-	45	Journal of Business Economics	2016	Q2
R14	[27]	Resiliencia organizacio nal: ideas para el debate en el contexto ecuatoriano	Review the conceptual frameworks of organizational resilience, as well as its related constructs, models, case studies, and other aspects, which can serve as foundations for its application within the Latin American context, specifically in Ecuador.	Organizational Resilience	Ecuador	2	Journal Dominio de las Ciencias	2017	Q2
R15	[28]	The relational activation of resilience model: How leadership activates resilience in an organizatio nal crisis	Propose a Relational Resilience Activation Model to explain how leaders could leverage relationships to activate resilience during a crisis.	Resilience and Leadership in Times of Crisis	Singapore	78	Journal of Contingencies and Crisis Management	2017	Q2
R16	[29]	Resilience for sustainabilit y as an eco- capability	Identify the dynamic capabilities that foster organizational resilience towards sustainability.	Sustainability as an Eco-Capacity	Brazil	13	International Journal of Climate Change Strategies and Management	2017	Q3
R17	[30]	Organizatio nal Resilience: The Theoretical Model and Research Implication	Provide the primary concept of organizational resilience; Construct the foundational theoretical model and some managerial implications.	Organizational Resilience	-	18	ITM Web of Conferences	2017	-
R18	[31]	Organizatio nal Resilience and Risk Manageme nt Improveme nt - How To Reduce and Prevent Fire Hazard Using Simulation Scenarios	Explore the possibilities of using the Monte Carlo simulation technique to determine certain characteristic design parameters of the organization's work units.	Business Continuity Management Risk Management. Organizational Resilience	-	-	23rd International Scientific Conference on Economic and Social Development Economic and Social Development (Esd 2017)	2017	-
R19	[32]	Resiliencia organizacio nal: propuesta de un modelo	Propose an integrated analysis model based on conceptual issues regarding resilience in the workplace,	Organizational Resilience	-		Cadernos EBAPE.BR	2017	-



R20[33]Measureme nt of organizatio nal An successful change system, 2) the continuity of such change over time, and 3) organizational syze.Develop a model to incorporate suitable alternative measures to reflect: 1) the Resilience - degree of overall successful change ResilienceSouth Pacific4SSRN Electronic JournalR20[33][33][33]SSRN across different asset bases such as suppliers, customers, technology, and the organizational system, 2) the continuity of such change over time, and 3) organizational size.South Pacific4SSRN Electronic Journal2	2017 -
R21[34]What we know and do not organizatio al resilienceIdentify organizational conceptualized and assessed through a literature review.Organizational Resilience-50International Journal of Production Management and Engineering2	2018 -
R22 [35] Toward a Examine dynamic contemporary model of organization nal resilience propose a dynamic integrated model to study resilience with an inclusive concept. Cognitive Resilience Behavioral Resilience - 18 Nankai Business 2 Review Integrated model to Study resilience with	2018 Q3
R23[36]The geography theoretical model of strain: mapping how Organizatio differentiated stress nal emergence in focal resilience as parts of an a function organization triggers of movements in intergroup adjacent parts to provide or retain necessary resources, enabling focal parts to adapt effectively.Organizational Resilience-63Academy of Management 2R23[36][36]a function organization triggers of an a function organization triggers of movements in intergroup adjacent parts to provide or retain necessary resources, enabling focal parts to adapt effectively63Academy of Management 2	2018 Q1
R24 [11] Organizatio Examine the relationship between resilience organizational Organizational and resilience and financial financial performanc in Resilience e tourism firms, using Adaptive a second-order construct of resilience 36 Annals of Tourism Research 2	2018 Q1
R25[37]Inside the Originizational ing What resilience. Enhances and Inhibits Organization nal ResiliencePropose a conceptual of organizational resilience.Social Constructivism-4Journal of Applied Behavioral Science2	2018 Q2
Duilding Empirically and Accordentional II is a TERE	2018 01



		nal resilience: Four configurati ons	processes at disruption onset and factors determining varied response configurations.				on Engineering Management		
R27	[39]	A dynamic model of organizatio nal resilience: adaptive and anchored approaches	Discuss organizational resilience's role depending on entity type and reliability, proposing a dual- spectrum model including adaptive and anchored approaches.	Resilience	-	29	Journal Corporate Communicati ons	2018	Q2
R28	[40]	Organizatio nal Resilience of Family Businesses	Identify factors affecting organizational adaptability to dynamic, hostile, and complex environments, especially during disruptive events.	Organizational Resilience	Poland	2	Journal Problemy Zarzadzania	2019	-
R29	[41]	Spanish validation of the Benchmark Resilience Tool (short- form version) to evaluate organisatio nal resilience	Adapt and validate the short version of the Resilience Benchmark Tool in Spanish, exploring its relation to safety climate.	Benchmark resilience and safety climate	Spain	13	Journal Safety Science	2019	QI
R30	[42]	Rethinking organizatio nal resilience and strategic renewal in SMEs	Examine how SMEs vary in formalizing activities for strategic growth and resilience against operational disruptions.	Strategic development and organizational resilience planning	United Kingdom	50	Journal Entrepreneurs hip and Regional Development	2019	Q1
R31	[43]	Predictors of organizatio nal resilience by factorial analysis	Identify organizational resilience (OR) factors, developing a structural equation model. The article examines theoretical backgrounds and literature on resilience factors, proposing classifications used to create a questionnaire to assess the relative importance of factors in various industrial sectors.	Organizational Resilience	Mexico	5	International Journal of Engineering Business Management	2019	Q3
R32	[44]	Organizatio nal resilience and organizatio nal performanc e: Examining	Contribute by researching the direct and indirect relationships between organizational resilience and performance, with resilient leadership	Organizational Resilience, Resilient Leadership, Organizational Culture, and Organizational Performance	Indonesia	13	Academy of Strategic Management Journal	2019	Q2



1

		the mediating roles of resilient leadership and	and organizational culture as mediating roles.						
R33	[45]	nal culture How to emerge stronger: Antecedent s and consequenc es of organizatio nal resilience	Analyze corporate social responsibility towards employees (CSRE) in fostering resilience, showing how it impacts organizational learning capacity (OLC) and firm performance	Organizational Resilience	Spain	22	Journal of Management and Organization	2019	Q2
R34	[46]	Effect of information system artifacts on organizatio nal resilience: A study among Malaysian SMEs	Examine the effects of engagement, communication, competence, community, consideration, and coordination on information system artifacts, and the impact of these artifacts on resilience among Malaysian SMEs.	Organizational Resilience	Malaysia	5	Journal Sustainability (Switzerland)	2019	Q2
R35	[47]	Degenderin g organizatio nal resilience – the Oak and Willow against the wind	Present a gendered organizational resilience model that challenges dominant resilience conceptualizations, exploring how gendered organizational structures, language, and daily practices interact to limit inclusive resilience.	Organizational Resilience	-	10	Journal Gender in Management	2019	Q2
R36	[48]	Beyond "bouncing back": Towards an integral, capability- based understandi ng of organizatio nal resilience	Summarize recent resilience literature in two dominant paradigms: the Plan- to-Resist and Crisis Containment approaches, establishing a comprehensive resilience concept.	Resilience as a Plan to Withstand	-	21	Journal of Contingencies and Crisis Management	2019	Q2
R37	[49]	Toward a resilient organizatio n: analysis of employee skills and organizatio n adaptive traits	Apply the employee- organization relationship (E-O-R) framework to understand employee skillsets, organizational traits, and resilience.	Organizational Resilience	United States	2	Journal of Sustainable Tourism	2020	QI
R38	[50]	The role of social capital on proactive	Examine supply chain partners' social capital as an external factor building	Organizational Resilience	China	15	International Journal of Disaster Risk Reduction	2020	Q1



		and reactive resilience of organizatio ns post- disaster	organizational resilience using a conceptual model.						
R39	[51]	Organizatio nal resilience: a capability- based conceptuali zation	Conceptualize resilience as a metacapacity, breaking it into components. Three successive resilience stages— anticipation, coping, and adaptation—are proposed with an overview of underlying capacities forming organizational resilience.	Organizational Resilience	-	122	Journal Business Research	2020	QI
R40	[52]	Exploring the antecedents of organizatio nal resilience practices – A transactive memory systems approach	Explore individual and business-level antecedents in a manufacturing firm's capacity to collaborate and integrate knowledge for resilience practices.	Organizational Resilience	Spain and Italy	4	International Journal of Operations and Production Management	2020	QI
R41	[53]	Assessing Resilience in Enterprise Architectur e: A Systematic Review	Explore cutting-edge research on enterprise architecture resilience (EA).	Organizational Resilience	-	3	Proceedings - 2020 IEEE 24th International Enterprise Distributed Object Computing Conference, EDOC 2020	2020	-
R42	[54]	Advanceme nts to the Multi- System Model of Resilience: updates from empirical evidence	Analyze advancements in the Multisystem Resilience Model, examining empirical factor structures alongside other resilience measures.	The multisystem resilience model	Canada	1	Journal Heliyon	2020	QI
R43	[55]	A multilevel framework to enhance organizatio nal resilience	Offer a multilevel framework for enhancing resilience and present an empirical study investigating the impact of multilevel elements on an organization's ability to respond to critical situations.	Multilevel Factors in Crisis Management and Resilience	-	8	Journal of Risk Research	2020	Q2
R44	[56]	A Likert Scale- Based Model for Benchmark ing Operational	Present a user- friendly rating tool to compare survey responses, such as for assessing disaster risk reduction, operational capacity	Rating scales, anchoring, and benchmarking	-	9	International Journal of Disaster Risk Science	2020	Q1



		Capacity, Organizatio nal Resilience, and Disaster Risk Reduction	gaps, and organizational resilience.						
R45	[57]	Organizatio nal resilience as response to a crisis: case of COVID-19 crisis	Explore organizational resilience's contribution to firms' ability to cope with the COVID-19 crisis through an empirical study of 16 affected Tunisian firms.	Resilience	Tunisia	-	Continuity & Resilience Review	2021	-
R46	[58]	Team Resilience Model: An Empirical Examinatio n of Information Systems Projects	Present an empirically tested theoretical model explaining team resilience.	Resilience	-	-	Journal Reliability Engineering and System Safety	2021	Q1
R47	[59]	Organizatio nal resilience process: integrated model of safety culture	Raise awareness of safety precautions and parameters to reduce workplace injuries and accidents.	Safety Culture and Organizational Resilience	Pakistan	-	Organization Management Journal	2021	Q3
R48	[60]	Organizatio nal Resilience: A Valuable Construct for Manageme nt Research?	Present a systematic review of organizational resilience, covering both conceptual and operational aspects.	Organizational Resilience	-	15	International Journal of Management Reviews	2021	Q1
R49	[61]	Exploring Organizatio nal Resilience Through Key Performanc e Indicators	Empirically explore non-financial KPIs as a factor in building resilience.	Key Performance Indicators (KPIs) Organizational Resilience	Brazil	3	Journal of Industrial and Production Engineering	2021	Q2
R50	[62]	Defining, conceptuali zing, and measuring organizatio nal resilience: A multiple case study	Examine organizational resilience processes in six highly resilient companies: Southwest Airlines, Apple, Microsoft, Starbucks, Kyocera, and Lego.	Organizational Resilience	Japan United States Denmark	1	Journal Sustainability (Switzerland)	2021	Q2
R51	[63]	Can You Drink Money? Integrating Organizatio nal Perspective -Taking and Organizatio nal Resilience	Explore sustainability leadership and perspective-taking behaviors initiated by actors in freshwater management in response to significant challenges.	Organizational Resilience	United States Canada New Zealand	1	Journal of Business Ethics	2021	Q1



in a Multi-				
level				
Systems				
Framework				
for				
Sustainabili				
ty				
Leadership				

The application of these statistical tools enabled a clear and accurate presentation of the information extracted from the reviewed studies. This approach not only streamlined data organization but also highlighted existing gaps in the literature, serving as a foundation for proposing future research directions in organizational resilience for SMEs.

#### **III. RESULTS**

In this section, we provide an overview of findings derived from SLR on organizational resilience in SMEs, focusing on three primary dimensions: (i) search outcomes, (ii) quality assessment, and (iii) quality factors. This structured analysis captures the essential metrics and evaluative criteria, ensuring a rigorous synthesis of insights into the resilience mechanisms that influence SME performance. This approach is intended to enhance the understanding of resilience indicators and their relevance in the context of organizational sustainability in SMEs.

## A. RESULTS OF THE INFORMATION SEARCH

The search outcomes were derived from the previously outlined search strategies. A total of 51 primary studies were rigorously selected for this SLR after an exhaustive screening process. This count was achieved by applying the inclusion and exclusion criteria detailed in previous sections. The search results are consolidated in Tables 3 and 4, presenting the primary studies, relevant metadata (author, objective, theoretical framework, country, citations, journal, year, and quartile), and studies featuring models and examined variables. Of the 51 studies, 4 (7.84%) were conference articles, while 47 (92.16%) were journal publications.

It is noteworthy that, out of the 51 articles, only three studies explicitly adhered to rigorous systematic review guidelines, constituting just 5.88% of the total studies. This highlights a significant gap in SLRs in the field of organizational resilience for SMEs. In addition, several articles were excluded because they did not meet the inclusion criteria. These exclusions were primarily due to articles being written in languages other than English, published outside the stipulated timeframe, or lacking a direct focus on organizational resilience topics or responses to the research questions posed in this SLR.

#### **B. QUALITY ASSESSMENT**

As previously noted, quality assessment of the selected studies was conducted using the evaluation criteria established by the Centre for Reviews and Dissemination (CRD) at the University of York. This quality assessment framework has been employed in prior studies and is considered suitable for ensuring high standards in systematic reviews. The authors assessed the quality of the 51 included primary studies, and the results are presented in Table 6. The findings indicated that, based on the four key quality assessment questions, each article scored at least one point out of a possible four.

Of the 51 studies, only 10 achieved a total quality score of 4, indicating that these studies correctly applied the systematic review guidelines. Additionally, eight of these articles presented models that will serve as a foundation for subsequent research with a quantitative focus, as shown in Table 4. Consequently, three studies scored 1, representing 5.88% of the primary studies, while two studies scored 1.5 (3.92%). Another 7 studies reached a score of 2 (13.73%), 9 studies achieved a score of 3 (25.49%), 7 studies had a score of 3.5 (13.73%), and finally, 10 studies scored 4 (19.61%).

The results regarding the number of publications and their corresponding publication years are presented in Table 3, and the percentage of primary studies categorized by year is shown in Figure 3.

C. MODELS FOR SMES IN EMERGING ECONOMIES The reviewed models offer valuable insights into the dynamics of organizational and financial resilience specifically tailored to the unique challenges faced by SMEs in emerging economies. For example, the HERO model underscores the importance of fostering healthy and resilient organizational environments, aligning with the imperative for SMEs to cultivate strong internal cultures that can mitigate external disruptions. Additionally, models examining the interplay between resilience and financial performance, such as Planned and Adaptive Resilience, underscore the dual necessity of proactive planning and adaptive flexibility, both of which are critical for SMEs navigating resource-limited contexts. Structural equation models, which identify key resilience factors, provide actionable frameworks for prioritizing interventions that address specific vulnerabilities within SMEs. This review bridges theoretical constructs with practical applications, laying the groundwork for the development of tools that directly



address the operational challenges faced by SMEs in emerging economies. Future research will build on this foundation by validating a resilience framework through empirical field studies, ensuring its applicability to the realities of SMEs in these regions.

CILL D & CTEDIZATION	OF BEGH	ENCE MODELO	AND THED	ACCOCIATED	VADIADIEC
CHARACTERIZATION	OF RESILI	ENCE MODELS	AND THEIR	ASSOCIATED	VARIABLES

ID	Author (s)	Study Title	Research Questions	Theoretical Alignment	<b>Practical Alignment</b>	Variables
R3	[1]	We Need a Hero! Toward a Validation of the Healthy and Resilient Organization (HERO) Model	RQ1 RQ2 RQ3	Explores the concept of healthy and resilient organizations as a theoretical framework.	Validates the practical application of a model to foster resilience in organizational environments.	<ul> <li>Healthy Organizational Resources and Practices (HORP) <ul> <li>Autonomy (task)</li> <li>Feedback (task)</li> <li>Supportive climate (interpersonal)</li> <li>Teamwork (interpersonal)</li> <li>Coordination (interpersonal)</li> <li>Transformational leadership vision (interpersonal)</li> <li>Transformational leadership - inspiring communication (interpersonal)</li> <li>Transformational leadership - intellectual stimulation (interpersonal)</li> <li>Transformational leadership - supportive leadership (interpersonal)</li> <li>Transformational leadership - supportive leadership (interpersonal)</li> <li>Transformational leadership - personal recognition (interpersonal)</li> <li>Transformational leadership - personal recognition (interpersonal)</li> <li>Healthy organizational practices</li> <li>Healthy Employees/Teams</li> <li>Mental competence</li> <li>Collective efficacy</li> <li>Vertical trust</li> <li>Horizontal trust</li> <li>Positive emotions</li> <li>Work engagement (vigor)</li> <li>Work engagement (absorption)</li> <li>Resilience</li> <li>Healthy Organizational Outcomes (by Employees)</li> <li>In-role performance</li> <li>Extra-role performance</li> <li>Organizational commitment</li> <li>Service quality</li> <li>Excellence</li> <li>Healthy Organizational Outcomes (by Immediate Supervisors)</li> <li>In-role performance</li> </ul> </li> </ul>
R24	[11]	Organizational resilience and financial performance	RQ1 RQ2 RQ3	Analyzes the relationship between organizational resilience and financial performance, leveraging concepts of planned and adaptive resilience.	Identifies practical strategies connecting resilience to financial success in tourism firms.	<ul> <li>PRes1: Given that others depend on us, the way we plan for the unexpected is appropriate.</li> <li>PRes2: Our organization is committed to practicing and testing its emergency plans to ensure their effectiveness.</li> <li>PRes3: We focus on being able to respond to the unexpected.</li> <li>PRes4: We have clearly defined priorities for what is important during and after a crisis.</li> <li>PRes5: We proactively monitor our industry to have an early warning of emerging issues.</li> <li>Adaptive Resilience</li> <li>ARes1: Our organization maintains sufficient resources to absorb some unexpected change.</li> </ul>



						<ul> <li>ARes2: If key personnel were unavailable, there are always others who could perform their role.</li> <li>ARes3: There would be strong leadership within our organization if a crisis hit.</li> <li>ARes4: We are known for our ability to use knowledge in novel ways.</li> <li>ARes5: We can make tough decisions quickly.</li> <li>Financial Performance</li> <li>FP1: Overall organizational performance following the 2010/2011 earthquakes.</li> <li>FP2: Debt level since the 2010/2011 earthquakes.</li> <li>FP3: Organizational cash flow since the 2010/2011 earthquakes.</li> <li>FP4: Profitability level of the organization since the 2010/2011 earthquakes.</li> </ul>
R31	[43]	Predictors of organizational resilience by factorial analysis	RQ1 RQ2 RQ4	Examines theoretical factors of organizational resilience using structural equation models.	Classifies relevant resilience factors and develops practical tools for various industrial sectors.	<ul> <li>VS: Vision Sharing</li> <li>L: Leadership</li> <li>MC: Change Management</li> <li>PN: Perspective Network</li> <li>CI: Commitment and Engagement</li> <li>FR: Roles and Responsibilities</li> <li>IC: Innovation and Creativity</li> <li>AC: Adaptability</li> <li>OC: Organizational Culture</li> <li>RL: Resilient Leadership</li> <li>OCM: Organizational Capacity and Management</li> </ul>
R32	[44]	Organizational resilience and organizational performance: Examining the mediating roles of resilient leadership and organizational culture	RQ1 RQ2 RQ3	Investigates the link between organizational resilience, resilient leadership, organizational culture, and performance.	Provides a practical approach to enhancing performance through strengthened leadership and organizational culture.	<ul> <li>RL: Resilient Leadership</li> <li>OR: Organizational Resilience</li> <li>OC: Organizational Culture</li> <li>OP: Organizational Performance</li> </ul>
R33	[45]	How to emerge stronger: Antecedents and consequences of organizational resilience	RQ1 RQ3 RQ4	Addresses corporate social responsibility (CSR) as a key antecedent of organizational resilience.	Examines how these practices influence organizational learning capacity and firm performance.	<ul> <li>CSREE: Corporate Social Responsibility for Employees</li> <li>RESIL: Resilience at Work</li> <li>OLC: Organizational Learning Capacity</li> <li>FPERF: Firm Performance</li> <li>EXP: Experimentation</li> <li>RISK: Risk Acceptance</li> <li>INT: Interaction with the Environment</li> <li>DIA: Dialogue</li> <li>TDEC: Decision-Making</li> </ul>
R34	[46]	Effect of information system artifacts on organizational resilience: A study among Malaysian SMEs	RQ1 RQ2 RQ3	Explores the impact of information system artifacts on organizational resilience.	Identifies technological practices to strengthen resilience in Malaysian SMEs.	<ul> <li>CMM: Commitment <ul> <li>I am focused and able to respond to the unexpected.</li> <li>I am committed to taking ownership of problems and solving them.</li> <li>I enjoy discussing my work and roles with others to gain better insights.</li> <li>I have a strong sense of belonging among my peers during adversity.</li> <li>My organization's culture motivates me to learn from both successes and failures to find more effective solutions.</li> </ul> </li> <li>COM: Communication</li> </ul>



			<ul> <li>I use effective messaging to raise awareness and build stability in crisis management.</li> <li>I stay informed and up-to-date to provide deeper knowledge to my work groups.</li> <li>I follow corporate culture and can achieve amicable resolution during adversity.</li> </ul>
			<ul> <li>I can access critical information and communicate effectively to seek expert opinions.</li> <li>I can communicate openly with</li> </ul>
			<ul> <li>employees to manage crises and create stability.</li> <li>CIT: Community</li> <li>I work collaboratively to manage tasks efficiently and handly explained to an an</li></ul>
			<ul> <li>I am committed to sharing knowledge with staff to solve issues.</li> <li>I can gather additional support with relevant information from my work</li> </ul>
			<ul><li>group for recovery.</li><li>I am more engaged with a problem until it is resolved.</li><li>As a team, we feel responsible for</li></ul>
			addressing disruptions that impact organizational effectiveness. CMP: Competence • I can stay focused and have a clear
			<ul> <li>understanding of my roles under pressure.</li> <li>I can view a situation from a different perspective and solve problems.</li> <li>I have the price competently at weak</li> </ul>
			<ul> <li>I continually reevaluate and improve my approach to my work.</li> <li>I take responsibility for solving problems competently.</li> </ul>
			<ul> <li>CON: Connection</li> <li>I have a close network connection vision between employees and sector groups.</li> </ul>
			<ul> <li>I can establish close relationships with others in the industry for better support and action during adversity.</li> <li>I can work as a team to produce more effective establisher.</li> </ul>
			<ul> <li>I can share strategies with colleagues and partners to prevent adversity.</li> <li>I am aware of how a crisis in our organization would impact others</li> </ul>
			<ul> <li>COD: Coordination</li> <li>I often consider what might go wrong to efficiently coordinate responses to challenges.</li> </ul>
			<ul> <li>I can analyze and negotiate with staff to handle situations efficiently during a crisis.</li> <li>I coordinate tasks effectively to identify</li> </ul>
			<ul> <li>and analyze vulnerabilities.</li> <li>I feel capable of handling multiple tasks simultaneously with a streamlined process.</li> <li>Consideration</li> </ul>
			<ul> <li>In my organization, we set priorities for crisis recovery.</li> <li>When struggling to achieve something difficult, I focus on my progress rather</li> </ul>
			than feeling discouraged.



						<ul> <li>I am motivated to manage my work with an action-oriented approach in crisis management.</li> <li>I make decisions based on the latest information to resolve issues effectively.</li> <li>I am able to respond to unexpected events and activate self-assessment to improve my work approach.</li> <li>ISA: Information System Artifact</li> <li>With ISA, it is easy to find what I am looking for on my corporate site.</li> <li>ISA could facilitate task navigation.</li> <li>ISA offers a logical design that is easy to follow.</li> <li>With ISA, functional tasks are seamlessly integrated.</li> <li>ISA should reduce rigidity by decreasing reliance on rigid procedures to support organizational resilience.</li> <li>With ISA, I can complete my work effortlessly.</li> <li>ISA would enhance my job performance.</li> <li>With ISA, my work productivity would increase.</li> <li>ISA would be useful in my job.</li> <li>My work would be effective with ISA use.</li> <li>ISA should increase cognitive absorption and block most other distractions.</li> <li>ISA should increase cognitive absorption with engaging features.</li> <li>ISA should reduce siloed mentality, which is detrimental to employee and organizational resilience.</li> <li>My organization should respond resiliently with ISA use.</li> <li>ISA should reduce siloed mentality, which is detrimental to employee and organizational resilience.</li> <li>My organization should recover quickly and achieve resiliently.</li> <li>With ISA, my organization effectively reduces vulnerability.</li> <li>With ISA, should necover quickly and achieve resilience.</li> </ul>
R38	[50]	The role of social capital on proactive and reactive resilience of organizations post-disaster	RQ <sub>1</sub> RQ <sub>3</sub>	Uses social capital as a critical external factor in building organizational resilience.	Proposes a conceptual model integrating supply chain relationships into resilience strategies.	<ul> <li>Structural Capital</li> <li>SC1: We spend time together at social events with our key supply chain partners.</li> <li>SC2: We maintain a close social relationship with our key supply chain partners.</li> <li>SC3: We promote interaction between staff at all levels of our organization and key supply chain partners.</li> </ul>



			• SC4: We encourage cross-functional
			interaction (logistics and marketing)
			heteroon consisters and marketing)
			between our company and key supply
			chain partners.
			Relational Capital
			RC1: Our relationships with key supply
			chain partners are characterized by
			chain particles are characterized by
			close interactions at multiple levels.
			<ul> <li>RC2: Our relationships with key supply</li> </ul>
			chain partners are marked by mutual
			respect at multiple levels
			• RC3: Our relationships with key supply
			chain partners are built on mutual trust
			between parties.
			• RC4: Our relationships with key supply
			• RC4. Our relationships with Rey suppry
			chain partners include personal
			friendship at multiple levels.
			• RC5: Our relationships with key supply
			chain partners are characterized by high
			lavala of nacionacity
			levels of reciprocity.
			Cognitive Capital
			<ul> <li>CC1: Our organization shares the same</li> </ul>
			ambitions and vision with our key
			amontons and vision with our Key
			supply chain partners.
			<ul> <li>CC2: Individuals in our organization</li> </ul>
			and our key supply chain partners are
			enthusiastic about achieving the
			collective goal of the antire supply
			conective goar of the entite suppry
			chain.
			<ul> <li>CC3: Both our organization and our key</li> </ul>
			supply chain partners agree on what is
			hest for the relationship
			CGA E
			• CC4: Executives in our organization
			and our key supply chain partners have
			compatible philosophies and
			approaches to business dealings
			Proactive Organizational Posiliance
			rioactive Organizational Resinence
			• POR1: We create internal awareness of
			disruptions and strive to instill this
			awareness in our employees.
			• POP2: We analyze and access both the
			• FOR2. We analyze and assess both the
			likelihood and impact of potential
			disruptions.
			• POR3: We enhance our capabilities to
			prevent disruptions
			pop 4 W
			• POR4: We are committed to preparing a
			contingency plan for potential
			disruptions.
			Reactive Organizational Resilience
			• DOD1; We can quistily recomming
			• KOK1. we can quickly recognize when
			a threatening situation arises.
			• ROR2: We can gather and interpret
			signal information to gauge the
			magnitude leastion and source of the
			maginuuc, location, and causes of the
			disruption.
			• ROR3: We can identify, formulate, and
			evaluate a set of possible responses to
			the disruption
			DOD4 W
			• KOR4: we can rapidly organize a
			formal response team of key personnel,
			both on-site and at the corporate level.
			• ROR5: We are highly successful in
			handling aniong in the first way
			nanoning crises, including managing
			public relations issues.
			Supply Chain Complexity
			• SCC1: Our supply chain is highly
			complex
			<ul> <li>SCC2: Our supply chain involves many</li> </ul>
			actors (a a suppliers logistics service



						providers) and/or numerous logistics/transport transactions. • SCC3: Our supply chain forms a fairly
R46	[58]	Team Resilience Model: An Empirical Examination of Information Systems Projects	$RQ_1$ $RQ_3$	Develops an empirically tested model for team resilience in information systems projects.	Provides practical tools to enhance team resilience in technological contexts.	<ul> <li>Infection of the infection of t</li></ul>
						• EC2: Identify and remove barriers to project execution (e.g., physical



		environment conditions like temperature, noise level; interpersonal relationships: unresolved past issues:
		antisocial behavior).
		• EC3: Promote active listening among
		• EC4: Prioritize team interests over
		personal interests.
		• EC5: Encourage project team members
		to acknowledge their weaknesses and mistakes.
		• EC6: Promote the offering and acceptance of apologies among project
		• EC7: Reinforce the need for team
		members to always give the benefit of
		the doubt before drawing negative
		Working Conditions
		• WO1: Ensure redundancy of non-
		human resources (e.g., equipment).
		• WO2: Establish a flexible work schedule to meet the needs of each team
		• WO3: Provide opportunities for
		continuous learning within the project
		team.
		• WO4: Foster a positive and loyal project team environment
		• WO5: Ensure suitable working
		conditions.
		• SR1: Set up teams with the necessary
		competencies to perform project activities.
		• SB2: Provide training to develop
		required project competencies.
		<ul> <li>SB3: Build individual resilience among project team members.</li> </ul>
		• SB4: Identify each team member's most
		valuable behavioral traits that can
		• SB5: Identify each team member's
		behavioral traits that might "weaken" the project team.
		• SB6: Promote the project team members' ability to learn from
		mistakes.
		• SB7: Encourage assertiveness among
		team members (e.g., "speak up on what needs to be said")
		• SB8: Promote the recognition,
		appreciation, and use of each team
		member's talents and competencies.

## D. QUALITY FACTORS

Additional quality factors assessed in this SLR include the total quality score of publications based on publication years, average quality score, standard deviation, and quality percentage of studies over the years, as detailed in Table 8. The average quality scores of studies that followed the rigorous SLR guidelines are presented in Table 6. Table 9 displays the number of studies and their percentages according to the publication type (journal articles or conference papers). To ensure robust quality control, researchers conducting SLRs should apply quality assessment criteria to ensure reliable and high-standard results. This quality evaluation can also serve as a benchmark for future studies, fostering confidence in other researchers' findings.

TABLE V
RELATIONSHIP BETWEEN RESEARCH QUESTIONS AND
STUDIES

ID	Research	Research	Research	Research		
	Question 1	Question 2	Question 3	Question 4		
R1	✓	×	×	√		



R2	✓	√	✓	✓
R3	✓	√	✓	✓
R4	√	√	√	✓
R5	√	×	√	✓
R6	√	×	×	✓
R7	√	×	×	√
R8	✓	✓	✓	✓
R9	✓	×	×	✓
R10	$\checkmark$	×	×	✓
R11	✓	×	×	✓
R12	✓	✓	×	✓
R13	$\checkmark$	$\checkmark$	×	✓
R14	✓	×	×	✓
R15	✓	✓	✓	✓
R16	√	×	×	√
R17	√	√	√	✓
R18	√	×	×	√
R19	✓	✓	✓	✓
R20	√	√	√	✓
R21	✓	×	×	✓
R22	✓	✓	✓	✓
R23	√	√	√	✓
R24	√	√	√	✓
R25	✓	✓	×	✓
R26	✓	×	×	✓
R27	√	√	√	✓
R28	✓	×	×	✓
R29	√	×	×	✓
R30	✓	✓	×	✓
R31	✓	✓	✓	✓
R32	√	×	×	✓
R33	√	√	√	✓
R34	√	×	×	✓
R35	√	√	√	✓
R36	√	×	×	✓
R37	✓	✓	✓	✓
R38	✓	✓	✓	✓
R39	✓	✓	✓	✓
R40	√	×	×	✓
R41	✓	×	×	✓
R42	✓	✓	✓	✓
R43	√	✓	×	✓
R44	✓	✓	×	✓
R45	✓	✓	×	✓
R46	✓	✓	✓	✓
R47	✓	×	×	✓
R48	✓	×	×	✓ ×
R49	✓	×	×	✓ <b>1</b>
R50	✓	×	×	✓ <b>1</b>
R51	✓ ×	×	×	✓

The reliable findings of this research can support stakeholders in decision-making processes. Additionally, research outcomes grounded in quality criteria can foster trust among other researchers in the same field, potentially leading to new knowledge discoveries. Another measure to enhance quality assessment involves employing existing standard criteria, which may result in additional benchmarks and elevate research standards. Notably, there is a need to apply the Database of Abstracts of Reviews of Effects (DARE) criteria from the Center for Reviews and Dissemination at the University of York, given their rigorous and stringent standards. Originally designed for clinical applications, these criteria are highly beneficial for quality assessments in systematic reviews across various fields such as organizational resilience.

ID	0.4	QUA		133E3	Tetal Group	
ID D1	QA <sub>1</sub>	QA <sub>2</sub>	QA3	QA4	1 otal Score	Ideal Score
KI D2	N	N	P	Y	1.5	4
R2	Y	Y	P	Y	3.5	4
R3	Y	Y	Y	Y	4	4
R4	Y	Y	Р	Р	3	4
R5	N	Y	Р	Р	2	4
R6	N	Р	Р	Y	2	4
R7	N	Р	Р	Y	2	4
R8	Y	Y	N	Р	2.5	4
R9	N	Р	N	Р	1	4
R10	N	Р	N	Р	1	4
R11	N	Р	N	Р	1	4
R12	Y	Ν	Y	Y	3	4
R13	Y	Ν	Y	Y	3	4
R14	Y	Ν	Y	Р	2.5	4
R15	Y	Ν	Y	Y	3	4
R16	Y	Y	Y	Y	4	4
R17	Y	Ν	Y	Y	3	4
R18	Р	Y	Y	Р	3	4
R19	Р	Ν	Y	Р	2	4
R20	Y	Y	Y	Y	4	4
R21	Y	Y	Y	Р	3.5	4
R22	Р	Y	Y	Y	3.5	4
R23	Y	Y	Р	Y	3.5	4
R24	Y	Y	Y	Y	4	4
R25	P	Р	Y	Y	3	4
R26	Р	Y	Y	Y	3.5	4
R27	Y	Р	Y	Р	3	4
R28	Y	Р	Y	Р	3	4
R29	Y	Р	Y	Р	3	4
R30	Y	Y	Y	Р	3.5	4
R31	Y	Y	Y	Y	4	4
R32	Ŷ	Ŷ	Ŷ	Ŷ	4	4
R33	Ŷ	Ŷ	Ŷ	Ŷ	4	4
R34	Y	Y	Y	Y	4	4
R35	N	Y	Y	N	2	4
R36	N	Ý	v	P	2.5	4
R37	P	Ŷ	P	P	2.5	4
R38	V	v	v	V	4	<u>т</u> Д
R39	P	P	P	Y	25	4
R40	V	P	P	v	3	4
R/1	V	N	P	V	25	т Л
R/12	P	N	v	P	2.3	
D/2	D	V	1 V	r V	2 5	
R43	r P	1 P	I V	1 V	3.3	4
D 45	r V	Р	I V	I P	2	4
R43	I V	r V	I V	r V	3	4
R40	Y	Y N	Y	r P	4	4
K4/	ř V	IN N	r D	P V	2.3	4
R48	Y D	N D	P	Y	2.5	4
R49	P	P	P	Y	2.5	4
R50	P	P	Y	N	2	4
R51	Y	N	Р	N	1.5	4

TABLE VI

## **IV. DISCUSSION**

In this section, the authors provide answers to the research questions outlined at the beginning of the study. Four research questions were established for this investigation.

TABLE VII						
AVERAGE QUALITY SCORE						
SLR NO SLR						
Number of Studies	3	48				
Percentage of Studies	5.88%	94.12%				
Average Quality Score	2.83	2.86				



SCORE BY YEARS											
	Year										
	2003	2006	2012	2014	2015	2016	2017	2018	2019	2020	2021
Number of Primary Studies	1	1	2	2	2	5	7	7	9	8	7
Total Quality Score	1.5	3.5	7	4	4.5	9	21.5	24	30	23	18
Average Quality Score	1.50	3.50	3.50	2.00	2.25	1.80	3.07	3.43	3.33	2.88	2.57
Standard Deviation	0	0	0.70711	0	0.354	1.095	0.7319	0.345	0.75	0.6409	0.7868
Quality Score as Percentage	1.03%	2.40%	4.79%	2.74%	3.08%	6.16%	14.73%	16.44%	20.55%	15.75%	12.33%
Percentage of Primary Studies	1.96%	1.96%	3.92%	3.92%	3.92%	9.80%	13.73%	13.73%	17.65%	15.69%	13.73%

TABLE IX	
TYPE OF PUBLICATION	
Conference	Iournal

		Conterent	Je Jour	1141				
Number of St	Number of Studies			7				
Percentage of	Percentage of Studies			6%				
TABLE X								
IMPACT OF STUDIES								
	Q1 Q2 Q3 WoS							
Number of Studies	19	17	7	4				
Percentage of Studies	40.43%	36.17%	14.89%	8.51%				

#### A. HOW MANY SLRs WITH PRIMARY STUDES EXIST ON ORGANIZATIONAL AND FINANCIAL RESILIENCE?

This study included 51 primary studies related to organizational and financial resilience sourced through an extensive search of electronic databases. Of the synthesized results, only 5.88% of the primary studies were identified by applying the rigorous SLR guidelines. This small percentage reflects the limited application of SLR methodologies in the fields of organizational and financial resilience. Studies following these guidelines received an average quality score of 2.83, indicating moderate adherence to quality standards.



FIGURE 3. Percentage of Publications by Year

40,43% 36,17% 14,89% 8,51% Q1 Q2 Q3 WoS

FIGURE 4. Impact of Studies

Additionally, the remaining 94.12% of the studies did not apply a full SLR approach; however, their average quality score was slightly higher at 2.86. This suggests that while many studies did not strictly adhere to systematic review guidelines, this does not necessarily compromise study quality. However, the findings highlight a significant need to increase the use of systematic reviews to strengthen the research in this field.

#### B. HOW DO RESEARCHERS WORKING ON ORGANIZATIONAL AND FINANCIAL RESILIENCE REPORT THE QUELITY OF THEIR STUDIES?

Based on the thematic areas and 51 selected primary studies, journal and conference publications were analyzed to assess study quality. A total of 92.16% of the studies were published in academic journals, whereas only 7.84% were presented at conferences. These data indicate a strong preference for journal publications, which may be associated with the rigorous peer-review process that is typically characteristic of journals, contributing to the perception of higher quality.

In addition, the quality of the studies was assessed based on the quartiles of their publications. As shown in Table 10, most studies (40.43%) were published in Q1 journals, followed by Q2 journals (36.17%), indicating a high level of publication quality. However, a smaller percentage of studies (14.89%) were published in Q3 journals and 8.51% in Web of Science (WoS) journals, suggesting that while there are high-quality studies, a significant number still require improvements in terms of academic rigor.



## C. HOW DO THE REPORTED STUDIES ADDRESS THE RESILIENCE NEEDS IN ORGANIZATIONS?

The studies included in this review underscore the importance of enhancing both organizational and financial resilience in companies, particularly during times of crises. Resilience is a critical factor in an organization's ability to adapt and survive in dynamic and uncertain environments, especially during economic crises and pandemics. Many of the reviewed studies emphasize the need to develop organizational strategies that enable companies to not only withstand crises but also thrive in adverse conditions.

Studies have also identified that organizational resilience significantly impacts companies' financial stability, resulting in an enhanced ability to manage risks and capitalize on opportunities during periods of uncertainty. Overall, the reviewed studies highlight the importance of strengthening organizational capacities to respond to emergencies and economic crises, underscoring the need for continued research in this area to bolster organizational sustainability.

# D. WERE-RESEARCH TOPICS LIMITED IN NUMBER?

An analysis of the studies included in this review revealed that the number of SLR studies on organizational and financial resilience remains limited. Only 5.88% of the reviewed studies applied rigorous systematic review guidelines, indicating a shortage of studies that followed this approach. This highlights the urgent need for further research employing SLR methodologies to enhance the robustness and reliability of findings in this field.

During the search process, many articles were excluded because they did not meet established criteria. Although a considerable number of studies on organizational and financial resilience have been identified, most have not applied rigorous systematic reviews, raising concerns about the quality and consistency of current research. Consequently, future researchers are encouraged to adopt stricter SLR guidelines to ensure higher quality and contribute more effectively to knowledge in this field.

#### E. HOW CAN THE FINDINGS GUIDE SMES IN IMPLEMENTING RESILIENCE STRATEGIES, PARTICULARLY IN RESOURCE-CONSTRAINED ENVIRONMENTS?

The findings of this study provide critical insights into how SMEs can effectively implement organizational and financial resilience strategies, even in resource-constrained environments. This analysis highlights that combining planned and adaptive resilience approaches is essential for addressing the unique challenges faced by SMEs, such as limited financial resources, constrained human capital, and restricted access to technology. Adaptive resilience strategies such as fostering resilient leadership, cultivating a robust organizational culture, and promoting social capital equip SMEs to respond dynamically to disruptions while maximizing existing resources. Similarly, planned resilience mechanisms, including proactive risk assessments and scenario planning, enable enterprises to anticipate crises and strategically optimize resource allocation.

Moreover, the findings emphasize that resilience can be achieved by leveraging internal strengths such as enhancing trust within teams, promoting cross-functional communication, and establishing resilient supply chain partnerships. These practices are particularly suited to SMEs in emerging economies where financial and operational constraints demand innovative and resourceefficient solutions. By focusing on low-cost, high-impact strategies. SMEs can strengthen their ability to adapt to and thrive in volatile and uncertain environments, thereby ensuring operational continuity and long-term sustainability.

Building on these insights, future research should aim to provide a practical model of resilience tailored to SMEs operating in resource-limited contexts. This model will undergo rigorous validation through fieldwork in SMEs, further bridging the gap between theoretical frameworks and real-world applicability and offering actionable tools for resilience-building in diverse economic settings.

# **V. CONCLUSION**

The SLR of organizational and financial resilience in SMEs highlights the growing importance of resilience as a critical component of business sustainability in volatile environments. Throughout the analysis of the 51 primary studies, only 5.88% rigorously applied the SLR guidelines, underscoring the lack of comprehensive reviews in this area. The findings indicate that organizational resilience is a multifaceted construct encompassing both planned and adaptive dimensions that enable organizations to withstand and thrive during times of crisis.

The reviewed studies emphasize that while financial resilience is intrinsically linked to crisis response capabilities, most research has focused on global contexts without specifically addressing the unique characteristics of SMEs in emerging economies. This indicates a gap in the literature that requires more targeted and contextualized studies. Furthermore, the importance of human capital, organizational culture, and resilient leadership has been established as a foundational pillar for enhancing SMEs' responsiveness to disruptive events.

Therefore, future research should adopt a broader approach, incorporating not only qualitative methodologies but also quantitative analyses to accurately measure the impact of resilience on SMEs' financial performance. With increased rigor in applying SLR guidelines, more robust models can be developed that offer practical tools to enhance resilience in such enterprises and ensure their long-term sustainability. Consequently, in the next research phase, as part of the



lead author's doctoral studies, a quantitative model was applied based on the variables identified in this SLR.

#### REFERENCES

- M. Salanova, S. Llorens, E. Cifre, and I. M. Martínez, "We Need a Hero! Toward a Validation of the Healthy and Resilient Organization (HERO) Model," *Group Organ Manag*, vol. 37, no. 6, pp. 785–822, Dec. 2012, doi: 10.1177/1059601112470405.
- [2] D. M. DeJoy, M. G. Wilson, R. J. Vandenberg, A. L. McGrath-Higgins, and C. S. Griffin-Blake, "Assessing the impact of healthy work organization intervention," *J Occup Organ Psychol*, vol. 83, no. 1, pp. 139–165, Mar. 2010, doi: 10.1348/096317908X398773.
- [3] M. G. Wilson, D. M. DeJoy, R. J. Vandenberg, H. A. Richardson, and A. L. McGrath, "Work characteristics and employee health and well-being: Test of a model of healthy work organization," *J Occup Organ Psychol*, vol. 77, no. 4, pp. 565–588, 2004, doi: 10.1348/0963179042596522.
- [4] S. N. Morales, L. R. Martínez, J. A. H. Gómez, R. R. López, and V. Torres-Argüelles, "Predictors of organizational resilience by factorial analysis," *International Journal of Engineering Business Management*, vol. 11, Mar. 2019, doi: 10.1177/1847979019837046.
- [5] S. R. Velu, A. Al Mamun, T. Kanesan, N. Hayat, and S. Gopinathan, "Effect of information system artifacts on organizational resilience: A study among Malaysian SMEs," *Sustainability (Switzerland)*, vol. 11, no. 11, 2019, doi: 10.3390/su11113177.
- [6] A. Rodriguez-Sanchez, J. Guinot, R. Chiva, and A. Lopez-Cabrales, "How to emerge stronger: Antecedents and consequences of organizational resilience," *Journal of Management and Organization*, vol. 27, no. 3, pp. 442–459, 2021, doi: 10.1017/jmo.2019.5.
- [7] E. Seville, D. Van Opstal, and J. Vargo, "A primer in resiliency: Seven principles for managing the unexpected," *Global Business and Organizational Excellence*, vol. 34, no. 3, pp. 6–18, 2015, doi: 10.1002/joe.21600.
- [8] C. A. Lengnick-Hall, T. E. Beck, and M. L. Lengnick-Hall, "Developing a capacity for organizational resilience through strategic human resource management," *Human Resource Management Review*, vol. 21, no. 3, pp. 243–255, Sep. 2011, doi: 10.1016/j.hrmr.2010.07.001.
- [9] D. Parsons, "Organisational resilience: Parsons argues that a modern organisation's ability to survive and prosper against the flow-on effects of natural disasters will depend on its resilience capacity," *Australian Journal of Emergency Management*, vol. 25, no. 2, pp. 18–20, 2010.
- [10] A. M. S. Azzaz and I. A. Elshaer, "Heritage Tourism Resilience and Sustainable Performance Post COVID-19: Evidence from Hotels Sector," *Heritage*, vol. 7, no. 3, pp. 1162–1173, Mar. 2024, doi: 10.3390/heritage7030055.
- [11] G. Prayag, M. Chowdhury, S. Spector, and C. Orchiston, "Organizational resilience and financial performance," *Ann Tour Res*, vol. 73, pp. 193–196, 2018, doi: 10.1016/j.annals.2018.06.006.
- [12] B. Kitchenham, "Procedures for Performing Systematic Reviews." [Online]. Available: https://www.researchgate.net/publication/228756057
- [13] K. Maswadi, N. B. A. Ghani, and S. B. Hamid, "Systematic Literature Review of Smart Home Monitoring Technologies Based on IoT for the Elderly," *IEEE Access*, vol. 8, pp. 92244– 92261, 2020, doi: 10.1109/ACCESS.2020.2992727.
- [14] L. Riolli and V. Savicki, "Information system organizational resilience," *Omega (Westport)*, vol. 31, no. 3, pp. 227–233, Jun. 2003, doi: 10.1016/S0305-0483(03)00023-9.
- [15] J. Y. L. Thong and C. S. Yap, "Information systems and occupational stress: A theoretical framework," *Omega (Westport)*, vol. 28, no. 6, pp. 681–692, 2000, doi: 10.1016/S0305-0483(00)00020-7.

- [16] J. H. Gittell, K. Cameron, S. Lim, and V. Rivas, "Relationships, Layoffs, and organizational resilience: Airline industry responses to september 11," *Journal of Applied Behavioral Science*, vol. 42, no. 3, 2006, doi: 10.1177/0021886306286466.
- [17] D. Kantur and Í. S. Arzu, "Organizational resilience: A conceptual integrative framework," *Journal of Management* and Organization, vol. 18, no. 6, 2012, doi: 10.5172/jmo.2012.18.6.762.
- [18] R. Pal, H. Torstensson, and H. Mattila, "Antecedents of organizational resilience in economic crises - An empirical study of Swedish textile and clothing SMEs," *Int J Prod Econ*, vol. 147, no. PART B, 2014, doi: 10.1016/j.ijpe.2013.02.031.
- [19] J. P. Gilly, M. Kechidi, and D. Talbot, "Resilience of organisations and territories: The role of pivot firms," *European Management Journal*, vol. 32, no. 4, 2014, doi: 10.1016/j.emj.2013.09.004.
- [20] D. Kantur and A. I. Say, "Measuring Organizational Resilience: A Scale Development," *Pressacademia*, vol. 4, no. 3, pp. 456– 456, Sep. 2015, doi: 10.17261/Pressacademia.2015313066.
- [21] N. Sahebjamnia, S. A. Torabi, and S. A. Mansouri, "Integrated business continuity and disaster recovery planning: Towards organizational resilience," *Eur J Oper Res*, vol. 242, no. 1, 2015, doi: 10.1016/j.ejor.2014.09.055.
- [22] N. Ortiz-de-Mandojana and P. Bansal, "The long-term benefits of organizational resilience through sustainable business practices," *Strategic Management Journal*, vol. 37, no. 8, 2016, doi: 10.1002/smj.2410.
- [23] A. Annarelli and F. Nonino, "Strategic and operational management of organizational resilience: Current state of research and future directions," 2016. doi: 10.1016/j.omega.2015.08.004.
- [24] K. Frisbie and J. Converso, "Organizational resilience and enrollment trends of independent, for-profit higher education institutions," *Work*, vol. 54, no. 2, 2016, doi: 10.3233/WOR-162296.
- [25] A. De Galizia, C. Simon, P. Weber, B. Iung, C. Duval, and E. Serdet, "Markers and Patterns of Organizational Resilience for Risk Analysis," in *IFAC-PapersOnLine*, 2016. doi: 10.1016/j.ifacol.2016.10.609.
- [26] O. Buliga, C. W. Scheiner, and K. I. Voigt, "Business model innovation and organizational resilience: towards an integrated conceptual framework," *Journal of Business Economics*, vol. 86, no. 6, 2016, doi: 10.1007/s11573-015-0796-y.
- [27] R. Elidea Quiñonez and M. Prado Solis, "Resiliencia organizacional: ideas para el debate en el contexto Ecuatoriano," *Dominio de las Ciencias*, vol. 3, no. 3, pp. 488– 504, 2017.
- [28] W. L. Teo, M. Lee, and W. S. Lim, "The relational activation of resilience model: How leadership activates resilience in an organizational crisis," *Journal of Contingencies and Crisis Management*, vol. 25, no. 3, 2017, doi: 10.1111/1468-5973.12179.
- [29] A. A. A. Souza, M. F. R. Alves, N. Macini, L. O. Cezarino, and L. B. Liboni, "Resilience for sustainability as an ecocapability," *Int J Clim Chang Strateg Manag*, vol. 9, no. 5, 2017, doi: 10.1108/IJCCSM-09-2016-0144.
- [30] L. Xiao and H. Cao, "Organizational Resilience: The Theoretical Model and Research Implication," *ITM Web of Conferences*, vol. 12, 2017, doi: 10.1051/itmconf/20171204021.
- [31] D. Vucina and R. Fabac, "Organizational Resilience and Risk Management Improvement - How To Reduce and Prevent Fire Hazard Using Simulation Scenarios," *Economic and Social Development (Esd 2017)*, no. September 2017, 2017.
- [32] H. A. R. Irigaray, K. C. M. de Paiva, and C. C. Goldschmidt, "Resiliência organizacional: proposição de modelo integrado e agenda de pesquisa," *Cadernos EBAPE.BR*, vol. 15, no. spe, 2017, doi: 10.1590/1679-395158881.
- [33] M. K. Kolay, "Measurement of Organizational Resilience An Approach," SSRN Electronic Journal, 2017, doi: 10.2139/ssrn.2965435.



- [34] C. Ruiz-Martin, A. Lopez-Paredes, and G. Wainer, "What we know and do not know about organizational resilience," *International Journal of Production Management and Engineering*, vol. 6, no. 1, 2018, doi: 10.4995/ijpme.2018.7898.
- [35] Z. Ma, L. Xiao, and J. Yin, "Toward a dynamic model of organizational resilience," 2018. doi: 10.1108/NBRI-07-2017-0041.
- [36] W. A. Kahn, M. A. Barton, C. M. Fisher, E. D. Heaphy, E. M. Reid, and E. D. Rouse, "The geography of strain: Organizational resilience as a function of intergroup relations," 2018. doi: 10.5465/amr.2016.0004.
- [37] L. Gover and L. Duxbury, "Inside the Onion: Understanding What Enhances and Inhibits Organizational Resilience," *Journal of Applied Behavioral Science*, vol. 54, no. 4, 2018, doi: 10.1177/0021886318797597.
- [38] K. Burnard, R. Bhamra, and C. Tsinopoulos, "Building organizational resilience: Four configurations," *IEEE Trans Eng Manag*, vol. 65, no. 3, 2018, doi: 10.1109/TEM.2018.2796181.
- [39] A. W. Ishak and E. A. Williams, "A dynamic model of organizational resilience: adaptive and anchored approaches," *Corporate Communications*, vol. 23, no. 2, 2018, doi: 10.1108/CCIJ-04-2017-0037.
- [40] T. Ingram and K. Bratnicka-Myśliwiec, "Organizational Resilience of Family Businesses," *Problemy Zarzadzania*, vol. 2/2019, no. 82, pp. 186–204, 2019, doi: 10.7172/1644-9584.82.10.
- [41] L. Gonçalves, J. B. Navarro, and R. Sala, "Spanish validation of the Benchmark Resilience Tool (short-form version) to evaluate organisational resilience," *Saf Sci*, vol. 111, 2019, doi: 10.1016/j.ssci.2018.09.015.
- [42] B. Herbane, "Rethinking organizational resilience and strategic renewal in SMEs," *Entrepreneurship and Regional Development*, vol. 31, no. 5–6, 2019, doi: 10.1080/08985626.2018.1541594.
- [43] S. N. Morales, L. R. Martínez, J. A. H. Gómez, R. R. López, and V. Torres-Argüelles, "Predictors of organizational resilience by factorial analysis," *International Journal of Engineering Business Management*, vol. 11, 2019, doi: 10.1177/1847979019837046.
- [44] D. Suryaningtyas, A. Sudiro, A. T. Eka, and W. I. Dodi, "Organizational resilience and organizational performance: Examining the mediating roles of resilient leadership and organizational culture," *Academy of Strategic Management Journal*, vol. 18, no. 2, 2019.
- [45] A. Rodríguez-Sánchez, J. Guinot, R. Chiva, and Á. López-Cabrales, "How to emerge stronger: Antecedents and consequences of organizational resilience," *Journal of Management and Organization*, 2019, doi: 10.1017/jmo.2019.5.
- [46] S. R. Velu, A. Al Mamun, T. Kanesan, N. Hayat, and S. Gopinathan, "Effect of information system artifacts on organizational resilience: A study among Malaysian SMEs," *Sustainability (Switzerland)*, vol. 11, no. 11, 2019, doi: 10.3390/su11113177.
- [47] H. Witmer, "Degendering organizational resilience the Oak and Willow against the wind," *Gend Manag*, vol. 34, no. 6, 2019, doi: 10.1108/GM-10-2018-0127.
- [48] P. M. Darkow, "Beyond 'bouncing back': Towards an integral, capability-based understanding of organizational resilience," *Journal of Contingencies and Crisis Management*, vol. 27, no. 2, 2019, doi: 10.1111/1468-5973.12246.
- [49] G. P. Nyaupane, G. Prayag, J. Godwyll, and D. White, "Toward a resilient organization: analysis of employee skills and organization adaptive traits," *Journal of Sustainable Tourism*, vol. 29, no. 4, 2020, doi: 10.1080/09669582.2020.1822368.
- [50] X. Jia, M. Chowdhury, G. Prayag, and M. M. Hossan Chowdhury, "The role of social capital on proactive and reactive resilience of organizations post-disaster," *International Journal of Disaster Risk Reduction*, vol. 48, 2020, doi: 10.1016/j.ijdrr.2020.101614.

- [51] S. Duchek, "Organizational resilience: a capability-based conceptualization," *Business Research*, vol. 13, no. 1, 2020, doi: 10.1007/s40685-019-0085-7.
- [52] D. Cotta and F. Salvador, "Exploring the antecedents of organizational resilience practices – A transactive memory systems approach," *International Journal of Operations and Production Management*, vol. 40, no. 9, 2020, doi: 10.1108/IJOPM-12-2019-0827.
- [53] A. Aldea, E. Vaicekauskaite, M. Daneva, and J. P. Sebastian Piest, "Assessing Resilience in Enterprise Architecture: A Systematic Review," *Proceedings - 2020 IEEE 24th International Enterprise Distributed Object Computing Conference, EDOC 2020*, pp. 1–10, 2020, doi: 10.1109/EDOC49727.2020.00011.
- [54] J. J. W. Liu, M. Reed, and K. P. Fung, "Advancements to the Multi-System Model of Resilience: updates from empirical evidence," *Heliyon*, vol. 6, no. 9, 2020, doi: 10.1016/j.heliyon.2020.e04831.
- [55] J. Tasic, S. Amir, J. Tan, and M. Khader, "A multilevel framework to enhance organizational resilience," *J Risk Res*, vol. 23, no. 6, 2020, doi: 10.1080/13669877.2019.1617340.
- [56] G. Pescaroli, O. Velazquez, I. Alcántara-Ayala, C. Galasso, P. Kostkova, and D. Alexander, "A Likert Scale-Based Model for Benchmarking Operational Capacity, Organizational Resilience, and Disaster Risk Reduction," *International Journal of Disaster Risk Science*, vol. 11, no. 3, 2020, doi: 10.1007/s13753-020-00276-9.
- [57] B. Mokline and M. A. Ben Abdallah, "Organizational resilience as response to a crisis: case of COVID-19 crisis," *Continuity & Resilience Review*, vol. ahead-of-p, no. ahead-of-print, 2021, doi: 10.1108/crr-03-2021-0008.
- [58] J. Varajão, G. Fernandes, A. Amaral, and A. M. Gonçalves, "Team Resilience Model: An Empirical Examination of Information Systems Projects," *Reliab Eng Syst Saf*, vol. 206, 2021, doi: 10.1016/j.ress.2020.107303.
- [59] H. Hafeez, M. I. Abdullah, M. A. Zaheer, and Q. Ahsan, "Organizational resilience process: integrated model of safety culture," *Organization Management Journal*, vol. ahead-of-p, no. ahead-of-print, 2021, doi: 10.1108/omj-03-2020-0893.
- [60] J. Hillmann and E. Guenther, "Organizational Resilience: A Valuable Construct for Management Research?," *International Journal of Management Reviews*, vol. 23, no. 1, 2021, doi: 10.1111/ijmr.12239.
- [61] M. J. E. Werner, A. P. L. Yamada, E. G. N. Domingos, L. R. Leite, and C. R. Pereira, "Exploring Organizational Resilience Through Key Performance Indicators," *Journal of Industrial* and Production Engineering, vol. 38, no. 1, 2021, doi: 10.1080/21681015.2020.1839582.
- [62] R. Chen, Y. Xie, and Y. Liu, "Defining, conceptualizing, and measuring organizational resilience: A multiple case study," *Sustainability (Switzerland)*, vol. 13, no. 5, 2021, doi: 10.3390/su13052517.
- [63] G. F. Tuazon, R. Wolfgramm, and K. P. Whyte, "Can You Drink Money? Integrating Organizational Perspective-Taking and Organizational Resilience in a Multi-level Systems Framework for Sustainability Leadership," *Journal of Business Ethics*, vol. 168, no. 3, 2021, doi: 10.1007/s10551-019-04219-3.





JUAN DIEGO OCHOA CRESPO was born in the canton of Biblián, province of Cañar, Ecuador, on February 4, 1987. He received a bachelor's degree in Business Engineering from the University of Cuenca, Ecuador, a Master's degree in Business Management from the Universidad Técnica Particular de Loja, Ecuador; and a Master's degree in Accounting and Auditing, with a focus on Tax Management from the Universidad Católica de Cuenca, Ecuador. He is currently pursuing a Ph.D. in

Business Administration and Management at the Universidad Pablo de Olavide in Seville, Spain. He serves as a research professor at the Universidad Católica de Cuenca, where he also holds the position of Director of the Business Administration Program. His research interests include business administration, organizational and financial resilience, auditing, tax management, and the impact of artificial intelligence on decision making.



JOSÉ MANUEL FERIA-DOMÍNGUEZ is Doctor in Business Administration and Management from the University of Seville (2004) and senior lecturer in Finance at the Department of Financial Economics and Accounting from the University Pablo de Olavide (Seville, Spain) since 1998. Author of numerous articles published in top international indexed journals such as International Journal of Finance and Economics (IJFE),

Quarterly Review of Economics and Finance (QREF), Economics and Sociology, Journal of Business Strategy and Development (BSD), Journal of Development Effectiveness(JDE), Journal Utilities Policy (JUIP), Journal of Operational Risk (JOR), International Journal of Environmental Research and Public Health (IJERPH), Sustainability, North American Journal of Economics and Finance (NAJEF), Spanish Journal of Finance and Accounting (REFC), Universia Business Review (UBR), Journal of Financial Transformation, Journal of Financial Management and Analysis, etc. he is specialized in risk management, environmental finance and microfinance. He leads, as main research, the emerging project "New Methodological Tools for Risk Measurement." He received the second prize in the "Awards for Research and Study" (2013) and (2016) of the Financial Studies Foundation (www.fef.es) and the International Award on Risk Management (2008), to commemorate the 150th anniversary of Santander Bank. He has also completed several international research stays at the University of Applied Sciences BFI Vienna, University of Hull (UK), University of University of Groningen (Netherlands), Universidade do Algarve (Faro, Portugal), Westminster University (UK), Stockholm School of Business (Sweden), and the Options & Futures Institute (Madrid). ORCID: 0000-0001-9573-8347



**DIEGO CORDERO** was born in Azogues, Ecuador in 1966. He graduated as a Computer and Informatics Systems Engineer at the Escuela Politécnica Nacional, Quito, Ecuador in 1993. As a Master in Management Information Systems, at the Escuela Politécnica del Ejército, Guayaquil Ecuador, in 2008. As a PhD in Sciences Administration at the Universidad Nacional Autónoma de México (UNAM), México in 2017. As Postdoc in "Latin America and its Insertion in the Global Order," Ecuador in 2018.

He has held various positions, such as System Manager, Strategic Manager, Dean, Director of Research, Academic Director, and Director of Innovation Processes. He has led research projects. He is the author of two books, ten chapters of books, and more than 40 articles, and has participated as a speaker in more than 15 international conferences. His research interests include technological governance and inclusion, green

IT, data analytics, and educational innovation. He is also an Associate Editor of the journal UDA Academ.

Dr. Cordero is currently a research professor at the Universidad Católica de Cuenca (UCACUE) and a member of the Green IT Research Group. It is an accredited researcher of the Secretary of Higher Education, Science, Technology, and Innovation of the Republic of Ecuador and the Ecuador Node Coordinator of TIC Latin America.