

Assessing the Integration of Organizational Resilience and Sustainability: Insights from a Systematic Literature Review

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Abstract. The Sustainable Development Goals (SDGs) rely heavily on the participation of the public sector as a major player in its successful implementation. A sound public administrative system is a standalone goal for sustainable SDG-16 that seeks to develop effective, responsible, and inclusive institutions at all levels for the development of mankind. However, the prevalent perception of public sector organizations is that they are overly large, inefficient, wasteful, untruthful, and lack transparency. Therefore, we conducted a Systematic Literature Review (SLR) on the pillar(s) of organizational sustainability and antecedents of organizational resilience that are frequently studied, highlighting current problems. This study analyzed 53 articles (published between 2008 and 2022) on organizational resilience in relation to sustainability. We review studies published in international journals. The findings show that organizational resilience and sustainability research has advanced significantly during this time and is still a promising field for scholarly investigation. The SLR reveals that most studies were conducted in developed nations, followed by some Asian countries, and there are adequate studies in the private sector, while the public sector has received limited attention from the research community and practitioners. This research gap is presented and discussed. *Keywords:* *Organizational Resilience; Organizational Sustainability; Public Sector; Dimensions; Antecedents*

1 Introduction

The COVID-19 pandemic has caused significant disruptions in the public sector, leading to productivity declines, job losses, and increased unemployment. However, some organizations show resilience and rebound faster than their counterparts. The public sector is

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often large, unwieldy, wasteful, unreliable, and ineffective. This results in a drop in people's trust and dissatisfaction with its services. To address this, governments and government officials have recognized the importance of efficient administration and have created resilient, sustainable frameworks and strategies to preserve their organizations [1]. The Sustainable Development Goals (SDGs) of the 2030 Agenda rely heavily on the public sector's participation in its successful implementation [2–5]. A sound public administrative system is a standalone goal for sustainability, as SDG-16 aims to develop effective, responsible, and inclusive institutions at all levels. Public organizations must design and implement a sustainability strategy to engage with the SDGs and the 2030 Agenda. The global economy will experience a 4.3% decline in 2020, affecting 81% of the world's workforce. The unemployment rate rose to 8.8% in April. International tourism and supply lines declined also impacted global trade. Increased resilience to financial, societal, and ecological disruptions is crucial for recovery and requires a commitment to the SDGs by states, corporations, and society. Organizational resilience (OrRES) and organizational sustainability (OrSUS) are influenced by an organization's ability to react, integrate, and adapt to evolving conditions.

The rapid development in OrRES and OrSUS research may have been underestimated, so it is imperative to investigate the most recent advancements in the field by reviewing a wide stream of well-established literature sources. However, only a few numbers of systematic literature evaluations relevant to OrRES and OrSUS research have been carried out [6–9]. To the best of our knowledge, the available data is insufficient to fully grasp the connections between these variables. This review presents recent developments in organizational resilience and sustainability theories, frameworks, models, and critical determinants from 2008 to 2022. It provides a summary of studies and offers recommendations for practitioners of public policy to optimize the meaning of these concepts. The Systematic Literature Review (SLR) methodology was chosen to address these concerns based on the research questions listed below:

- RQ1: What pillar(s) of organizational sustainability are commonly studied in the literature?
- RQ2: What antecedent(s) of organizational resilience are mostly considered in the literature?
- RQ3: What are the problems and challenges of ORES factors in the OSUS?
- RQ4: What are the potential future research areas?

This paper is structured as follows: Section 2 reviews the literature on organizational resilience, organizational sustainability, and the relationship between organizational resilience and sustainability; Section 3 describes the methodology used for this literature review; and Section 4 presents the main findings of the relationship. Section 5 discusses the challenges and problems; section 6 presents the potential future research areas while section 7 concludes the paper.

2 Literature Review

2.1 Organizational Sustainability

Sustainability is a widely accepted concept, but its definition can be unclear in sectors where environmental foundations are secondary [8,10]. In such contexts, the simplest definition of sustainability is "maintaining the status quo and not disappearing" [10,11]. This can be translated as the fundamental idea of sustainability, with the readiness to moderate or prevent change [12]. Sustainability can also be defined as "anything that supports the well-being of

societies and the environment" or "an ethical concept that things should be better in the future than they are at present." The Brundtland Commission Report from 1987 defines sustainability as "development that meets the requirements of the present without endangering the potential of future generations to fulfil their respective interests." This traditional definition is still widely applied in many other disciplines, with modest modifications and additions. Leach's definition of sustainability is "the ability to maintain specified aspects of human well-being, social equality, and environmental integrity for an undetermined period of time" [13]. The main objectives of sustainable development are "protecting and maintaining natural and cultural resources for the future and mitigating change." Examples of concrete actions taken in the name of sustainability include reducing carbon consumption, increasing biodiversity, protecting tangible heritage artifacts, and revitalizing intangible cultural traditions [8,14].

One of the most pressing concerns for academics and practitioners alike in the present day is restoring the sustainability of our world [1]. As illustrated in the Brundtland Commission's Report definition of sustainability or sustainable development [15], organizations that apply sustainable practices profit in terms of reputation [16]. Following that, the Triple Bottom Line of Sustainability was developed, which established the concept that corporate aims were inextricably linked to the societal and environmental contexts in which they operated [17]. The three-pillar model of the environment, economy, and society has traditionally been used to represent sustainability [18]. The "three pillars" framework for sustainable development has gained significant traction in the literature, often balancing competing aims within these three categories. However, this concept has not been theoretically developed, making it challenging to understand its origins. The strategy has been promoted as a "shared vision" for sustainable development since 2001, but it is not universal. Other foundations, such as institutional, cultural, and technical, are considered by some studies. Some theories avoid sustainability silos altogether by focusing on broader systems. Researchers and experts suggest that an organization's ability to thrive must be based on balancing multiple areas, including physical, institutional, administrative/executive, political, cultural, and technological dimensions.

2.2 Organizational Resilience

The organizational climate has become increasingly complex and volatile due to globalization and economic activity internationalization [19]. Major corporate crises are now a normal part of every organization, threatening their existence and future growth [20,21]. Resilient organizations thrive in today's competitive environment despite constant change and uncertainty [22,23]. The concept of resilience, crucial for an organization's survival in turbulent, chaotic, and unexpected circumstances, is receiving significant attention from academics [24]. Research into organizational crisis with a focus on organizational resilience is crucial, as it can add new insights and practical applications to existing literature on crisis management theory and provide practical suggestions for resolving crises in organizations already experiencing severe difficulties [25]. The roots of resilience remain a challenge, but scholars have provided a broad description of it. Resilience is the ability of a system to absorb and recover from disruptions, with its roots in the late 1960s and early 1970s fields of positive psychology, ecology, engineering, and physics [26]. Management scholars developed the concept of "organizational resilience" to address the rapid changes in the economic environment and competition. This concept refers to people's ability to withstand and bounce back from shocks. Resilience gained popularity in the late 1990s, with researchers focusing

on post-disaster resilience research, disaster analysis, organizational adaptability, information system resilience, healthcare systems, and supply chains [27–30]. Organizational resilience has also gained attention in psychology, with research focusing on psychologically healthy children in high-risk settings and their resilience in the face of adversity [31]. Resilience has been studied in various fields, including high-reliability organizations, crisis management, and disaster response [32–35]. Organizational resilience is a complex and multi-dimensional concept that can be understood from various perspectives, including capacity, functional, process, and outcome [36,37]. Researchers prefer static perspectives, which view resilience as the product of an organization's efforts rather than its purpose. Dynamic perspectives, on the other hand, focus on the capability and process aspects of resilience. The capability-based perspective focuses on an organization's ability to respond to and foresee future events, while the outcome-based approach emphasizes the condition of good adaptation during a crisis. The functionalist view emphasizes the ability of an organization to adjust to changes in its complex and ever-changing surroundings [38–41]. Three primary components contribute to an organization's resilience: functioning in a volatile context, adapting to a crisis by realigning resources, rearranging relationships, and streamlining procedures, and growing and rebounding. OrRES is described as the capacity of an organization to reorganize resources, optimize processes, reshape relationships, recover quickly from a crisis, and generate counter-trend growth during the crisis. Organizations that demonstrate resilience can not only recover but also thrive during times of adversity [42–45].

3 Methodology

A literature review (SLR) is a crucial process that advances knowledge based on previous discoveries. It synthesizes empirical data to address a research question, incorporating all published information and evaluating the validity of the evidence. Researchers must first recognize the knowledge boundary and acknowledge the extent of existing research. Significant literature is analyzed to identify gaps that need further investigation. The SLR technique seeks to understand how concepts emerged and adds significance to the study. To push the knowledge boundary, researchers must be aware of the scope and intensity of the current body of work, identifying any gaps that need further investigation. The [46] protocols for performing SLR are followed in this systematic review, providing evidence-based backing for the topic under inquiry. The current study used SLR to determine key variables of the correlation between OrRES and OrSUS, offering a framework incorporating these determinants. SLR allows for thorough evaluation of relevant material and uncovering previously undiscovered insights. The procedures taken to build the study's framework using SLR are depicted in Figure 1.

3.1 The Search Process

This research uses Scopus and Google Scholar databases to generate relevant documents for the analysis. Researchers from numerous disciplines commonly use these databases, particularly for management research [47]. The former is a freely available web search engine that indexes the full text or metadata of scholarly literature across a variety of publishing formats and disciplines [24], and the latter is the most comprehensive index of scholarly works, such as journal articles, books, and proceedings from conferences [47].

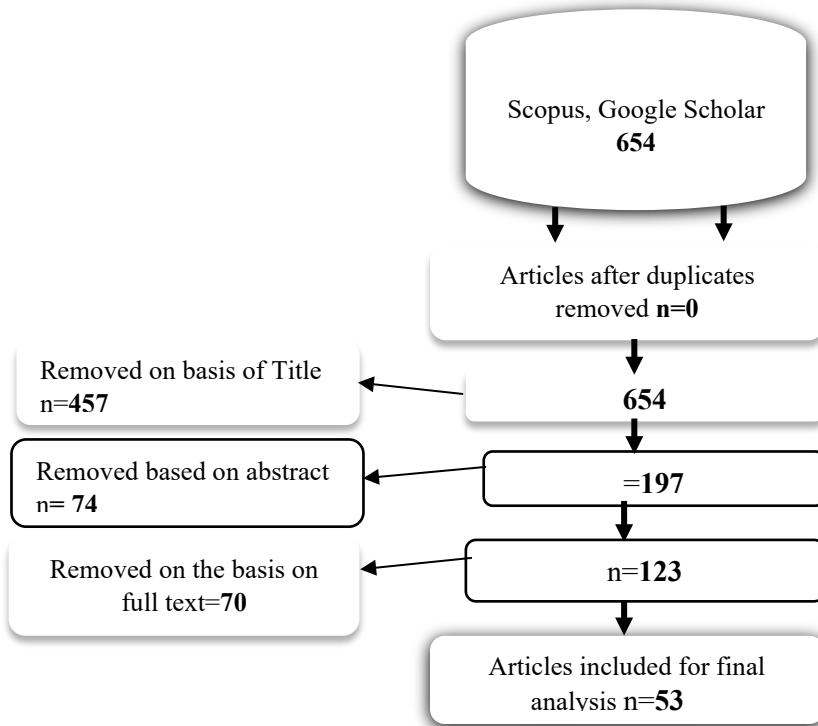


Fig 1. Systematic Literature Review Process

The study uses the Boolean operator "OR" to search for keywords "organizational resilience" or "organizational sustainability" and carefully selects articles that are significant enough for review. The number of OrRES and OrSUS studies has increased since 1998, driven by the need for organizations to make good decisions in the dynamic global environment. The literature was retrieved in October 2022, revealing 654 documents on these topics. The study examined duplicate data, excluding 457 contributions, and analyzed 197 documents, while 123 papers were subjected for full text scrutiny resulting to exclusions of additional 70 documents. The snowball method was used to investigate selected references and citations, resulting in 53 publications. To ensure consistency in the description of elements influencing organizational resilience and sustainability, the definitions and items used to measure factors were examined. The pool of publications used in the study was comparable in terms of research questions, goals, used frameworks, and conclusions. The alignment of these definitions and measurement was evaluated to ensure that the characteristics explored were substantially equivalent. The links between factors influencing organizational resilience and sustainability in many organizations were highlighted in the 53 papers included through the systematic literature review.

3.2 Quality Assessment

Clear objectives and conclusions and proper data collecting, and analytic procedures were used to further examine the quality of the papers chosen for the review. For example, if the goals were clear, a score of 1 is provided; if they were partially apparent a value of 0.5, and if they were not clear, a score of 0 is given. The quality evaluations were taken from [48] as well as [49]. Each article's overall score is obtained by summing the scores. The quality assessment findings are shown in Table 3.2 out of the 53 papers, 7 had received excellent ratings, while four received low ratings.

Table 1. Quality Scores of Accepted Papers

	Quality (Score)					Total
	Poor	Fair	Good	Very Good	Excellent	
% Of papers	<15%	<15%-45%	46%-65%	66% -85%	>86%	100%
Studies	4	11	19	12	7	53

3.3 Data Extraction

The reference management platform, Mendeley (<http://www.mendeley.com/>), was utilized to keep track of each article's references. The disciplines of study, methodologies, and theories employed were among the data retrieved.

4 Findings

The review explores various resilience factors that impact organizational sustainability. Papers like [50] assessed the impact of crisis anticipation, robustness, and recoverability on economic and social sustainability. [51] used a scale to investigate the relationship between organizational sustainability and resilience in higher education institutions in Turkey. [44] used robustness, redundancy, adequacy, and speediness. Strategic agility and digitalization were also used to measure the impact of sustainability on organizations. [25] examined the sustainability of six highly resilient firms, focusing on capital, strategy, cultural, relationship, and learning resilience. Other studies used agility, organizational learning, sensing, and anticipation, while planning ability and adaptability were used in two studies. Most studies used organizational learning and other dimensions to objectively measure resilience of organizations for sustainability.

Table 2. Studies on dimensions of organizational Sustainability identified in the literature.

Structure Type	Pillars	Source/No. of Articles	Context	Domain
1 Pillar	Social	(Magis, 2010; Manyena et al., 2008)	Roundtable FGD in USA & Zimbabwe	Forest Sustainability Rural Water Supply
	Environmental	(Meacham, 2016; Park et al., 2013; Ning et al., 2013; Folke & Gunderson, 2010)	12 Countries in Europe and Asia	Building Regulatory Bodies
	Economic	(Bansal & DesJardine, 2014)	USA	Business Firms
2 Pillars	Social and Environmental	(Xu et al. 2015; Hunt, 2009)		SLR

Structure Type	Pillars	Source/No. of Articles	Context	Domain
	Economic and Environmental	(Derissen et al., 2011)	Germany	Natural Capital Stocks
	Social and Economic	(Asprone & Manfredi, 2015; Domptail et al., 2013; Singh3, 2021)	India	4 industries
3 Pillars	Social, Environmental and Economic	(Hajishirzi et al., 2022; Negri et al., 2021; Zavala-Alcivar et al., 2020; Balugani et al., 2020; Purvis et al., 2019; Mensah, 2019; Irfan et al., 2018; Scalia et al., 2018; Jarzebski et al., 2016; Berkes & Ross, 2016; Saxena et al., 2016; Lew et al., 2016; Saunders & Becker, 2015; Lizarralde et al., 2015; Fiksel et al., 2014; Redman, 2014; Bocchini et al., 2014; Olsson et al., 2014; Anderies et al., 2013; Ahern, 2013; Ahi & Searcy, 2013; Akamani, 2012; Pierce et al., 2011; Ahern, 2011; Li & Yang, 2011; Avery & Bergsteiner, 2011; Ulanowicz et al., 2009; Chapin et al., 2009; Seager, 2008; Blackmore & Plant, 2008; Milman & Short, 2008)	US, Europe and Asia	Mostly Private sectors
4 Pillars	Social, Environmental, Economic and Cultural-Historical	[93]		Model Development
	Social, Environmental, Economic, and Institutional	(Rahimi et al., 2020)	Iran	Beekeeping Industry
		(Qtaishat et al., 2020; Armindo et al., 2019)	Jordan & Portugal	Housing Development Project

Structure Type	Pillars	Source/No. of Articles	Context	Domain
	Social, Environmental, Economic and Cultural			& Metal Industry
	Economic, Environmental, Social-Cultural, and Institutional	Asmelash & Kumar, 2019	Ethiopia	Tourism Industry
5 Pillars	Social, Environmental, Economic, Cultural and Administrative	(Sezen-Gültekin & Argon, 2020)	Turkey	Sakarya University
	Social, Environmental, Economic, Cultural and Executive	(Sezen-Gültekin & Argon, 2020)	Turkey	Higher Education Institutions

On the other hand, [99] looked at the relationship between resilience and sustainability and identified absorptive capacity, adaptive capacity, and transformative capacity as the major components of resilience towards addressing urban vulnerability which is the surest way to the long-term advantage of sustainability. In addition, the terms sustainability and resilience can be used interchangeably in certain contexts. Similarly, resilience is, however, considered as a major element of wider sustainability goals. Accordingly, [100] investigated the five dimensions of resilience (physical resilience, structure and setting resilience, organizational resilience, economic resilience, and legal resilience) and were proposed as a risk-based approach for informing the enhancement of sustainable infrastructure resilience and potential resilience implications from the perspective of emergency services. The study has also found that various researchers viewed organizational resilience using different antecedents or predictors as shown in Table 4.2 below:

Table 3. Studies on antecedents of organizational resilience identified in the literature

Cluster Type	Antecedent(s) of Organizational Resilience	Source (No. of Papers)	Context	Research Domain
7 antecedents	Flexibility, velocity, market adaptation,	Mari et al., 2014 (1)	Pakistan	Garment industries

	redundancy, contingency planning, technology, shared information			
6 antecedents	Flexibility, redundancy, shared information, trust, leadership, innovation	Ramirez-Peña et al., 2020 (2)	Spain	Shipbuilding company
4 antecedents	Flexibility, redundancy, robustness, and leadership	Hosseini-Motlagh et al., 2020 (1)	Iran	Wheat production company
	Flexibility, redundancy, robustness, and contingency planning	Fahimnia et al., 2016 (1)	Australia	Sportswear Clothing Company
	Flexibility, redundancy, shared information, and market adaptation	V. de Souza et al., 2019 (1)	1	
	Flexibility, shared information, visibility, velocity	Collier et al. 2017; Zahiri et al. 2017 (2)	France	Aviation Industry, Afghanistan & Pharmaceutical Industry
3 antecedents	Adaptive Capacity, Absorptive Capacity and Transformative Capacity	(Zeng et al., 2022) (1)	1	SLR
	Anticipation, Robustness and Recoverability	Singh ³ , 2021 (1)	India	4 industries
	Resilience, Adaptation, and Coping Strategy	Bahta & Myeki, 2021 (1)	South Africa	Livestock sector
	Robustness, Agility, and Integrity	Sezen-Gültekin et al., 2020 (1)	Turkey	188 companies

	Flexibility, shared information, visibility	Mari et al., 2016 (1)	Pakistan, India, China, and Bangladesh	Garment industries
	Survival, Adaptation, and Innovation	Dahles, 2018 (1)	Indonesia	Tourism sector
2 antecedents	Robustness, Flexibility	(Owida et al., 2022) (1)	UAE	Food & beverage Factory
	Resilience and Digital-Transformation	Hajishirzi et al., 2022 (1)	Iran	Iranian Companies
	Relational Resilience, and Operational Resilience	Yllmaz Borekci et al., 2021 (1)	Turkey	Manufacturing & Service Organizations
	Redundancy and contingency planning	Kaur et al., 2020 (1)	India	Procurement sector
	Flexibility, redundancy	Salman Habib et al., 2019; Ramezankhani et al., 2018; Govindan et al., 2015 (3)	Pakistan in Portugal and Iran	Cement Kilns Corporation Automotive Industry Automotive Industry in Portugal
	Robustness, redundancy	Pavlov et al., 2019; Edgeman & Wu, 2016 (2)	Europe	Springboard Enterprise
	Adaptation and Innovation	Lew et al., 2016 (1)	Taiwan	Tourism Sector
	Resilience and Robustness	Domptail et al., 2013 (1)	Argentina, Namibia & Indonesia	Rangeland and Lake Systems
	Resilience and Efficiency	Li & Yang, 2011 (1)	China	River Basins
1 antecedent	Organisational Learning	Vihari et al., 2019; Gray & Jones, 2016 (2)	India and Wales	Pharmaceutical Companies in India & SMEs in Wales
	Dynamic Capabilities	Souza et al., 2017 (1)	Brazil	Manufacturing Industries
	Redundancy	Fahimnia et al., 2018 (1)	Australia	Clothing Company
	Resilience	Marlow et al., 2022; Metaxas & Psarropoulou, 2021; Winnard et al., 2018;		Urban Planning & Devt in USA,

		Golicic et al., 2017; Meacham, 2016; Jarzebski et al., 2016; Saxena et al., 2016; Ortiz-De-Mandojana & Bansal, 2016; Saunders & Becker, 2015; Asprone & Manfredi, 2015; Lizarralde et al., 2015; Olsson et al., 2014; Bocchini et al., 2014; Ning et al., 2013; Pierce et al., 2011; Derissen et al., 2011; Milman & Short, 2008; Manyena et al., 2008 (18)	USA, Others in Europe and Asia	industrial companies etc
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In another study tagged the “Indicators to assess organizational resilience – a review of empirical literature” [129] identified organizational awareness and adaptability as constructs of resilience while [130] used situational awareness, critical vulnerability management and adaptability as indicators of organizational resilience. Structural ability, cognitive ability, relational ability, and emotional ability were used as organizational resilience constructs in a study conducted by [131]. Robustness and flexibility also have positive impact on sustainability [121], while competitive advantage, data-driven business process innovation, customer engagement, and organizational resilience had a significant influence on sustainability [65]. Lastly, [108] identified resilience, adaptation and coping strategies as factors that positively impact the sustainability of livestock sector in South Africa, in addition operational and relational resilience were used to assess the organizational sustainability and survivability [113] while structural dependence, organizational capacity, and process continuity and found a significant effect on organizational culture and sustainability [132]. In line with foregoing, literature has provided some various connotations and structure of organizational resilience as a multi-dimensional and cross-level concept as shown in Table 3.

5 Problems/Challenges in Organizational Resilience and Sustainability

The study created by [133] identifies these underlying conflicting objectives and the trade-offs between them. This is why it is difficult to implement sustainability and resilience practices in organizations because they require, for instance, concentrating on efficiency (sustainable) or flexibility (resilient). The previous literature evaluations examined the resilience and sustainability criteria in organizations separately, despite their academic and practical applicability. By conducting a thorough study of resilient and sustainable organizations, this paper fills this gap [7]. It has also been made clear that there are several difficulties between the two conceptions that could prevent this integration (i.e., having different objectives, diverse methods for accomplishing their objectives, various perspectives on balance, and a concentration on varied values). Some resilience critics claim that resilience

does not always imply a desirable state or a normatively positive nature because a system can be extremely resilient without achieving sustainability objectives. For example, highly resilient systems can exist in states that lower social welfare, like repressive governments or contaminated water supplies [59]. The studies also point out several difficulties between sustainability and resilience that could prevent their integration [14]. These involve putting emphasis on various values, pursuing various goals, making various assumptions about what is normal, using various methods to achieve their aims, and various research focuses [74,134,135]. In addition, some critics of the resilience of social-ecological systems, such as [136] contend that resilience created by humans eventually fails for two reasons. First off, it decreases resilience by fixing social and economic systems in particular states and directions (such as those associated with market mechanisms, technological advancements, and governance practices). Secondly, it weakens the ability of the ecosystems that support the parts of the social and economic system to provide critical services to society and other people, such as freshwater supply and climate change [59,136].

To ensure that future generations' ability is not compromised in any way, for instance, in terms of the environment, the economy, or human health, organizational resilience is a fundamental component of sustainability [137]. Vulnerable groups or organizations will be particularly at risk from a lack of resilience, and these systems will eventually find it difficult to recover [138,139]. One of the significant challenges of the organizational resilience and organizational sustainability described in this SLR was it is difficulties in measuring complex network organization; interdependencies among environment; inter-organizational collaboration; connections between the environment and social organization; communications. Even though resilient people encounter stress, failures, and challenging emotions, they still draw on their resources and enlist the aid of their support networks to get through difficulties and conquer obstacles [138,139].

Although there are many reasons to combine resilience and sustainability, there is a delay because key decision-makers lack the awareness and incentive to do so as well as the technical, financial, and legal resources necessary to ensure that the necessary conditions are satisfied [140]. On the other hand, there is a substantial amount of data and information available globally that can be incorporated. When the government makes its spending plans, which because of problems like the recession, for example, focused on economic value rather than quality, it is time to ensure that the future work will be "balanced" by adhering to prerequisites of sustainability and resilience and to truly comprehend social value and importance [140]. There is an obvious need to better integrate these themes; but because it is unclear how to do so, practitioners have chosen to treat sustainability and resilience as separate topics. With the experience of turbulent mega-events, the rate at which the environment is changing, potential hazards, and the high susceptibility of many countries and organizations' vital structures and environments, adversities are now decidedly on the agenda of many nations and organizations. Moreover, the belief that these two still receive separate attention raises serious concerns because it goes against recommendations for integration made by, among others, the UN 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction, 2015–2030, and the Hyogo Framework for Action (HFA2005–2015). It also improves the possibility of inefficient budget spending because of risky and inappropriate allocation [7]. Adding the "resilience" component to the list of sustainability criteria will thus increase the difficulty of project planning (social, environmental, cultural, administrative, institutional, technological, and economic). Organizations must be viable and resilient enough to handle disruptions due to this mix.

Another potential issue is that the rules could be divided into four main categories based on "who can do what," including political, social, technical, and strategic planning. These four categories are tied to one another through a "action-reaction" process [7,14,140]. The initiative for change could begin from any specific angle, whether it be technical,

political, or social, to inform strategic planning, which is essential for creating the requisite techniques, benchmarks, and responses to technical and political for execution and enforcement, as well as inform social about the developing strategies. Although there are many obstacles, some of which are related to technological competence, resources, and psychology because of risk perception and prioritization, the procedure appears to be simple and uncomplicated. People, organizations, and even governments frequently prioritize their needs for greater effect and resource availability, which frequently leads to the disregard of hazards with lower pressure [74]. For instance, the risk of death from a traffic accident is greater than the risk from a natural disaster [141], so resources and attention will obviously be centered more on formulating laws and improving facilities in a way that lessens the effects of road crashes than on dealing with natural disasters.

Resilience and sustainability will likely become even more complex because of the integration. It can be seen as a change that involves numerous stakeholders, many of whom have various goals and priorities. As a result, the difficulty level of this change will increase. [142] emphasized the fact that communication between and among groups/parties can be difficult because of perceptions and standpoint. This suggests that there is a chance of people losing their willingness to work together and considering change as a laborious process. If integration is seen as a business case that would ultimately veer from its planned course, the situation could worsen. Environmental Management Systems (EMS) are business-based procedures, EMS reduced fragmentation and improved evidence for decision-makers [143]. As a result, the integration process must consider the numerous obstacles that must be carefully overcome. Some of these obstacles are plain to see, while many others are hidden.

6 Potential Research Opportunities on Organizational Resilience and Sustainability

Future study is essential to understanding how organizational resilience contributes to sustainability. Due to the nature of the study, there are several limitations. First, the review was limited to articles published or produced in English; it is unclear how the primary findings and conclusions would change if the sample frame had included articles in other languages or other document forms. Secondly, it is limited to original empirical studies and conceptual frameworks, systematic and bibliometric reviews indexed in Scopus and Google Scholar. Scopus is one of the best places to look for archival copies of scholarly papers, although it does not cover everything [144,145]. More databases like Web of Science, IEEE, EBSCO, and Dimensions could be used in future research. Consequently, the results presented so far have provided an insight that can be useful to the public administration and related research communities and practitioners. Nevertheless, there are future directions that are worth exploring. This section discusses and points out the limitations and potential areas for future research. From a theoretical standpoint, the findings could be representative of common occurrences. The studies addressing organizational resilience and organizational sustainability covered in this SLR primarily focused on the antecedents of organizational resilience (Table 3) by analyzing the number of studies over a certain period. Firstly, based on the dimensions of organizational sustainability (Table 2) mostly considered in the literature, this study found that most of the articles like [9,65,66] studied the three dimensions of sustainability or the triple-bottom-line (TBL) to understand organizational sustainability as a fundamental key to support organizations to achieved sustainable development goal, followed by studies like [93] and [94] that used four pillars i.e., the TBL plus either cultural, historical or institutional sustainability. However, only two studies like [59] and [62] employed five-dimensional combination of the TBL and cultural as well as administrative

and or executive sustainability [51]. Similarly, as depicted in Table 2 some scholars combine only two pillars e.g., social and environmental [59,60], economic and environmental [61], as well as economic and social [50,63,64]. Accordingly, social dimension alone has been studied by [52,53], environmental [54–57], and economic [58]. Secondly, the systematic literature review also showed that most of the studies in the area were conducted in the Western/advanced economies and some Asian countries [10,50,79,99,112,113,121,124,126,146,147] which, because of cultural and contextual variables, may not yield a result that can be generalized to other countries. Therefore, this calls for further study in African and other developing nations. In addition, despite the abundance of research, very few studies have studied the impact of organizational resilience on sustainability in public organizations, with the majority of studies focusing on companies in the private sector [44,129,148–150] as such, public sector is understudied. This opens a new opportunity that requires urgent attention from organizational research communities. Thirdly, most studies examine organizational resilience [151] or sustainability [152] as a distinct construct as such conducting a study that fills the gap by integrating the two constructs (resilience and sustainability) in single empirical research with goal of maintaining sustainable values while recovering from crises is desirable. Finally, some papers like [95] and [96] did not indicate the based theory in conducting their research. However, organizational scholars are expected to use existing behavioral organizational theories and methods to better understand this exciting domain in the context of public sector organizations. Although some researchers [54–57] provide their research findings with an environmental contribution as one of the most prevalent factors, this might be a stimulating way to combine other various organizational resilience for organizational sustainability. This study provides significant evidence for public sector players in developing countries, such as the civil servants of both federal, states and local governments, and academic communities. Organizational researchers should focus their efforts on other aspects of individual and group resilience behavior on organizational sustainability that are worth further investigation.

7 Conclusion

Concerns are emerging about the idea of combining sustainability with resilience to protect organizations against possible disasters as the concept of resilience is gaining importance in sustainable development. This study conducted a SLR using a Scopus and Google Scholar databases and explored articles on the connections between the notions of organizational resilience and sustainability, as well as the difficulties in creating an integrated framework that incorporates both. It is extremely difficult to propose a single framework that completely integrates the two ideas due to the complexity of the concerns of resilience and sustainability in the unstable global environment, as well as the discrepancies in their definitions, methodologies, and domains of applicability. Obviously, there is no one method that works for everyone when it comes to integrating resilience criteria into the sustainability agenda. Based on the location, climate, and types of crises/hazards to which the context is exposed, the combined framework needs to be modified and customized to match the case-by-case nature of organizations. Various stakeholders must be actively always involved in the integration process. Additionally, as certain systems are not originally built to incorporate specific resilience antecedents, one cannot simply dive into the sustainability assessment frameworks without first looking for suitable antecedents of resilience. Therefore, practitioners must create new structures, or a thorough change of current systems, for

organizational resilience and sustainability systems to be integrated for sustainable development of organizations.

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