Review

Integrative Review of Absorptive Capacity's Role in Fostering Organizational Resilience and Research Agenda

Nay Chi Khin Khin Oo [1] and Sirisuhk Rakthin [2,*]

1 College of Management, Mahidol University, Bangkok 10400, Thailand
2 Center for Research on Sustainable Leadership, College of Management, Mahidol University, Bangkok 10400, Thailand
* Correspondence: sirisuhk.rak@mahidol.ac.th

Abstract: Organizational resilience (OR) has been studied as an important construct for maintaining an organization's sustainability in today's dynamic business world. However, the exact way to systematically achieve OR in real organizational settings is still unknown. In this paper, the scholars elucidate how OR can be fostered by developing knowledge absorptive capacity based on the knowledge-based view and dynamic capability theory. The paper highlights the significance of knowledge resources for a firm's survival nowadays and provides conceptual clarity of how a firm's ACAP could reinforce fostering OR. Thereby, this review fills the knowledge gaps of previous studies. Based on the review corpus, scholars also address other prominent antecedents for nurturing OR, such as leadership styles, dynamic capabilities, organizational learning, unlearning, networks, and social capital. Lastly, a conceptual model was developed for future organizational studies. In addition to the aforementioned contributions, the study's novelty also lies in the review method, which is systematically conducted in an integrated manner by combining a bibliometric analysis and a scoping review. Furthermore, the study analyzes a more expansive database that includes 823 documents and covers documents published more recently, from 1992 to 2021.

Keywords: organizational resilience; resilience; absorptive capacity; corporate sustainability

1. Introduction

In today's ever-changing business world, challenges and threats derived from uncertainties come without any prior notice. In addition, the world's economy has shifted to a knowledge economy saturated with knowledge-intensive businesses and occasional technological disruptions [1]. In this regard, proper knowledge management and knowledge resources are deemed to be crucial for an organization's sustainability nowadays. Unlike in the past, the intensity and range of threats materializing today are more severe and extensive [2]. Thus, it becomes more competitive and challenging to keep organizations sustainable. For instance, threats that have arisen in recent years include cyber security violations [3], terrorist attacks [4], natural disasters due to climate change [5], global economic crises [6], and unexpected catastrophes [7]. Consequently, organizations are continuously seeking effective ways of surviving and thriving in this dynamic, turbulent environment [8]. One solution that addresses this challenge is to enhance the organization's resilience [9]. But how can an organization achieve organizational resilience?

Although many scholars have studied OR, the exact way to systematically achieve OR in real organizational settings is still unknown [10]. In fact, numerous studies have highlighted the roles that knowledge management and dynamic capabilities could play in building resilient organizations [11,12]. This literature has identified the absorptive capacity concept, a knowledge-based dynamic capability, as a relevant factor to consider for nurturing organizational resilience. However, several scholars have proposed that the concepts of absorptive capacity (ACAP) and organizational resilience (OR) are similar, and their

relationship needs to be addressed more explicitly in the literature [13,14]. Nevertheless, no study we have reviewed so far provides an explication of these two constructs jointly. Therefore, using an integrative review method, this review contributes to the literature by providing a conceptual clarity of how a firm's ACAP could reinforce fostering OR along with other prominent antecedents, such as leadership styles, dynamic capabilities, organizational learning, unlearning, networks, and social capital.

Zahra and George [15] explained that ACAP refers to a firm's ability to acquire, assimilate, transform, and exploit new external knowledge to achieve competitive advantages and superior performances. Lengnick-Hall, Beck, and Lengnick-Hall [16] defined OR as the ability "to effectively absorb, develop situation-specific responses to and ultimately engage in transformative activities to capitalize on disruptive surprises" (p. 244). Based on these two definitions, Hillmann and Guenther [13] conclude that ACAP seems to be a protective factor that mitigates adversity and is evidently linked to OR. In addition, ACAP has been widely considered a prominent concept for firms' long-term survival and competitiveness under the knowledge-based view [17] and dynamic capability theory [18]. Empirical studies further conclude that ACAP also encourages innovation within firms [19–21], which is evidently essential for making organizations resilient in dynamic environments [22–24]. Thus, understanding the significance of the ACAP and OR relationship would benefit both organizations and academic literature.

Over the past decade, several research reviews have sought to conceptualize and analyze the literature on OR. For example, Hillmann and Guenther [13] analyzed 176 documents from Business Source Complete (EBSCO) and ISI Web of Knowledge's Social Sciences Citation Index (SSCI). The scholars reviewed previous OR conceptualizations and provided a more parsimonious definition with a conceptual model. They defined OR as "the ability of an organization to maintain functions and recover fast from adversity by mobilizing and accessing the resources" [13] (p. 31). They also highlighted a firm's resilient behavior, resources, and capabilities as the main factors determining OR in the conceptual model.

Williams et al. [2] developed a framework for OR by integrating crisis management and resilience literature in their review. The review was conducted by analyzing 384 articles from mainstream management and crisis management journals and manually exploring high-impact articles that may have fallen outside the initial search. The scholars suggested a more expansive configuration for OR pertaining to resource endowments, organizing practices, and postcrisis responses. Additionally, they suggested a resilience feedback loop in their review.

In the review by Linnenluecke [25], influential publications and five schools of thought in resilience research, (1) organizational responses to external threats, (2) design principles that reduce supply chain disruptions as well as vulnerabilities, (3) the adaptability of business models, (4) organizational reliability, and (5) employee strengths, were identified. The scholars analyzed 339 papers published from 1977 to 2014 in business and management journals by using Histcite-analysis. The review focused on the resilience concept evolution in business and management literature over time.

Unlike the previous reviews, this review focuses on identifying OR antecedents, mainly focusing on the role played by the ACAP, as found in dynamic capability and knowledge management literature. This review analyzes a more expansive database that includes 823 documents and covers documents published more recently, from 1992 to 2021. In addition, an OR conceptual model is developed for future research studies. The novelty of the current review also lies in the review method, which is systematically conducted in an integrated manner by combining a bibliometric analysis [26] and a scoping review [27]. Considering previously addressed knowledge gaps, the author has framed three research questions.

(1) What is the intellectual structure of OR research in business and management literature?
(2) What are the key theoretical as well as empirical findings in OR research, and what do empirical studies suggest about how ACAP contributes to OR?
(3) What is the conceptual relationship between ACAP and OR?

The scholar utilizes 823 documents from the Scopus database to conduct a bibliometric analysis and identifies five schools of thought, (1) organizational resilience under resource-based view and strategic management perspectives, (2) organizational resilience in disaster management, (3) resilience under organizational behavior perspectives, (4) resilience management in social-ecological systems, and (5) resilience engineering and system safety. Following the bibliometric analysis, a scoping review with 62 relevant documents from the review database is conducted to understand the landscape of OR in relation to ACAP. By clarifying the conceptual relationship of these two constructs, this review will contribute to both theory development as well as research and practice. Theory development and research will be advanced by identifying a more refined conceptual model which can be used for future OR studies. The review also has the potential for contributing to practice by highlighting knowledge-based capability that can enhance OR through building ACAP.

The remainder of this paper is organized into three main parts. The review method is discussed in the next section. After delineating the review methods employed in this paper, the results and findings of the study are reported in the following section. Lastly, inferences from findings and conceptual model development are conferred in the discussion section.

2. Method of Review

The author employed the integrative review method in the current study since this review method allows for the inclusion of diverse research methodologies, such as experimental and non-experimental research, to provide a more clear understanding of a specific phenomenon [28]. The current integrative review consists of two methods. First, bibliometric analysis was conducted to identify the intellectual structure of OR research in business and management literature. Second, a scoping review of OR was carried out by focusing on the selected school of thought which could explain the relationship between ACAP and OR. This section will outline the research methods employed in the present review.

2.1. Bibliometric Analysis

The scholar employed bibliometric analysis using VOSviewer software (version 1.6.17) to answer the first research question, which is to identify the main research streams in OR research. Bibliometric analysis is a quantitative approach that utilizes publication data (such as sources, authors, citations, and keywords) to provide the trends and highlights in the knowledge base of a specific field. Zupic and Čater [26] explain that bibliometric review provides a non-biased, empirically-grounded approach that analyzes a body of knowledge in a systematic, transparent, and reproducible manner. Similarly, bibliometric analysis benefits researchers in constructing their theoretical backgrounds, such as the systematization of particular information (i.e., articles, journals, researchers, institutions, and countries), understanding of a specific field as well as the networks formed in the subject, therefore, it is deemed to be a reliable method for various research areas [29–31].

Despite the different types of bibliometric analysis methods, this review used author co-citation analysis to identify the intellectual structure of OR research in management literature. In the author co-citation analysis method, the contents of two authors are assumed to be similar or related if they are frequently cited together [26]. Thus, this analysis has been used to evaluate the relationship among authors contributing to a field of study to identify the intellectual structure in that field [32]. VOSviewer software tracks the frequency with which two authors appeared in the same reference lists of the review articles [32] for analyzing author co-citation data. The software could also provide an author co-citation map for visualizing the relatedness of authors in clusters and revealing the main research streams of OR publications in management literature.

Identification of Sources for Bibliometric Review

The Scopus online data repository was chosen for collecting the documents since it has broad coverage across different fields of study, such as management and education [33]. This review follows the Preferred Reporting Items for Systematic Reviews

and Meta-Analyses (PRISMA) flowchart [34]. The searched string, "organi*ational resilience" or "business resilience" or "management resilience" or "corporate resilience" or "enterprise resilience" or "industry resilience" or "resilient organi*ation", was used to conduct a keyword-based search for finding OR research publications in business and management literature.

The initial search yielded 1355 documents published from 1992 to 2021. After limiting the document types to English reviews and articles only, 486 documents were removed from the database. The author went through the abstracts of the remaining 869 papers to evaluate the document eligibility. Consequently, 46 documents were removed due to topical irrelevancy, and the final review corpus for bibliometric analysis included 823 documents published between 1992 and 2021.

After identifying the eligible sources from Scopus, the bibliographic data were exported to Microsoft Excel for storage and descriptive analysis. The exported data were cleaned by eliminating the alternative expressions of the same data terms using a 'thesaurus' file [35]. For example, an author's names 'barney, j.' and 'barney, j.b.' are assumed as the same author, thus, replacing 'barney, j.' with 'barney, j.b.' in the thesaurus file. The scholar further conducted author co-citation analysis with the cleaned data set in VOSveiwer software.
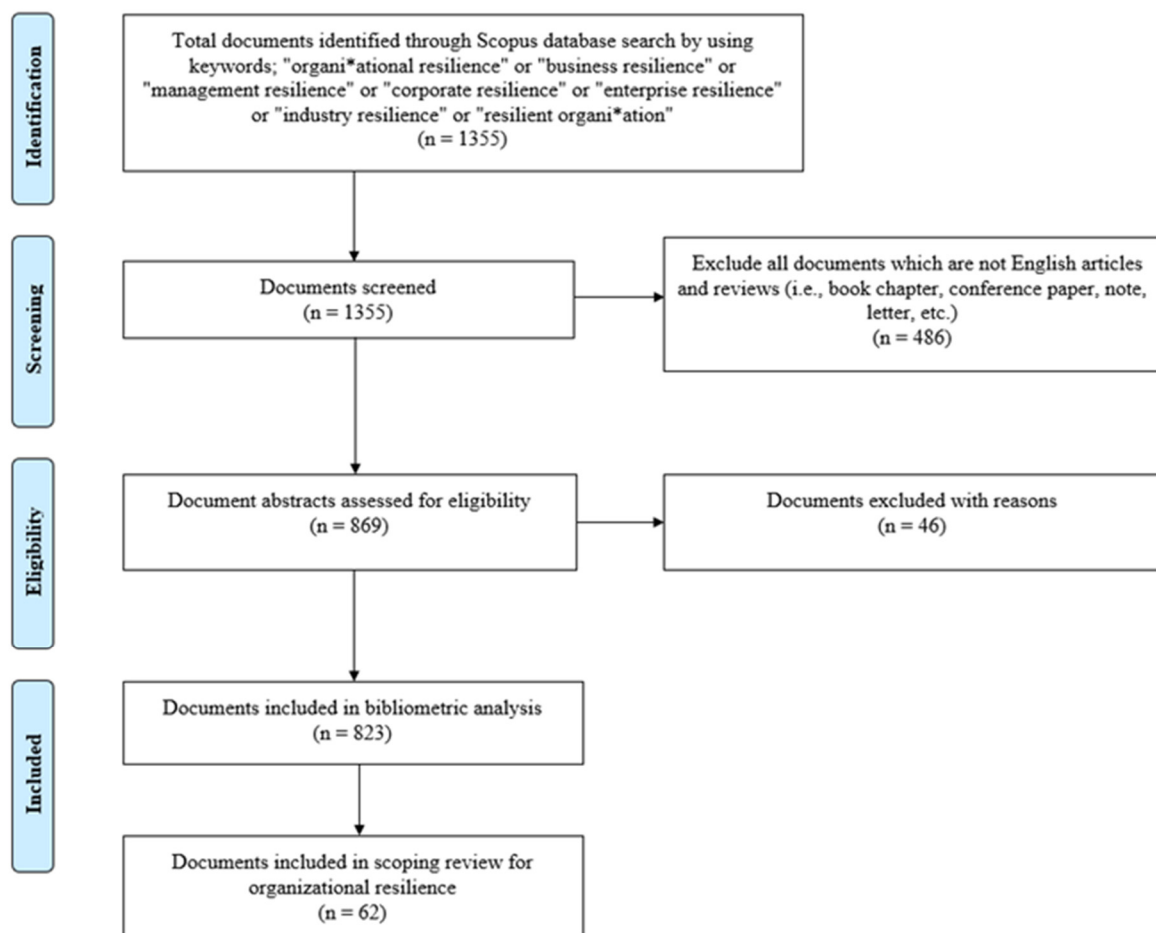
2.2. Scoping Review

Following the bibliometric review, a scoping review was conducted to provide a deeper understanding of OR in relation to ACAP. Grimshaw [36] defined scoping reviews as "exploratory projects that systematically map the literature available on a topic, identifying key concepts, theories, sources of evidence, and gaps in the research" (p. 34). In this study, the scoping review method was employed to map the literature and examine OR key concepts and empirical findings in relation to ACAP. The scholar scoped down the literature into 'organizational resilience under resource-based view and strategic management perspectives', which is one school of thought identified from the bibliometric analysis.

The scoping review of this paper follows the framework of Levac, Coquhoun, and O'Brien [27], which includes the research question identification, relevant data selection, data extraction, synthesizing and summarizing results, and presenting results. This review will answer two out of three research questions mentioned in the introduction.

(2) What are the key theoretical as well as empirical findings in OR research, and what do empirical studies suggest about how ACAP contributes to OR?
(3) What is the conceptual relationship between ACAP and OR?

Identification of Sources for Scoping Review

Since this review emphasizes the conceptual relationship of ACAP and OR, the scholar selected the sources for scoping review by focusing specifically on the knowledge-based view and dynamic capability theory in the chosen school of thought, 'organizational resilience under resource-based view and strategic management perspectives'. All documents identified in the bibliometric review that focused explicitly on the aforementioned scope were compiled and extracted from the review database. In addition, the relevant articles authored by scholars located in the selected school of thought were also retrieved from the reference lists of selected publications. Publications without full-paper access and irrelevant articles were eliminated. The final scoping review corpus includes 62 papers (Figure 1).

Figure 1. PRISMA flow chart for bibliometric analysis and scoping review of organizational resilience in management literature.

3. Results

This section reports the results from the current integrative review according to the research questions.

3.1. Intellectual Structure of Organizational Resilience Research

An author co-citation analysis was conducted to identify the intellectual structure of OR research in business and management literature. Through author co-citation analysis, five research streams emerged from the intellectual structure of OR research. Further, they are visualized as clusters on the author co-citation map exported from VOSviewer software. These research streams include (1) organizational resilience under resource-based view and strategic management perspectives, (2) organizational resilience in disaster management, (3) resilience under organizational behavior perspectives, (4) resilience management in social-ecological systems, and (5) resilience engineering and system safety. According to White and McCain [37], these schools of thought are the intellectual pillars of emerging literature in respective fields of study, which is the OR in business and management literature in this case (Figure 2).
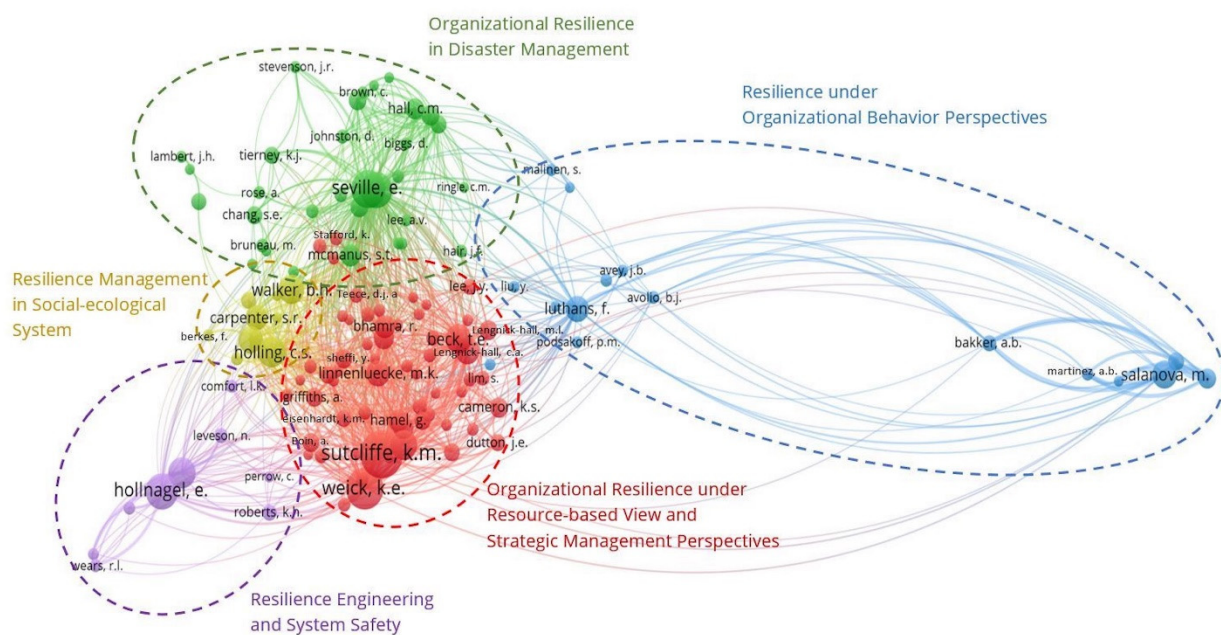
Figure 2. Author Co-Citation Map of organizational resilience in business and management literature published between 1992 and 2021 using the threshold of 43 citations per author and a display of 126 authors.

The red cluster is the largest school of thought, and it contains authors mapping the domain of Organizational Resilience under Resource-Based View and Strategic Management Perspectives in the literature. This research stream is led by Sutcliffe, K.M. (474 co-citations), Weick, K.E. (390 co-citations), Vogus, T.J. (216 co-citations), Beck, T.E. (212 co-citations), and Lengnick-Hall, C.A. (188 co-citations). The authors from this school of thought have conceptualized resilience pertaining to uncertainties, crises, and dynamic environments in organizational settings [9,38,39] and studied leadership [40,41], innovation, and entrepreneurship [42,43], as well as applications of different strategic resources, such as human resources [16,44] and intellectual or knowledge-based resources [45,46].

In this cluster, sensemaking and mindfulness [47,48] are also underlined as other organizations' abilities to overcome unexpected events successfully. The scholars also highlight the prominence of dynamic capabilities, which allows firms to integrate, construct, and reconfigure external and internal resources to survive in a rapidly changing business environment [49]. In this research stream, OR has been explained from different business management disciplines, i.e., supply chain management [50], human resource management [16], strategic management [13], and marketing [51].

The green cluster is the second largest research stream, and it includes authors mapping the terrain of Organizational Resilience in Disaster Management. This research stream is led by Seville, E. (331 co-citations), Vargo, J. (292 co-citations), Mcmanus, S.T. (135 co-citations), Hall, C.M. (121 co-citations), and Ritchie, B.W. (113 co-citations). The authors located in this school of thought have published on OR pertinent to disasters and natural hazards [52,53], disaster resilience [54,55], disaster recovery [56], crisis management for tourism [57], and sustainable tourism [58].

The blue cluster is the third largest school of thought, and it comprises authors from the domain of Resilience under Organizational Behavior Perspectives in business management literature. This research stream is led by Salanova, M. (202 co-citations), Luthans, F. (176 co-citations), Llorens, S. (115 co-citations), Schaufeli, W.B. (92 co-citations), and Bakker, A.B. (80 co-citations). The scholars in this cluster focus on work engagement and burnout [59,60], psychological capital [61], job demand and job resources [62,63], organizational stress [64,65], and employee resilience [66,67].

The yellow cluster is one of the smallest clusters. The authors in this cluster map the domain of Resilience Management in Social–Ecological Systems in business management literature. This research stream is led by Holling, C.S. (234 co-citations), Walker, B.H. (210 co-citations), Folke, C. (188 co-citations), Carpenter, S.R. (164 co-citations), and Adger, W.N. (84 co-citations). This cluster highlights the origin of the resilience concept. The resilience concept originated from ecology [68] and was later applied in different disciplines, i.e., psychology, material science, organizational management, etc. The scholars from this research stream conceptualized resilience from ecological system perspectives [68,69].

The second smallest school of thought is Resilience Engineering and System Safety in the purple cluster. This research stream is led by Hollnagel, E. (295 co-citations), Woods, D.D. (233 co-citations), Roberts, K.H. (78 co-citations), Leveson, N. (74 co-citations), and Comfort, L.K. (60 co-citations). The studies in this domain are concentrated on publications pertinent to system safety [70], resilience engineering [71,72], complex system [73], software safety [74,75], cognitive system engineering [76,77], and human error [78,79].

3.2. Organizational Resilience Concept

The resilience concept originated from ecology in the 1960s and early 1970s through studies of interacting populations, such as functional responses of predators and prey, regarding ecological stability theory [68,80,81]. It was later applied in different disciplines, such as psychology [82], material science [83], management [84], etc. The term resilience was first used in management literature by Meyer [85]. In his research, Meyer [85] examined the organizational adaptation to environmental jolt, and it became the conceptual origin of resilience in this field. This concept has recently gained increasing attention in organization and management literature [86]. Studies have been conducted about rare events [87,88], surprises [89], catastrophes [90], or crises [91]. In addition, research in OR literature is fragmented across different schools of thought [25]. The definitions of OR differ according to the context of studies, and it can be considered an umbrella construct as it is broad and encompasses diverse themes or phenomena [10]. In this paper, the conceptualizations and definitions of OR are reported as found in the current review corpus.

The concept of OR is fuzzy and has been defined in various ways, i.e., as an outcome, capacity, capability, characteristic, strategy, behavior, performance, or process [13]. However, this paper picks up the three most popular conceptualizations of OR from the literature. These conceptualizations are (1) OR as an outcome, (2) OR as a capacity or capability, and (3) OR as a process.

Most past studies conceptualized OR as an outcome. Those studies focus specifically on factors and antecedents that distinguish resilient organizations from less resilient ones [10]. In this perspective, the construct is often defined as a firm's ability to recover from adverse situations [2]. This group of studies underlines the possible firms' factors to facilitate resilience in organizations. Some significant factors are redundancies [92], adequate resources [93], positive relationships [93], and collective behaviors in organizations [94]. Although these studies provide fruitful insights into organizational factors or sources that seem important for organizations to respond effectively to adversity, they are retrospective and input-oriented rather than focusing on the elements of OR [10].

In contrast, some scholars explained OR as a capacity or capability [2,95]. Although several scholars argued that capacity and capability have disparities [14], the two terms seem to be applied interchangeably in the OR literature [13]. This group of studies is extremely heterogenous, as both static and dynamic views of OR can be found in these studies. Unlike outcome-based studies, this research stream explains OR elements and how OR can be acquired in organizations. A recent study by Duchek [10] conceptualized OR capabilities for different stages in the resilience process. The scholar combined capability and process approaches to develop a conceptual framework that could provide a holistic view of achieving OR in different resilience stages: anticipation before, coping during, and adaptation after unexpected events.

In most recent literature, OR was often conceptualized as a process that leads to resilient outcomes [2,86,96–98]. Sutcliffe and Vogus [98] are the pioneers of this conceptualization. They argued that superior outcomes alone are not substantial for defining OR. Scholars who follow this perspective distinguish different resilience stages based on the timeline of unexpected events [2,10,86,97,99]. Some studies in this process perspective underline the dynamic nature of OR as "an interaction between the organization and the environment" [2] (p. 20). In the subsequent section, the different definitions of OR are discussed.

3.3. Organizational Resilience Definitions

The earliest definitions of resilience found in organizational and managerial contexts mainly emphasize resisting and recovering from disruptions. However, the definitions vary across different disruptive events. For example, Home III and Orr [100] explained resilience as a firm's ability to respond productively to disruptions without lingering in long regressive behavior. Similarly, the construct was defined as a capacity to uphold or reinstate an acceptable functionality after perturbations by Robert et al. [101]. Linnenluecke, Griffiths, and Winn [97] defined OR as the capacity to absorb extreme weather impacts and recover from the situation. These definitions focus on the static nature of OR, which targets reacting and returning to the original state when adversities occur. Thus, the earliest descriptions of OR reflect the coping ability of firms. Coping with disruption is essential for organizations to survive when facing uncertainties, albeit organizations sometimes need to advance or adjust or change the existing structure (metamorphose) for a better fit in a new environment [16,102].

Hence, scholars considered another factor, transformation, or adaptation, in elucidating OR. Vogus and Sutcliffe [103] argued that an organization's positive adjustments resulted from challenges deemed to make the organization stronger and more resourceful, and maintaining these adjustments make the organization resilient [103]. Lengnick-Hall et al. [16] defined OR as an ability to effectively absorb the threatening disruptive surprises encountered by an organization, establish suitable responses, and undertake ultimate transformative activities to avail of the disruptions. This understanding of OR provides the dynamic property of the construct. For instance, Hamel and Välikangas [9] asserted that organizational strategies and business models need to be dynamically reconfigured according to changing situations. In the recent review of Kantabutra and Ketprapakorn [104], OR was defined as "an organizational capability that improves both organizational adaptability and organizational buffering capacity in response to abrupt environmental changes so that the organization bounces back and strengthens its current entity by dynamically reinventing itself for the future as the surrounding environmental changes" (p. 18).

Some scholars added anticipation of unexpected events as a capacity of OR in explicating the construct. Somers [105] stated that resilience is more than just surviving when encountering adversity; it involves potential risk identification and acting proactively to ensure that the organization thrives. Ortiz-de-Mandojana and Bansal [106] similarly described OR as an organization's incremental capacity to anticipate and adjust to the circumstance. Considering the active response and anticipation perspectives, Duchek [10] provides a more explicit definition of OR, the "ability to anticipate potential threats, to cope effectively with adverse events, and to adapt to changing conditions" (p. 220). In this review, the scholar follows the organizational resilience definition of Duchek [10] to explain the conceptual relationship between OR and ACAP.

3.4. Organizational Resilience Theoretical and Empirical Findings

OR is an overarching construct, and it has been studied in different contexts. Scholars noted that this construct is also context-specific [2,10,13]. Consequently, various types of antecedents or drivers were identified based on the context of studies in the literature. However, this paper highlights four important drivers and antecedents for fostering OR capability, as found in the current review corpus.

3.4.1. Leadership Styles

Due to the ubiquitous uncertainties, the rush to make a timely decision and execute appropriate responses by leaders is essential for every resilient organization [107] in the dynamic business environment. Additionally, de Oliveira Teixeira and Werther Jr [108] claimed that leadership is the combined force of an organization that establishes OR. Sheffi [109] also argued that a leadership's quality and the empowerment resulting from the leadership are important for adaptive organizational culture, which aids organizations in responding effectively during turmoil or adversity [110]. Thus, leadership is considered one of the most crucial drivers for building resilient organizations. Personal traits, actions, influence, patterns of interaction with others, responsibilities undertaken, and authority derived from a formal administrative position have traditionally been used to describe leadership [111]. In recent studies, leadership has been explained as a process that regulates a group of employees or followers to achieve a specific task or goal, and it impacts the actions and behaviors of others [112–114]. Several scholars have outlined the importance of leadership in crises and uncertain events [107], and it has been contended to be an important factor for organizations' success [115]. In the Tan Tock Seng Hospital in Singapore case study by Teo, Lee, and Lim [116], the scholars concluded that leadership and relational connections are critical to promoting OR during a crisis. The types of leadership behavior are also vital in shaping followers' attitudes and firms' performance in adverse situations [116].

Some scholars argued that during high uncertainty periods, charismatic leadership behavior, which communicates determination, and provides missions and visions while articulating high-performance expectations, is more predictive of organizational performance than transactional leadership behavior, which focuses on setting goals and tasks and ensuring compliance [117]. Baykal [110] proposed that an authentic leadership style, in which leaders emphasize constructing employees' self-efficacy by undertaking actions according to their convictions and confidences rather than resembling other idealized leaders, is an important driver for fostering OR in a rapidly changing environment. Transformational leadership, which motivates changes by providing inspiring visions and facilitates employees to overcome the discomfort of changes [118], has also been discussed as a driver of OR in several studies. According to Suryaningtyas, Sudiro, Eka, and Dodi [41], transformational leadership is assumed to make quick organizational system changes and adjustments to respond to alterations in the external environment. Odeh, Obeidat, Jaradat, and Alshurideh [40] also found the positive impact of transformational leadership on adaptive culture and a firm's resilience in their analysis of 309 Dubai service firms. Thus, different leadership styles and behaviors are evidently influenced in building OR.

Since different leadership styles evidently affect building OR, knowledge-oriented leadership is also expected to influence the organization's resiliency. Knowledge is considered one of the most valuable strategic resources that aids firms in achieving flexibility and adaptation to changes [15]. According to Donate and De Pablo [119], organizations need a blend of various leadership styles to effectively and efficiently manage knowledge. Thus, the scholars introduced a leadership style that integrates transformational and transactional leadership, along with motivational and communication factors, for better knowledge management in organizations. In other words, knowledge-oriented leadership employs two different leadership styles accordingly to situations. For example, transactional leadership is best used for institutionalizing, reinforcing, and refining existing knowledge, while transformational leadership is best used for challenging the current situation of the firm [120,121]. Many researchers later follow this leadership approach in their knowledge-based view studies [122,123]. In this review, the scholar refers to the understanding of Donate and De Pablo [119], who defined knowledge-oriented leadership as integration of transformational and transactional leadership, along with motivational and communication factors, for better knowledge management in organizations.

Knowledge-oriented leadership is often explained as how the management level shows an attitude, mindset, or action that encourages the activities of knowledge generation,

distribution, and exploitation in an organization [124,125]. Knowledge-oriented leaders encourage and appreciate employees' new ideas by teaching, demonstrating, rewarding them, and improving those ideas [125,126]. Furthermore, Naqshbandi and Jasimuddin [125] contended that knowledge-oriented leadership is meant for creating and promoting an organization's knowledge through various processes, such as improving learning experiences and enabling knowledge flow from external sources. According to Hamel and Prahalad [127], leaders who seek to cultivate OR establish explorations for external forces that may impact their organizations' future success. The aforementioned characteristics of knowledge-oriented leadership could facilitate the members of an organization to handle the knowledge acquired from external sources effectively. Thus, knowledge-oriented leadership is deemed to be a promising antecedent for building OR.

3.4.2. Dynamic Capabilities

According to Teece, Pisano, and Shuen [18], dynamic capability is an organization's ability to integrate, build, and restructure internal and external competencies to respond to the dynamic environment. Teece [128] proposed a dynamic capabilities framework by integrating innovation and strategy literature to highlight the critical management capabilities for maintaining superior firm performance in a rapidly changing business world. According to the scholar, the factors which encourage sensing problems, seizing opportunities, and transforming an organization's capabilities regarding the dynamic environment are the foundations of dynamic capabilities [128]. These factors include skills, methods, procedures, organizational structures, decision rules, and unique disciplines. Previous studies have noted that organizations could create, deploy, and protect intangible assets that provide superior long-term business performance by using dynamic capabilities [129]. In addition, Teece, Pereraf, and Leih [130] asserted that dynamic capabilities promote organizational agility. Strong dynamic capabilities are critical for firm growth and financial performance where the business environment is highly uncertain and turbulent [130].

Akpan, Johnny, and Sylva [131] recently studied the relationship between OR and dynamic capabilities by analyzing 11 Nigerian manufacturing firms. They examined the effects of two dynamic capability dimensions, i.e., sensing capability and reconfiguration capability, on OR capacity, which includes adaptability and agility. The positive effects of both dynamic capability dimensions on adaptability and agility were found. Additionally, Kurtz and Varvakis' [129] conceptual article outlines the role and prominence of dynamic capabilities for SMEs' adaptation and resilience to maintain competitive advantages in a rapidly changing environment. The scholars followed Pavlou and El Sawy's [132] dynamic capabilities model, which comprises four capabilities: sensing capability, learning capability, integrating capability, and coordinating capability. Further, they explained how each capability is associated with OR since the goal of both dynamic capabilities and OR is to maintain sustainable competitiveness in the long term [129]. Sensing capability refers to an ability to recognize crisis triggers; thus, it can help predict the crisis. Learning capability is considered an ability to promote knowledge creation and understanding; therefore, it enhances the ability to adapt to changes. Integrating capability means contributing individual knowledge to the group, enabling leaders to encourage employees to participate in strategic reconfigurations of organizations in a turbulent environment. Coordinating capability is an ability to aid the task assignment and resource allocation; hence, it encourages the effective allocations of available resources and the ability to track the obtained results. Thereby, each capability facilitates resilience in the organization. Based on this discussion, the author posits dynamic capabilities as important drivers for OR.

3.4.3. Organizational Learning and Unlearning

Organizational learning is another important driver for fostering OR. According to Odeh et al. [40], transforming into a learning organization is needed for uncovering hidden opportunities [133] to adapt and respond to firms' survival during sudden shocks [134]. Huber [135] explained that learning occurs when the range of an organization's potential

behavior is changed during information processing. Based on this understanding, Tsang and Zahra [136] claimed that information entered is transformed and potentially kept in organizational behaviors or routines. Learning is considered an important ability for an organization to reconfigure or adapt after a disruption [137]. Many studies have claimed that organizational learning is a capability that contributes to OR [98,138,139].

According to Sutcliffe and Vogus [98], learning is both an input and result of OR processes. As input, organizations employ previous crisis experience to handle current crises, and as an outcome, feedback from the crisis changes beliefs and practices for adapting to current and future crises [139]. The conceptual paper of Duchek [10] provides a more comprehensive explanation of the prominence of organizational learning in different resilience stages. The scholar argued that observing, identifying, and preparing for a crisis should be undertaken by the organization during the anticipation phase. Furthermore, organizations need to possess the ability to accept the problem and develop and implement solutions to cope with external challenges, Duchek [10]. Lastly, reflection upon the crisis experiences and learning from them to make advancements or organizational change for future crises are important in the adaptation phase after a disruption incidence. Thus, organizational learning seems to have an important role in every stage of the resilience process. Koronis and Ponis [140] proposed that the learning and knowledge absorptive ability of firms are assumed to increase firms' resilience performance. Additionally, Khan et al. [138] argued that learning is pertinent to experimentation in solution searching and association with the environment; therefore, the learning capability might positively influence nurturing and maintaining the resilience capability of organizations. Thereby, organizational learning is considered an antecedent of organizational resilience.

Unlearning in an organization is often seen as necessary for successful adaptation to external changes, encouraging organizational learning, and improving the firm's performance [136]. Tsang and Zahra [136] defined organizational unlearning as abolishing old routines in favor of new ones. According to Hedberg [141], as reality changes, knowledge expands and simultaneously becomes obsolete; thus, learning new knowledge and removing obsolete knowledge are essential for better understanding. Fiol and O'Connor [142] offered a more explicit unlearning definition which is the "intentional displacement of well-established patterns of action and understanding due to an exogenous disruption" [142] (p. 6). Scholars claim that unlearning helps to learn better, and vice versa. The aforementioned unlearning definitions describe the construct as a capability with ostensive aspects (i.e., understanding a routine cognitively and emotionally) and performative aspects (i.e., particular actions undertaken in the routine).

Starbuck [143] explained unlearning as a part of the process of coping with strong uncertainty and a precondition for learning by highlighting the possible unlearning process with no reconfiguration of new patterns. Orth and Schuldis [144] examined 244 employees from German and Austrian organizations to study the organization's learning and unlearning capability for resilience during COVID-19. Although the scholars found the positive effect of organizational learning on OR, they failed to prove the moderating effect of unlearning capability on the relationship between organizational learning and resilience. Unlearning was proposed as an antecedent of inevitable change and organizational learning in Wang's [139] model of OR and learning capabilities. According to Morais-Storz and Nguyen [145], unlearning capability along with learning is crucial for making an organization strategically resilient. Unlearning is assumed to have organizational-level effects [146], such as influencing organizational readiness for alterations [147] and affecting the organizational knowledge absorptive capacity [148]. In addition, following Koronis and Ponis' [140] idea, Evans, Cregan, and Wall [149] classified resilience into four domains, i.e., preparedness, responsiveness, adaptability, and learning, and they argued that all of these capabilities are positively affected by the unlearning ability of firms. Based on this discussion, the author highlights the unlearning capability as an antecedent of organizational resilience.

3.4.4. Networks and Social Capital

Another driver of OR is social capital which resides in relationships that are created through exchange and provide access to resources [150]. Relationships between an organization and different entities are crucial for the knowledge absorption process, which enables the organization to anticipate possible triggers before disruptions, cope with the situation during disruptions, and adapt the organization appropriately after disruptions. According to the social capital theory, relational networks are important for a business as they provide valuable resources through facilitating economic activities by sharing information, collaborating, and discovering novel ways to achieve competitive advantages [150–152]. Furthermore, Mzid, Khachlouf, and Soparnot [153] explained that trust between entities could remove blockades obstructing knowledge-sharing, open communication, continuous feedback, and long-term relationships. In addition, inter-organizational networks have been identified as one of the most important success factors in innovation implementation [154], which is essential for making an organization resilient [23,24]. For this review, the scholar follows the definition of Nahapiet and Ghoshal [150], who understand social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (p. 243).

Previous studies have highlighted the positive influence of networks and social capital on OR [153,155,156]. Jia et al. [155] studied the role of social capital on OR by examining 88 firms that were affected by the Sichuan earthquake. They followed the social structure perspectives and analyzed the effects of three social factors, i.e., structural capital, relational capital, and cognitive capital, on reactive and proactive dimensions of OR. However, their study only found the positive impacts of structural capital on proactive OR and relational capital on reactive OR. Similarly, Mzid et al. [153] investigated the role of social capital on family firm resilience in their interviews with four Tunisian family firms. Subsequently, scholars proposed that social capital affects not only on family firm's resilience but also the human capital and financial capital of the firm. Thus, social capital and networks are posited as the drivers of firms' resilience capability.

3.5. Key Theories in ACAP Literature and Relationship of ACAP and OR

In the resource-based view literature, ACAP is considered a valuable strategic capability, which is a path-dependent, firm-specific, and socially ingrained ability to create competitiveness through exploiting new external knowledge. In the early 1990s, organizational ACAP was claimed to depend on individual ACAP, not simply the combination of employees' individual ACAP. Later, it was considered a multilevel construct, and the lowest analysis level is the individual level, where the relationship between learning and ACAP is most evident [157]. Since ACAP can reinforce, supplement, or refocus a firm's knowledge base, developing as well as sustaining ACAP in a firm is vital for the firm's performance and long-term survival [158]. Lastly, ACAP is often described as a capability that enables firms to exploit new external knowledge and predict possible future technological advancement more precisely [159]. Different definitions of ACAP, key theories, as well as the conceptual relationship between ACAP and OR are discussed in the subsequent sections.

3.5.1. Definition of Absorptive Capacity

ACAP is first introduced by Cohen and Levinthal [160] as a firm's ability to recognize the value of external knowledge, assimilate, and exploit it for commercial gain. They emphasized firms' research and development (R&D) as a driver of ACAP. They addressed the characteristics of individuals' and organizations' cognitive structures and asserted that without past knowledge, organizations are unable to evaluate new information and, as a result, fail to absorb it. Although the conceptualization of Cohen and Levinthal [160] is used in many studies [161–163], several scholars have reconceptualized and redefined the construct throughout the past three decades.

Lane and Lubatkin [162] analyzed organizations' capacity to absorb knowledge from other organizations. Their approach is slightly different from the original conceptualization

of Cohen and Levinthal [160]. Cohen and Levinthal [160] conceptualized ACAP from the perspective of absorbing knowledge from a sector as a byproduct of a firm's R&D. However, Lane and Lubatkin [162] conceptualized the construct as relative ACAP, which is an ability of a (student or receiver) organization to value, assimilate, and apply knowledge derived from another (teacher or sender) organization.

In 2002, Zahra and George [15] reviewed the concept of ACAP and redefined ACAP as a dynamic capability. The new definition of Zahra and George [15] is that ACAP is a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge to generate a dynamic organizational capability. The ability to detect and obtain relevant external information is known as the acquisition ability; this involves weak signals sensing and early discontinuous change detection in the environment. Assimilation is referred to as an ability to analyze, construe, and comprehend the acquired information, as well as extrapolate relevant consequences. The assimilated information is needed to combine with existing knowledge through the transformation process. Transformation ability also allows firms to integrate two apparently incongruous information sets. The last domain, exploitation, is the ability to operationalize acquired and transformed knowledge for strategic purposes, such as mitigating or exploitative strategies development to ensure organizational effectiveness and survival for the long-term.

The scholars believe that the four dimensions of ACAP are complementary and combinative in nature. Furthermore, they regroup the four capabilities into realized absorptive capacity (RACAP) and potential absorptive capacity (PACAP). RACAP is composed of transformation capability and exploitation capability, while PACAP consists of knowledge acquisition and assimilation capabilities of ACAP. Zahra and George [15] also stated that ACAP is a dynamic capability related to knowledge creation and deploying the created knowledge to improve a firm's ability to achieve and sustain competitiveness.

However, in Zahra and George's [15] conceptualization, they omitted the "ability to recognize the value" (p. 128) part of the original definition of Cohen and Levinthal [160]. However, Todorova and Durisin [164] highlighted that capability to recognize the value of new external knowledge is important to absorb valuable knowledge. Todorova and Durisin [164] reintroduced the capability to recognize the value of new knowledge as a step before knowledge acquisition. The scholars redefined ACAP as the capability of recognizing the value, acquiring, assimilating, or transforming and exploiting the new knowledge. The scholars proposed that assimilation and transformation are alternative processes since the new knowledge that fits the existing cognitive structures does not require to be totally transformed but altered slightly to improve fit. In other words, firms transform the newly acquired knowledge when it is impossible to assimilate it. Additionally, the scholars proposed that information pieces organizations seek to absorb may circulate between assimilation and transformation processes before they successfully dissolve into the knowledge structures and are ready for firms' exploitation. In this paper, the scholar considers ACAP as a four-dimensional construct and defines it as an ability to acquire, assimilate, transform, and exploit new external knowledge for strategic purposes [15].

3.5.2. Key Theories in ACAP

ACAP has been explained under various theories in management literature. However, the author emphasizes two key theories, namely, the knowledge-based view and dynamic capability perspective, to underline the relevancy of ACAP.

Knowledge-based view (KBV) is derived from the resource-based view (RBV) theory of Barney [165]. RBV explains that the radical sources and drivers of organizations' competitive advantages and superior performances are related to the attributes of organizations' resources and capabilities which are valuable, rare, imperfectly imitable, and non-substitutable [165]. Under KBV, knowledge is regarded as the most important strategic resource, which implies creating and sustaining competitive advantages and implementing the strategies in organizational structure and systems [17]. The extant research studies in KBV contend that firms' success, competitiveness, and long-term survival in challenging

business environments mainly rely on firms' knowledge-based resources [119,166,167]. Organizational knowledge, especially tacit knowledge, is relatively more difficult to imitate or substitute than other types of resources.

KBV points out that knowledge is preserved by individuals, not by organizations, and can be garnered as either tacit or explicit knowledge [168]. Kogut and Zander [169] proposed that an organization is a knowledge-bearing entity that administers its knowledge-based resources by employing different dynamic capabilities to generate, transfer, and transform knowledge into competitive advantages. KBV of a firm generates a substantial amount of research growth in the field of organizational learning [170]. Globally, the paradigms for attaining firms' productivity change with the age of emerging technologies. The transition from manufacturing to services in many developed economies relies on manipulating information and knowledge, not on the application of physical products [171]. Unlike other tangible resources, knowledge can be used concurrently in different applications, yet its values do not diminish [172]. Thus, KBV has become an imperative theory for most modern organizations. From this perspective, ACAP, as a knowledge-based dynamic capability, is considered an important ability of a firm to absorb external knowledge, transform and exploit it for superior performance and sustain competitive advantages [15].

Another theory to highlight the relevancy of ACAP is the dynamic capability theory. Teece et al. [18] developed dynamic capability theory to elucidate how firms can compete and survive in dynamic business environments in which changes are rapid. This concept was also derived from RBV [165]. RBV argued that businesses need to have intangible and tangible assets that are valuable, rare, and difficult to imitate or substitute in order to compete successfully. However, in a highly dynamic environment, firms' resources alone are deemed unsubstantial [18]. Thus, Teece et al. [18] argued that ambitious firms might require the ability to redeploy resources and respond to threats quickly. The scholars defined dynamic capability as an organization's ability to combine, construct, and reconfigure external and internal organizational competencies to respond to the turbulent environment. They also asserted that key dynamic capability determinants are fostered in organizational routines and processes. In contrast, Eisenhardt and Martin [173] explained dynamic capabilities as organizational processes, such as integration, reconfiguration, gaining, and releasing resources, to match the changes in the market by utilizing resources. The scholars noted that these processes could cope with turbulence and create market changes.

According to Rugami and Evans [174], dynamic capabilities are assumed to create the flexibility of an organization to exploit its resources effectively to achieve harmony with its peculiar business environment. Furthermore, the dynamic capabilities perspective displays a company's potential to gain new types of competitive advantage by revitalizing its competencies, structure, and resources to harmonize with the ever-changing business environment [174]. ACAP is claimed to be a specific type of dynamic capability pertinent to learning in organizations [175]. Zahra and George [15] conceptualized ACAP as a dynamic capability comprising four organizational capabilities, i.e., knowledge acquisition, assimilation, transformation, and exploitation. Thus, ACAP as a dynamic capability is considered a relevant factor for organizational growth and long-term survival in a rapidly changing environment as it influences a firm's ability to create and deploy the knowledge necessary for building other organizational capabilities [15].

3.6. Conceptual Relationship of ACAP and Organizational Resilience

As we have previously mentioned, the world's economy has shifted to a knowledge economy that is saturated with knowledge-intensive businesses and occasional technological disruptions [1]. In this type of economy, businesses rely greatly on "intellectual capabilities than on physical inputs or natural resources, combined with efforts to integrate improvements in every stage of the production process" [1] (p. 201). Hence, knowledge is deemed to be one of the most important resources for a firm's growth and survival these days. Furthermore, developing general knowledge, technical facilities, and generalized control of resources is considered beneficial for preparation against inevitable jolts [176]. In

addition, several studies have contended that knowledge is important for making an organization resilient [10,86,177]. For instance, knowledge acquisition, especially from external sources, is important for predicting potential surprises; knowledge gained during crises aids in strategy development for coping during crises and adapting after crises. In this sense, nurturing firms' ACAP would contribute to managing these knowledge resources efficiently and achieving resiliency in dynamic environments.

Studies from supply-chain management literature also underline the significance of ACAP as an antecedent of supply-chain resilience. Gölgeci and Kuivalainen [178] asserted that ACAP is a boundary-spanning capability that facilitates productive interactions and partnerships between different organizational boundaries. The scholars contend that ACAP routines and processes are needed for transferring knowledge from partners to provide superior value to customers during environmental turbulences. Nagati and Rebolledo [179] claimed that although the ACAP concept refers explicitly to acquiring and assimilating external knowledge from outside sources, especially from inter-organizational relationships, it also reinforces learning processes inside the organization gained from previous experience and current behaviors. Additionally, Van Doorn et al. [180] posited that ACAP helps to comprehend unforeseen changes in actual time, allows recognition of repercussions of environmental jolts and possible opportunities from them, as well as provides knowledge mechanisms to mitigate the turmoil when it occurs. In this regard, ACAP, as a firm's knowledge-based dynamic capability, is posited for reinforcing the firm's knowledge management processes and strengthening the organizational resilience for the firm's sustainability.

Moreover, conceptual similarities between ACAP and OR have been highlighted by several scholars [13,14,16]. Lengnick-Hall et al. [16] defined OR as "a firm's ability to effectively absorb, develop situation-specific responses to, and ultimately engage in transformative activities to capitalize on disruptive surprises that potentially threaten organizational survival" (p. 244). They considered OR a collective construct and argued that it is embedded in a set of individual-level factors, such as knowledge, abilities, and organizational routines, which enable them to overcome the consequences of disruptions. Similarly, several scholars claim that resilience in an organizational context concerns an organization's ability to anticipate, absorb external disruptions, learn from them, and adapt to future challenges while still pursuing its core objectives [181,182]. These concepts of OR seem to overlap with the ACAP concept, which explains a firm's ability to absorb external knowledge, transform it, and use it for strategic purposes [15]. In the systematic review of Hillmann and Guenther [13], the ACAP concept was highlighted as a possible protective factor of OR, which mitigates the effect of uncertainties and disruption. The scholars also suggested distinguishing ACAP from OR concept for future study. Thus, this integrative review seeks to fill the knowledge gaps by distinguishing ACAP as a knowledge-based dynamic capability that enables organizations to achieve resilience capabilities regarding different resilience stages by exploiting external knowledge.

To distinguish ACAP from OR, this review follows Duchek [10]'s understanding of OR as "an ability to anticipate potential threats, to cope effectively with adverse events, and to adapt to changing conditions" (p. 220). Duchek [10] explained OR as a three-dimensional construct comprising anticipation, coping, and adaptation capabilities. The scholar combined the capability approach and process approach to explain how OR could be achieved in different resilience stages: anticipation before, coping during, and adaptation after unexpected events. The associations of ACAP with each resilience capability will be delineated in subsequent sections.

3.6.1. ACAP and Anticipation Capability

According to Somers [105], anticipation capability means an ability to recognize critical developments inside an organization or in its environment and react proactively. To survive in turbulent environments and cultivate future success, organizations often need to be able to handle the manifestations of unexpected events [10]. Organizations need anticipation

capability to avoid uncertainty or reduce the potential impacts of uncertainties [183]. Previous scholars have explained anticipation capability comprises internal and external development observations, critical changes as well as potential threats identifications, and preparations for uncertainty [10,96,105]. As ACAP determines a firm's ability to use the knowledge of future environmental conditions to make decisions [8], it could promote the anticipation capability of the firm. Additionally, ACAP broadens the reach of organizational learning by improving both recollection and application of existing knowledge, as well as the assimilation and acquisition of new information [160]. As a result, the more the firm can absorb and exploit knowledge, the more it will be able to anticipate and prepare to face uncertainty.

3.6.2. ACAP and Coping Capability

Another resilience capability is coping capability. The OR definition of Home III and Orr [100], who explained the construct as responding productively to significant change, reflects the coping capability towards disruptions. In other words, coping capability means an ability to resist destruction by effectively handling uncertainties [86]. According to the previous literature, coping capability comprises two abilities: accepting the problem and developing as well as implementing solutions [10,184,185]. Coping with changes [186] and continuous new knowledge development abilities [96] are keys to success in turbulent environments [187]. As the author discussed before, ACAP enables firms to realize the value of new external knowledge through acquiring and assimilating processes and transforming it for the firms' benefit [15]. Therefore, with ACAP, the organizations might be able to undergo better sensemaking which is "the ongoing retrospective development of plausible images" [48] (p. 409) that rationalize the current situation. Subsequently, the organizations will be able to accept the problem and develop solutions for coping as they realize the plausibility through sensemaking. Therefore, ACAP is proposed as a driver which encourages coping capability.

3.6.3. ACAP and Adaptation Capability

The last OR capability is adaptation capability. Limnios, Mazzarol, Ghadouani, and Schilizzi [188] defined adaptation as an ability to undertake organizational adjustments that lead to organizations' advancement after crises. Adaptation is often assumed to be long-term learning [183]. Reflection as well as learning abilities, and organizational change capabilities are the two components of adaptation capability, as these abilities help organizations avoid or minimize the negative impacts of unexpected events [10,189]. Kurtz and Varvakis [129] proposed that ACAP, as a dynamic learning capacity, is associated not only with knowledge creation ability and anticipation but also adaptation ability and organizational enhancement following the disruption. Several scholars claimed that organizations depend on external knowledge and ACAP to improve their performance and to ensure their survival as well as adaptation in a dynamic market [190]. Hence, firms need to acquire critical knowledge from external sources to foster adaptation capabilities. Extracting critical knowledge from external sources [191] without internal knowledge creations [192] is often difficult. Albeit, with ACAP, the firms can absorb external knowledge and combine it with existing internal knowledge to transform it for different applications. Additionally, the dynamic capability perspective elucidates ACAP as a capability that enables organizations to make continuous reconfigurations through knowledge accumulation and to respond more effectively and quickly to market alterations [190]. Therefore, the more an organization can absorb and exploit knowledge, the more it will be able to reflect, learn, and advance following disruptive situations.

3.6.4. ACAP as an Antecedent of Organizational Resilience

The relationship between ACAP and resilience has been highlighted in several recent papers. For instance, Morais-Storz et al. [8] proposed that the organizational legacy, including ACAP and adaptive capacity, are antecedents of strategic resilience. Additionally,

many studies from supply chain management literature have highlighted the relationship between ACAP and an organization's supply chain or operational resilience. For example, Roh et al. [46] analyzed the data from 205 managers and practitioners from different firms to study the influence of ACAP on low/high-impact resilience in organizations' supply chains. The positive impacts of ACAP on proactive and reactive dimensions of supply-chain resilience are also analyzed and discovered in the study of Cheng and Lu [193] regarding 297 senior managers of Taiwanese manufacturing firms. Considering ACAP as a boundary-spanning capability, Gölgeci and Kuivalainen [178] found a direct positive effect of ACAP on supply chain resilience and the partial mediation effect of ACAP on the relationship between social capital and supply chain resilience by studying 265 Turkish firms. Thus, ACAP evidently influences the resilience of organizations.

4. Conceptual Model Development

In this section, the author will discuss the inferences drawn from the review's findings and the conceptual framework development for future OR studies (Figure 3).
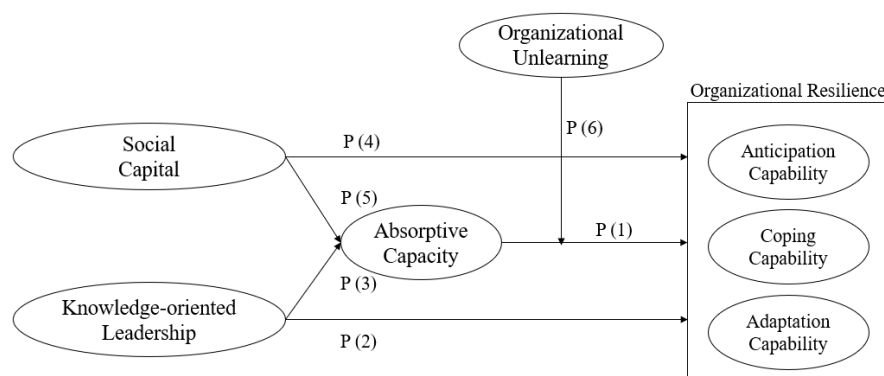
Figure 3. Conceptual model of organizational resilience.

4.1. ACAP to Organizational Resilience

In the previous section, the author discussed ACAP as a knowledge-based dynamic capability that enables organizations to achieve resilience capabilities regarding different stages through exploiting external knowledge. KBV of firms also highlights the importance of knowledge [169] and the crucial role of ACAP in establishing competitive advantages for short-term and long-term survival. Subsequently, many studies have underlined the importance of knowledge-based resources and capabilities to survive in a dynamic business environment [45,144,194]. Based on this literature, ACAP seems to be one of the main components for organizations' knowledge base development [195] and a relevant antecedent for OR. In addition, ACAP has been asserted as a pivotal factor for reducing uncertainties in organizations' supply chains as it closes the gap between available knowledge and required knowledge to handle supply chain risks in organizations [196] effectively. Additionally, many studies from supply chain management literature underline the positive relationship between ACAP and supply-chain or operational resilience of organizations [46,178,193]. This literature also brings the prominence of ACAP to light for fostering organizational resilience. The relevancy of ACAP in fostering OR could also be justified with the dynamic capability perspective. Since dynamic capabilities have been studied as important factors for fostering OR in several papers [43,129,131], ACAP, as a knowledge-based dynamic capability, is also expected to reinforce building OR capabilities. Thus, the following statement is proposed.

Proposition 1. *An organization's absorptive capacity (ACAP) positively influences fostering organizational resilience (OR) capabilities.*

4.2. Knowledge-Oriented Leadership, Absorptive Capacity, and Organizational Resilience

The importance of leadership during a crisis and uncertain events is previously delineated in this paper [107]. Teo et al. [116] also underlined the importance of leadership behavior types in determining organizational performance or followers' attitudes during a crisis. As different leadership styles and behaviors of organizations have evidently affected the cultivation of OR [40,117], knowledge-oriented leadership, as a combinative leadership style of transformational and transactional leadership, is also expected to influence organizations' resiliency. Furthermore, it is widely accepted that knowledge is considered one of the most valuable strategic resources that aids firms in achieving flexibility and adaptation to changes [15]. As knowledge-oriented leadership emphasizes how the management level shows an attitude, mindset, or action that encourages the activities of knowledge generation, allocation, and exploitation within an organization [124,125], it reinforces building organizations' resiliency. Hamel and Prahalad [127] contended that leaders who seek to cultivate OR establish explorations for external forces that may impact their organizations' future success. Through knowledge-oriented leadership, the leaders will create and promote an organization's knowledge through various processes, such as improving learning experiences and enabling knowledge flow from external sources [125]. Thus, organizations will be able to detect the possible triggers of threats and effectively handle the knowledge acquired from external sources. Additionally, OR capabilities require a lot of learning processes for different resilience stages. The knowledge-oriented leaders will facilitate those learning processes by motivating and communicating with the members of organizations. In this respect, knowledge-oriented leadership is posited to influence the firm's OR. Therefore, the author offers the following proposition.

Proposition 2. *Knowledge-oriented leadership positively influences fostering organizational resilience (OR) capabilities.*

Furthermore, several studies have shown that different leadership styles also impact an organization's ACAP [197,198]. For example, Flattern et al. [198] investigated 608 firms from Austria, Brazil, Germany, India, Singapore, and the USA to study the relationships between transformational leadership and transactional leadership on ACAP. The researchers considered ACAP as a two-dimensional (PACAP and RACAP) construct and proposed direct positive effects of transformational leadership on both dimensions as well as a direct effect of transactional leadership on RACAP. However, they posited that transactional leadership might have a negative impact on PACAP. Their study found a significant positive influence of transformational leadership on both dimensions of ACAP and the positive effect of transactional leadership on RACAP. Nevertheless, they did not find any significant negative impact of transactional leadership on PACAP. In addition, knowledge-oriented leadership is found to reinforce the knowledge management processes of an organization [122] which are important for determining the organization's ability to explore and exploit external knowledge [199]. Based on this discussion, the author posits that knowledge-oriented leadership influences a firm's OR by facilitating the firm's ability to acquire, assimilate, transform, and exploit the new external knowledge. Therefore, the author offers the following proposition.

Proposition 3. *An organization's absorptive capacity (ACAP) mediates the relationship between knowledge-oriented leadership and organizational resilience (OR) capabilities.*

4.3. Social Capital, Absorptive Capacity, and Organizational Resilience

Relationships between an organization and different entities are crucial for the knowledge absorption process, enabling the organization to anticipate possible triggers before disruptions, cope with situations during disruptions, and adapt the organization appropriately after disruptions [10]. Further, the social capital theory explains that relational networks are important since they provide valuable resources by facilitating economic

activities by sharing information, collaborating, and discovering novel ways to achieve competitive advantages [150–152]. Firms could access resources or social capital embedded in the structures, links, and cognitions of those relationships [200]. In addition, these social resources aid firms' OR by benefitting various contextual processes, such as sharing information, exchanging resources, and collaborating with intra- or inter-organizational teams [201]. Similarly, Burt [202] asserts that social capital acts as a channel for information sharing, accessing resources, enhancing efficiency in formation diffusion, and reducing redundancies, which leads to contributing OR. The antecedent role of social capital in fostering OR has been investigated in many studies [153,155,156] as well as previously explained in this paper. For instance, the evidence of positive social capital on OR could be found in Jia et al.'s [155] study of 88 firms affected by the Sichuan earthquake and Mzid et al.'s [153] study of Tunisian family firms. In addition, Duchek [10] proposed the positive influence of social resources on OR by enhancing OR's coping capability in her conceptual paper. Thus, social capital is posited as a driver of firms' resilience capability, and the following statement is proposed.

Proposition 4. *Social capital positively influences fostering organizational resilience (OR) capabilities.*

According to Cohen and Levinthal [160], social capital improves an entity's ability to acquire, assimilate, integrate, and administer newly acquired external knowledge by encouraging the development of communication [203] for forming interpersonal relationships. Similarly, Tsai and Ghoshal [204] contended that social capital provides accessibility to tangible and intangible resources, creates opportunities, and enables learning. Furthermore, several studies have highlighted the positive influence of social capital on firms' ACAP [205,206]. Kittikunchotiwut [205] analyzed the data of 119 leather product exporting firms to investigate the role of social capital on ACAP and innovation. Consequently, the researchers discovered the positive associations of two social capital dimensions, i.e., relational and cognitive dimensions, on ACAP. Valdaliso et al.'s [206] case study of an electronics and ICT cluster from Spain proposed that social capital fosters a firm's intra-cluster knowledge links and, thus, enhances the firm's ACAP. Additionally, Gölgeci and Kuivalainen [178] examined the roles of social capital and ACAP in the supply chain resilience of 265 Turkish firms. They tested and found the mediation effect of ACAP on social capital and supply-chain resilience. Based on this discussion, the author posits that social capital influences a firm's OR by facilitating the firm's ability to acquire, assimilate, transform, and exploit new external knowledge. Therefore, the author offers the following proposition.

Proposition 5. *An organization's absorptive capacity (ACAP) mediates the relationship between social capital and organizational resilience (OR) capabilities.*

4.4. Moderating Effect of Organizational Unlearning

The prominence of learning processes in cultivating OR capabilities for different resilience stages has previously been highlighted in this paper. Tsang and Zahra [136] explained that the unlearning ability of an organization is often seen as a necessary condition for successful adaptation to external changes, encouraging organizational learning, and improving the firm's performance. As reality changes, knowledge expands and simultaneously becomes obsolete; thus, learning new knowledge and removing obsolete knowledge is essential for better understanding [141]. This literature implies that unlearning is a precondition for better learning. Additionally, several studies have underlined the importance of a firm's unlearning ability for building a resilient organization [144,145]. Furthermore, the unlearning ability is assumed to cause organizational-level consequences [146], such as impacting the organizational readiness for change [147] and affecting the ACAP in an organization [148]. According to Becker [207], the unlearning ability is a key factor for successfully competing in dynamic and complex markets as it could provide the constant development of newness. Furthermore, Cepeda-Carrion et al. [208] stated that organiza-

tional learning processes contribute to firms' ACAP, albeit an unlearning ability is needed for the proper employment of newly acquired knowledge accordingly. Therefore, the effect of new external knowledge acquisition, assimilation, transformation, and exploitation abilities on fostering OR capabilities is expected to be higher in firms that possess better unlearning abilities. In other words, the positive effect of ACAP on OR capabilities will be stronger in the firms which can manage to remove obsolete knowledge better. According to this discussion, the author proposes the following statement.

Proposition 6. *Organizational unlearning moderates the relationship between absorptive capacity (ACAP) and organizational resilience (OR) capabilities.*

5. Conclusions

This review seeks to fill the research gap addressed by the previous review of Hillmann and Guenther [13], which outlines that conceptual clarity between ACAP and OR is needed. Thus, the current study provides the conceptual model of OR by extending the capability-based conceptualization of Duchek [10], who explained the construct as "an ability to anticipate potential threats, to cope effectively with adverse events, and to adapt to changing conditions" (p. 220). This understanding defines resilience as a three-stage process, and each stage induces a different resilience capability, i.e., anticipation capability, coping capability, and adaptation capability. This paper employs these three resilience capabilities to distinguish ACAP from the OR concept. Based on the review's findings, ACAP is concluded as a knowledge-based dynamic capability that enables organizations to achieve resilience capabilities regarding different resilience stages by exploiting external knowledge.

This paper also highlights the antecedent roles of knowledge-oriented leadership and social capital in achieving OR. The scholar also proposed the unlearning ability as a moderator on the relationship between ACAP and OR. Researchers have noted that empirical studies of OR are mostly retrospective, descriptive, and outcome-focused [16,97], and fewer retrospective studies are suggested for understanding complex, path-dependent, and socially ingrained OR capabilities [10]. Although this paper's conceptual framework is outcome-focused, it is not limited to retrospective analysis as the model describes the resilience capabilities based on three resilience process stages. However, more insight is required into the determinants of the OR process [86]. Researchers could also apply this conceptual model for future studies in a different context. This paper also provides a more comprehensive understanding of the ACAP and OR relationship. In addition, the current review analyzes a more expansive database which includes 823 documents and covers documents published more recently, from 1992 to 2021. The novelty of the present study also lies in the review method, which is systematically conducted in an integrated manner by combining a bibliometric analysis [26] and a scoping review [27].

In terms of practical implications, this paper highlights the important role of ACAP for building OR by using knowledge resources. Through this paper, managers and practitioners may gain insights into managing knowledge-based resources and capabilities for building resilience in their organizations. In addition to the role of ACAP, the review also highlights knowledge-oriented leadership, a novel leadership style, as a driver of fostering resilience capabilities. This proposition may provide an understanding for managers to practice a knowledge-oriented leadership style in their organizations to enable resilience capabilities. Managers should employ the knowledge-oriented leadership style and create environments that facilitate knowledge exploration and exploitation to ensure that their organizations do not miss any important information regarding possible uncertainties. With knowledge-oriented leaders, the firms' knowledge absorption ability from external sources will be enhanced, and firms will be able to anticipate ahead, handle the adversities better, and transform for a better fit with the changing environment. The mediation role of ACAP on the relationship between social capital and OR implies that firms' ACAP capitalizes the social capital for fostering OR. Firms might not notice or be able to exploit

the valuable resources embedded in social networks for pursuing OR unless they recognize the possible uncertainties or adversities and explore as well as exploit those resources for anticipating, coping, and adapting accordingly. Thus, improving ACAP may facilitate firms effectively utilizing social capital in nurturing OR. The author also underlines the moderating role of organizational unlearning ability, which has been paid less attention to in most organizations. Thereby, organizations may notice the existence and potential of unlearning ability in fostering OR for dynamic environments. The entrenchment of obsolete knowledge could create barriers to learning new knowledge [143], which is necessary for both cultivating ACAP and OR. Therefore, organizations should not hesitate to remove obsolete beliefs, norms, and understandings to allow new and more appropriate knowledge to come in.

Regardless of the novelty and contributions provided by this review, it still has several limitations. Firstly, the timeframe of bibliometric analysis is limited to 1992–2021, and the documents included in the review corpus are collected only from the Scopus database. Thus, some relevant or useful documents published outside this timeframe or excluded in the Scopus database have been left out. To be more substantial, scholars may retrieve and combine documents from different databases in future studies. Secondly, the review corpus includes only two document types: articles and reviews. In this sense, documents that could provide valuable insights into this particular topic may exist in the other document types and the grey literature. Therefore, future studies may consider including them. Thirdly, the conceptual model proposed in this paper needs to be empirically tested for further determination. Additionally, this study emphasizes elucidating the conceptual relationship of ACAP and OR in the business and management literature. Hence, scholars may explicate this relationship from different perspectives and literature. The centrality of the review is also on knowledge-based and dynamic capability theories. Thus, future studies may examine the relationship from different theoretical lenses.

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