

ORGANIZATIONAL AGILITY AND ORGANIZATIONAL RESILIENCE: THE MEDIATING ROLE OF CRISIS MANAGEMENT CAPABILITY

¹Dr. Rehmat Ullah Khan

²Dr. Sajjad Ahmad Afridi

³Sara Ibrahim

¹PhD, Department of Management Sciences, Hazara University Mansehra

²Associate Professor, Department of Management Sciences, Hazara University Mansehra

³PhD Scholar, Department of Management Sciences, Hazara University Mansehra

zafrani@yahoo.com sajjadafриди@hu.edu.pk saraibrahimswati@gmail.com

Abstract

In today's volatile and uncertain business environment, organizations face unprecedented disruptions that challenge their ability to maintain continuity and performance. This study investigates the impact of organizational agility on organizational resilience, with crisis management capability as a mediating mechanism, grounded in Dynamic Capability Theory. Using a cross-sectional research design, data were collected from 250 senior and mid-level managers across large, medium, and SME organizations in Pakistan. The study employed validated 7-point Likert scales to measure organizational agility, crisis management capability, and organizational resilience, and Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to test the proposed relationships. The results indicate that organizational agility positively influences both organizational resilience and crisis management capability. Crisis management capability also positively affects organizational resilience and partially mediates the relationship between agility and resilience. These findings demonstrate that while agility enables organizations to sense and respond to environmental changes, its translation into resilience is strengthened through structured crisis preparedness and response mechanisms. The model explains 41% of the variance in organizational resilience, highlighting the substantial role of dynamic capabilities in fostering adaptive performance. Theoretically, this study extends Dynamic Capability Theory by identifying crisis management capability as a key mechanism that links agility to resilience, providing insights into the microfoundations of organizational adaptability. Practically, the study suggests that managers should integrate agile practices with robust crisis management systems to enhance resilience, particularly in SMEs and turbulent environments. Policy interventions can further support organizations by providing frameworks, resources, and training to strengthen both agility and crisis management capabilities.

Keywords: Organizational Agility, Organizational Resilience, Crisis Management Capability, Dynamic Capability Theory, PLS-SEM

Article Details:

Received on 30 May 2025

Accepted on 22 June 2025

Published on 25 June 2025

Corresponding Authors*:

Introduction

Organizations today operate in an increasingly volatile, uncertain, complex, and ambiguous (VUCA) environment characterized by economic turbulence, technological disruption, global pandemics, geopolitical instability, and supply chain disruptions. These uncertainties have intensified the need for organizations to develop capabilities that enable them not only to survive unexpected shocks but also to adapt and thrive in the face of crises (Cardenas, 2024; Desai & Hogg, 2024; Handoyo et al., 2023). In this context, organizational resilience has emerged as a critical organizational capability that enables firms to absorb disruptions, recover quickly, and continue functioning effectively during and after adverse events (Abourobkbah et al., 2023; Awad et al., 2025). Resilient organizations possess the capacity to anticipate threats, respond to unexpected challenges, and reconfigure resources to sustain long-term performance (Blaique et al., 2023; Dohmen et al., 2023).

crises such as the COVID-19 pandemic, financial shocks, and environmental disasters have highlighted that traditional rigid organizational structures are insufficient to cope with rapid environmental changes (Bello et al., 2024; Chopra et al., 2024; Correia Filho & Baggio, 2022). Instead, organizations increasingly rely on organizational agility, which refers to the ability of firms to sense environmental changes, respond rapidly, and adapt organizational processes to emerging opportunities and threats (Afridi et al., 2021; Almazrouei et al., 2024; Attar & Abdul-Kareem, 2020). Organizational agility allows firms to quickly reconfigure resources, make timely decisions, and adjust strategies in response to dynamic environmental conditions (Afridi et al., 2020; Ludviga & Kalvina, 2023; Muduli & Choudhury, 2024). Empirical studies have demonstrated that organizations with higher levels of agility are better positioned to respond to unexpected disruptions and maintain operational continuity (Afridi et al., 2024; Ibrahim et al., 2026; Muduli & Choudhury, 2024; Pitafi et al., 2023). For example, research shows that organizational agility significantly enhances both crisis management processes and organizational resilience, emphasizing its importance in helping organizations survive and overcome crises effectively (Hanu & Khumalo, 2024; Ramzan, 2021).

Although prior studies recognize the importance of organizational agility for enhancing resilience (Afridi, Asad, et al., 2023; Blaique et al., 2023; Cooper et al., 2019; Ibrahim & Khan, 2025), the mechanisms through which agility contributes to resilience remain insufficiently explored. Simply possessing agile structures may not automatically translate into resilience unless organizations have the appropriate capabilities to manage crises effectively. One such critical mechanism is crisis management capability (Burhan et al., 2021; Ludviga & Kalvina, 2023), which refers to an organization's ability to anticipate potential crises, prepare appropriate response strategies, manage disruptions, and facilitate recovery after crises occur (Olsen et al., 2023; Steenkamp & Dhanesh, 2023). Effective crisis management involves preparedness, rapid decision-making, communication coordination, and resource mobilization during critical events. Organizations that possess strong crisis management capabilities are better able to mitigate the negative consequences of crises and restore normal operations quickly (Afridi & Ibrahim, 2026; Ibrahim & Hassan, 2025; Noh & Liu, 2024; Zhang et al., 2023).

Organizational agility can play a crucial role in strengthening crisis management capability. Agile organizations are typically characterized by decentralized decision-making, flexible structures, rapid information sharing, and adaptive leadership, all of which enhance the organization's ability to identify emerging threats and respond

promptly (Abourobah et al., 2023; Attar & Abdul-Kareem, 2020; Halalmeh, 2021). By enabling faster sensing and response mechanisms, agility supports proactive crisis planning, adaptive decision-making, and efficient coordination during disruptive events (Ibrahim & Inayat, 2025a, 2025b; Prieto & Talukder, 2023; Rastogi & Pandita, 2025). Consequently, agile organizations are more likely to develop strong crisis management systems that help them effectively cope with unexpected shocks.

Furthermore, crisis management capability is a key determinant of organizational resilience. Organizations that effectively manage crises are better able to minimize operational disruptions, maintain stakeholder trust, and recover more quickly from adverse situations. Crisis management processes such as risk assessment, contingency planning, and coordinated response strategies enable organizations to withstand external shocks and maintain continuity in operations (Afridi, Javed, et al., 2023; Ibrahim et al., 2025). Studies indicate that organizations with well-developed crisis management capabilities demonstrate higher levels of resilience because they can absorb shocks and adapt to changing conditions more effectively (Ashraf et al., 2024; Haider et al., 2017; Sajid et al., 2025).

Despite the growing scholarly interest in agility and resilience, limited research has examined the mediating role of crisis management capability in the relationship between organizational agility and organizational resilience. While agility enables organizations to respond quickly to environmental changes, the translation of agility into resilience may occur through organizational capabilities that facilitate effective crisis handling. Therefore, understanding how crisis management capability acts as an intervening mechanism is crucial for explaining how agile organizations build resilience in turbulent environments. Addressing this gap, the present study investigates the relationship between organizational agility and organizational resilience, with crisis management capability serving as a mediating mechanism. By integrating insights from dynamic capability perspectives, the study argues that organizational agility functions as a strategic capability that enables firms to develop effective crisis management processes, which in turn strengthen their resilience against environmental disruptions. This study contributes to the growing literature on organizational resilience by highlighting the importance of crisis management capability as a key pathway through which agility enhances organizational adaptability and survival during crises.

The findings of this study are expected to contribute both theoretically and practically. Theoretically, it extends the literature on agility and resilience by identifying crisis management capability as an important mediating mechanism linking these constructs. Practically, the study offers valuable insights for managers and policymakers by emphasizing the importance of developing agile structures and crisis management systems to enhance organizational resilience in turbulent environments.

Theoretical Framework: Dynamic Capability Theory

This study is grounded in Dynamic Capability Theory (Al Nuaimi et al., 2024; Newbert, 2005), which explains how organizations develop the ability to sense environmental changes, seize opportunities, and reconfigure internal and external resources in response to dynamic and uncertain environments. The theory argues that sustainable organizational performance does not solely depend on static resources but rather on firms' ability to adapt, integrate, and reconfigure capabilities to address rapidly changing environmental conditions (Abbas, 2024; Al Nuaimi et al., 2024; Amui et al., 2017).

In turbulent environments characterized by technological disruption, economic uncertainty, and unexpected crises, organizations must develop higher-order capabilities that allow them to respond effectively to external shocks (Blaique et al., 2023; Cardenas, 2024; Dohmen et al., 2023). Dynamic capability theory emphasizes that organizations capable of continuously adapting their strategies, structures, and processes are more likely to survive and thrive during periods of disruption. Within this perspective, organizational agility can be conceptualized as a dynamic capability that enables firms to rapidly sense environmental changes and respond flexibly to emerging challenges and opportunities (Afridi & Haider, 2018; Attar & Abdul-Kareem, 2020; Rastogi & Pandita, 2025).

Organizational agility facilitates rapid decision-making, flexible resource allocation, and adaptive organizational processes, allowing firms to adjust their operations and strategies in response to environmental volatility (Abourokbah et al., 2023; Müceldili et al., 2020; Pitafi et al., 2023). However, agility alone may not directly translate into resilience unless organizations possess mechanisms that allow them to manage crises effectively. This is where crisis management capability becomes critical. Crisis management capability represents an organizational capacity that enables firms to anticipate, prepare for, respond to, and recover from disruptive events (Bernanke, 2013; Noh & Liu, 2024; Rubenstein et al., 2023). From the perspective of dynamic capability theory, crisis management capability can be considered a reconfiguration capability that allows organizations to deploy resources efficiently during crises and maintain operational continuity.

Furthermore, organizational resilience represents the outcome of effective dynamic capabilities. Resilient organizations possess the ability to absorb shocks, recover from disruptions, and adapt to changing environmental conditions (Seraj et al., 2022; Suriyankietkaew et al., 2022). Dynamic capability theory suggests that resilience emerges when organizations effectively integrate sensing, seizing, and reconfiguring capabilities to respond to external disturbances. Based on this theoretical lens, the present study proposes that organizational agility enhances crisis management capability by enabling organizations to respond rapidly to environmental threats. In turn, crisis management capability strengthens organizational resilience by helping organizations absorb shocks and recover from crises more effectively. Therefore, crisis management capability serves as a key mechanism through which organizational agility contributes to organizational resilience.

Hypotheses Development

Organizational Agility and Organizational Resilience

Organizational agility refers to the ability of organizations to sense environmental changes and respond quickly through flexible structures, adaptive decision-making, and rapid resource reconfiguration (Rasheed et al., 2023; Rozak et al., 2021). Agile organizations can adjust strategies, processes, and operations in response to dynamic environmental conditions, allowing them to cope more effectively with uncertainty and disruption. In increasingly volatile environments, organizations face frequent crises such as economic shocks, technological disruptions, and supply chain disturbances (Ananth Alias Rohith Bhat et al., 2025; Xia et al., 2025). Agile organizations possess the flexibility required to address these challenges by rapidly mobilizing resources and implementing adaptive responses (Darvishmotevali et al., 2020; Muduli & Choudhury, 2024; Ramzan, 2021). As a result, agility enables organizations to maintain operational continuity and adapt to unexpected disruptions, which enhances their ability to recover from crises.

Prior studies indicate that organizational agility enables firms to better manage uncertainty, respond to external shocks, and maintain stability during turbulent conditions (Abourokbah et al., 2023; Almazrouei et al., 2024; AlNuaimi et al., 2022; Attar & Abdul-Kareem, 2020). These characteristics are closely associated with organizational resilience, which reflects the ability of firms to withstand disruptions and adapt to changing circumstances. Therefore, organizations that demonstrate higher levels of agility are more likely to develop stronger resilience capabilities.

H1: Organizational agility positively influences organizational resilience.

Organizational Agility and Crisis Management Capability

Crisis management capability refers to an organization's ability to anticipate, prepare for, respond to, and recover from crises (Ayaz et al., 2023; Bernanke, 2013). It includes activities such as risk assessment, contingency planning, crisis communication, and coordinated response mechanisms. Organizations with strong crisis management capability are better prepared to handle unexpected disruptions and minimize negative impacts on operations and performance (Ahmad et al., 2021; Noh & Liu, 2024; Olsen et al., 2023; Rubenstein et al., 2023). We argue that organizational agility plays a critical role in strengthening crisis management capability. Agile organizations typically have decentralized decision-making structures, flexible processes, and rapid information-sharing mechanisms (Abourokbah et al., 2023; Almazrouei et al., 2024; Halalmeh, 2021), which enable them to respond quickly to emerging threats. These characteristics facilitate proactive crisis planning, rapid response coordination, and effective resource mobilization during crises. Moreover, agile organizations are better equipped to detect early warning signals and implement timely responses to mitigate potential crises. By promoting adaptability and responsiveness, organizational agility enhances the effectiveness of crisis management systems within organizations.

H2: Organizational agility positively influences crisis management capability.

Crisis Management Capability and Organizational Resilience

Crisis management capability is a crucial determinant of organizational resilience because it equips organizations with the necessary tools to handle disruptions effectively. Research suggests that organizations that possess strong crisis management capabilities can anticipate potential threats, respond swiftly to crises, and recover more efficiently from adverse events (Charoensukmongkol & Phungsoonthorn, 2022; Mazhabi, 2025). Effective crisis management enables organizations to reduce operational disruptions, protect critical resources, and maintain stakeholder confidence during crises (Burhan et al., 2021; Charoensukmongkol & Phungsoonthorn, 2022). By implementing structured response mechanisms and recovery strategies, organizations can absorb shocks and continue functioning despite adverse circumstances.

Previous research suggests that organizations with well-developed crisis management systems demonstrate greater resilience because they can adapt to unexpected disruptions and restore operations more quickly (see e.g., Blaique et al., 2023; Dohmen et al., 2023; Faruquee et al., 2024; Garrido-Moreno et al., 2024). Consequently, crisis management capability plays a vital role in strengthening the resilience of organizations operating in uncertain environments.

H3: Crisis management capability positively influences organizational resilience.

Mediating Role of Crisis Management Capability

Dynamic capability theory suggests that organizational outcomes often emerge through intermediate capabilities that translate strategic capabilities into performance outcomes

(Al Nuaimi et al., 2024; Dunn et al., 2023). In this context, organizational agility may enhance resilience indirectly by strengthening organizational capabilities that enable effective crisis response. Agile organizations are more capable of developing robust crisis management systems due to their flexible structures, rapid decision-making processes, and adaptive resource allocation (Dohmen et al., 2023; Mazhabi, 2025; Muduli & Choudhury, 2024). These characteristics allow organizations to prepare for potential crises, coordinate responses efficiently, and recover quickly from disruptions. As crisis management capability improves, organizations become better equipped to withstand shocks and maintain operational continuity.

Therefore, crisis management capability serves as a key mechanism through which organizational agility contributes to organizational resilience.

H4: Crisis management capability mediates the relationship between organizational agility and organizational resilience.

Conceptual Framework

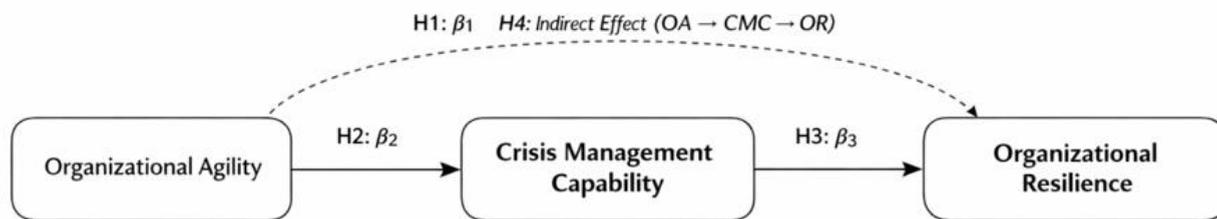


Fig.1: Conceptual Framework

Methodology

Research Design

This study adopts a quantitative, cross-sectional research design to examine the relationship between organizational agility, crisis management capability, and organizational resilience. The research model is grounded in Dynamic Capability Theory, which emphasizes that organizations develop higher-order capabilities to sense changes, seize opportunities, and reconfigure resources in dynamic environments.

Participants and Procedure

Data were collected from senior and mid-level managers working in large, medium-sized organizations, and SMEs operating in Pakistan, as these individuals are actively involved in strategic decision-making and crisis response processes within their organizations. A purposive sampling technique was employed to ensure that respondents possessed sufficient managerial experience and knowledge regarding organizational agility, crisis management practices, and resilience strategies. This approach allowed the study to obtain information from participants who were directly engaged in organizational planning and crisis response activities.

The data collection process involved the distribution of structured questionnaires through both online platforms and direct organizational contacts. Prior to participation, respondents were informed about the purpose of the study and assured that their responses would remain anonymous and confidential. Participation was voluntary, and informed consent was obtained from all respondents. A total of 300 questionnaires were distributed, out of which 264 responses were received, resulting in a response rate of approximately 88%. After screening for incomplete responses and potential outliers, 250 questionnaires were retained for final analysis, which exceeded the minimum sample size

recommended by Hair et al. (2022) for Partial Least Squares Structural Equation Modeling (PLS-SEM).

The demographic profile of the respondents indicates a diverse managerial sample. Approximately 68% of the respondents were male and 32% were female. In terms of age distribution, 27% were between 25–34 years, 46% between 35–44 years, and 27% were above 45 years of age, suggesting that most respondents had substantial professional experience. Regarding educational qualifications, 52% held a master’s degree, 30% possessed a bachelor’s degree, and 18% had a doctoral degree or other professional qualifications. In terms of managerial experience, 35% of the respondents had 5–10 years of experience, 41% had 11–15 years, and 24% had more than 15 years of managerial experience. Finally, regarding organizational roles, 56% were mid-level managers while 44% held senior managerial positions.

This demographic distribution indicates that the respondents possessed adequate managerial experience and organizational knowledge to provide reliable insights into organizational agility, crisis management capability, and resilience practices.

Measures

The constructs in the study were measured using validated scales from prior research, with all items rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Organizational agility was measured using six items adapted from Sharifi and Zhang (2001) and Overby et al. (2006), including statements such as “Our organization quickly adapts its processes to market changes.” Crisis management capability was measured with seven items adapted from Pearson and Clair (1998) and Mitroff et al. (2006), such as “Our organization has effective plans to respond to unexpected crises.” Organizational resilience was measured with nine items adapted from Duchek (2020) and Lengnick-Hall et al. (2011), including “Our organization can absorb disruptions without significant performance loss.” Before the main study, the survey instrument was pretested for clarity, reliability, and content validity.

Results

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4, which is appropriate for predictive modeling, complex relationships, and small to medium sample sizes. The analysis followed a two-stage approach, starting with measurement model assessment to evaluate reliability and validity, followed by structural model assessment to test hypotheses and mediating effects. The measurement model was evaluated using factor loadings, Cronbach’s alpha, composite reliability (CR), and average variance extracted (AVE). All constructs demonstrated satisfactory reliability (Cronbach’s alpha > 0.7, CR > 0.7) and convergent validity (AVE > 0.5).

Table No 1: Measurement Model (CFA, Reliability & Validity)

Construct	Items	Loadings	Cronbach’s α	CR	AVE
OA	OA1–OA6	0.71–0.86	0.88	0.91	0.62
CMC	CMC1–CMC7	0.70–0.85	0.89	0.92	0.61
OR	OR1–OR9	0.72–0.87	0.90	0.93	0.63

Discriminant validity was confirmed using the HTMT ratio, with all values below 0.85, indicating that constructs were empirically distinct.

Table No 2: Discriminant Validity (HTMT)

Constructs	OA	CMC	OR
OA	—	0.55	0.60
CMC	0.55	—	0.62
OR	0.60	0.62	—

HTMT criterion: < 0.85 → discriminant validity confirmed

Hypotheses Testing

The structural model tested the direct and indirect relationships among the constructs. Path coefficients, t-values, and p-values were examined using bootstrapping with 5,000 resamples. The results indicated that organizational agility positively influenced organizational resilience (H1) and crisis management capability (H2), while crisis management capability positively influenced organizational resilience (H3).

Table No 3: Structural Model (Path Coefficients, Significance)

Path	β	t-value	p-value	Result
OA → OR	0.32	4.21	<0.001	Supported (H1)
OA → CMC	0.48	6.15	<0.001	Supported (H2)
CMC → OR	0.41	5.03	<0.001	Supported (H3)
OA → CMC → OR	0.20	4.12	<0.001	Mediation Supported (H4)

R² values:

- CMC = 0.23
- OR = 0.41

f² effect sizes:

- OA → CMC = 0.15 (medium)
- CMC → OR = 0.17 (medium)

Mediating Analysis

The indirect effect of organizational agility on resilience through crisis management capability was significant, indicating partial mediation (H4). The model explained 41% of the variance in organizational resilience and 23% of the variance in crisis management capability, with effect sizes indicating medium impacts (f² = 0.15–0.17). These results suggest that crisis management capability serves as an important mechanism through which agile organizations enhance their resilience in turbulent and uncertain environments.

Table No 4: Mediation Analysis: Bootstrap indirect effect (5,000 resamples)

Mediation Path	β (Indirect)	SE	t-value	95% CI	Result
OA → CMC → OR	0.20	0.05	4.12	[0.12, 0.31]	Partial Mediation

Discussion

The findings of this study provide empirical evidence for the pivotal role of organizational agility in enhancing organizational resilience through the mediating effect of crisis management capability. Consistent with Dynamic Capability Theory, the results indicate that organizations equipped with agile structures, rapid decision-making processes, and flexible resource allocation are better able to respond to environmental volatility and unforeseen disruptions. Specifically, the direct relationship between organizational agility and resilience suggests that agility allows organizations to adapt quickly, reconfigure

resources, and maintain operational continuity during crises. This aligns with prior research emphasizing that agile organizations possess higher adaptive capacity and are more likely to recover from disruptions effectively.

Moreover, the study confirms that crisis management capability partially mediates the relationship between agility and resilience. Agile organizations not only respond faster to environmental changes but also develop structured systems and processes to anticipate, prepare for, and manage crises. By enhancing crisis management capabilities, agility translates into tangible resilience outcomes, enabling organizations to absorb shocks, recover from disruptions, and sustain performance. This finding underscores the importance of considering intervening mechanisms when examining the link between agility and resilience, as agility alone may not suffice to ensure long-term organizational survival without the presence of robust crisis management processes.

The results also highlight the significant explanatory power of the proposed model, with 41% of the variance in organizational resilience explained by agility and crisis management capability. This suggests that while agility and crisis management are critical, resilience is influenced by multiple factors, including organizational culture, leadership, and external environmental conditions. Overall, the findings provide strong empirical support for integrating dynamic capabilities and crisis management practices to foster resilient organizations in turbulent contexts.

Theoretical Implications

This study contributes to the organizational resilience literature by extending Dynamic Capability Theory to explain how agility translates into resilience through crisis management capability. While previous research primarily examined agility or resilience in isolation, this study demonstrates that agility alone is insufficient; the translation of agility into resilience occurs through structured crisis management systems, which act as a dynamic mechanism connecting strategic capabilities with performance outcomes.

Additionally, the study highlights crisis management capability as a mediating mechanism, offering a theoretical lens to understand the pathway through which agility enhances resilience. By identifying crisis management as a critical mediator, the research provides a nuanced understanding of the microfoundations of organizational resilience, bridging the gap between organizational-level capabilities and resilience outcomes. Finally, the model provides a theoretically grounded framework for future research exploring the antecedents of resilience, emphasizing that dynamic capabilities operate through intermediate organizational processes to generate adaptive outcomes.

Practical Implications

The findings offer several practical insights for organizational leaders and policymakers. Agility enables firms to respond swiftly to changing market conditions, emerging threats, and unexpected disruptions. Second, organizations must invest in crisis management capabilities, including contingency planning, early warning systems, coordinated response teams, and effective communication protocols. The study demonstrates that without robust crisis management processes, agility may not fully translate into resilience.

Managers can use these insights to design integrated resilience strategies, combining agile organizational structures with structured crisis management systems. This approach is particularly critical for SMEs and medium-sized enterprises operating in turbulent environments, where resource constraints make it essential to optimize both agility and preparedness. Furthermore, policymakers and industry associations can

support organizations by providing training, frameworks, and resources to strengthen crisis management practices, ultimately enhancing sector-wide resilience.

Conclusion

This study empirically examines the impact of organizational agility on organizational resilience, with crisis management capability serving as a mediating mechanism. The results demonstrate that agile organizations are better able to sense, respond to, and adapt to environmental disruptions, and that crisis management capability amplifies this effect by providing structured mechanisms to manage crises effectively. By integrating agility and crisis management within a dynamic capability framework, the study provides both theoretical and practical insights into fostering resilient organizations in uncertain and turbulent contexts. The findings suggest that organizational resilience emerges not solely from agile structures but from the effective integration of agility and crisis preparedness, emphasizing the importance of a proactive, capability-driven approach to managing uncertainty.

Limitations and Future Research

Despite its contributions, this study has several limitations. First, the research employs a cross-sectional design, which limits causal inferences. Future studies could adopt longitudinal or panel designs to examine how agility and crisis management capability influence resilience over time. Second, the study focuses on organizations operating in Pakistan, which may limit generalizability to other cultural and economic contexts. Comparative studies across countries and industries could enhance external validity. Third, the study relies on managerial self-reported data, which may introduce common method bias, although procedural remedies and PLS-SEM mitigate some concerns. Future research could incorporate multi-source data, including employee, customer, and objective organizational performance measures. Finally, while this study highlights crisis management capability as a mediator, other potential mechanisms—such as knowledge management, innovation capability, or organizational learning—may also link agility and resilience. Future research could explore multiple mediators and moderators, such as leadership support, digital transformation, or environmental turbulence, to develop a more comprehensive understanding of organizational resilience.

References

- Abbas, J. (2024). Does the nexus of corporate social responsibility and green dynamic capabilities drive firms toward green technological innovation? The moderating role of green transformational leadership. *Technological forecasting and social change*, 208, 123698.
- Abourobkha, S. H., Mashat, R. M., & Salam, M. A. (2023). Role of absorptive capacity, digital capability, agility, and resilience in supply chain innovation performance. *Sustainability*, 15(4), 3636.
- Afridi, Khan, W., Haider, M., Shahjehan, A., & Afsar, B. (2021). Generativity and Green Purchasing Behavior: Moderating Role of Man-Nature Orientation and Perceived Behavioral Control. *SAGE Open*, 11(4), 21582440211054480.
- Afridi, S. A., Afsar, B., Shahjehan, A., Khan, W., Rehman, Z. U., & Khan, M. A. (2020). Impact of corporate social responsibility attributions on employee's extra-role behaviors: Moderating role of ethical corporate identity and interpersonal trust. *Corporate Social Responsibility and Environmental Management*.
- Afridi, S. A., Ali, S. Z., & Zahid, R. A. (2024). Nurturing environmental champions: Exploring the influence of environmental-specific servant leadership on

- environmental performance in the hospitality industry. *Environmental Science and Pollution Research*, 31(34), 46281-46292. <https://doi.org/https://doi.org/10.1007/s11356-023-29690-4>
- Afridi, S. A., Asad, Zaheer, S., Khan, W., & Gohar, A. (2023). Bridging Generative Leadership and Green Creativity: Unpacking the Role of Psychological Green Climate and Green Commitment in the Hospitality Industry. *SAGE Open*, 13(3), 21582440231185759. <https://doi.org/10.1177/21582440231185759>
- Afridi, S. A., & Haider, M. (2018). Impact of healthcare quality on customers' loyalty; mediating effect of customers' commitment: a comparative study of public and private hospitals of Peshawar. *The Business & Management Review*, 9(4), 529-542.
- Afridi, S. A., & Ibrahim, S. (2026). From Environmental Commitment to Green Innovation: The Mediating Role of Green Absorptive Capacity in SMEs. *Journal of Management Science Research Review*, 5(1), 1398-1422.
- Afridi, S. A., Javed, A., Ali, S. Z., Zafar, S., & Haider, M. (2023). Cultivating Sustainability: The Role of Generative Leadership, Green Passion, and Green Work Behavior in Pakistan's Tourism Industry. *Sustainability*, 15(19), 14139. <https://doi.org/https://doi.org/10.3390/su151914139>
- Ahmad, N., Scholz, M., Arshad, M. Z., Jafri, S. K. A., Sabir, R. I., Khan, W. A., & Han, H. (2021). The inter-relation of corporate social responsibility at employee level, servant leadership, and innovative work behavior in the time of crisis from the healthcare sector of pakistan. *International Journal of Environmental Research and Public Health*, 18(9), 4608.
- Al Nuaimi, F. M. S., Singh, S. K., & Ahmad, S. Z. (2024). Open innovation in SMEs: A dynamic capabilities perspective. *Journal of Knowledge Management*, 28(2), 484-504.
- Almazrouei, F., Sarker, A. E., & Zervopoulos, P. (2024). Linking Change Readiness, Organizational Agility, Organizational Structure and Public Value-Driven Innovation Performance: An Integrative Framework. *University of Sharjah Journal for Humanities & Social Sciences*, 21(4).
- AlNuaimi, B. K., Singh, S. K., Ren, S., Budhwar, P., & Vorobyev, D. (2022). Mastering digital transformation: The nexus between leadership, agility, and digital strategy. *Journal of Business Research*, 145, 636-648. <https://doi.org/https://doi.org/10.1016/j.jbusres.2022.03.038>
- Amui, L. B. L., Jabbour, C. J. C., de Sousa Jabbour, A. B. L., & Kannan, D. (2017). Sustainability as a dynamic organizational capability: a systematic review and a future agenda toward a sustainable transition. *Journal of Cleaner Production*, 142, 308-322.
- Ananth Alias Rohith Bhat, P., Shakila, B., Pinto, P., & Hawaldar, I. T. (2025). Volatility Spillover Effects Between Indian Textile Companies and Exchange Rate: A BEKK-GARCH Analysis. In *Sustainable Data Management: Navigating Big Data, Communication Technology, and Business Digital Leadership. Volume 1* (pp. 195-206). Springer.
- Ashraf, S., Ali, S. Z., Khan, T. I., Azam, K., & Afridi, S. A. (2024). Fostering sustainable tourism in Pakistan: Exploring the influence of environmental leadership on employees' green behavior. *Business Strategy & Development*, 7(1), e328. <https://doi.org/https://doi.org/10.1002/bsd2.328>
- Attar, M., & Abdul-Kareem, A. (2020). The role of agile leadership in organisational agility. In *Agile business leadership methods for industry 4.0* (pp. 171-191). Emerald Publishing Limited. <https://doi.org/https://doi.org/10.1108/978-1-80043-380-920201011>

- Awad, N. H. A., El-Sayed, B. K. M., & Ashour, H. M. A.-A. A. (2025). Unlocking innovation and resilience among emergency nurses through cultural intelligence: insights from a structural equation model. *BMC nursing*, 24(1), 919. <https://doi.org/https://doi.org/10.1186/s12912-025-03569-w>
- Ayaz, M., Chaudhary, G. M., & Masoom, M. A. (2023). Effect of Energy Crisis on Performance of Export and Non-Export Oriented Textile Companies in Pakistan. *Journal of Educational Research and Social Sciences Review (JERSSR)*, 3(1), 140-147.
- Bello, H. O., Idemudia, C., & Iyelolu, T. V. (2024). Navigating financial compliance in Small and Medium-Sized Enterprises (SMEs): Overcoming challenges and implementing effective solutions. *World Journal of Advanced Research and Reviews*, 23(1), 042-055.
- Bernanke, B. S. (2013). *The Federal Reserve and the financial crisis*. Princeton University Press.
- Blaique, L., Ismail, H. N., & Aldabbas, H. (2023). Organizational learning, resilience and psychological empowerment as antecedents of work engagement during COVID-19. *International Journal of Productivity and Performance Management*, 72(6), 1584-1607.
- Burhan, M., Salam, M. T., Abou Hamdan, O., & Tariq, H. (2021). Crisis management in the hospitality sector SMEs in Pakistan during COVID-19. *International Journal of Hospitality Management*, 98, 103037.
- Cardenas, I. C. (2024). Mitigation of climate change. Risk and uncertainty research gaps in the specification of mitigation actions. *Environmental Science & Policy*, 162, 103912.
- Charoensukmongkol, P., & Phungsoonthorn, T. (2022). The interaction effect of crisis communication and social support on the emotional exhaustion of university employees during the COVID-19 crisis. *International Journal of Business Communication*, 59(2), 269-286.
- Chopra, S. S., Senadheera, S. S., Dissanayake, P. D., Withana, P. A., Chib, R., Rhee, J. H., & Ok, Y. S. (2024). Navigating the challenges of environmental, social, and governance (ESG) reporting: The path to broader sustainable development. *Sustainability*, 16(2), 606.
- Cooper, B., Wang, J., Bartram, T., & Cooke, F. L. (2019). Well-being-oriented human resource management practices and employee performance in the Chinese banking sector: The role of social climate and resilience. *Human Resource Management*, 58(1), 85-97.
- Correia Filho, W. L., & Baggio, D. K. (2022). Dynamic capability and coopetition: A strategic alternative in the COVID-19 era. In *Multidimensional approach to local development and poverty: causes, consequences, and challenges post COVID-19* (pp. 21-30). IGI Global.
- Darvishmotevali, M., Altinay, L., & Köseoglu, M. A. (2020). The link between environmental uncertainty, organizational agility, and organizational creativity in the hotel industry. *International Journal of Hospitality Management*, 87, 102499.
- Desai, S. N., & Hogg, M. A. (2024). Organizational identification and leader evaluation in a global workplace: Interaction of self-uncertainty, self-construal, and organizational culture. *Journal of Applied Social Psychology*, 54(3), 147-161.
- Dohmen, A. E., Merrick, J. R., Saunders, L. W., Stank, T. P., & Goldsby, T. J. (2023). When preemptive risk mitigation is insufficient: The effectiveness of continuity and resilience techniques during COVID-19. *Production and operations management*, 32(5), 1529-1549.

- Dunn, M., Munoz, I., & Jarrahi, M. H. (2023). Dynamics of flexible work and digital platforms: Task and spatial flexibility in the platform economy. *Digital Business*, 3(1), 100052.
- Faruquee, M., Paulraj, A., & Irawan, C. A. (2024). The dual effect of environmental dynamism on proactive resilience: can governance mechanisms negate the dark side? *Production Planning & Control*, 35(15), 2113-2130.
- Garrido-Moreno, A., Martín-Rojas, R., & García-Morales, V. J. (2024). The key role of innovation and organizational resilience in improving business performance: A mixed-methods approach. *International Journal of Information Management*, 77, 102777.
- Haider, M., Gul, S., Afridi, S. A., & Batool, S. (2017). Factors Affecting Foreign Direct Investment in Pakistan. *NUML International Journal of Business & Management*, 12(2), 136-149.
- Halalmeh, M. (2021). The impact of strategic agility on employees' performance in commercial banks in Jordan. *Management Science Letters*, 11(5), 1521-1526.
- Handoyo, S., Suharman, H., Ghani, E. K., & Soedarsono, S. (2023). A business strategy, operational efficiency, ownership structure, and manufacturing performance: The moderating role of market uncertainty and competition intensity and its implication on open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2), 100039.
- Hanu, C., & Khumalo, N. (2024). From high-performance work systems and resilience to employee well-being during crises: exploring the moderating role of employee ambidexterity. *Current Psychology*, 43(11), 9955-9968.
- Ibrahim, S., Afridi, S. A., & Inayat, A. (2026). Value-Driven Sustainability: Unpacking the Behavioral Pathway Linking Self-Transcendence to Sustainable Performance in the Tourism and Hospitality Sector. *Advance Journal of Econometrics and Finance*, 4(1), 386-398.
- Ibrahim, S., & Hassan, H. (2025). LINKING ORGANIZATIONAL PURPOSE TO EMPLOYEE ENGAGEMENT: THE MEDIATING ROLE OF THRIVING AT WORK AND THE MODERATING ROLE OF DIGITAL RESILIENCE. *Center for Management Science Research*, 3(1), 365-382.
- Ibrahim, S., & Inayat, A. (2025a). ADDRESSING BRAIN DRAIN IN HEALTHCARE: THE ROLE OF HIGH-PERFORMANCE WORK SYSTEMS, WORK ENGAGEMENT, AND JOB SATISFACTION IN PAKISTAN. *Pakistan Journal of Social Science Review*, 4(6), 298-317.
- Ibrahim, S., & Inayat, A. (2025b). IMPACT OF CULTURAL INTELLIGENCE ON SUSTAINABLE PERFORMANCE: MEDIATING ROLE OF OCBE, LEARNING ORIENTATION, AND PSYCHOLOGICAL EMPOWERMENT. *Pakistan Journal of Social Science Review*, 4(5), 1221-1250.
- Ibrahim, S., & Khan, R. U. (2025). FROM SHARING TO SHAPING: INVESTIGATING THE LINK BETWEEN KNOWLEDGE EXCHANGE AND INNOVATIVE WORK BEHAVIOUR AMONG EDUCATORS. *Journal of Business and Management Research*, 4(3), 1-14.
- Ibrahim, S., Waseem, M., & Scholar, I. P. (2025). Leading Green, Innovating Clean: Exploring the Path from Transformational Leadership to Eco-Innovation through Employee Behavior. *Journal of Business and Management Research*, 4(1), 995-1029.

- Ludviga, I., & Kalvina, A. (2023). Organizational Agility During Crisis: Do Employees' Perceptions of Public Sector Organizations' Strategic Agility Foster Employees' Work Engagement and Well-being? *Employee Responsibilities and Rights Journal*, 1-21.
- Mazhabi, Z. (2025). Investigating leadership attributes and strategies during times of crisis and educational change: A story of public primary school principals in Lombok, Indonesia. *Educational Management Administration & Leadership*, 17411432241300280. <https://doi.org/https://doi.org/10.1177/17411432241300280>
- Müceldili, B., Tatar, B., & Erdil, O. (2020). Can curious employees be more agile? The role of cognitive style and creative process engagement in agility performance. *Global Business and Organizational Excellence*, 39(6), 39-52.
- Muduli, A., & Choudhury, A. (2024). Exploring the role of workforce agility on digital transformation: a systematic literature review. *Benchmarking: An International Journal*.
- Newbert, S. L. (2005). New firm formation: A dynamic capability perspective. *Journal of small business management*, 43(1), 55-77.
- Noh, Y., & Liu, P. (2024). Exploring How consumers' perceptions of corporate social responsibility impact dining intentions in times of crisis: an application of the social identity theory and theory of perceived risk. *Journal of Risk and Financial Management*, 17(2), 44.
- Olsen, M., Oskarsson, P.-A., Hallberg, N., Granåsen, M., & Nordström, J. (2023). Exploring collaborative crisis management: A model of essential capabilities. *Safety science*, 162, 106092.
- Pitafi, A. H., Rasheed, M. I., Islam, N., & Dhir, A. (2023). Investigating visibility affordance, knowledge transfer and employee agility performance. A study of enterprise social media. *Technovation*, 128, 102874.
- Prieto, L., & Talukder, M. F. (2023). Resilient Agility: A Necessary Condition for Employee and Organizational Sustainability. *Sustainability*, 15(2), 1552.
- Ramzan, M. (2021). Symmetric impact of exchange rate volatility on foreign direct investment in Pakistan: do the global financial crises and political regimes matter? *Annals of Financial Economics*, 16(04), 2250007.
- Rasheed, M. I., Pitafi, A. H., Mishra, S., & Chotia, V. (2023). When and how ESM affects creativity: The role of communication visibility and employee agility in a cross-cultural setting. *Technological forecasting and social change*, 194, 122717.
- Rastogi, S., & Pandita, D. (2025). Driving entrepreneurial success: navigating AI-driven transformation through workforce agility and sustainability. *Journal of Innovation and Entrepreneurship*, 14(1), 75. <https://doi.org/https://doi.org/10.1186/s13731-025-00554-0>
- Rozak, H. A., Adhiatma, A., Fachrunnisa, O., & Rahayu, T. (2021). Social media engagement, organizational agility and digitalization strategic plan to improve SMEs' performance. *IEEE Transactions on Engineering Management*, 70(11), 3766-3775.
- Rubenstein, L., Jalazai, R., Spiegel, P., & Glass, N. (2023). The crisis of maternal and child health in Afghanistan. *The Lancet*, 401(10371), 87-90.
- Sajid, R. N., Ibrahim, S., Qureshi, J. A., & Rooh, S. (2025). THE MODERATING ROLE OF COMPETITIVENESS ON THE EFFECT OF STRATEGY FORMULATION PROCESS ON INNOVATION PERFORMANCE DIMENSIONS IN MICROFINANCE BANKS OF PAKISTAN. *Center for Management Science Research*, 3(3), 835-845.
- Seraj, A. H. A., Fazal, S. A., & Alshebami, A. S. (2022). Entrepreneurial competency, financial literacy, and sustainable performance—examining the mediating role of entrepreneurial resilience among Saudi entrepreneurs. *Sustainability*, 14(17), 10689.

- Steenkamp, H., & Dhanesh, G. S. (2023). Care-based relationship management during remote work in a crisis: Empathy, purpose, and diversity climate as emergent employee-organization relational maintenance strategies. *Public Relations Review*, 49(4), 102371.
- Suriyankietkaew, S., Krittayarungroj, K., & Iamsawan, N. (2022). Sustainable Leadership practices and competencies of SMEs for sustainability and resilience: A community-based social enterprise study. *Sustainability*, 14(10), 5762.
- Xia, H., Hou, X., Zhang, J. Z., & Abedin, M. Z. (2025). A new probability forecasting model for cotton yarn futures price volatility with explainable AI and big data. *Journal of Forecasting*, 44(1), 112-135.
- Zhang, Y., Xing, C., & Guo, X. (2023). The shielding effect of access to finance on small and medium-sized enterprises during the COVID-19 crisis: Comparing fintech and traditional finance. *Emerging Markets Finance and Trade*, 59(8), 2383-2397.