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## Leadership Traits and Crisis Readiness: A Quantitative Study of Human Impact on Supply Chain Resilience

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### Abstract

In the unsteady and interdependent modern market, the concept of supply chain resilience became one of the key strategies. The current study examines, quantitatively, the connection between the leadership qualities and the crisis preparedness particularly linked with the role played by the human-centric leadership and its impact on the performance of supply chains under the disruptions. A group of middle to higher rank supply chain managers of varying industries was used to explore how the top leadership features of emotional intelligence, adaptability, strategic vision, decisiveness, and communication affect the resilience of the organization. Structural equation modeling and correlational analysis was used to determine characteristics that were most associated with crisis preparedness. Findings show that emotional intelligence and strategic vision go well together as predictors of resilience, through the mediation of organizational culture and psychological safety. The study paves way in understanding leadership theory, crisis management, and operational strategy through provision of empirical data that will aid in the inclusion of the human factor when planning and training on resilience.

**Keywords:** Adaptability, Communication, Crisis Readiness, Emotional Intelligence, Resilience, Strategic Vision

### 1. Introduction

The present global environment, characterized by the constant civil upheavals, including the events related to the pandemic, geopolitical instabilities, and climate incidents, have brought the supply chain resilience to the status of a crucial organizational skill. The COVID-19 pandemic in specific revealed key fragilities of the global supply chains and highlighted the need of strong and resilient systems <sup>[1]</sup>. Even though the scholarly community has applied a lot of attention to the strategic and technological aspects of supply chain resilience, the corresponding human and leadership aspects are not well-researched. This paper thus aims at filling these gaps in the empirical literature by investigating the role of leadership qualities on crisis preparedness and supply chain. The research can have both practical and theoretical applications that can be used in informing the development of leadership, building the capacity of leaders to deal with a crisis situation, and in policy making at the organizational level, by quantitatively evaluating how the leadership qualities of emotional intelligence, adaptability,

decisiveness, strategic vision, and communication, among others, interact to deliver the outcome of resiliency <sup>[2]</sup>.

### 2. Literature Review

#### 2.1 Theoretical Frameworks

The research uses three theoretical concepts to explore the correlation between leadership characters and supply-chain resiliency. Transformational and Transactional Leadership Theories The two main theoretical frameworks in which to analyze leadership are called Transformational and Transactional Leadership Theories. The transformational leadership lays emphasis on vision, inspiration and person-specific support, which are abilities that are especially critical in times of discontinuity and uncertainty. Transactional leadership, in contrast, places more emphasis on task focus, performance management and structural features that guarantee stability and continuity in the times of crisis.

This is with regard to the Resource- Based View (RBV) of the firm that conceptualizes leadership traits as intangible

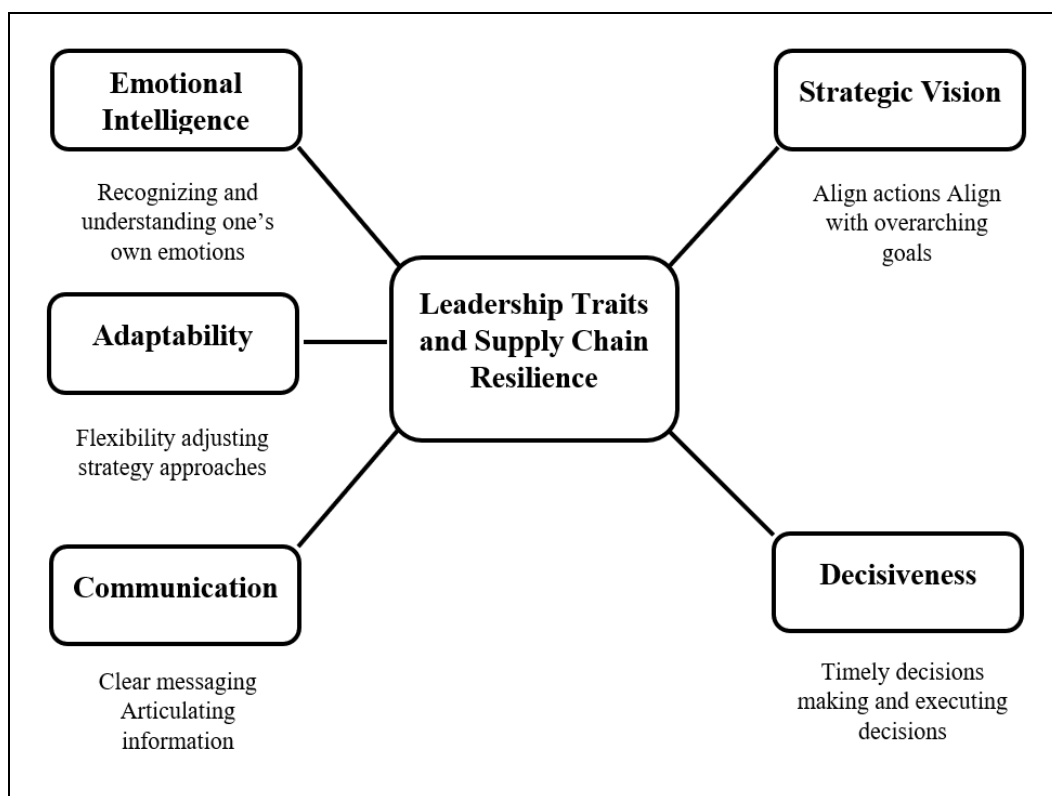
assets that can deliver sustainable competitive advantages. The argument that human capital can play a crucial role in boosting resilience is supported by the RBV when referring to leadership as a value that sustains the organizational capabilities of the industry, in terms of being flexible, innovative, and capable of coping with crises <sup>[3]</sup>.

Lastly, Crisis Management Theory provides a time-based view of navigating through the uncertainty that is experienced by the organization with focus on the preparedness and response, recovery, and learning. Such a framework highlights the role of leadership in the heart of the crisis lifecycle and promotes its integrated approach that activates psychological, structural and strategic forces towards building resilience.

## 2.2 Key Leadership Traits

The study focuses on the five main traits of leadership that are normally linked to successful crisis management: Emotional Intelligence (EI) decisiveness, adaptability, strategic vision, and communication skills. EI includes

elements such as self consciousness, emotional editing, compassion and people skills <sup>[4]</sup>. People with high EI are usually effective communicators, they are able to with stand stresses and better solve any conflict in times of crisis. Decisiveness refers to taking unhesitating, solid and assertive decisions under pressure and this characteristic is a must when a quick action has to be taken as to stem disruption. Adaptability allows describing the ability to remain flexible when it comes to changing strategies and ways of working; adaptive leaders are ready to innovate and decrease the damage caused by unexpected changes <sup>[5]</sup>. Strategic vision enables the executives to take a long term approach in solving short-term emergencies and they are able to stream present moves with the long-term goals of the organization. Communication skills comprise actually having the messages articulated transparently, apportionably, and persuasively, thus encouraging consistency, fostering trust and reducing miss-information at turbulent times.



**Fig 1:** Mind Map of Leadership Traits Relevant to Supply Chain Resilience

The diagrammatic illustration in Figure 1 helps to visualize the main leadership attributes discussed in the current study and demonstrate how they distinctively contribute to managing a crisis and organizational survival. The emotional intelligence fosters empathy and helps regulate stress; flexibility enhances responsiveness to the changing world; strategic vision coordinates the immediate action with the long-term goal; communication promotes openness and congruence; decisiveness helps responding quickly and without any doubts. All these characteristics enhance the role of encompassing human-related factors into the theory of resilience in terms of the study and reinforce the whole theory development <sup>[6]</sup>.

## 2.3 Supply Chain Resilience

Supply chain resilience describes the ability of an entity to predict, absorb and recover out-of-control shocks to maintain current operations and protect the levels of its services provided to customers. The idea has a number of interconnecting factors:

Redundancy: storing excess stock, excess plant and excess distribution potential that soften a blow. Flexibility: making it easy to quickly redistribute resource, switch suppliers, and adjust transportation systems. Visibility: complete overview of the operations and potential risks across the whole supply network, continuously, and in real time. Collaboration: The smooth communication and collaboration of all internally

and externally located divisions to exchange and share information, response coordination, and agreement on the strategic goals. When the dimensions are combined, they make an enterprise to be flexible and adaptable with the international uncertainties <sup>[7]</sup>.

## 2.4 Human Factor in Crisis Management

On top of logistical planning, human aspect of an organization is another determining factor of being resilient. There are two human-related variables that deserve special attention: a sense of psychological safety as well as trust between members of the team. Psychological safety can be defined as an atmosphere of personal safety to meet and express concerns, make some errors and challenge the existing practices without facing punishments. This kind of surrounding can lead to more innovativeness, organizational learning and pro-activeness in problem solving. Instead, team trust is based on mutual competence, credibility, and benevolence, which offer the source of constructive collaboration, speeded-up decision making, and collective action. Lastly, a model of decision fatigue that occurs when our mind is pushed to think, underscores the importance of leaders having emotional intelligence skills and resiliency skills to cope with extended cognitive load <sup>[8]</sup>. The results point to the fact that leadership does not only relate to distinct behaviors but also to constructing emotional environments in stressful situations and influencing optimal thinking.

## 2.5 Previous Empirical Findings

Several qualitative studies have highlighted the significance of leadership in the times of crises; however, empirically based, quantitative studies are limited. The academic community tends to focus on managerial decision-making and case studies or not to focus on an investigative approach to the interaction between personal characteristics and the organizational resilience. Furthermore, few studies have combined the rigorous aspects of statistics to reflect the complexity on the ground, the use of structural equation modelling <sup>[9]</sup>. This paper attempts to fill this research gap by estimating the degree to which leadership qualities can be predictors of resilience outcomes and investigate the moderating and mediating variation induced by cultural and psychological-safety factors.

## 3. Materials and Methods

### 3.1 Research Design

The current quantitative correlational study design examines how certain leadership qualities are linked with the resilience of the supply-chain in case of a crisis situation. Survey research The study aims at establishing predictive relationships and not causality and therefore a correlational research approach will be applicable. The study took a cross-sectional design where data were gathered at one time to reflect leadership portraits and resilience results in contexts of real-life organizations. Such an arrangement allows the investigation of statistically important trends in various organizational settings and provides a picture of leadership effectiveness in the scenario of disruption.

### 3.2 Population and Sample

The survey will be conducted among middle and senior

level supply chain professionals having decision-making capability in manufacturing, healthcare, retail, logistics and technology. These respondents usually manage continuity of chains, manage suppliers and implement crisis-response protocols. To ensure the representation, the stratified sampling plan is pursued, allowing the proportionate representation relatively to industry and worldwide regions <sup>[10]</sup>. The study has a high external validity as stratification based on sector, firm size and geographic region are done. Excluded are only those respondents who lack at least five years of experience in the supply-chain and have not once fallen into at least one organizational crisis or major disruption in the last five years. The research aims to have at least 300 people sampled so as to have enough statistical power of multivariable modeling and to draw conclusions that are generalizable.

### 3.3 Data Collection Tools

The current research collected information through a digital survey questionnaire that used three main blocks.

**Leadership Assessment:** The behavioural constructs were assessed using Multifactor leadership questionnaire (MLQ) which is a validated instrument with extensive usage in leadership studies. The MLQ assesses transformational and transactional scales and provides subscales that can be viewed discrete and contributing to the emotional intelligence, adaptability, decisiveness, strategic vision, and communication. Respondents were used to rate how much they agreed with each statement on a five point Lickert scale <sup>[11]</sup>.

**Measurability of resilience:** The resilience of the supply chain was evaluated through a complex tool which consisted of the analysis of Supply Chain Resilience Assessment Model (SCRAM) and Crisis Leadership Framework. Capabilities caught by this module include the requirement of preparedness planning, response agility, recovery performance, collaboration performance and resource flexibility. It also contains those that measure perceived crisis preparedness and flexibility.

**Demographic and Organizational Context:** There were a few more items providing demographic (industry classification, organizational size, scope of operations (local, regional, global)) and leadership role. Contextual data allow adjusting confounding factors in a statistical analysis and provide a more detailed cross-sectional observation <sup>[12]</sup>.

Online surveys were conducted using a secure internet-based research and were guaranteed confidentiality in order to motivate the respondents to give sincere and full answers. A pilot validation exercise on a selection of participants was conducted and a pre-testing was also performed in order to ascertain clarity, relevance, and reliability of survey items.

### 3.4 Variables

In this analysis, the five main traits of leadership which include emotional intelligence, decisive, flexible, strategic thinking, and communication will be investigated as the independent variables. The operationalization of each trait is ranked according to the responses based on multiple answer questionnaire Multifactor Leadership Questionnaire (MLQ). It is argued that the traits exploit both psychological and operational aspects of resilience <sup>[13]</sup>.

Crisis readiness and supply-chain resilience are the main

dependent variables to be analysed. The measure of those constructs is a multidimensional index covering the subcomponents like system redundancy, operational flexibility, network visibility, coordination efficiency, and recovery speed. The subcomponents are assessed by using validated Likert scale questions and yield to a composite resilience scores.

In order to respond to the given effect of moderation, organization culture (e.g., hierarchical, collaborative) is constructed as a moderator, which can enhance or weaken an impact of leadership traits. A mediator is tested between EI and the crisis performance at the team level, psychological safety measured with the help of the scale developed by Edmondson. Experience with crisis (based upon past frequency and intensity of disruption) is used as a backdrop control variable.

### 3.5 Data Analysis Techniques

The type of data analysis that is going to be utilized in the current study would involve a combination of basic and advanced statistical methods in order to produce valid, robust, and generalizable data.

**Descriptive Statistics:** Demographic and organizational characteristics were explained in means, standard deviations, frequencies, and distributions. These descriptives provide the preliminary knowledge that is needed to interpret further analyses. **Reliability and validity Testing:** Cronbach alpha was used in measuring internal consistency, where 0.70 was used as the criterion of acceptability. Exploratory Factor Analysis (EFA) was used to check construct validity before the Confirmatory Factor Analysis (CFA) was used to verify the factor structures of leadership and resilience scales. The average variance extracted (AVE) and the subjects and inter-construct relationship were used to test convergent and discriminant validity<sup>[14]</sup>.

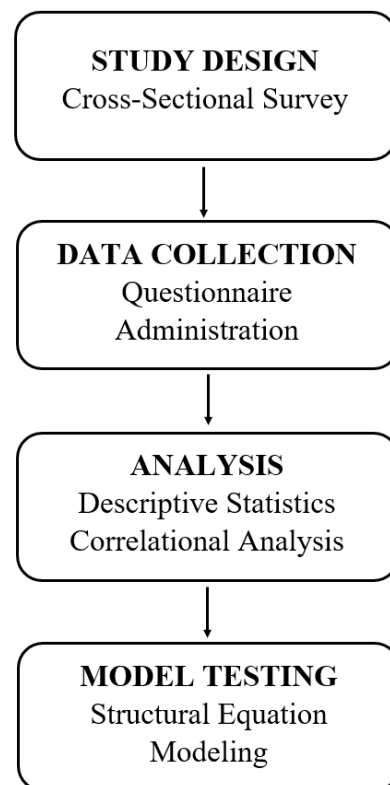
**Correlation Analysis:** It was determined that Pearson product-moment correlation coefficients found the strength and direction of bivariate relationships between leadership traits and resilience indicators. Significant correlations were used in choosing predictors in regression and SEM models.

**Multiple Regression Analysis:** Hierarchical linear regression models were made to approximate the predictive capability of every leadership characteristic on outcomes of crisis preparedness and resilience. Moderation of organization culture was tested by the inclusion of interaction terms. Regression diagnostics (VIF, the tolerance) clarified that the integrity of the regression coefficients was available.

**The Structural equation modeling (SEM):** SEM was used to check the general theoretical model which involved the latent variables as well as the observed variables. Leadership trait to resilience paths were modeled both directly and indirectly through mediators including psychological safety. The Model fit was assessed based on Root Mean Square Error of Approximation (RMSEA < 0.08), Comparative Fit Index (CFI > 0.90) and Tucker-Lewis Index (TLI > 0.90). Indirect effects were estimated (based on approximately 5,000 samples), and the results were calculated using techniques of bootstrapping (5,000 samples).

Collectively, these analytical steps can help one have a broader insight on the impact of certain leadership attributes

on the resilience of an organization in case of a crisis situation. Multivariate techniques are used to conduct a rigorous test of hypothesized relationships and thus make the study contribute to theory and practice.



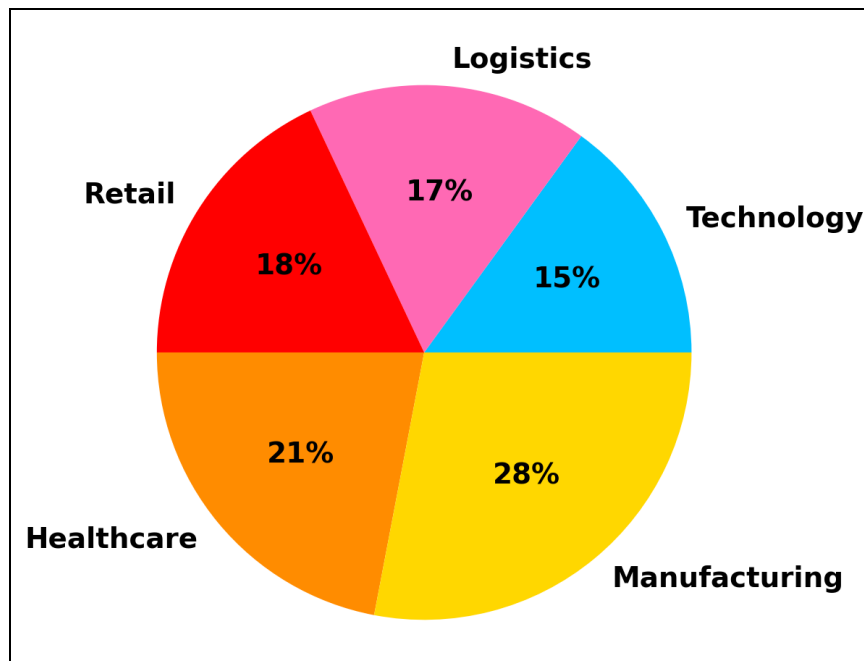
**Fig 2:** Research Methodology

The research design of the current study schematically presented in the Figure 2 below navigates the consecutive steps in which the study took place. The study started by identifying a cross-sectional survey with data collection that is informed by validated tools. After descriptive and correlational analysis was used, structural equation modeling (SEM) was utilized in order to test the hypothetical relationships between the leadership traits and the supply chain resilience. The use of multivariate methods, namely SEM, is a testimony to the stringent adherence of the study towards supporting and testing of the hypotheses and verification of the theory<sup>[15]</sup>.

## 4. Results

### 4.1 Descriptive Statistics

The final response covered 328 mid-to-senior-level supply chain professionals organized into five major industries, including manufacturing (28%), healthcare (22%), retail (18%), logistics (17%), and technology (15%). The geographical distribution of the participants was in North America (40%), Europe (30%), Asia-Pacific (20%), and others (10%). Sixty two percent said they had a personal responsibility in leading during a major disruption within the last five years. Associated industry experience totaled 12.7 years; and 48 percent of the responders were at C-suite or the director level. Cronbach alpha values of all key constructs are more than 0.80, which means high internal consistency. The preliminary data analysis showed no major outliers and pattern of missing data.



**Fig 3:** Sectoral Distribution of Survey Respondents

In the present study, a pie chart (Fig. 3) was used to present the category of respondents by industry sector of the three hundred and twenty eight reported. The largest number was represented by the manufacturing segment (28%), followed by healthcare (22%), retail (18%), logistics (17%), and technology (15%). The developing heterogeneous sample will allow generalizing the research findings to the wide scope of supply-chain situations.

External validity of a study can be improved by inclusion of the various sectors in the study to acquire a broad range of crisis scenarios and operations intricacy. The diversity in sectors also enhances statistical models by neutralizing the industry-level fluctuation in leadership styles and survivability strategies.

**Table 1:** Descriptive Statistics of Demographic Variables, Leadership Competencies, and Resilience Measures

Variable	Mean	Std. Dev.	Min	Max
Age (years)	42.3	8.5	25.0	60.0
Industry Experience (years)	12.7	6.3	5.0	35.0
Emotional Intelligence	4.2	0.6	2.5	5.0
Strategic Vision	4.0	0.7	2.8	5.0
Adaptability	3.8	0.8	2.7	5.0
Communication	3.7	0.7	2.6	4.9
Decisiveness	3.5	0.9	2.0	4.8
Psychological Safety	4.1	0.6	2.9	5.0
Crisis Readiness	3.9	0.7	2.8	5.0
Supply Chain Resilience	4.0	0.8	2.7	5.0

The descriptive statistics of demographic and scale-based measures of leadership characteristics and resilience is provided in Table 1. The average age of respondents was 42.3 years and average industry experience of the respondents was 12.7 years. As far as leadership competencies are concerned, emotions intelligence, strategic visioning, and adaptability posted mean scores of more than 3.8 out of a scale of 5 points on Likert-type scale, evidencing a substantially good leadership profile among the sample. The standard deviations were not extreme which implied uniform perceptions of the respondents. Psychological safety, crisis readiness and supply chain resilience as the resilience-related variables showed the high central tendencies and medium dispersion, supporting the robustness and the interior consistency of survey measures. These descriptive statistics are a critical background to interpret correlation, regression and SEM statistics that are to follow.

#### 4.2 Correlation Findings

The study was based on bivariate analysis of correlation that was used to explore the interrelationship between emotional intelligence and supply-chain resilience, strategic vision, crisis readiness, adaptability, communication, decisiveness, and psychological safety. The results provide strong positive correlation with emotional intelligence and general supply-chain resilience ( $r = 0.61, p < 0.01$ ), and strategic vision and crisis readiness ( $r = 0.58, p < 0.01$ ). Adaptability ( $r = 0.49$ ), communication ( $r = 0.44$ ), and decisiveness ( $r = 0.38$ ), had moderate though statistically significant relationships with resilience indicators as well. The mediating trend was observable in the case of psychological safety, which is tightly linked with emotional intelligence ( $r = 0.56$ ) and team-performance statistics ( $r = 0.60$ ).

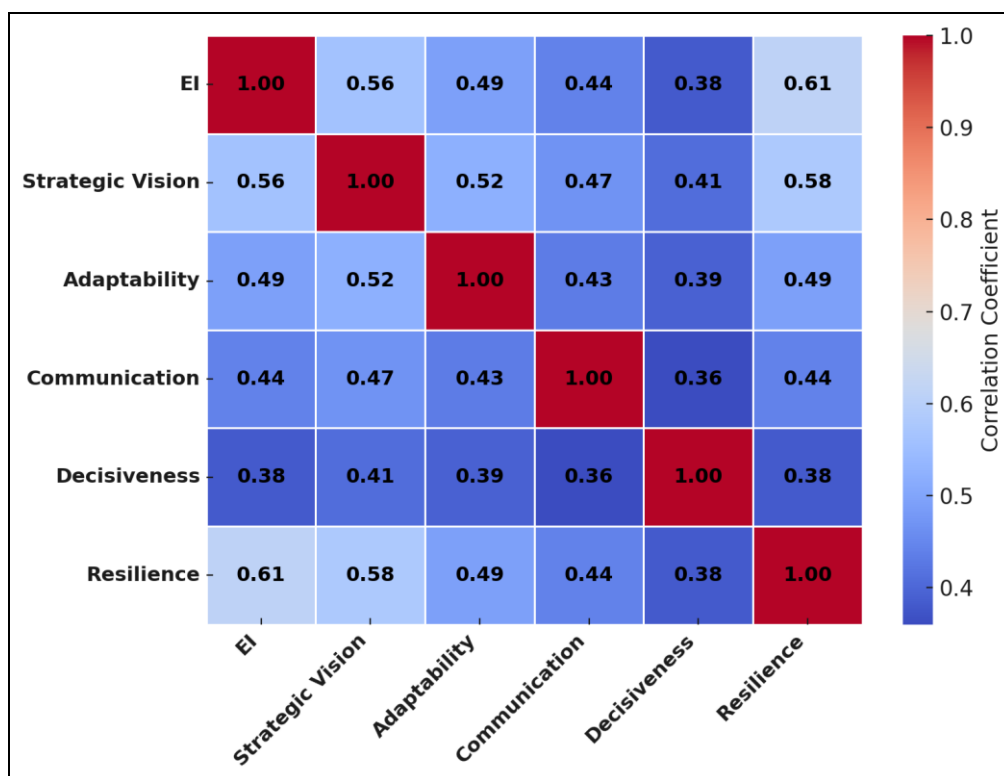


Fig 4: Heatmap of Leadership Traits and Resilience Correlations

The picture seen in Figure 4 depicts Pearson correlation coefficients of leadership traits and resilience. Emotional intelligence (EI) and strategic vision demonstrate the highest relationships with the outcomes of resilience ( $r = 0.61$  and  $r = 0.58$ , respectively), thus indicating their predictive value. Adaptability, communication, decisiveness, also have a positive correlation albeit to a lesser degree. Visualization here is used to confirm the quantitative findings by giving a brief comparative visualization of strength of relations. Emotional intelligence (EI) and strategic orientation come out as the most important factors that need to be taken into consideration when defining what is accessible to these resilience-building interventions.

#### 4.3 Regression and SEM Output

In hierarchical multiple regression analysis it was found that the emotional intelligence ( $B = 0.37$ ,  $p < 0.001$ ), strategic vision ( $B = 0.32$ ,  $p < 0.001$ ), and adaptability ( $B = 0.25$ ,  $p < 0.01$ ) were the most noticeable predictors of crisis readiness and emotional intelligence and strategic vision were the most important predictive variables. The introduction of the interaction terms indicated that organizational culture had a moderating effect, namely, the connection between emotional intelligence and communication and between EI and resilience outcomes showed greater effect in collaborative cultures. A structural model assessment in terms of an SEM was found with acceptable fit values ( $RMSEA = 0.045$ ,  $CFI = 0.931$ ,  $TLI = 0.924$ ), thus confirming the causal connections stated in the hypothesis. Results of a mediation analysis then followed that psychological safety partially mediated between emotional intelligence and resilience (Indirect effect = 0.19,  $p < 0.01$ ). All in all, the results suggest that leadership qualities related to 52% of the variance in the resilience assessment and emphasize their value in crises situations.

## 5. Discussion

### 5.1 Interpretation of Key Findings

The arguably solid empirical evidence provided by the current research shows that certain leadership qualities have a huge impact on the resilience of the supply chain during crisis. Strategic vision and emotional intelligence presented themselves as the most important predictors, which allows to say that the presence of both the interpersonal astuteness and a long-term strategic orientation is crucial when maneuvering in high-stress and high-uncertainty environment. Flexibility was also an important factor, thus once again proving the importance of agile leadership in unstable situations. In spite of the relatively low degree of predictive power, the role of communication and decisiveness was found to be significant in terms of contributing to organizational coordination and acting in time.

The complexity of the resilience mechanisms is also seen in the mediation effect that psychological safety has and the moderation by the organizational culture. Such findings predispose that traits of leadership do not work in a vacuum but that they are influenced and interacted by the organizational environments. Leaders with trust-building skills, propensity to openness, and collaborative ethic compound the positive influence of their qualities in question leading to better resilience rates on the team level [16].

### 5.2 Comparison with Existing Literature

It is agreeable that empirical evidence supports theoretical suggestions about transformational leadership studies that emphasized the need of inspiration, individualized consideration, and intellectual stimulation to be behavioral dimensions very important in times of crises. Not to mention, this paper contributes to the previous research with

some quantifiable data and determines the viability of trait-resilience associations in various industries as far as statistical questions are concerned. Emotional intelligence and strategic vision come out as the best predictors which are coherent with literatures presently available as regards to organizational psychology and managing disasters. This research also incorporates the variables into a chain resilience framework<sup>[17]</sup>.

Unlike the analyses that are likely to highlight either structural or technical preparedness, this study highlights the strategic importance of a human-centric capacity. Under the synthesis of leadership qualities, psychological constructs, and organizational culture, the study also provides a multi-dimensional explanation of what outperforms disruption in terms of continuity and recovery.

### 5.3 Theoretical Implications

Current results can significantly enhance the literature of leadership and crisis management. First, they demonstrate that the Resource-Based View is also relevant since they show that the leadership traits are treated as a form of intangible assets that lend competitive advantage to the entity in the form of enhanced crisis preparedness. Second, the involvement of the psychological safety as the mediating factor expands the theory of transformational leadership introducing the relational concept that can determine the pathways of resilience. Third, the evidence of leadership/organizational culture interaction points to the necessity of expanding the traditional models of leadership to take into consideration the contextual and systemic variables that mediate the quality of leaders.

When combined, these insights emerge to reflect the need to reconsider leadership development model towards the development of not just the trait-enhancement practices, but also the willing creation of conducive cultural environments. Crisis leadership does not fall in the boundaries of traditional command-and-control leaders; instead, it is about the development of environments where resilience is actively built and maintained by crowds.

## 6. Practical Implications

### 6.1 For Supply Chain Leaders

The empirical evidence substantiated the argument that modern world of leadership requires a combination of emotional intelligence, adaptive ability and the strategic vision. Therefore, current leadership development courses should introduce teaching modules focused on the self-awareness development, advancement of crisis communication skills as well as the improvement of scenario-based decision-making<sup>[18]</sup>. In the framework of the continuously more complex supply chain ecosystems, emotional resilience, empathetic interactions, and collaborative problem-resolving have to be made into an obligatory leadership competency.

### 6.2 For Organizations

Leadership competencies should be on an official risk management/continuity plan of an organization. Through the inclusion of human-based measures within resilience dashboards such as psychological safety, team cohesion and adaptive capacity a fuller view of readiness is obtained. Moreover, the development of a culture based on trust,

transparency, and constant learning intensifies the productivity of leadership capacities in periods of crisis situations<sup>[19]</sup>.

### 6.3 For Policymakers and Industry Bodies

At the policy level, it is essential to develop uniform frameworks of lead competency in supply chain sensitive industries. Guidelines and certification schemes within an industry should be promoted by regulatory bodies, and industry associations, with an emphasis on crisis leadership preparedness instead of a tight focus regionally on technical compliance. The further development of the systems of resilience leadership through the investment in national and regional leadership academies specialized in resilience leadership would further support the systemic preparedness to face the future disruptions. Collectively, these recommendations also indicate a required paradigm shift, namely, the idea of thinking about leadership as a responsive task rather than as a proactive tool of resilience engineering in the more volatile supply chain networks.

## 7. Limitations

The current research contributed to modern understanding of the nature of leadership and the ability to withstand crises; however, there were a number of limitations to the methods used that should be reviewed closely. First, cross-sectional research design excludes causality, forcing longitudinal research to be conducted to measure temporal progression of traits and their dynamic role in other variables such as resiliency. Besides, the data were collected by use of self-reported surveys which is a technique prone to either response bias or the social desirability effects. Later investigations may thus include supplementary tools, e.g 360-degree assessment, or objective performance-based assessment.

On one hand the sample was composed of various sectors and locations in the industry thus making it somewhat representative, but on the other hand it might not be representative of not only certain sectors but also regions that are underrepresented. Moreover, five dimensions of leadership were taken into account in the study when other, such as resilience, integrity, and systems thinking, might be worth a more formal evaluation. Lastly, exogenous factors, such as regulatory systems, geopolitical security, and technological advancement, were not directly administered, which can have great effects on resilience performance<sup>[20]</sup>.

## 8. Conclusion

The current study provides empirical data that leadership qualities, with the most prominence given to emotional intelligence and strategic vision, can be used as salient predictors of supply-chain crisis readiness and resilience. More effective navigation of disruptive events is achieved with greater ease in operation contexts with a psychological safety and collaborative cultures, based upon the dimensions of leadership. The research therefore, highlights the strategic value of being HCL-inclusive in the view of making it part of resilience packages. Measurement of these correlations in organizational and psychological frameworks provides the present work with an overarching conceptual framework to enhance resilience in multi-faceted high-stakes contexts. In future research, investigators could build upon these results

by conducting longitudinal research, with inclusion of objective measures of behavior, and subjecting interventions to rigorous testing in the effort to develop these important leadership capabilities under conditions of a real-time crisis.

## 9. Reference

- Wieland A, Durach CF. Two perspectives on supply chain resilience. *Business Strategy and the Environment*. 2021;42:315–322.
- Madi Odeh RB, Obeidat BY, Jaradat MO, Masa'deh R, Alshurideh MT. The transformational leadership role in achieving organizational resilience through adaptive cultures: the case of Dubai service sector. *International Journal of Productivity and Performance Management*. 2023;72(2):440–468.
- Sathiyaseelan A, Balasundaram S, Zirkler M, Patangia B. Innovative leadership and sustainable development: Exploring resource-efficient strategies among Indian managers. *Business Strategy and Development*. 2024;7(4):e70049.
- Riggio RE, Newstead T. Crisis leadership. *Annual Review of Organizational Psychology and Organizational Behavior*. 2023;10(1):201–224.
- Schuetz A. Effective leadership and its impact on an organisation's success. *Journal of Corporate Responsibility and Leadership*. 2016;3(3):73–90.
- Sharma A. The role of emotional intelligence in crisis leadership: effects on employee morale and organizational resilience. *International Journal of Advanced Research*. 2024;12(10):98–119.
- Scholten K, Schilder S. The role of collaboration in supply chain resilience. *Supply Chain Management: An International Journal*. 2015;20(4):471–484.
- Shree S, Kiran PR. A multi-loop learning blueprint for organizational resilience: An inter-connectional perspective. *Development and Learning in Organizations: An International Journal*. 2025. [Forthcoming].
- Wu YL, Shao B, Newman A, Schwarz G. Crisis leadership: A review and future research agenda. *The Leadership Quarterly*. 2021;32(6):101518.
- Okeagu CN, *et al.* Principles of supply chain management in the time of crisis. *Best Practice and Research: Clinical Anaesthesiology*. 2021;35(3):369–376.
- Bass BM, Avolio BJ. Multifactor leadership questionnaire. *Western Journal of Nursing Research*. 1996.
- Ghawe A, Gonzalez P. Context in information systems leadership. 2019. [Conference or publisher unspecified].
- Ledesma J. Conceptual frameworks and research models on resilience in leadership. *SAGE Open*. 2014;4(3):2158244014545464.
- Westaway MS, Rheeder P, Van Zyl DG, Seager JR. Interpersonal and organizational dimensions of patient satisfaction: the moderating effects of health status. *International Journal for Quality in Health Care*. 2003;15(4):337–344.
- Shin N, Park S. Supply chain leadership driven strategic resilience capabilities management: A leader-member exchange perspective. *Journal of Business Research*. 2021;122:1–13.
- Meneghel I, Martínez IM, Salanova M. Job-related antecedents of team resilience and improved team performance. *Personnel Review*. 2016;45(3):505–522.
- Gong Y, Abdullah MY. Exploring leadership styles and organisational resilience during crises in China. *Uniglobal Journal of Social Sciences and Humanities*. 2024;3(2):332–337.
- Sadri G. Emotional intelligence and leadership development. *Public Personnel Management*. 2012;41(3):535–548.
- Lisdiono P, Said J, Yusoff H, Hermawan AA. Examining leadership capabilities, risk management practices, and organizational resilience: The case of state-owned enterprises in Indonesia. *Sustainability*. 2022;14(10):6268.
- Djourova NP, Rodríguez Molina I, Tordera Santamatilde N, Abate G. Self-efficacy and resilience: mediating mechanisms in the relationship between the transformational leadership dimensions and well-being. *Journal of Leadership and Organizational Studies*. 2020;27(3):256–270.

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