

*Original Research*

# Investigating Effective Organizational Leadership's Indicators in Covid19 Crisis Management

Zohreh Amooee

Master of Business Management, Department of Business Management, Faculty of Economics and Administrative Sciences, University of Mazandaran, Babolsar, Iran

Morteza Movaghar

Assistant Professor, Department of Executive Management, Faculty of Economics and Administrative Sciences, University of Mazandaran, Babolsar, Iran

Bahareh Abedin<sup>1</sup> 

Assistant Professor, Department of Executive Management, Faculty of Economics and Administrative Sciences, University of Mazandaran, Babolsar, Iran

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## Abstract

Generally, the purpose of this study is to extract leadership indicators at the time of crisis and specifically, to identify the most effective indicators during the corona crisis. In the present study, a mixed-methods approach (qualitative and quantitative) has been used. In the qualitative part, the research approach is exploratory, and in the quantitative part, it is descriptive-survey. In the qualitative phase, initial data was obtained from reviewing the literature and coding of previous researches and data analysis was performed using a theme analysis method in Maxqda 2018 Software. In the quantitative phase, to prioritize the themes obtained from the literature review, they were given to 10 leaders of active international corporations in the form of AHP questionnaire. Finally, using Expert Choice Software, the weights of the data were calculated and they were all prioritized. Our investigations have shown that the indicators of crisis leadership can be prioritized as strategic awareness, empathetic communication, analytical thinking, facilitation skills and flexible guidance. The current research is the first one conducted with this approach, especially in Iran, and its results can also be considered by managers in other organizations as well.

**Keywords:** Business Leadership, Crisis Leadership, Corona Pandemic.

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<sup>1</sup> Corresponding author's Email: [b.abedin@umz.ac.ir](mailto:b.abedin@umz.ac.ir)

## Introduction

Leading an organization with all its complexities is a big challenge especially when it faces a more complex phenomenon such as corona crisis in the world, which not only affects an organization but also the whole business ecosystem. Rudolf et al. (2021) identified leadership as one of the top 10 organizational roles mostly affected by the Corona crisis. It can be said that this crisis has provided the conditions for leaders to test their performance at home, at work, and among different regions of the world (Dasborough & Scandura, 2021).

A crisis actually puts a leader's skills to a real test, no matter what the cause of the crisis is. It is a common belief that a person is born as a leader or not, and leadership is something that cannot be learned. Contrary to what people believe, good leadership is actually a strategic choice, rather than a natural gift (Lampinen, 2020). Recently, Emirza and Katrinli (2022) defined leadership as an important role in the organization, attributed the systematic mental relationships of the people in the organization to the leader and stated that when a leader and a follower are mentally (i.e., at the structural level) close to each other, they experience higher-quality relationships. Accordingly, the importance of leadership in an organization can be further confirmed. According to Schaedler et al. (2021), among all the actors involved in managing the organizational crisis, strategic leaders play a special pivotal role.

Organizational crisis is an unexpected event for the members and stakeholders of the organization and is a potentially destructive threat to the core organization and its stakeholders (Bundy et al., 2017; König et al., 2020).

A crisis either occurs directly in a system or is caused by external factors and is usually unpredictable (i.e., it is not possible to predict when and where it occurs). However, it is not usually unexpected except for when natural disasters occur causing an emergency (Dos Santos, Banderia-de-Mello, & de Almeida, 2016). In such a turmoil, the leaders' natural tendency to do work and solve all problems is felt. Leadership is essential to all stages of a corporate's life, helping to its growth, success and improvement. However, the real power of leadership emerges not in the stage of maintaining the company's performance, but in a situation where the business is facing difficult conditions, such as crisis (Kirilina, 2017). When a crisis occurs, the organization turns to the leader because his role is critical to finding the answers, understanding the meaning of crisis, and taking the initiatives (Combe & Carrington, 2015). According to Luke (2008), leaders must overcome the critical situation and chaos in the organization and rebuild the organization in proportion to the changing environmental conditions. Hence, it can be concluded that a leader plays an important role in crisis management (Fener & Cevik, 2015). Crises have different forms, including human conflicts, man-made events, economic problems or natural disasters that disrupt the natural order of societies (Santos, Banderia-de-Mello, & Cunha, 2016). Organizational crisis is operationally defined as an event or time period that includes uncertainty, important issues, and urgency (Sommer, Howell, & Hadley, 2016; as cited in Pearson & Clair, 1998). Increased competition and complex crises can slow the growth of companies and also have a significant negative impact on business sustainability and development due to the lack of effective leadership skills (Fleming & Zhu, 2017). Given the importance of crisis leadership, the present study extracts the

leadership indicators from the literature and prioritizes them according to the views of the leaders of active corporations during the Corona Virus pandemic in Iran. The main question of this research addresses the most effective leadership indicators during the Corona Virus pandemic.

### *Leadership*

Leadership is one of the widely researched and discussed topics in all areas of organizational science because literally no achievement is possible without a good leadership. Leadership may be formal, occur at all levels of management, and be informal and emerging, not just awarded as a title or position (Yammarino, 2013). Leadership is a process in which a person influences the thinking, attitude, behavior and responsibility of others. To be effective, a person who introduces himself as a leader must have specific abilities that other members of the group or organization do not, including motivation, inspiration, employees' targeting, etc. There are several definitions for leadership. However, the common definition implies that the leader must have the ability to coordinate, inspire, manage, observe, make teams, etc., and have one goal, i.e., the successful completion of given tasks and the achievement of planned goals (Dashtevski, 2019). Over time, researchers have developed different leadership styles because there has been no specific universal leadership style. Despite many different leadership styles, a good or effective leader is believed to be able to inspire, motivate, and guide activities to help achieve the goals of the group or organization. Conversely, an inefficient leader does not contribute to the development of the organization and can actually slow down the achievement of the organizational goals (Amanchukwu, Stanley, & Ololube, 2015).

### *Crisis*

Crises have the potential to separate the organization's history from its future, replace security with insecurity, separate effective leaders from ineffective ones, and change the "normal activities" of an organization to significant improvements (Yutomo & Hanita, 2020). Pearson and Clair (1998), referring to organizational crises, defined a crisis as "a low-possibility event with a great impact that threatens the life of an organization; it is characterized by ambiguity in its causes and effects and decisions are required to be made quickly with regard to it" (Durst & Henschel, 2021).

According to Mitrov (2008), there are seven major types of crises. The first one is the economic crisis, indicating the internal and external factors of the business that threaten the goals of an organization, including labor strike, market and product collapse, unavailability or limited labor opportunities. The second is the physical crisis, involving significant disruption in the corporation or its main equipment, loss of major suppliers, distributors, and customers. The third type of crisis is the information crisis in which there is a loss of information, documents, records or sensitive and confidential organizational files. Human resources is the fourth case, indicating a situation in which there is a loss of a key executive staff member or member of a team, lack of available technology, workplace violence or sabotage. The fifth crisis is the reputation crisis which happens when rumors and bad news that can damage the organization's reputation spread. The sixth case involves the psychological crisis through which an unimaginable act happens, including threats of kidnapping and ransom, terrorist attacks or even manipulating the

services or products of the organization. Finally, the seventh case is made up of natural disasters, such as tornadoes, volcanic eruptions, tsunamis, earthquakes, fires and floods.

### *Crisis Leadership*

The world of the 21st century is chaotic and full of uncertainties with severe turmoil in financial markets, failure in corporate governance and credit crises in corporate leadership. Under these indicators of constant uncertainty and turmoil, new leaders are required (Krieger & Zhovotobryukh, 2013). Leadership under pressure occurs when there is a public event and crisis. In this situation, leaders are transferred from a normal situation to a more dangerous one, which is characterized by uncertainty and ambiguity. Effective leaders who have the ability to manage both are vital preconditions for success (Smee, 2020). According to Dobrin (2013), crisis leadership is when an organizational leader leads the members of the organization “in a sudden and largely unforeseen situation, a severely negative and emotionally exhausted one”. The literature shows that the success of leaders in critical situations largely depends on their ability to process information, act on it, and influence others inside and outside their organization (Bundy et al., 2017).

Smith and Riley (2012) proposed nine key features for crisis leadership: A) capacity to make decisive decisions in the face of limited and unreliable information; B) strong mutual interpersonal communication skills; C) procedural information; H) highly advanced synthesis skills; D) emphatic communication with others and to respect the legitimacy of their views; I) ability to continue to be optimistic in the face of troubles; F) flexibility; E) strong visual thinking capacity and readiness to use it; and F) ability to rapidly develop new ideas and solutions and turn problems into opportunities (Durst & Henschel, 2021). The main indicators of leadership in different stages of the crisis are shown in Figure 1.

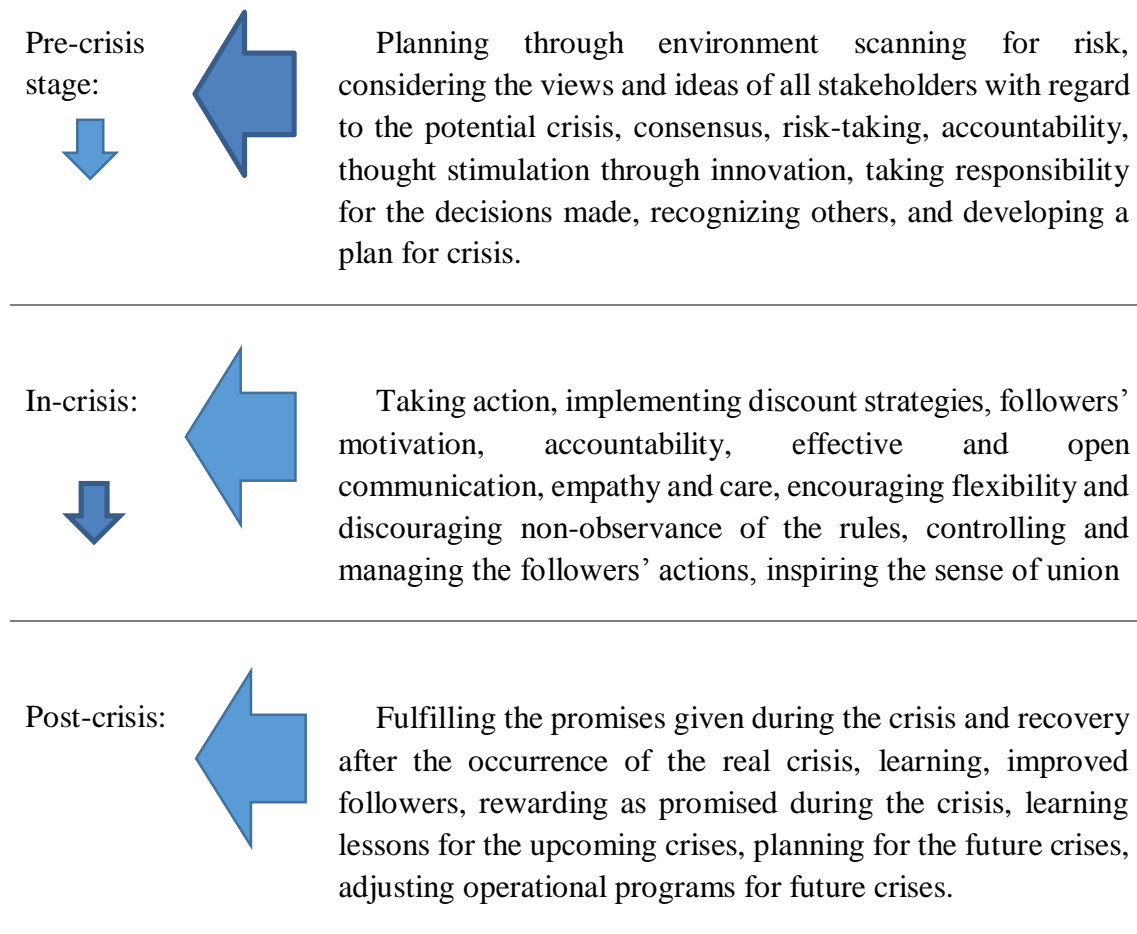


Figure 1. Indicators of crisis leadership (Du Plessis & Keyter, 2020)

## Methodology

The present study is an applied research which uses a qualitative exploratory approach. To identify the characteristics of crisis leadership, a review of literature has been used. The statistical population included all available and accessible articles found searching the keywords of “crisis leadership”, “organizational crisis leadership”, and “business crisis leadership” in Google Scholar search engine. Among various types of scientific writings, such as book chapters, books, national and international conference papers, only articles published in foreign journals were considered for this research. The keywords of “crisis leadership”, “organizational crisis leadership”, and “business crisis leadership” were included in the title with the exact terms of “leadership” and “crisis”. Totally, 298 articles were found belonging to the years 2015-2021. Removing the unavailable and inaccessible sources (considering the limitations in Iran), dissertations and books, 142 articles were extracted among which, there were articles irrelevant to the purpose of the research which were removed as well. Finally, after reading the abstracts of the articles left, the unrelated ones (such as those discussing the leadership crisis) were eliminated. In the next step, to ensure that the remaining articles would answer the research questions, the texts of the articles were quickly reviewed and 66 articles were left to be studied.

Finally, their texts were reviewed and analyzed. Open coding and then thematic analysis were used to analyze the data. Open coding was done using Maxqda 2018 Software. In the open coding stage, the texts were first carefully reviewed and read and the main concepts in the text were coded. Codes were classified based on their conceptual closeness under a particular category. Then, by putting the primary codes together, specific sub-themes were obtained and by putting the sub-themes together, the main themes were attained. The list of articles coded is shown in Table 2.

In the next step, using a questionnaire, the priority of these indicators was determined from the least important to the most important using the opinions of the leaders of international trading corporations active during the Corona crisis through the Analytic Hierarchy Process (AHP). After designing the hierarchical structure, the pairwise comparison between the criteria was determined using Expert Choice Software and the weight of the indicators was determined. Finally, the findings were merged.

Table 1. List of coded articles

No.	Researcher(s)	Year	Title
1	Sriharan, A., Hertelendy, A. J., Banaszak-Holl, J., Fleig-Palmer, M. M., Mitchell, C., Nigam, A., ... & Singer, S. J.	2021	Public Health and Health Sector Crisis Leadership During Pandemics: A Review of the Medical and Business Literature
2	Dasborough M., Scandura T.	2021	Leading through the crisis: “hands off” or “hands on”?
3	Schaedler L., Graf-Valchy L., König A.	2021	Strategic leadership in organizational crises: A review and research agenda
4	Kim, Sun-Ju	2021	Crisis leadership: An evolutionary concept analysis
5	Rameshan, Pallikara	2021	Crisis Leadership of Covid-19 Fightback: Exploratory Anecdotal Evidence on Selected World Leaders
6	Joniaková, Z., Jankelová, N., Blšťáková, J., & Némethová, I	2021	Cognitive Diversity as the Quality of Leadership in Crisis: Team Performance in Health Service during the COVID-19 Pandemic
7	DeMartino, Lindsay, and S. Gavin Weiser	2021	Administrative Leadership in Times of a Global Health Crisis: Voices and Images From the Field
8	Purnomo, Eko Nurhaji, Achmad Supriyanto, and Zummy Anselmus Dami	2021	The effectiveness of principal leadership styles in crisis management
9	Spradley, R. Tyler	2021	The Onslaught of Crisis Leadership Advice: Sifting Through Popular Leadership Sources in the COVID-19 Era



No.	Researcher(s)	Year	Title
10	Maak, Thomas, Nicola M. Pless, and Franz Wohlgezogen	2021	The fault lines of leadership: Lessons from the global Covid-19 crisis
11	Kuknor, Sunaina, and Shubhasheesh Bhattacharya	2021	Organizational Inclusion and Leadership in Times of Global Crisis
12	Freysteinson, W. M., Celia, T., Gilroy, H., & Gonzalez, K	2021	The experience of nursing leadership in a crisis: A hermeneutic phenomenological study
13	Lawton-Misra, Nita, and Tyrone Pretorius	2021	Leading with heart: academic leadership during the COVID-19 crisis
14	Fitriani, Fitriani	2021	Crisis Leadership In The Incident Command System
15	Siambi, James K	2021	The effect of self-leadership competencies on the perceived ability of school leaders to cope with COVID-19 pandemic crisis challenges in Jeddah schools, Saudi Arabia
16	Petridou, Evangelia, and Nikolaos Zahariadis	2021	Staying at home or going out? Leadership response to the COVID-19 crisis in Greece and Sweden
17	Bustamante, Christian Bryan S	2021	The Care of the self and the ethos of the leadership in times of pandemic and crisis
18	Taleatu, Taofiki Akinwumi, and Samuel Ayodele Majekodunmi	2021	The Leadership styles and Corporate performance during debt crisis in Nigeria
19	Vijayaravathan, Kalpana	2021	School Leadership Challenges in Faroese Compulsory Schools During the COVID-19 Crisis
20	Pallivathukkal, James	2021	Healthcare Leadership in Times of Crisis—An Overview of COVID-19 Crisis Management and Its Effect on Economy
21	Bavik Y.L., Shao B., Shao A., Schwarz G.	2021	<i>Crisis leadership: A review and future research agenda</i>
22	Gogalniceanu, P., Olsburgh, J., Loukopoulos, I., Sevdalis, N., & Mamode, N	2021	Capturing the crisis 'golden moment'—A leadership opportunity for overcoming institutional inertia in safety-critical situations
23	Schaedler L. Graf- Vlachy I. König A	2021	Strategic leadership in organizational crises: A review and research agenda
24	Maria Fors Brandebo	2020	Destructive leadership in crisis management
25	Forster, Bruce B., Michael N. Patlas, and Frank J. Lexa	2020	Crisis leadership during and following COVID-19

No.	Researcher(s)	Year	Title
26	Du Plessis, Davy, and Charles Keyter	2020	Suitable leadership styles for the Covid-19 converged crisis
27	Mutch, Carol	2020	Crisis leadership: Evaluating our leadership approaches in the time of COVID-19
28	Benlahcene, Abderrahmane, and Nurfarhana Salihah Binti Abdullah	2020	Public Leadership in Times of Crisis: Lessons from the Covid-19 Pandemic in Malaysia
29	Liu, Brooke Fisher, Irina A. Iles, and Emina Herovic	2020	Leadership under fire: How governments manage crisis communication
30	Lagowska, Urszula, Filipe Sobral, and Liliane Magalhães Girardin Pimentel Furtado	2020	Leadership under crises: A research agenda for the post-Covid-19 Era
31	Balwant, Paul Tristen	2020	Crisis leadership: Teaching external corporate communications via an experiential learning exercise
32	Wardman, Jamie K	2020	Recalibrating pandemic risk leadership: Thirteen crisis ready strategies for COVID-19
33	Jahagirdar, S., Chatterjee, A., Behera, S., & Mohapatra, A	2020	Response to the COVID-19 pandemic in India: Case studies on leadership in crisis situations
34	Kaul, Vivek, Vijay H. Shah, and Hashem El-Serag	2020	Leadership during crisis: lessons and applications from the COVID-19 pandemic
35	Wright, Michael	2020	The Importance of Decisive Leadership and Clear Direction During Crisis
36	Keen, PK Ken, Roderick Gilkey, and Edward L. Baker	2020	Crisis leadership—from the Haiti earthquake to the COVID pandemic
37	Sadiq, Abdul-Akeem, Naim Kapucu, and Qian Hu	2020	Crisis leadership during COVID-19: the role of governors in the United States
38	Fragouli, Evangelia	2020	A critical examination of the interaction of crisis leadership & corporate reputation
39	Khaled, Sheikh Mamun	2020	Strategic Leadership Through Crisis
40	Dirani, K. M., Abadi, M., Alizadeh, A., Barhate, B., Garza, R. C., Gunasekara, N., ... & Majzun, Z	2020	Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic
41	Leea, Hee Myung, and Min Jae Parkb	2019	Crisis Management Leadership and Organizational Culture Improvement: the Case of POSCO M-TECH in Republic of Korea



No.	Researcher(s)	Year	Title
42	Lacerda, Teresa C	2019	Crisis leadership in economic recession: A three-barrier approach to offset external constraints
43	Bhaduri, Raka M	2019	Leveraging culture and leadership in crisis management
44	Bell, Steven	2019	Learning from Crucible Moments: Lessons in Crisis Leadership
45	Kearns, K., Alexander, C., Duane, M., Gardner, E., Morse, E., & McShane, L	2019	Leadership in a crisis
46	Bekdash, Mazen O	2019	Leadership and decision-making style for airline crisis management in emerging markets
47	Fortunato, John A., Ralph A. Gigliotti, and Brent D. Ruben	2018	Analysing the dynamics of crisis leadership in higher education: A study of racial incidents at the University of Missouri
48	AlKnawy, Bandar	2018	Leadership in times of crisis
49	Kapucu, Naim, and Yusuf Ustun	2018	Collaborative crisis management and leadership in the public sector
50	Najib, Shehla	2018	Student Protests In Universities: Exploring The Model For Crisis Management, Crisis Leadership And Organizational Learning
51	Dückers, M. L., Yzermans, C. J., Jong, W., & Boin	2017	Psychosocial crisis management: The unexplored intersection of crisis leadership and psychosocial support
52	Bowers, Melissa R., J. Reggie Hall, and Mandyam M. Srinivasan	2017	Organizational culture and leadership style: The missing combination for selecting the right leader for effective crisis management
53	Teo, Winnie L., Mary Lee, and Wee- Shiong Lim	2017	The relational activation of resilience model: How leadership activates resilience in an organizational crisis
54	Stern, Eric K	2017	Crisis, leadership, and extreme contexts
55	Liu, Helena, Leanne Cutcher, and David Grant	2017	Authentic leadership in context: An analysis of banking CEO narratives during the global financial crisis
56	Deneke, Dametew Tessema	2017	Crisis Leadership in Ethiopia: A Comparative Analysis on the 1989 Coup D'état and the Post-2016 Protracted Political Instability

No.	Researcher(s)	Year	Title
57	Sommer, S. Amy, Jane M. Howell, and Constance Noonan Hadley	2016	Keeping positive and building strength: The role of affect and team leadership in developing resilience during an organizational crisis
58	Santos, Rodrigo Antônio Silveira dos, Rodrigo Bandeira de Mello, and Cristiano José Castro De Almeida Cunha	2016	The leadership process during an organizational crisis
59	Rottig, Daniel, and Bryan S. Schaffer	2016	The Importance of Charismatic Leadership Behavior in Times of Organizational Crisis and Change: An Examination of Justice Perceptions and Cultural Context
60	Nyenswah, Tolbert	2016	Leadership in times of crisis: a personal reflection from the center of the Ebola epidemic response in Liberia
61	Karim, Akram Jalal	2016	The indispensable styles, characteristics and skills for charismatic leadership in times of crisis
62	Gilstrap, C. A., Gilstrap, C. M., Holderby, K. N., & Valera, K. M.	2016	Sensegiving, leadership, and nonprofit crises: How nonprofit leaders make and give sense to organizational crisis
63	Walker, S. M., Earnhardt, M. P., Newcomer, J. M., Marion Jr, J. W., & Tomlinson, J. C	2016	Crisis leadership during the Great Recession of 2008
64	Mishra, Sushant Kumar	2016	Linking crisis management and leadership competencies: The role of human resource development
65	Nyenswah, Tolbert, Cyrus Y. Engineer, and David H. Peters	2016	Leadership in times of crisis: the example of Ebola virus disease in Liberia
66	Fener, Tugba, and Tugce Cevik	2015	Leadership in crisis management: Separation of leadership and executive concepts
67	Mutch, Carol	2015	Leadership in times of crisis: Dispositional, relational and contextual factors influencing school principals' actions
68	Mazánek, Lukáš	2015	Leadership during Crisis: Threat Identification and Solution Proposal
69	Cook, Michael D., and M. Kenneth Holt	2015	Crunch time: When leadership matters most

## Results and discussion

After reviewing the 66 articles, 48 codes were found. Then, by categorizing the sub-themes, 5 main themes were obtained, as shown in Table 2.

Table 2. Main themes and sub-themes

Concept	Sub-themes	Main-Themes
Honesty	Organizational trust building	Empathetic communication
Trust building		
Awareness of crisis		
Pay attention to employee safety	Valuing employees	
Ensuring the well-being of individuals		
Prioritize attention to employees		
Appreciate people's efforts	Transparent and open communication	
Strengthen open communication		
Transparency in communication		
Empathy	Communication intelligence	
Listen to the staff		
Combining diverse perspectives	Group intelligence	Facilitation skill
Effective team building		
Strengthen the spirit of cooperation		
Motivate employees	Motivational guidance	
Orientation to employees		
Decide decisively	Agility	Strategic awareness
Quick decision making		
Immediate action		
Responsibility	Commitment	
Accountability		
Vision determining	Futurism	
Environmental scanning		
Lead the organization towards a long-term future		
Strategic forecasting		
Strategic thinking		
Strategic planning		
Readiness for crisis		
Risk taking	Courage	
Having self-confidence		
Understanding and interpreting the crisis	Identify and crisis understanding	
Crisis identification		
Flexibility	Positive adaptation	Analytical thinking
Compatibility		
Resilience		
Innovation		
Keep calm in times of crisis		

Concept	Sub-themes	Main-Themes
Learning from crisis		Continuous improvement
Understanding customer’s needs	Continuous improvement	
effective Stakeholder management		
Effectiveness		
Efficacy		
Applying a credible leadership style	Liberal (populist) leadership	Flexible guidance
Applying participatory leadership style		
Applying a transformational leadership style		
Applying a charismatic leadership style	Authoritarian leadership	
Applying exchange leadership style		
Applying authoritarian leadership style		

The five indicators of crisis leadership were identified as follows:

**Empathetic communication:** The leader communicates with his employees by empathizing and listening to them and cares about the issues and affairs of the employees. He also provides the ground for organizational trust for the employees by being honest and expressing the problems of the organization in public.

**Strategic Awareness:** By recognizing the changes and knowing what those changes mean to the organization and what needs to be done about them, the leader makes the right decision and action, and takes responsibility for it.

**Analytical thinking:** The leader, according to the teachings of crisis time, shows creativity and innovation and tries to create a consistent growth in all parts of a process by improving productivity.

**Flexible guidance:** The leader has the responsibility of leading the organization to achieve its goals. To lead the organization, he can use a variety of flexible guidance styles in different situations, which determine the atmosphere of the organization and how leaders interact with their employees.

**Facilitation skill:** The leader simplifies problems and reduces troubles by motivating the employees and helping them to move forward, and tries to transfer decision-making tools to individuals and groups, and to keep the role and activities of group members remarkably consistent.

In the second step, to prioritize the characteristics of crisis leadership, the themes obtained were listed in the form of an AHP questionnaire and a pairwise comparison table and given to 10 leaders of international trading corporations with at least 10 years of experience who were active during the Corona crisis and familiar with the business environment. For instance, managers were asked to compare the effectiveness of the criteria of empathetic communication and analytical thinking in leading the corona crisis.

They were supposed to make a quantitative comparison and prioritize the criteria using the numbers 1-9. This comparison was performed in pairs for all criteria.

Then 10 questionnaires were completed and the answers to the questionnaires were entered into Expert Choice Software. Thus, the pairwise comparison matrix was made, as shown in Table 3 (the main diagonal of the matrix is naturally 1 since in matrix comparisons, the comparison of two similar items will be the same and the inverse comparison of the two items will be recorded as a fraction).

Table 3. Pairwise comparison matrix of criteria

	Empathetic communication	Facilitation skills	Strategic awareness	Analytical thinking	Flexible guidance
Empathetic communication	1	3	1.3.4	2	3
Facilitation skills	1.3	1	1.4.2	1.2.3	2.7
Strategic awareness	3.4	4.2	1	3.5	4.8
Analytical thinking	1.2	2.3	1.3.5	1	4.3
Flexible guidance	1.3	1.2.7	1.4.8	1.4.3	1

#### *Calculating the Final Weights of the Criteria Using Expert Choice Software*

The pairwise comparison matrices presented in Table 3, were entered into the software. After processing the data, the relative weight of each data in relation to the other ones was extracted. In the hierarchical analysis process, the elements of each level are compared in pairs with their corresponding element at a higher level and then their relative weight is calculated. The final weight was displayed in Figure 2 for the analyst to easily compare them. According to Figure 2, the comparison of the weights of the criteria shows that the criteria of strategic awareness, empathetic communication, analytical thinking, facilitation skills and flexible guidance with the final weights of 0.466, 0.217, 0.165, 0.096 and 0.057 had the most to least importance in crisis leadership during the Corona pandemic, respectively. This means that at the time of the Corona crisis, first, a leader is needed primarily to guide the organization towards achieving its goals by recognizing the crisis in a timely manner and making the right decision. Second, the leader needs to monitor employees and listen to them because in crisis, the leader's empathetic communication leads to employees' loyalty and provides organizational trust. He also needs to have an analytical mind to respond quickly to problems and make decisions to avoid recurring injuries during a crisis. Leaders with analytical skills actually take innovative and preventive measures, and have creative performance. Having a leader with strong analytical thinking in critical situations is crucial to limiting damage to the corporation. In addition, the crisis leader should motivate employees and encourage participatory discussion in groups. Finally, the leader should offer a leadership style based on circumstances to succeed in a crisis. A style can be considered the dominant pattern

of the leader's behavior in a situation. Typically, it refers to the decision-making patterns considering the followers rather than to all aspects of leadership. Good leaders generally have intermittent alternative states that are not style-specific and can adapt to different situational needs (Vanwart, 2003).

One of the advantages of the hierarchical analysis process is the control of decision consistency. In other words, in this process, the degree of incompatibility of the decision can always be calculated and its good and bad or acceptable or rejected can be judged. Incompatibility rate is an indicator that measures the degree of consistency of experts' responses to pair assessments and comparisons. Following that, the incompatibility rate, calculated by the software was equal to 0.06, which is less than 0.1 and an acceptable value in terms of time. Thus, there is no need to reconsider the judgments.

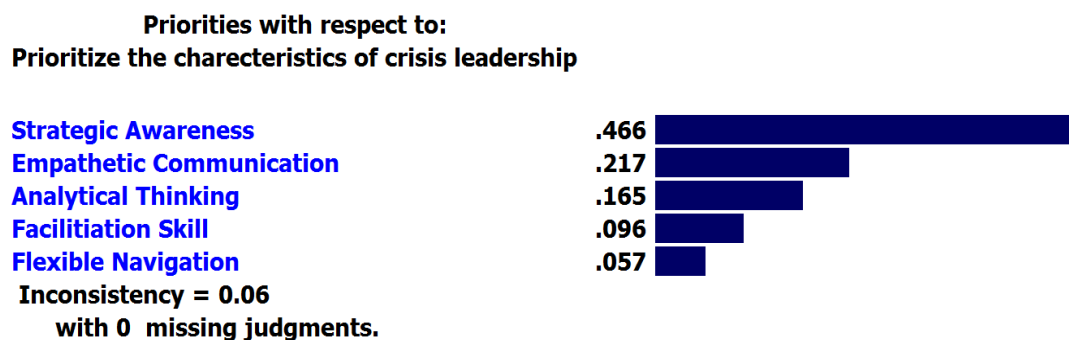


Figure 2. Final weights of the criteria

## Conclusion

The modern world is witnessing a large number and different forms of crises, the extent to which varies between those that occur at the individual level and those that occur in the groups. Crises affect different organizations, both locally and globally. Given that in the circumstances around us, changes are unstable and successive, this has led to the complexity of crises and the multiplicity of their dimensions. Therefore, we must deal with these crises and manage them wisely because their continuation will lead to great human and economic problems. Crisis management requires a distinctive and creative leader with the characteristics that enable him to deal effectively with these crises (Allide & Arnat, 2020). A critical event can threaten any organization at any time during its business life cycle (Hargis & Watt, 2010). Therefore, it is important to understand the steps that can be taken to reduce any losses and facilitate the rapid recovery of the organization. The results of various research studies lead to a full understanding of how the leaders' actions or inactions during a crisis can affect the crisis process (Walker et al., 2016). Crises come in many forms and can slow down the growth of corporations. The literature shows that the success of leaders in critical situations depends to a large extent on their ability to process information, acts on it, and influences others outside their organization. Critical situations test the flexibility, leadership and readiness of organizations, systems and individuals. Organizational crises are ambiguous and complex and require immediate response. They occur rarely but have severe consequences and require decisions that bring about significant organizational changes. Corporate leaders must take precautionary or preventive measures in advance to overcome the



organizational crisis. Managers and leaders who understand the risk of a crisis at the right time can take actions to lessen the damages in the long run. It is the responsibility of the leaders and managers of the organization to recognize the initial signals and in this way, survive during the crisis with the least damage. In this research, using the literature review method, the indicators of leadership in critical situations were identified. By reviewing the articles belonging to the years 2015-2021, 64 articles related to the subject were reviewed and 5 indicators of crisis leadership were identified. The five indicators of crisis leadership include empathetic communication, facilitation skills, strategic awareness, analytical thinking, and flexible guidance.

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