


## The Role of Transformational Leadership in Disaster Management in the Context of Crisis Management and Sustainable Society Understanding: The Case of the 2023 Kahramanmaraş Earthquake in Türkiye

Ayşe ASİLTÜRK<sup>1</sup>

<sup>1</sup> Associate Professor Dr., Trabzon University, ayseasilturk@trabzon.edu.tr 

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### ABSTRACT

In a world that is becoming increasingly interconnected due to globalization and digitalization, countries and societies are struggling with various crises. These crises, which emerge in the environmental, economic, political, social and technological fields, have become threats to the sustainability of societies. Sudden and powerful natural disasters dramatically affect societies both materially and spiritually. In today's world surrounded by disasters, it is of great importance for institutions and organizations to review their crisis management approaches and the crisis leadership they exhibit in combating different types of crises. The aim of this study is to examine the role of the transformational leadership approach in crisis management in order to ensure the sustainability of societies in the face of sudden and devastating crises. In particular, the intervention and recovery processes carried out after the Kahramanmaraş (Syria-Türkiye) earthquake, which occurred on February 6, 2023 and was described as one of the biggest disasters of the century, were evaluated from the perspective of transformational leadership. In this context, the main objective of the study is to reveal the impact of leadership not only on administrative but also on moral, psychological and social reconstruction processes in post-crisis recovery processes. As a result of the study, it was observed that transformational leadership characteristics (inspirational motivation, intellectual stimulation, individual interest and idealized influence) increased the recovery capacity of the society during and after the crisis. In the Kahramanmaraş earthquake example, it was determined that the transformational leadership behaviours exhibited by local administrators, public officials and civil society leaders reinforced social trust, strengthened the sense of solidarity and accelerated the recovery processes. In contrast to traditional authoritarian or mechanical crisis management approaches, transformational leadership was observed to produce more inclusive, motivating and sustainable results.

**Keyword:** Crisis Management, Transformational Leadership, Sustainable Communities, 2023 Kahramanmaraş Earthquake

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## Kriz Yönetimi ve Sürdürülebilir Toplum Anlayışı Bağlamında Afetlerle Mücadelede Dönüşümcü Liderliğin Rolü: Türkiye’de 2023 Kahramanmaraş Depremi Örneği

### Makale Türü

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### ÖZET

Küreselleşme ve dijitalleşmenin etkileriyle birlikte giderek daha yakınlaşan dünyada ülkeler ve toplumlar çeşitli krizlerle mücadele etmektedir. Çevresel, ekonomik, politik, sosyal ve teknolojik alanlarda ortaya çıkan bu krizler, toplumların sürdürülebilirliğini tehdit eder hâle gelmiştir. Özellikle ani biçimde gelişen güçlü doğal afetler, toplumları hem maddi hem de manevi olarak dramatik biçimde etkilemektedir. Afetlerle kuşatılmış günümüz dünyasında, farklı kriz türleriyle mücadelede kurum ve kuruluşların sahip oldukları kriz yönetimi yaklaşımlarını ve sergiledikleri kriz liderliğini gözden geçirmeleri büyük önem arz etmektedir. Bu çalışmanın amacı, ani ve yıkıcı krizler karşısında toplumların sürdürülebilirliğini sağlayabilmek için dönüşümcü liderlik yaklaşımının kriz yönetimindeki rolünü incelemektir. Özellikle 6 Şubat 2023 tarihinde meydana gelen ve yüzyılın en büyük afetlerinden biri olarak nitelendirilen Kahramanmaraş (Suriye-Türkiye) depreminin ardından yürütülen müdahale ve iyileşme süreçleri, dönüşümcü liderlik perspektifinden değerlendirilmiştir. Bu bağlamda çalışmanın temel hedefi, kriz sonrası toparlanma süreçlerinde liderliğin sadece yönetsel değil, aynı zamanda moral, psikolojik ve toplumsal yeniden inşa süreçlerine olan etkisini ortaya koymaktır. Çalışma sonucunda, dönüşümcü liderlik özelliklerinin (ilham verici motivasyon, entelektüel teşvik, bireysel ilgi ve idealize edilmiş etki) kriz anlarında ve sonrasında toplumun toparlanma kapasitesini artırdığı gözlemlenmiştir. Kahramanmaraş depremi örneğinde; yerel yöneticilerin, kamu görevlilerinin ve sivil toplum öncülerinin sergilediği dönüşümcü liderlik davranışlarının, toplumsal güveni pekiştirdiği, dayanışma duygusunu güçlendirdiği ve iyileşme süreçlerini hızlandırdığı belirlenmiştir. Geleneksel otoriter ya da mekanik kriz yönetimi yaklaşımlarının aksine, dönüşümcü liderliğin daha kapsayıcı, motive edici ve sürdürülebilir sonuçlar doğurduğu görülmüştür.

**Anahtar Kelimeler:** Kriz Yönetimi, Dönüşümsel Liderlik, Sürdürülebilir Topluluklar, 2023 Kahramanmaraş Depremi

## Introduction

The increasing number of environmental, economic, political, social and technological crises in the world has led to the need to reconsider crisis management approaches and crisis leadership. Some of the major crises recorded in recent world history are as follows (I.P.O.C. Change, 2007; Goldstein & Xie, 2009; McKibbin & Stoeckel, 2010; Kashparov, 2019):

- The Cold War between the United States and the Soviet Union (1947-1991),
- Climate change characterized by global warming, melting glaciers, rising sea levels and extreme weather events (since the second half of the 20th century, after the 1950s)
- The Chernobyl Nuclear Disaster (1986),
- The Asian Financial Crisis that started in Thailand and spread to Asian countries (1997),
- The Global Financial Crisis that started with the collapse of Lehman Brothers (2008),
- The Arab Spring that affected many countries in the Middle East and North Africa (2010),
- The Syrian civil war and the refugee crisis it caused (2011),
- The collapse of health systems around the world collapse and social isolation of societies Covid-19 Pandemic (2020).

Another type of crisis that many countries in the world have to face is the crises experienced due to natural disasters. Natural disasters can be slow-developing types such as famine, drought, severe cold, or sudden forms such as avalanches, earthquakes, storms, tornadoes, rock falls, floods, inundations, landslides, volcanic eruptions, fires (AFAD, 2023). In recent years, the number of natural disasters has been increasing in the world and in Türkiye. Some of the largest natural disasters in world history are the Great Kanto Earthquake (Japan-1923), the China Flood Disaster (1931), the Bhola Cyclone (Bangladesh-1970), the Tangshan Earthquake (China-1976), the Indian Ocean Earthquake and Tsunami (2004), the Hurricane Katrina (USA-2005), the Sichuan Earthquake (China-2008), the Haiti Earthquake (2010), the Tōhoku Earthquake and Tsunami (Japan-2011), and the Türkiye (Kahramanmaraş Pazarcık and Elbistan) Earthquake (2023) (Lay et al., 2005; Schencking, 2008; Zhang et al., 2016; Courtney, 2018; Biswas & Daly, 2021; Uchida & Bürgmann, 2021; Ahsan & Özbek, 2022; Höfer, 2023; Naddaf & Callaway, 2023).

It is clear that in order to cope with these crises that have spread around the world, both in terms of their numbers and their effects, social awareness and actions are needed beyond individual consciousness. The survival of societies depends on their sustainability. In order to understand what a sustainable community means, the meaning of

sustainability and its elements must be well understood.

The aim of this study is to address transformational leadership behaviors through the earthquake incident in Kahramanmaraş on February 6, 2023. Within the scope of the study, the realization of sustainable development and access to sustainable communities, the concepts of crisis management and disaster management, the importance of transformational leadership in crisis periods, transformational leadership theory and its elements, and the evaluation of the February 6 Kahramanmaraş earthquake in terms of transformational leadership are included.

## Sustainable Development and Sustainable Communities

Although the concept of sustainability is generally expressed in the literature as an integrated descriptor of environmental, economic and social conditions; it does not mean that these three areas are of equal importance. It is argued that environmental sustainability is by far the most important factor, and that the possibility of global disaster due to climate change makes economic and social sustainability unimportant. On the other hand, environmental degradation, which is a complex concept affected by society and economy, needs to be determined with scientific methods. It is seen that global sustainability is addressed in terms of climate change caused by global warming due to greenhouse gases accumulated in the atmosphere (Sikdar, 2020).

There is a knowledge gap due to unknowns regarding environmental sustainability. Annual global temperature increases in atmospheric carbon stock can be determined with high precision. However, there is a great uncertainty regarding how carbon emissions are distributed by countries and businesses. Blind spots in measuring thermal forcing from non-carbon-based greenhouse gases such as methane make it difficult to identify the factors underlying the true social cost of carbon and are a shortcoming in current global carbon management (George, 2021). It can be argued that digital technologies can contribute significantly to becoming more sustainable and including the unknowns in this equation. Because the use of digital technologies in the context of sustainability is increasing. For example, some large enterprises have started to track their carbon footprint with new technologies such as artificial intelligence and machine learning, the internet of things, big data and analytics, and blockchain. For example, IBM has developed a system that tracks blockchain-based carbon credits for the energy sector. In order to increase the energy efficiency of data centers, Google reduces its carbon footprint by using artificial intelligence algorithms supported by big data analytics. Schneider Electric optimizes its operations

by using internet of things sensors in its production facilities; it reduces the amount of emissions by monitoring the amount of carbon emissions in real time. Microsoft optimizes supply chain operations by calculating carbon emissions with the "Microsoft Sustainability Calculator" it developed. (Google, 2024; Hedera, 2025; IBM, 2025; Microsoft, 2020; Schneider Electric, 2025).

Environmental and economic sustainability can be considered as concepts that are intertwined with social sustainability, mutually affecting each other, and even inseparable. In a deserted world depicted in science fiction movies, societies that fight barbarically for basic needs such as water and food reveal a painful picture of what can happen when environmental sustainability cannot be achieved. Economic sustainability should not take precedence over environmental sustainability. As Elsayy and Youssef (2023) stated in their study, they emphasize that starting from the Industrial Revolution, the business world focused on maximizing short-term profits, ignoring long-term environmental and social impacts, and that societies, governments, and businesses only became aware of environmental degradation in the mid-20th century. In this sense, the publication of the Brundtland Report (1987) by the World Commission on Environment and Development can be considered a milestone.

Sustainable development and the creation of sustainable communities are closely related. Sustainable development is a development model that balances the consumption of natural resources with environmental, economic and social dimensions, and does not jeopardize the ability of future generations to meet their needs (Brundtland Report, 1987). Sustainable development refers to strategic goals at the global level, while sustainable communities refer to the implementation of these goals at the local level. Sustainable communities are communities that encourage individuals to participate in decision-making processes; support small businesses and local agricultural activities; adopt waste management, environmentally friendly transportation systems and water conservation; manage renewable energy sources such as biomass, solar and wind; and are environmentally sensitive, economically resilient and socially inclusive with all these features (Elkington & Rowlands, 1999; Brundtland & Mansour, 2010; Newman & Jennings, 2012; United Nations, 2015; Daly, 2017).

Blay-Palmer (2011) defines sustainable community as "a community that unites people in a place or space based on ecological balance, participatory democracy and social self-governance". Since the 1990s, many sustainable community projects have been initiated to address environmental, economic and social issues,

increase social well-being and protect the long-term health of human and natural systems, as sustainability has become a growing concern in societies (Gahin et al., 2003). One of the four main dimensions of the "Sustainable Cities and Communities" heading of the World Bank's Global Practice on Cities, Disaster Risk Management, Resilience and Land is "sustainable communities". Sustainable communities are resilient to social, economic and natural shocks, and are well prepared for natural disasters, the intensity and frequency of which are increasing due to climate change (The World Bank, 2023).

In terms of creating sustainable communities, the importance of crisis management is increasing and communities are expected to be more resilient. Resilience, in its shortest form, is "the ability of communities to cope with external stresses and disturbances caused by environmental, political and social changes". Community vitality is important in ensuring resilience (Dale et al., 2010). While community vitality refers to the dynamic and sustainable operation of a community in economic, social and cultural aspects, it decreases or increases according to the level of commitment, interaction and cooperation among community members (Putnam, 2000). It is claimed that community vitality has been seriously damaged in the industrial world. It is suggested that governments can determine a strategic policy that can bridge individual/national/international actions by increasing community vitality in the context of sustainable development (Dale et al., 2010).

## Crisis Management and Disaster Management

Many early crisis management theories were developed based on devastating natural disasters or large-scale industrial accidents. These studies address the typology of disaster management organizations and groups, behavioral patterns, values, response to natural disasters, and the impact of social problems on response to natural disasters. Since the 1980s, crisis management research has focused on crisis planning and preparation for potential crises, and has particularly focused on emergency planning, human resource training, and the role of leaders in crises (Özcan, 2021).

The concept of crisis is defined as natural or human-based events that require immediate intervention, cause panic and chaos at the social level, and negatively affect organizations and societies because they are relatively difficult to control. Crisis management, which also includes disaster management and requires continuity, is examined in three basic stages: "pre-crisis, crisis moment, and post-crisis." Disaster management, which is a dimension of crisis management, is being prepared for

disasters, preventing disasters, reducing their damage in the event of a disaster, and effectively managing social resources before and after the disaster (Çağırtekin, 2019).

Sudden crises such as earthquakes cause serious chaos and unpredictability in the disaster area. Natural disasters have five stages. The pre-crisis period is the uncertain time period before the natural disaster. The moment of crisis is the period when the society experiences direct physical loss due to the occurrence of the disaster. Responding to the crisis is done by conducting search and rescue efforts. Recovery is achieved by meeting the shelter, energy, health, water, food and funeral needs of the society exposed to the disaster. Reconstruction is the reconstruction of the society exposed to the disaster (Özcan, 2021).

The purpose of crisis management is to develop the ability of the organizational structure to move flexibly so that the necessary decisions can be made and implemented in a timely manner in times of crisis (Aydiner, 2014). Organizations include all organizations in the public sector, private sector, and non-profit sector outside of these two areas. States and local governments on the public sector side, and various businesses and non-profit organizations on the private sector side need to be actively involved in crisis management. As organizations become more sensitive to crises such as natural disasters that question sustainability efforts or lack thereof, the issue of sustainability becomes even more important for managers.

In the context of areas of responsibility and activities, sustainability management and crisis management practices need to be shared and carried out in cooperation by all levels of society, such as the public sector, private sector, non-profit sector, and individuals (Barham, 2017). Crisis management should be built on a strong network that includes the interaction of knowledge, responsibility, experience, and expertise between central and local government units; there should be cooperation between managers and employees in accordance with governance principles (Aydiner, 2014). The fact that Türkiye is inevitably located in an earthquake zone and that earthquakes of great magnitude, such as the February 6, 2023 Kahramanmaraş earthquake, may occur at certain intervals creates the need for managers to empower their employees both cognitively and psychologically in terms of earthquake preparedness and response.

### **The Importance of Transformational Leadership in Crisis Periods**

Today's leaders face various challenges in transforming operational systems and mobilizing human resources due to increasing globalization,

technology, communication and competition. Transformational leadership skills are needed to adapt to this rapid change (Ani, 2008). Crises pose a threat, change the dynamics of the organization and force leaders to meet the conditions of this changing situation (Pietraszek & Cieslak, 2020).

Crises cause a kind of trauma in organizations. Organizational trauma refers to "an experience in which a group is cognitively and emotionally unprepared, leaving them completely defenseless or at least temporarily helpless." Crisis can cause emotional connection, traumatic reactions and excessive emotional burden among employees to spread among members. When traumatic reactions go beyond the individual, the organization begins to suffer; efficiency and productivity decrease, and burnout increases. There is a need to understand the leadership behaviors that can transform the organization from this traumatic position of helplessness and fragility to a strong and functioning organization (Hormann, 2018; Pernick, 2022).

In crisis conditions, it becomes important not only how leaders will move the organization forward, but also how they will increase their sense of self-confidence and security by guiding people (Pietraszek & Cieslak, 2020). So what would be the most appropriate type of leadership in managing natural crises such as earthquakes? In response to this question, it can be argued that a type of leadership should be followed according to the contingency approach, taking into account the crisis stages, type and magnitude. According to Fiedler et al. (1969), the contingency approach argues that a leader's success depends on how well the leader's style or personality fits the situation. This theory draws attention to two types of leader behaviors: a leader who focuses on task-oriented behavior and a leader who focuses on people.

Choosing the appropriate leadership and decision-making styles is the biggest challenge in avoiding the consequences of a crisis. Alkhawlanı et al. (2019) proved the mediating effect of rational decision-making between transformational leadership and crisis management, and determined that transformational leaders have the ability to transfer their enthusiasm and inspirational motivation to their subordinates, which leads to better interaction during a crisis. Transformational leaders are considered "change agents" due to their ability to identify the weaknesses and strengths of employees, train and develop them to fulfill themselves for the benefit of the organization (Alqatawenah, 2018). Transformational leadership involves transforming the attitudes and assumptions of organization members so that they can take part in transforming the organization (Christensen, 2009). It can be argued

that transformational leadership can be used in managing the traumatic reactions of employees who have been and/or will be exposed to trauma due to disasters. Indeed, transformational behaviors are needed especially when environmental conditions such as those in a crisis create fear, anxiety and mental distress; when dysfunction or uncertainty is perceived. It is stated that in overcoming crises, every leader should follow a motivation, stress management, trust and communication plan (Behling & McFillen, 1996; Pietraszek & Cieslak, 2020). In this context, transformational leadership is one of the most popular approaches to leadership due to its focus on “inspiring and empowering followers to succeed in times of uncertainty” (Northouse, 2019). In fact, transformational leadership is frequently emphasized in crisis research (Behling & McFillen, 1996; Zhang et al., 2012; Lott-Dunn, 2013; Tapanainen & Kamioka, 2013; Sarkar & Ray, 2015; Hasan & Rjoub, 2017; Alkhawali et al., 2019). Since the stages of the crisis process involve different levels of uncertainty, it is expected that different types of leadership, not a single type of leadership, will be successful. In fact, it is stated that task-oriented or autocratic leaders work well in situations where there is little control during a crisis; transformational leaders are more effective in the post-crisis and preparation stages for new crises (Fiedler et al., 1969).

Transformational leadership is a dynamic process in which leaders and followers can influence each other. In contrast to transactional leadership, in the transformational leadership model, which is not position-dependent, leaders try to increase followers' awareness while facilitating the achievement of lower-level needs (Avolio & Bass, 1995). Crisis intervention can be seen as a skill built on the Resource-Based Approach. Leidner et al. (2009) emphasize that organizational skills such as leadership are very important in obtaining value from other sources in crisis intervention. The transformational leader can interact by selecting which employees can best help resolve the crisis. When the information of team members with critical information is combined, this interaction provides synergy to the organization, and more flexibility can be gained in dealing with crises (Leidner et al., 2009; Tapanainen & Kamioka, 2013). In the context of crisis management, division of labor and job descriptions should be prepared in a way that does not cause confusion and conflict between groups, and leadership should be shared at all levels (Leidner et al., 2009; Tapanainen & Kamioka, 2013). In crisis situations, leaders should evaluate the situation quickly and comprehensively, make effective decisions, and be able to convey instructions to their subordinates in a timely manner. In this context, it is argued that the behaviors of transformational leaders can greatly inspire subordinates, change the values of subordinates, motivate subordinates, and thus encourage subordinates to accept

group/organizational goals and work together towards a common vision (Zhang et al., 2012). If transformational leaders can convey messages to their followers about missions, visions, and clear goals that show concrete results for organizations, they can make this change less stressful (Lott-Dunn, 2013). It can be argued that effective crisis management and leadership depends on the skills built and practiced before the crisis. Agility, which includes perceiving environmental changes and responding quickly, is a facilitator for leadership in crisis situations. In order for transformational leadership to be effective as a crisis management approach, agile and dynamic capabilities must be developed. During a crisis, leaders and teams must work carefully and quickly, as mistakes can lead to dire consequences (Sommer, 2008; Tapanainen and Kamioka, 2013).

### Transformational Leadership Theory and Elements

James MacGregor Burns, who first proposed the Transformational Leadership Theory, defined a transformational leader as “one who promotes organizational development while elevating followers' desires for success and personal growth” (Burns, 1978). Burns defined the concepts of transactional leadership and transformational leadership. In transactional leadership, leaders maintain a series of bargaining relationships with followers to meet current needs. Transformational leadership foregoes this bargaining relationship and achieves desired performance by “developing, intellectually stimulating, and inspiring followers to transcend their own self-interest for a higher collective purpose” (Shadraconis, 2013).

Bass (1985) expanded on Burns' work by examining how leaders lead followers to do more than expected, including educating them about the importance of a particular goal or raising their level of consciousness. Bass (1990, 1997) argued that transformational leadership is not an autocratic leadership style, but a leadership that encourages cooperation and creativity, and on the other hand, transformational leaders help followers see beyond their own interests and focus on the needs of the organization. According to Bass (1999), the task of the transformational leader is to align the interests of the organization members and thus develop team spirit. Ryan (2000) emphasizes that transformational leaders improve the lives of employees and transform their followers into leaders.

The main elements of transformational leadership are “ideal influence, intellectual stimulation, individual consideration, and inspirational motivation.” These elements are briefly explained below (Bass, 1985; Avolio and Bass, 1995; Avery, 1999; Ani, 2008;

Shadraconis, 2013; Northouse, 2019; Wells-Cornwall, 2021):

*Idealized influence:* The leader exhibits the values, beliefs, and moral stance that followers want to emulate. Ideally, the effect increases when leaders develop trust, respect, share risk, and exhibit altruistic behavior, and decreases when they do the opposite. To maintain commitment, leaders must continually send signals that encourage commitment, respect, and loyalty from their followers. When the leader's behaviors are inconsistent with how they frame the message, it can cause followers to experience cognitive dissonance, decreasing commitment and motivation to help achieve organizational goals.

*Intellectual stimulation:* The ability of the leader to offer creative solutions to problems faced by subordinates and to encourage subordinates to seek new approaches to accomplishing tasks. Transformational leadership requires encouraging intellectual curiosity and creativity, reformulating problems, challenging the status quo, and questioning assumptions. Transformational leaders challenge their followers to question the organization's beliefs and values; they encourage them to think from a different perspective and provide feedback to develop new ways to address organizational problems.

*Individualized consideration:* The transformational leader determines and develops the needs of followers while providing the necessary feedback to achieve organizational goals, and values the potential, needs, and aspirations of followers for long-term benefits. In this case, leaders serve as mentors to followers and encourage two-way communication.

*Inspirational motivation:* The transformational leader sets realistic expectations, creates and communicates a vision, clarifies followers' expectations, inspires them, and develops confidence in subordinates' ability to complete tasks. In this case, as individuals help achieve organizational goals, their integration as part of the group or organization can serve as a psychological contract that increases commitment to the organization and the leader. Creating a common understanding among team members and ensuring collaborative efforts for the benefit of all are more motivating than a power relationship (Avery, 1999). Transformational leaders are leaders who increase self-efficacy and ensure followers' social identification with the group, ultimately motivating their followers (Shamir et al., 1993).

### **Evaluation of the Kahramanmaraş Earthquake of February 6, 2023 in the Context of Transformational Leadership**

Approximately 80% of the earthquakes in the world occur in Indonesia, China, Japan, Pakistan, Chile,

Russia, Iran, Peru and Türkiye. In Türkiye, where earthquake activity is high, the vast majority of earthquakes occur in the border zones of the North Anatolian Fault, East Anatolian Fault, Southeastern Anatolian Thrust Belt and Aegean Graben System (Özmen & Nurlu, 1999). The Kahramanmaraş Pazarçık and Elbistan earthquakes of February 6, 2023 went down in history as one of the largest earthquakes in Türkiye's history, affecting 11 provinces and causing the death of approximately 55,000 people (Erdener, 2019). Being more prepared for earthquakes is important in Türkiye, which is located in the Alpine-Himalayan earthquake zone and where earthquake risk is widespread. In this context, within the scope of the 12th Development Plan, a "Disaster Management Specialization Commission" was established, aiming at integrated disaster management. The main elements of integrated disaster management include "reducing disaster risks, ensuring disaster preparedness, developing disaster response capacity and activating post-disaster recovery efforts".

Transformational leadership can be considered directly related to these elements of integrated disaster management from various perspectives. Below, the actions taken after the February 6 Kahramanmaraş earthquake are analyzed in the context of transformational leadership elements: (AFAD, 2023a; AFAD, 2023b; Türkiye Cumhuriyeti Çevre, Şehircilik ve İklim Değişikliği Bakanlığı, 2024; Selçuk, 2024; Altı Şubat Arama Kurtarma ve İnsani Yardım Derneği, 2023; Para, 2023):

*Idealized influence:* As an indication of the magnitude of the Kahramanmaraş earthquakes, the government of the Republic of Türkiye declared a level 4 alarm for the earthquake region and a state of emergency for 3 months in 10 provinces. 102 countries offered aid to Türkiye, more than 141 thousand people from 94 countries participated in the search and rescue efforts. Following the earthquakes, BOTAŞ announced that the flow of natural gas to the earthquake zones was stopped. Hatay Airport was closed to all flights, while Gaziantep Airport and Kahramanmaraş Airport were closed only to civilian flights. While Vice President Fuat Oktay and some ministers managed the emergency situation from the AFAD center, governors of the provinces damaged by the earthquake and governors from neighboring provinces were assigned. During the disaster process, leaders, including President Recep Tayyip Erdoğan and relevant ministers, went to the provinces where the earthquake occurred after the disaster, stood by the community and made quick decisions, which created trust in the leaders. At the same time, AFAD's coordination of the process with the first interventions created an important impact in terms of leadership. On the other hand, it has been stated that some of the aid arrived late due to reasons such as the

earthquakes being in a very wide area, the deterioration of infrastructure in some regions and difficulties in transportation. This is sufficient to explain why two earthquakes caused damage to an area of approximately 350,000 km<sup>2</sup>, approximately the total area of Germany, and why aid could not be delivered simultaneously to all the places in need, since neighboring provinces were simultaneously affected. This situation caused a perception of lack of leadership on the part of the people of that region, interrupting the continuity of the idealized effect. It is seen that some groups who want to use this situation to their advantage have made many speculative statements such as that the aid was sent deliberately late, etc.

*Intellectual stimulation:* Transformational leadership is about turning a crisis into an opportunity and producing innovative solutions. Innovative approaches using new technologies such as drones, mobile applications and artificial intelligence-based systems in post-disaster relief efforts demonstrate the capacity of leaders to produce solutions. Different types and features of cameras, Unmanned Aerial Vehicles (UAVs), generators, communication systems, radar systems and satellite systems developed by the Turkish defense industry have played a major role in the successful management of the disaster. FINDER (Finding Individuals for Disaster Emergency Response) technology, developed by NASA and using a microwave radar system, was used to detect people trapped under the rubble. Transformational leadership was demonstrated by emphasizing disaster-resistant, environmentally friendly, energy efficient and sustainable construction during the reconstruction process. It is seen that the creation of TUBITAK project calls in the context of combating disasters has encouraged many researchers to come up with innovations and the fruits of these projects will be offered in the market as various innovative products in a short time.

*Individualized consideration:* During the disaster process, both senior managers and local managers visiting and calling the victims provided emotional support to the victims. In the context of transformational leadership, it is seen that psychological support and social assistance projects were carried out for the earthquake victims; regular information was provided; empathy was shown and the concerns of the earthquake victims were listened to. In terms of state support, force majeure was declared in the region affected by the earthquake and tax liabilities were postponed until July 31, 2023; supports such as moving aid and rent aid were announced for earthquake victims according to their situation. "Türkiye One Heart" aid campaign was organized with a joint broadcast of 8 national television channels and 115.1 billion TL in donations were collected.

*Inspirational motivation:* Transformational leaders build trust by giving motivating messages in times when society is in a state of trauma and uncertainty. From the first moments when news of the disaster was heard, leaders called for working together and made statements such as "we will rebuild together" aimed at the unity and solidarity of the society. As soon as news of the disaster was received, aid campaigns were organized for disaster victims all over Türkiye, and aid trucks were prepared and sent to the disaster area as quickly as possible. In this context, it was seen that the spirit of solidarity was encouraged in the society. The direct involvement of leaders in campaigns to increase social solidarity created a transformational effect. Transformational leaders determine a clear vision in times of crisis and share this vision with stakeholders. After the Kahramanmaraş earthquakes, urban transformation strategies were created, primarily in earthquake zones, for disaster risk management, the creation of resilient cities and safe construction. There is a tendency to create development plans that cover the socio-economic effects of the earthquake.

## Discussion

There are numerous studies conducted using different samples and methods in the context of the effects of transformational leadership on followers, teams, and organizational outcomes: measurement of transformational leadership (House et al., 1991); locus of control and innovation (Howell & Avolio, 1993); development and performance (Dvir et al., 2002); organizational learning (Mirkamali et al., 2011); employee effectiveness (Srithongrun, 2011); creative flexibility (Sharma et al., 2012); communication (Çetin et al., 2012); employee job satisfaction (Munir et al., 2012); crisis management and leadership (Zhang et al., 2012; Sarkar & Ray, 2015; Hasan & Rjoub, 2017); crisis and transformational leadership (Behling & McFillen, 1996; Zhang et al., 2012; Lott-Dunn, 2013; Tapanainen & Kamioka, 2013; Sarkar & Ray, 2015; Hasan & Rjoub, 2017; Alkhwilani et al., 2019).

The transformational leader's ability to achieve leadership effectiveness, especially in times of crisis, depends on creating value congruence and synergy between the leader and his members. Zhang et al. (2012) examined the effect of transformational leadership on leadership effectiveness in the context of the 5.12 magnitude earthquake that occurred in China in 2008 with a retrospective approach and interviewed 146 leaders and 526 members from hospitals in the disaster area. According to the participants, exhibiting altruistic behaviors for transformational leaders is a good way to expand a leader's role as an example.

After the Great East Japan Earthquake on March 11, 2011 and the subsequent nuclear power plant failure

in Fukushima, organizations reevaluated their business continuity plans to adapt to large-scale crises. Tapanainen and Kamioka (2013)'s study shows that transformational leadership is praised by IT managers and can be applied in crisis situations.

Another study conducted with emergency service personnel and managers working in a large fire rescue organization in the United States found that managers who were seen by their subordinates as people who developed transformative and trusting relationships were more likely to rate their subordinates as having the potential to lead in crisis situations (Williams et al., 2019).

As evidenced during the Covid-19 pandemic, employees experienced mental and psychological health problems as well as job difficulties, and their organizational commitment was affected. A study conducted with 267 Vietnamese employees showed that transformational leadership had a strong and positive relationship with organizational commitment. The study emphasized that more attention should be paid to the individual consideration dimension, as it helps to ease members' struggles during the crisis, increase their satisfaction, and improve their organizational commitment (Nguyen & Konosu, 2023).

Northouse (2019) states that the transformational leader acts as a coach and mentor to his followers, helping them to realize themselves. In his study, he found that transformational leadership is associated with improved business results in both public and private sector environments.

## Conclusion and Recommendations

Disasters that cause great damage to life, property, and socio-psychology can be turned into an opportunity for managers and society to question their crisis management skills, identify deficiencies in practices, and develop them. Based on crisis intervention and post-crisis experiences, it is possible to develop leadership, increase employees' psychological resilience and well-being, and thus be better prepared for future disasters and reduce disaster damage. It is important for private sector organizations, especially public institutions and organizations, to plan and develop practices in terms of this preparation.

While the concept of transformational leadership is generally addressed in organizational contexts in the existing literature, in this study it was examined by adapting it to a major natural disaster on a societal scale. In this context, the study provides an original application of transformational leadership in the context of disaster management to the crisis management and disaster management literature.

However, analyzing the 2023 Kahramanmaraş earthquake, a major disaster that occurred in Türkiye, from a leadership perspective provides a local contribution to post-crisis leadership practices. In this study, an interdisciplinary approach to the field is presented by looking at disaster preparedness and response processes from a leadership perspective and a leadership-based perspective is provided for the vision of a sustainable society.

In this study, the idealized effect was evaluated from a societal perspective. However, it would be a topic that warrants further academic investigation to evaluate the idealized effect in terms of AFAD teams or other public and private sector teams working in the region. In the context of disasters, the evaluation of intellectual stimulation in terms of public sector and private sector employees and teams is valuable in terms of putting tacit knowledge into practice. In the context of transformational leadership, the results of individualized consideration in workplaces and teamwork during disaster periods should be addressed. It can be argued that there is an intellectual stimulation to develop new techniques, methods and tools for combating disasters, especially in societies where disasters are experienced intensely. In this way, innovations are designed not only for a country but also for the benefit of humanity. Transformational leadership can be function as an effective tool in institutions and organizations to provide this incentive.

The consequences of many disasters are a bill paid by people who intervene in nature unconsciously or do not know how to live with nature. Transformational leaders can play an important role in defining a clear vision, sharing it with society and creating a spirit of solidarity in societies that are beginning to learn how to combat disasters. Therefore, it is recommended that future studies focus on the implementation of transformational leadership and the analysis and development of transformational leadership behaviors.

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Ethics committee approval was not sought in this study because it was not a clinical or experimental study on humans or animals that required an ethics committee decision.