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#### RESEARCH ARTICLE

# Earthquake Experience: Emotional, Social, and Cognitive Dimensions

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#### Abstract

This research examines the emotional, social, and cognitive experiences of the 2023 earthquake in Turkey from a phenomenological perspective. This qualitative study conducted on 8 survivors living in Hatay revealed the multifaceted effects of the earthquake on individuals. The emotional experiences of the participants during the earthquake, their perceptions of their pre-disaster preparations, and the effects of the earthquake on their outlook on life were analysed through in-depth interviews. The findings show that the earthquake is not only limited to physical damage but also profoundly affects emotional, social, and cognitive levels. The study emphasises the importance of emotional support, education and information programs in terms of disaster management and community preparedness and offers recommendations to ensure that communities are better prepared for future disasters.

Keywords: Social experience • cognitive experience • earthquake • phenomenological perspective

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Natural disasters are events that leave significant traces in human history and create profound effects, especially in emotional, social, and cognitive dimensions. Large-scale disasters, such as the 2023 Turkey earthquake, not only cause physical destruction but also leave lasting traces on individuals' life experiences. In this context, understanding the emotional, social, and cognitive experiences of an earthquake contributes to a better understanding of coping strategies that focus on postdisaster recovery.

Understanding the intricate relationship between natural disasters, climate change, and community resilience poses both conceptual and methodological challenges. Cutter (2020) emphasised the importance of identifying who demonstrates resilience, under what circumstances, where, and to whom. This involves gauging resilience against dynamic changes or transformations in various systems (social, natural, technological) influencing community resilience. Within the emotional, social, and cognitive aftermaths of natural disasters, comprehending how these events impact individuals adds further conceptual and methodological complexities. The key lies in discerning how dynamic changes or transformations that contribute to these impacts influence individuals' emotional, social, and cognitive resilience. Therefore, establishing a conceptual framework and employing an appropriate methodology is crucial to unravelling the intricate connections between social, natural, and technological systems and their effects on individuals' emotional and social responses in coping with disaster aftermaths.

Earthquakes profoundly impact the social fabric, influencing factors such as social security, social responsibility, adaptability, social solidarity, fate perception, economic security, and job stability (Parsho et al., 2020). These disasters not only adversely affect individuals' physical and mental health but also disrupt their sense of security, peace of mind, and mental equilibrium. Surprisingly, however, disasters can also yield positive outcomes, particularly when strengthening social connections and support systems. The aftermath of a disaster often fosters increased social cohesion and unity within a community. The collective effort to restore quality of life has given rise to new cultural memories and memorial sites, prompting changes in local traditions and daily routines. This transformative process signifies the reconstruction of social life after disaster, during which people fortify their relationships, accumulate experiences, and reflect on them through their unique circumstances (Nakova & Milenkova, 2023). In essence, disasters, beyond their negative impacts, can serve as catalysts for solidarity and positive social change within communities.

Today, societies affected by earthquakes require more knowledge and understanding both in pre-disaster preparedness and in coping with the emotional aftermath (Basnet, 2020). This requires a focus on not only technical and engineering factors but also social, cognitive, emotional, and economic factors. Climate change, global warming,

and the negative effects of the human factor on the environment make it a reality that more individuals may be affected by the impacts of natural hazards in the future (Zulch, 2019). Therefore, society's resilience to natural disasters should increase in the future.

According to Gim and Shin (2022), community resilience profoundly influences the well-being of disaster victims. Disasters instigate crises in social capacity and individual well-being, primarily stemming from resource limitations, the allocation of resources, breakdowns in relationships, and the establishment of new connections. Enhancing community resilience is imperative to mitigate and address inequalities in the adverse effects of disasters. Focusing on disaster preparedness and community empowerment allows for a comprehensive understanding of the diverse impacts of disasters on individuals, particularly through the insights gained from survivors' experiences. According to Cutter (2016), the most common elements can be divided into economic, social, environmental, and infrastructural attributes and assets, social capital, community functions, connectivity, and planning capacities. The greatest variable overlap in the case studies concerned specific measures of social capital based on religious affiliation, access to civic organisations and health.

Disaster preparedness and community empowerment, as Makwana (2019) emphasised, play pivotal roles in improving the conditions of vulnerable populations affected by disasters. The significance of this research stems from the fundamental understanding that natural disasters, particularly large-scale events like the 2023 Turkey earthquake, exert profound impacts on emotional, social, and cognitive dimensions. Unravelling these impacts contributes to a better understanding of post-disaster recovery strategies. Beyond physical destruction, such disasters imprint lasting scars on individuals' life experiences. Focusing on the aftermath of the 2023 earthquake in Hatay through the perspectives of 8 participants, this research delves into a spectrum of complex factors—from emotional reactions to social interactions and cognitive processes. The aim of this study is to bridge existing gaps in disaster awareness and community preparedness literature and highlight the critical role of strengthening community resilience in mitigating future natural disasters. By emphasising the necessity to consider not only technical and engineering factors but also social, cognitive, emotional, and economic aspects, this research highlights the potential for a greater number of individuals to be impacted by future disasters. Consequently, the findings are anticipated to provide valuable insights for developing disaster management and community preparedness policies.

This research examines the emotional, social, and cognitive experiences of the 2023 earthquake in Turkey from a phenomenological perspective. This qualitative study conducted on 8 survivors living in Hatay revealed the multifaceted effects of the earthquake on individuals. The emotional experiences of the participants during the

earthquake, their perceptions of their pre-disaster preparations, and the effects of the earthquake on their outlook on life were analysed through in-depth interviews. The findings show that the earthquake is not only limited to physical damage but also profoundly affects emotional, social, and cognitive levels. The study emphasises the importance of emotional support, education and information programmes in terms of disaster management and community preparedness and offers recommendations to ensure that communities are better prepared for future disasters. This study employs a phenomenological design to explore the emotional, social, and cognitive dimensions of the experiences of survivors of the 2023 Turkey earthquake, utilising in-depth interviews and qualitative content analysis to uncover the essence of their lived experiences.

This study selected volunteers who had previously experienced an earthquake. To ensure diversity, participants were selected from various age groups, genders, and socioeconomic backgrounds. A total of 8 individuals, survivors of the 2023 earthquake in Turkey were included in the study. Hatay, Turkey, was chosen as the study location due to its diverse demographic characteristics and significant geographical representation in the affected areas. Hatay was particularly influenced by its distinction as the province with the greatest destruction and loss of life, making it a crucial location for understanding and exploring earthquake experiences.

The resulting findings were categorised under specific themes to provide a structured framework for understanding the participants' experiences during the earthquake. The themes that emerged in the emotional, social, and cognitive dimensions were utilised to elucidate and explain these experiences. The interpretation of the participants' experiences was supported by the codes associated with each theme, ensuring a nuanced and comprehensive understanding of the participants' responses to the earthquake.

Qualitative data encompassed a range of themes and codes that elucidated the emotional experiences of the earthquake. Participants consistently reported experiencing generalised fear and momentary anxiety. Additionally, some participants conveyed a specific fear of death during the earthquake, which they associated with a sense of mortality associated with the event. These findings align with existing literature, where numerous studies emphasise that earthquakes often trigger emotions such as shock, panic, confusion, helplessness, powerlessness, loss of confidence, loss of control, and, notably, fear (Bıçakcı & Ergüney Okumuş, 2023; Bikar et al., 2021; Cvetković et al., 2019; Karaarslan et al., 2023; Massazza et al., 2021; Raccanello et al., 2017; Sönmez, 2022; Şeker & Akman, 2014; Sun & Liu, 2023; Taşçı & Özsoy, 2021). Participants revealed that during the earthquake, they actively sought reassurance and felt a compelling need to protect their families. Additionally, there was a consistent emphasis on the instinct to embrace one another and exhibit solidarity, particularly within families.

Participants shared a range of emotional experiences during the earthquake, including generalised fear and momentary anxiety, reflecting their prevailing sense of uncertainty and danger. Some participants expressed a fear of death, likely stemming from the perceived seriousness and potential danger associated with the earthquake. Seeking reassurance and a heightened need to protect their families were common responses, indicating an instinctive drive to safeguard loved ones during disasters. Reports of panic behaviour and reduced rational thinking during the earthquake underscore the impact of stress and danger on cognitive function. The perceived need for quick reactions and movement to safe areas reflects an instinct for self-preservation in emergencies. Moreover, the instinct for hugging and solidarity among family members reflects a collective need for support during earthquakes, indicative of strengthened social ties during disasters. These findings underscore that earthquakes extend beyond physical threats, profoundly influencing emotional reactions and social behaviours. Such insights hold significance for disaster management and preparedness, emphasising the importance of addressing not only the physical consequences but also the emotional and social dimensions to ensure effective response strategies.

#### **Purpose**

The purpose of this study was to examine the emotional, social, and cognitive experiences of the 2023 earthquake in Turkey from a phenomenological perspective.

#### Method

This study employs a phenomenological design to explore the emotional, social, and cognitive dimensions of the experiences of survivors of the 2023 Turkey earthquake, utilising in-depth interviews and qualitative content analysis to uncover the essence of their lived experiences.

#### Phenomenological Design

This study investigates experiences related to earthquakes in emotional, social, and cognitive dimensions, focusing on individuals who have shared their emotional experiences following the 2023 Turkey earthquake. A qualitative phenomenological design was employed to uncover the collective meaning derived from the lived experiences of these individuals regarding the earthquake. Phenomenology aims to delve deeply into the essential nature of individuals' experiences when confronted with the specific phenomenon of an earthquake (Creswell & Poth, 2016; Yalçın, 2022).

According to Williams (2021), the phenomenological design, as a qualitative research method, offers a powerful and comprehensive understanding of lived experiences, providing high-level and authentic explanations. This approach requires

profound reflection and thorough investigation (Smith & Nizza, 2022). This study aims to contribute nuanced insights into the emotional, social, and cognitive dimensions of earthquake experiences, enhancing our understanding of the intricate nature of individual responses to such a phenomenon.

#### **Universe and Sampling**

The participants were selected from those who had previously experienced an earthquake. To ensure diversity, participants were selected from various age groups, genders, and socioeconomic backgrounds. A total of 8 individuals, survivors of the 2023 earthquake in Turkey were included in the study. Hatay, Turkey, was chosen as the study location due to its diverse demographic characteristics and significant geographical representation in the affected areas. Hatay was particularly influenced by its distinction as the province with the greatest destruction and loss of life, making it a crucial location for understanding and exploring earthquake experiences. Ethical permissions required for the study were obtained from Izmir Institute of Technology Social and Human Sciences Scientific Research and Publication Ethics Committee (Date: 27.10.2023: Number: 010/1). And informed consent was obtained from all participants.

## **Participant Selection Criteria**

*Diverse demographics*. Various age groups, genders, and socioeconomic backgrounds.

Experience. Direct experience of the 2023 earthquake in Hatay, Turkey.

Voluntary participation. The willingness to share personal experiences and insights.

#### **Data Collection**

Data were collected through semi-structured in-depth interviews, which were conducted either face-to-face or online. The following open-ended questions were posed to the participants to encourage detailed accounts of their emotional experiences, social interactions, and cognitive reactions during the earthquake:

*Emotional experience*. What emotions did you experience during the earthquake? What did you feel?

**Preparedness and education.** Do you feel educated about what to do before a disaster?

*Impact on life perspective.* How experience the earthquake affect your view of life?

These questions aimed to elicit rich and comprehensive narratives, providing valuable insights into participants' subjective experiences and perceptions of the earthquake.

## Interview protocols.

*Scheduling*. Interviews were scheduled at the convenience of the participants to ensure they felt comfortable and safe sharing their experiences.

Duration. Each interview lasted approximately 60-90 minutes.

*Environment*. Efforts were made to create a supportive and empathetic environment regardless of whether the interview was conducted in person or online.

## **Data Analysis**

The obtained data were subjected to qualitative content analysis. In this analytical process, the researchers coded the data based on predetermined main themes and subthemes. The coding process involved

**Initial coding.** Transcripts of the interviews were read multiple times, and initial codes were assigned to significant statements and phrases related to the emotional, social, and cognitive dimensions of the earthquake experience.

**Theme Development.** The codes were grouped into broader themes and subthemes that emerged from the data. These themes were continuously refined through an iterative process of data comparison and comparison.

**Validation.** To ensure the validity and reliability of the findings, peer debriefing and member checking were employed. The selected participants reviewed the themes and interpretations to confirm that they accurately represented their experiences.

The resulting findings were categorised under specific themes to provide a structured framework for understanding the participants' experiences during the earthquake. The themes that emerged in the emotional, social, and cognitive dimensions were utilised to elucidate and explain these experiences. The interpretation of the participants' experiences was supported by the codes associated with each theme, ensuring a nuanced and comprehensive understanding of the participants' responses to the earthquake.

#### **Ensuring Validity and Reliability**

To ensure the validity and reliability of the study:

**Philosophical foundations.** The phenomenological approach was grounded in established philosophical underpinnings, emphasising the importance of understanding lived experiences.

**Data collection procedures.** Detailed protocols were followed for participant selection and interview processes to ensure consistent and comprehensive data collection.

**Data analysis techniques.** Rigorous qualitative content analysis procedures were employed, including initial coding, theme development, and validation through peer debriefing and member checking.

By providing a detailed description of the phenomenological method, including data collection, coding, and analysis, this study aims to offer a robust and credible understanding of the emotional, social, and cognitive dimensions of earthquake experiences.

#### **Findings**

The data were systematically organised under specific themes to facilitate an analysis aimed at elucidating the experiences of the participants during the earthquake. The qualitative analysis generated findings that were substantiated by the emergent codes within each theme. Through these codes, the participants' experiences were thoroughly examined, discussed, and interpreted. Additionally, the interpretation of these experiences was enriched by drawing connections to various findings in the existing literature, providing a broader context and understanding of the participants' responses to the earthquake.

#### **Emotional Responses During an Earthquake**

The findings regarding the emotions and feelings of the participants during the earthquake are presented in Table 1.

Table 1
Emotions During an Earthquake

Themes	Codes	
Fear and Anxiety	General fear during an earthquake	
	Worry and anxiety during an earthquake	
Fear of Death	Exploring the fear of death during an earthquake	
	Feelings of death related to earthquakes	
Seeking Reassurance	Seeking to protect family and loved ones	
	Seeking reassurance and hugging each other	
Inability to think logically	Loss of the ability to think logically during an earthquake	
	Acting in panic and having difficulty making decisions	
Quick Response and Exit	Reacting quickly in an emergency	
	Need to go to a safe space	
TT . 1	Hugging among family members	
Hugging each	Seeking solidarity and support	

Qualitative data encompassed a range of themes and codes that elucidated the emotional experiences of the earthquake. Participants consistently reported experiencing generalised fear and momentary anxiety. Additionally, some participants conveyed a specific fear of death during the earthquake, which they associated with a sense of mortality associated with the event. These findings align with existing literature, where numerous studies emphasise that earthquakes often trigger emotions such as shock, panic, confusion, helplessness, powerlessness, loss of confidence, loss of control, and, notably, fear (Bıçakcı & Ergüney Okumuş, 2023; Bikar et al., 2021; Cvetković et al., 2019; Karaarslan et al., 2023; Massazza et al., 2021; Raccanello et al., 2017; Sönmez, 2022; Şeker & Akman, 2014; Sun & Liu, 2023; Taşçı & Özsoy, 2021). The consistency of these emotional responses among participants further emphasises the profound impact of earthquakes on individuals' psychological well-being.

Participants revealed that during the earthquake, they actively sought reassurance and felt a compelling need to protect their families. Additionally, there was a consistent emphasis on the instinct to embrace one another and exhibit solidarity, particularly within families. Some participants reported engaging in panic behaviour and diminished capacity for logical thinking during the seismic event. There was also a notable sense of urgency among certain respondents, prompting them to react swiftly and move to safer areas. These reactions align with the findings of Kamaledini and Azkia's (2021) study, in which factors such as earthquakes, the loss of close family members, economic and cultural circumstances, and individual and family education levels significantly influenced the psycho-social trauma experience. The reported behaviours during the earthquake underscore the complex interplay of emotional and survival instincts that individuals exhibit despite a seismic threat.

Participants shared a range of emotional experiences during the earthquake, including generalised fear and momentary anxiety, reflecting their prevailing sense of uncertainty and danger. Some participants expressed a fear of death, likely stemming from the perceived seriousness and potential danger associated with the earthquake. Seeking reassurance and a heightened need to protect their families were common responses, indicating an instinctive drive to safeguard loved ones during disasters. Reports of panic behaviour and reduced rational thinking during the earthquake underscore the impact of stress and danger on cognitive function. The perceived need for quick reactions and movement to safe areas reflects an instinct for self-preservation in emergencies. Moreover, the instinct for hugging and solidarity among family members reflects a collective need for support during earthquakes, indicative of strengthened social ties during disasters. These findings underscore that earthquakes extend beyond physical threats, profoundly influencing emotional reactions and social behaviours. Such insights hold significance for disaster management and preparedness, emphasising the importance of addressing not only the physical consequences but also the emotional and social dimensions to ensure effective response strategies.

#### **Preparedness and Education**

Findings on whether the participants felt trained about what to do before a disaster are presented in Table 2.

Table 2 Feeling Educated or not

Themes	Codes
Lack of Education	Not feeling sufficiently educated about what to do before a disaster
	Not feeling adequate about disasters
	Lack of training
	Not feeling sufficiently educated about what to do

The participant statements underscore the prevalent lack of knowledge on disaster preparedness and the associated emotions arising from these deficiencies. The theme of insufficient training highlights that the participants commonly perceive a lack of predisaster information, indicating a shared experience of inadequacy in this aspect. Participants expressed feeling inadequately trained regarding what to do before disasters, indicating a perceived lack of knowledge in this domain. This sentiment reflects a broader feeling of inadequacy in participants' pre-disaster preparedness. According to Ao et al. (2021), individuals' knowledge and awareness about earthquakes positively influence disaster preparedness, emphasising the need for authorities to enhance earthquake education among local populations as part of national efforts to mitigate future earthquake impacts. Lindell and Prater (2003) further explained that hazard mitigation and emergency preparedness practises can not only limit the physical impacts of natural disasters and reduce social impacts on community rescue resources and noncommunity assistance. These findings highlight the importance of strengthening public education and preparedness initiatives to enhance resilience in earthquake-prone areas.

Participants consistently expressed a shared sentiment of feeling insufficiently trained on what to do before a disaster. This perception reflects the collective awareness among participants regarding their lack of knowledge in pre-disaster preparedness. The statement "I do not feel sufficiently trained" indicates a commonly shared experience, highlighting a general feeling of inadequacy in terms of participants' pre-disaster preparedness. The acknowledgement that they believe they lack sufficient knowledge about disasters reflects a broader awareness of deficiencies in disaster awareness and preparedness. The statement "I do not feel sufficiently trained on what to do before a disaster" emphasises individuals' personal assessments of their knowledge inadequacy, underscoring the crucial role of education and information efforts in disaster management and community preparedness. Participants' awareness of this issue underscores the need for focused information sharing and curricula to enhance the effectiveness of preparation and response processes against future disasters.

#### Impact on the Life Perspective

The findings regarding how the participants' experiences of the earthquake affected their outlook on life are outlined in Table 3.

Table 3
Impact of Earthquake Experiences on the Life Perspective

Themes	Codes	
Fear and Panic	Fear and panic continued after the earthquake	
	Earthquake increases anxiety	
	Starting to think that people are meaner	
Living Conditions and Values	Longing for old living conditions	
	Living in a house again sounds utopian.	
	Becoming more cautious about life	
Personal Relations and Development	Decreasing life expectancy	
Being Cautious	The feeling that everything is meaningless, insignificant, and empty	
Meaninglessness and Hopelessness	The feeling that the world is uninhabitable	
	Pessimism and hopelessness	
	Future anxiety	
Trustlessness	Realising that people are hurtful and greedy	
	Distrust of life	
	Difficulty trusting people again	

The codes provided encapsulate the diverse impacts of the earthquake on individuals' emotional states and life perspectives. The persistent fear and panic observed after the earthquake reflects that individuals' emotional well-being remains unsettled in the aftermath of the traumatic event. The heightened anxiety surrounding the earthquake signifies persistent worry among individuals regarding potential future seismic events. The tendency to perceive people as more ruthless indicates a destabilising effect on trust and interpersonal relationships following an earthquake. Given that posttraumatic recovery often revolves around perceived coping self-efficacy, comprehending the emotional, social, and cognitive experiences after natural disasters is crucial (Benight & Bandura, 2004). These insights shed light on the multifaceted impacts of earthquakes on individuals' well-being and highlight the importance of addressing emotional and social dimensions in postdisaster recovery efforts.

The qualitative analysis findings highlight profound and diverse psychological effects of the earthquake on individuals. Ongoing feelings of fear, panic, and anxiety persist long after the event, reflecting their lasting impact on emotional well-being. Changes in living conditions evoke a nostalgia for past lifestyles, accompanied by heightened sensitivity to safety and increased caution about life. The earthquake is associated with a perceived reduction in life expectancy, which contributes to feelings

of hopelessness and anxiety about the future. Emotional trauma may lead to mistrust in relationships and suspicion towards others, reinforcing the idea that life is meaningless and empty and reflecting a general crisis of meaning. The negative effects of the earthquake contribute to a pervasive sense of hopelessness and anxiety, making it challenging for individuals to cope with uncertainty about the future. The seismic event can also amplify perceptions that people are hurt and greedy, fostering a general sense of insecurity and undermining trust in others. In summary, the experience of an earthquake profoundly shapes individuals' life perspectives, producing psychological difficulties and emotional strains. Psychological support and community-based assistance emerge as crucial components for coping with such situations. Karacaoğlu and Özkaya (2024) stressed the importance of sound crisis management, emphasising the need for effective communication strategies, the provision of reliable information, and meeting the needs of earthquake survivors.

The earthquake experience prompted individuals to reevaluate their values, particularly in relation to their previous living conditions and daily lives. The perceived utopian nature of living in a house again indicates heightened concerns about postearthquake housing safety. Increased caution about life reflects a shift towards a more careful and prepared mindset for coping with future uncertainties. These findings align with Parsho et al. (2020), who observed that earthquakes affect various aspects of social security, social responsibility, adaptability, social solidarity, perception of fate, economic security, and job stability. Similarly, Wang and Wang (2023) noted that China's Wenchuan earthquake in 2008 significantly diminished victims' subjective well-being, even after accounting for the mitigating effects of post-disaster relief programmes. In the context of post-earthquake communication and media influence post-earthquake, Karacaoğlu and Özkaya (2024) emphasised the importance of reliable sources, particularly scientists, and highlighted the influential role of social media, television, and radio. Their assessment underscores the urgent need to enhance disaster communication, media effectiveness, access to scientific data and data literacy skills. Focusing on scientists and reliable sources is a critical strategy to mitigate disaster impacts. This emphasises the vital role of effective communication and access to reliable information in post-disaster recovery efforts.

The earthquake had a dual impact on individuals' personal relationships with their environment. On the positive side, it fostered a sense of increased support and solidarity among individuals, indicative of a tendency for people to be more supportive of each other after traumatic experiences. Conversely, the heightened caution about life reflects that the earthquake prompted individuals to be more vigilant and prepared for future uncertainties, underscoring a transformative effect on personal attitudes and behaviours. However, the earthquake also had negative consequences on social relationships, leading to feelings of resentment, greed, and mistrust among people. The erosion of

trust may signify individuals' struggles in coping with the social aftermath of an earthquake. These findings align with Kaniasty's (2012) research, emphasising the significance of both social support mobilisation and social support breakdown models in trauma theory. This underscores the importance of post-disaster relief and response programmes in helping survivors maintain or even enhance their perceptions of support and confidence in the benefits of belonging to a valued social group and community. These insights highlight the need for comprehensive support structures that address both positive and negative impacts on personal relationships in the aftermath of a traumatic event like an earthquake.

The earthquake left individuals with a profound sense of meaninglessness, insignificance, and emptiness. The associated pessimism and hopelessness indicate a pervasive feeling of despair among individuals in the aftermath of the event. Similar observations have been made by mental health experts working with children who experienced the Chornobyl disaster, revealing that these children exhibit more distorted thoughts and feelings about their past, present, and future compared to their peers of the same age (Kronik et al., 1999). This underscores the far-reaching psychological impact of earthquakes, which profoundly affects individuals' perceptions and outlooks on life. Understanding and addressing these emotional challenges is crucial in the postdisaster recovery process.

This qualitative research provides a comprehensive understanding of the varied effects of the earthquake on individuals' emotional states and life perspectives. The persistent fear and panic after the earthquake suggest that individuals did not immediately recover from the traumatic events, with an increase in earthquake anxiety indicating constant worries about future seismic occurrences and a significant impact on their sense of security. The earthquake prompted a reassessment of individuals' values and living conditions, with the utopian feeling of living in a house again revealing concerns and uncertainties about housing safety. Concurrently, the inclination to be more cautious about life indicates that the earthquake fostered a mindset of increased care and preparedness for future uncertainties. Although the earthquake had positive impacts on shaping individuals' personal relationships and fostering increased support and solidarity after traumatic experiences, the effects were not solely positive. Feelings of meaninglessness, insignificance, and emptiness have a profound emotional impact on individuals. Pessimism and hopelessness emphasise the despair associated with the earthquake. The sense of resentment, greed, and mistrust between people reflects the negative impact on social relations, with the loss of trust indicating the difficulty individuals face in coping with the social effects of the earthquake. In this context, the complex emotional effects of the earthquake have profoundly impacted both individuals' inner worlds and social relationships. Understanding these complex effects is vital for developing comprehensive strategies to support individuals during the aftermath of such traumatic events.

#### Discussion

The qualitative research provides a comprehensive understanding of the varied effects of the earthquake on individuals' emotional states and life perspectives. However, it is essential to connect these findings to the broader concept of community resilience. While individual experiences are significant, understanding how they influence community resilience is crucial for developing comprehensive strategies to support communities in the aftermath of such traumatic events (Saul, 2022).

Cutter's community resilience emphasises the need for a holistic approach that considers social, economic, institutional, infrastructural, and environmental dimensions (Cutter, 2016; Cutter, 2020; Cutter & Derakhshan, 2021). By integrating a more detailed discussion of community resilience, this study illustrates how individual experiences and emotional responses contribute to or detract from community resilience.

The conclusion and discussion sections evaluate the implications of the findings on community resilience. This includes discussing how individuals' emotional and cognitive responses can inform strategies to enhance community preparedness and support systems. For instance, the persistent fear and anxiety observed among participants indicated the need for ongoing psychological support and community-based interventions. Similarly, the lack of preparedness and education underscores the importance of enhancing disastereducation and curricula at the community level. According to Karacaoğlu (2024), who identified basic disaster literacy skills during and after disasters, there is a significant need to encourage active citizen participation in disaster management and to develop curricula and policies based on disaster literacy skills.

Furthermore, understanding the impact of the earthquake on personal relationships and social trust can help design community interventions that foster social cohesion and collective resilience. Joseph et al. (2020) emphasised that social resilience and educational preparedness play a critical role in combating and recovering from natural disasters, while Karacaoğlu et al. (2024) revealed that societies' own preparations can provide a more effective response to disaster situations. By addressing the dual impact of the earthquake on personal and social relationships, community-level policies can be developed to strengthen social support networks and enhance community resilience against future disasters. In light of the research findings and discussion, suggestions for increasing community resilience are listed below.

- Enhance disaster preparedness programmes to include a focus on building community resilience. This includes training individuals on how their actions can contribute to collective safety and support.
- Establish community-based support systems that provide psychological and emotional support to disaster-affected individuals. These systems should foster social cohesion and collective healing.

- Improve disaster communication strategies by ensuring reliable information access and promoting scientific literacy. This helps build trust and confidence among community members.
- Foster social solidarity and support networks within communities. Encourage
  community activities and programmes that build trust and mutual support among
  members.
- develop policies that integrate individual emotional and cognitive responses into broader community resilience strategies. Ensure that these policies address the multifaceted impacts of disasters on individuals and communities.

By incorporating these recommendations, the study's findings can contribute to a more comprehensive understanding of how to enhance community resilience despite future earthquakes and other disasters.

This study provides a comprehensive exploration of the emotional, social, and cognitive experiences of individuals affected by the 2023 earthquake in Turkey. The qualitative analysis reveals the profound and multifaceted impacts of the earthquake, highlighting themes such as fear and anxiety, lack of disaster preparedness, and shifts in life perspectives. Key findings demonstrate that the participants experienced a range of emotional responses, including generalised fear, fear of death, and the need for reassurance. These emotional reactions align with the existing literature and highlight the significant psychological impact of seismic events. The study also revealed a prevalent sense of inadequate disaster preparedness among participants, highlighting a critical gap in education and training. Furthermore, the earthquake's impact on life perspectives indicates lasting changes in how individuals perceive safety, trust, and the meaning of life. However, to enhance the overall contribution of this study, connecting these individual experiences to the broader concept of community resilience is essential. Understanding how individual emotional and cognitive responses aggregate to influence community resilience is crucial for developing effective strategies to support communities in the aftermath of such traumatic events.

#### Conclusion

This study provides a comprehensive examination of the emotional, social, and cognitive experiences of survivors of the 2023 Turkish earthquake, utilising a phenomenological approach. The findings reveal that the earthquake had profound and multifaceted impacts on individuals' psychological well-being, social interactions, and cognitive perceptions. Participants reported experiencing several emotions, including fear, anxiety, and a specific fear of death, highlighting the significant psychological toll of the disaster. The study also underscores the prevalent lack of disaster preparedness among participants, highlighting critical gaps in education and training that must be addressed.

The earthquake's impact on life perspectives is evident in the lasting changes in how individuals perceive safety, trust, and the meaning of life. This study highlights the dual nature of the earthquake's effects on personal relationships, fostering increased support and solidarity on the one hand and leading to feelings of distrust and hopelessness on the other. These insights emphasise the importance of addressing both positive and negative social impacts on postdisaster recovery efforts.

To enhance the overall contribution of this study, it is crucial to connect individual experiences to the broader concept of community resilience. Understanding how individual emotional and cognitive responses aggregate to influence community resilience is essential for developing effective strategies to support communities in the aftermath of such traumatic events. Integrating a community resilience framework, such as Cutter's model, can provide a holistic approach to disaster preparedness and response, encompassing social, economic, institutional, infrastructural, and environmental dimensions.

In conclusion, the study underscores the importance of enhancing disaster preparedness programmes, establishing community-based support systems, improving disaster communication strategies, fostering social solidarity, and formulating comprehensive policies that integrate emotional and cognitive responses. By implementing these recommendations, communities can better prepare for future disasters and enhance their resilience. The insights gained from this study emphasise the need for a multifaceted approach to disaster management, ensuring that both the physical and psychological dimensions of disaster impacts are addressed and that individuals and communities are better equipped to cope with and recover from traumatic events.

Ethical Approval: Ethical permissions required for the study were obtained from Izmir Institute of Technology Social and Human Sciences Scientific Research and Publication Ethics Committee (Date: 27.10.2023: Number: 010/1).

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