

# A study on Kahramanmaraş Earthquake survivors : “Social media platforms were more effectively used than the traditional media”

## *Kahramanmaraş depremzedeleri üzerine yapılan bir araştırma: “Sosyal medya platformları geleneksel medyaya göre daha etkin kullanıldı”*

Yusuf Yurdigül<sup>1</sup> , Recep Bayraktar<sup>2</sup> , Serdar Çil<sup>3</sup> 



<sup>1</sup>Prof. Atatürk University Faculty of Communication, Television & Cinema Department, Erzurum, Türkiye

<sup>2</sup>Asst. Prof., Atatürk University Faculty of Communication, Radio, Television & Cinema Department, Erzurum, Türkiye

<sup>3</sup>Asst. Prof., Muğla Sıtkı Koçman University, Muğla Vocational School, Radio and Television Technology Program, Muğla, Türkiye

ORCID: Y.Y. 0000-0002-9903-4176;  
R.B. 0000-0002-6285-8059;  
S.Ç. 0000-0002-4868-7994

### Corresponding author/Sorumlu yazar:

Yusuf Yurdigül, Atatürk University Faculty of Communication, Television & Cinema Department, Erzurum, Türkiye

E-mail/E-posta:  
yurdigul@atauni.edu.tr

Received/Geliş tarihi: 28.03.2024

Revision requested/Revizyon talebi:  
23.05.2024

Last revision received/Son revizyon teslimi:  
04.06.2024

Accepted/Kabul tarihi: 14.06.2024

**Citation/Atf:** Yurdigül, Y., Bayraktar, R. & Çil, S. (2024). A study on Kahramanmaraş Earthquake survivors : “Social media platforms were more effectively used than the traditional media. *Connectist: Istanbul University Journal of Communication Sciences*, 66, 211-229.

<https://doi.org/10.26650/CONNECTIST2024-1460282>

### Abstract

Media professionals who broadcast in extraordinary situations because of commercial concerns struggle to provide every piece of information to audiences. Reflecting the dramatic dimension of a disaster, on the one hand, and considering the humanitarian situation of disaster victims, on the other hand, appears to be an area where balance must be established. Focusing on earthquake victims affected by the earthquake centred in Kahramanmaraş on February 6th, 2023, this study aims to reveal the earthquake victims' practises of using communication tools in the process and their opinions on the news created about the earthquake. The results of the present study are important in terms of creating a path for earthquake journalism and literacy for experts in the journalism profession and the earthquake news audience. A quantitative research method was used in the study, and a survey was conducted with 472 participants. The important findings of this study are that there are problems with Global System for Mobile Communications (GSM) operators, that social media platforms are more effective than traditional media for following earthquake-related information and voicing problems, the necessity of an effective fight against disinformation on social media, the lack of helpless images of earthquake victims not being shown in broadcasts, and earthquake-related data being announced every hour.

**Keywords:** Disaster journalism, social media, Kahramanmaraş earthquake, crisis communication, media

### Öz

Tecimsel kaygılar nedeniyle olağanüstü durumlarda yayın yapan medya çalışanları izleyicilere her bir enformasyonu sunmaya çabalamaktadırlar. Bir tarafta yaşanan afetin dramatik boyutunu yansıtmak, diğer tarafta afetzedelerin insani durumlarını göz önünde bulundurmak denge kurulması gereken bir alan olarak belirmektedir. 6 Şubat 2023 Kahramanmaraş merkezli depremin etkilediği

depremzedelere odaklanan çalışma depremzedelerin süreç içerisinde iletişim araçlarını kullanma pratiklerini ve depremle ilgili oluşturulan haberlere yönelik görüşlerini ortaya koymayı amaçlamaktadır. Bu bağlamda habercilik mesleğinin uzmanlarına ve deprem haberlerinin izleyicilerine bir izlek oluşturması açısından önem arz etmektedir. Nicel araştırma yönteminin kullanıldığı çalışma kapsamında 472 kişiye anket uygulaması gerçekleştirilmiştir. Çalışmanın önemli bulguları arasında GSM operatörleri ile ilgili olarak sorunların yaşandığı, depremle ilgili bilgilerin

takip edilmesi ve sorunların dile getirilmesi açısından sosyal medya platformlarının geleneksel medyadan daha etkili olduğu, sosyal medyadaki dezenformasyonla etkin mücadele yapılmasının gerekliliği, depremzedelerin çaresiz görüntülerinin yayınlarda gösterilmemesi ve depremle ilgili verilerin saatte bir açıklanması gerektiği ön plana çıkmaktadır.

**Anahtar kelimeler:** Afet haberciliği, deprem haberciliği, Kahramanmaraş depremi, kriz iletişimi, medya

## Introduction

Throughout human history, natural disasters such as earthquakes, tsunamis, floods, and landslides have occurred because of geographical characteristics and associated risks, resulting in loss of life. Although agricultural societies experienced comparatively fewer casualties due to sparser population settlements, the advent of urbanisation during the industrial era led to a concentration of populations in certain regions, consequently increasing the toll of natural disaster casualties. The impact of urbanisation, particularly when coupled with unplanned development that disregards geographical risks, has significantly intensified this situation. Moreover, urbanisation and industrialisation have not only contributed to the occurrence of natural disasters but have also generated man-made disasters. As disasters continue to exert growing influence and their societal impacts become more pronounced, humans have sought means to mitigate their effects. This effort encompasses various strategies implemented before, during, and after disasters.

Reaching information about disasters and transmitting the information to future generations are important strategies. In this context, the media has played a crucial role as a tool of information in every period of history and in every society (Yurdigül & Erdoğan Çakar, 2019, p. 275). Among these strategies, the media emerged as a potent tool with significant impact and influence across all stages of disaster management. The media bear crucial responsibilities, including raising public awareness and facilitating precautionary measures before disasters, coordinating search and rescue operations during crises, fostering public consensus, and directing attention towards alleviating post-disaster adversities.

As integral components of the risk and disaster communication ecosystem, news agencies and journalists play central roles in information dissemination, message transmission and public engagement during disaster recovery processes. However, they also possess the capacity to distort disaster events, create misunderstandings, or exacerbate negative consequences by withholding essential warnings under the guise of preventing public panic (Antunes et al., 2022, p. 522). Therefore, media entities should prioritise disaster preparedness in terms of both technological infrastructure and personnel training.

Türkiye, due to its geographical location, frequently faces the dual threat of natural and man-made disasters. The country's susceptibility to earthquakes along fault lines, forest fires intensified by climate change, floods, landslides, and droughts underscores the urgent need for comprehensive disaster preparedness measures. The absence of adequate preparations amplifies the potential devastating consequences of such disasters. Moreover, as the scope of destruction caused by natural disasters widens, their socioeconomic repercussions extend to encompass broader segments of society.

On February 6th, 2023, Kahramanmaraş and its 11 neighbouring provinces bore the brunt of two powerful earthquakes measuring 7.8 and 7.5 magnitudes, resulting in the loss of 53.537 lives and rendering thousands of buildings uninhabitable (NTV, 2024). The earthquake's impact reverberated across a vast geographical expanse, posing significant challenges to search and rescue efforts, aid distribution, and logistical operations due to disruptions in communication and coordination, particularly during the initial hours following the disaster. The widespread devastation wrought by the earthquake not only profoundly affected the immediate region but also reverberated throughout Türkiye, leaving indelible sociological and economic imprints.

It can be asserted that the Turkish media, while not fully meeting its responsibilities in preparing society for the impending disaster and catalysing public discourse to draw attention to this matter before the earthquake, demonstrated requisite sensitivity to the issue following the communication disruptions in the immediate aftermath of the event. Communication and coordination are pivotal elements necessary for mitigating the immediate impact of postdisaster destruction. Disruptions to communication infrastructure, potentially exacerbated by the intensified, can compound challenges faced by people who have experienced disaster and their families in accessing information and communicating effectively. Consequently, individuals often resort to both traditional media outlets and social media platforms to obtain information. As evidenced by the February 6th earthquakes, these channels, particularly social media platforms, played a crucial role in facilitating society's access to information, organising relief efforts, and fostering solidarity in the wake of the disaster.

This study evaluates earthquake-related news from the perspective of individuals affected by the February 6th, 2023 earthquake. Academic inquiries into the relationship between disasters and media commonly explore topics such as disaster media coverage, disaster narrative framing, and discourse analysis. For instance, Koç (2006) conducted

a discourse analysis of disaster-related news coverage in the Turkish press from 1923 to 2000. Similarly, Bolat (2023) scrutinised language usage and media self-regulation in coverage of the Kahramanmaraş earthquake, revealing instances of news presentation devoid of ethical considerations and self-regulatory measures. Kütükoğlu (2021) examined newspaper coverage of the Kahramanmaraş earthquake, while Yalçın (2023) delved into the relationship between earthquake news and broader newspaper discourse, highlighting the influence of biased journalistic approaches. Moreover, scholars such as Yılmaz (2019), Budak (2023), and Antunes et al. (2022) have explored disaster news through the lens of social responsibility, contending that such coverage often sensationalises the societal and economic ramifications of destruction rather than focusing on causes, prevention, or raising awareness about disaster preparedness. In general, existing studies on the interplay between disasters and media predominantly analyse the media treatment of the subject matter. By examining media usage and earthquake-related news consumption among disaster-affected individuals, this study offers a distinct perspective that adds insights to the existing literature.

### **Disaster and disaster communication**

Owing to its geographical characteristics and location, Türkiye faces significant disaster risks, which necessitate comprehensive preparedness measures. Consequently, the establishment of the Disaster and Emergency Management Presidency (DEMP) was imperative to undertake necessary actions for disaster realisation, emergency response, and civil defence services. DEMP's mandate includes ensuring preparedness against potential disasters, coordinating institutional efforts, and overseeing improvement initiatives in anticipation of any disaster or emergency situation. DEMP defines a disaster as "a natural, technological, or human-induced event that causes physical, economic, and social losses for the whole or certain segments of society, disrupts normal life and human activities, and overwhelms the coping capacity of the affected community" (DEMP, 2023). Disasters inflict disruption on affected communities, which surpasses their ability to manage solely with internal resources. The United Nations International Strategy for Disaster Reduction (UNISDR) emphasises that disasters can have human, material, economic, and environmental impacts (Le Roux & Van Niekerk, 2020, p. 129). The characterisation of a disaster is contingent on the magnitude of the material and moral losses incurred by society. To mitigate the repercussions of such losses resulting from disasters, effective preparedness measures must be instituted before and during these events. Establishing an efficient disaster communication network is essential for achieving this objective.

Disaster communication should primarily be executed effectively before the occurrence of a disaster, facilitating societal readiness for foreseeable risks, and enabling proactive measures against preventable hazards. As asserted by Houston et al. (2019, p. 596), disaster communication constitutes a critical component of disaster mitigation, preparedness, response, and postdisaster recovery efforts. The dissemination of disaster information within a community significantly influences its response to a disaster, emphasising the pivotal role of effective communication in saving lives (Sreedharan et al., 2019, p. 33). Communication is of paramount importance during disasters, where the demand for effective communication escalates markedly. As exemplified by earthquakes centred in Kahramanmaraş, disasters can impair communication infrastructure, engendering an environment of misinformation and confusion. The resulting inability of people who have experienced disaster to communicate with relatives or authorities fosters a sense of helplessness, while the breakdown of inter-institutional communication adversely impacts disaster recovery efforts. Therefore, in disaster preparedness initiatives, the establishment of a robust communication network with resilient infrastructure and alternative channels is imperative, along with comprehensive training for communication teams.

Disaster communication assumes two distinct forms: (i) the dissemination of disaster information to the public by governmental bodies, emergency management organisations, and disaster responders, typically through traditional and social media channels; and (ii) the creation and dissemination of disaster-related information by journalists and affected individuals, primarily through word-of-mouth and social media platforms (Fraustino, Brooke, & Yan, 2012, p. 6). Hence, to mitigate the risk of disinformation and the ensuing chaos that may arise before, during, and after a disaster, the communication network established by official institutions must ensure seamless information flow without any gaps.

Dufty categorises disaster communication into two distinct types based on communication duration: "Acute Communication" and "Long-Term Communication." Acute communication occurs when urgent information dissemination is imperative during the postdisaster search and rescue phase. Conversely, Long-Term Communication encompasses pre- and postdisaster efforts, including disaster risk reduction and recovery efforts, spanning an extended timeframe. Throughout these processes, it is imperative for all relevant institutions to establish coordinated and complementary communication systems. Within this framework, the media assumes a central role in facilitating public communication before, during and after disasters (Tarakçı, 2023, p. 1820).

The media bears a strategic imperative in disaster communication, which necessitates the provision of timely and accurate information to the public during the various phases of disaster management, including preparedness, mitigation, response and recovery. During disasters, the media serves as a crucial conduit for public communication, utilising a combination of traditional media channels and modern communication technologies, including social media platforms, to disseminate real-time information. In essence, the media is instrumental in updating information, raising public awareness regarding disaster conditions, managing aid distribution, fostering community engagement and volunteerism, fundraising initiatives, and monitoring and reporting on all pertinent developments, including disaster situation reports (Widyastuti, 2021, p. 101). Thus, the media assumes a pivotal role in disaster communication and must be adequately prepared for disasters and disaster reporting, mindful of their inherent responsibilities in this domain.

### **Disaster journalism**

Disaster journalism encompasses the coverage of pre-disaster, during-disaster, and post-disaster recovery processes, constituting a comprehensive journalistic endeavour. However, it appears that disaster journalism predominantly focuses on search and rescue activities during and immediately after disasters, both due to prevailing practises and the resulting public perception. As highlighted by Koç Akgül (2017, p. 30), media attention peaks during extraordinary situations, particularly when reporting on casualty figures, displaying images of disaster aftermath, and portraying affected individuals in dramatic or distressing circumstances. Commercial media outlets, driven by profit motives, may at times prioritise sensational imagery over ethical considerations, potentially infringing upon personal rights. Coverage of the post-disaster recovery phase typically gains prominence in the midst of dramatic developments. Conversely, the pre-disaster period, crucial for highlighting disaster risks and fostering public awareness, often receives attention only after a significant disaster event. This tendency towards a journalistic approach that downplays discourse on disaster preparedness, social issues, vulnerability, and community resilience, in favour of focusing solely on relief efforts, contributes to the normalisation of disasters and fosters a gap in the public perception of risk (Antunes et al., 2022, p. 521). Consequently, the media deviates from its inherent responsibilities in the realm of disaster journalism. According to Houston et al. (2019, p. 592), disaster journalism encompasses the gathering and presentation of news and information concerning natural and man-made events that have occurred,

are ongoing, or have the potential to occur. Hence, disaster journalism operates within three distinct phases: pre-disaster activities, search and rescue activities during and immediately after the disaster, and post-disaster recovery processes. While facilitating societal preparedness for disasters, the media must also undertake measures to enhance its own capacity for disaster reporting, such as cultivating specialised expertise and delineating journalistic principles.

Disaster journalism is tasked with advancing public interest and acknowledging the vulnerabilities and risks inherent in society. It should deliver reports imbued with a forward-thinking, anticipatory message aimed at altering reality to forestall or mitigate disaster effects, with the goal of acquainting the public with risks and their principal natural and anthropogenic determinants (Antunes et al., 2022, p. 534). The initial phase of disaster journalism involves disseminating information regarding disaster-related risks to society and producing content designed to pique public interest.

Media coverage of past disasters serves as a pivotal tool for understanding present risks and facilitating disaster communication. Lessons learned from previous disasters contribute to enhanced risk awareness and communication strategies. The media serves as a significant repository for historical disaster and risk research paradigms and functions as a repository of collective memory for disaster events (Antunes et al., 2022, p. 522). Moreover, it facilitates the aggregation and dissemination of experiences, knowledge, skills, and technologies embraced by communities residing in disaster-prone regions, thereby bolstering communities' resilience and capacity to mitigate disaster-induced losses (Sreedharan, Thorsen, & Sharma, 2019, p. 34). Furthermore, the media plays a complementary role in augmenting public awareness-raising endeavours aimed at reducing disaster risks. In this regard, educational initiatives and awareness campaigns on potential disasters and appropriate response protocols are very important. Through collaboration with institutions and organisations, the media should cultivate public opinion conducive to government mobilisation towards risk reduction and foster social consciousness surrounding disaster preparedness.

In moments of panic and uncertainty during and immediately following a disaster, individuals' primary concern is typically to determine the extent and persistence of the event. The different stages of disaster response necessitate different types of information for both individuals and organisations to mitigate the disaster's effects. Disruptions such as chaos and damage to communication infrastructures, common in disaster



scenarios, may impede access to and dissemination of crucial information. Consequently, the media assumes a critical role in information dissemination and access.

Journalist Michael Marcotte delineates four pivotal roles that the media fulfils during disasters: (i) announcing the location and impact of the disaster and elucidating its causes and mechanisms, (ii) establishing a communication framework to relay information provided by disaster victims and distribute essential information to them, (iii) expeditiously disseminating reliable information to create an early warning system, and (iv) providing a platform for citizens to unite and extend financial and moral support to one another (Yalçın, 2023, pp. 189-190). Furthermore, the media serves a crucial function in combating post-disaster misinformation, particularly on social media platforms. While social media significantly contributes to the formation of public spaces and aids in search, rescue, and the search efforts for people who have experienced disaster, it also engenders challenges. The abundance of unverified information and well-intentioned or provocative misinformation shared on these platforms can intensify postdisaster turmoil, underscoring the media's responsibility in navigating this landscape.

Another aspect of disaster journalism that is often overlooked compared with the pre-disaster phase is the post-disaster recovery process. Nugent et al. (2017) elucidated in their research that while there is a substantial surge in news coverage during the initial days of a disaster, there is a notable decline in coverage during the post-disaster reconstruction period compared to the first three days following the event (p. 3752). During the post-disaster reconstruction phase, the media concentrates on elucidating the disaster aftermath, facilitating cooperation between governmental and civil initiatives to alleviate the effects of destruction, and advocating for the needs and demands of those in disaster-affected areas. In this context, the media should prioritise addressing the challenges faced by vulnerable and marginalised communities during disasters, shed light on the allocation of aid funds by governmental authorities, and ensure transparent and equitable disaster management practises (Sreedharan, Thorsen, & Sharma, 2019, p. 34). Disaster journalism must be adequately prepared for disasters in terms of technical infrastructure, personnel training, and adherence to journalistic ethics, as well as the content and language employed in news reporting. Journalists should anticipate potential challenges that may arise during disasters, such as the absence of specialised teams and equipment, potential damage to communication infrastructure, and the impact of the disaster on journalists themselves or their families within their communication networks. These internal issues necessitate journalists' preparedness for potential disasters.

As a news genre, disaster journalism encompasses a broad spectrum of events, including natural disasters, such as floods, earthquakes, landslides, and tsunamis, and man-made disasters, such as environmental pollution, nuclear, biological, and industrial accidents. Within this framework, earthquake journalism emerges as a specific subset of disaster journalism, particularly relevant in countries like Türkiye situated in earthquake-prone regions. Defined by Maden (2023, p. 408), "earthquake journalism" encompasses fundamental information about earthquakes, expertise on seismic events, and adeptness in engaging with earthquake victims.

Structural journalism, as employed within earthquake journalism, seeks to enhance the role of journalism in resolving social conflicts, addressing societal issues, and fostering social progress. This approach diverges from traditional conflict-oriented journalism, adopting a constructive activist perspective (Li, Wu, & Chao, 2022, p. 2). By applying this theoretical framework to earthquake reporting, individuals can gain a more accurate understanding of seismic events, address their connection to such events, cope with resulting trauma, and contemplate future perspectives. However, in the Turkish context, achieving this constructive perspective in earthquake reporting remains elusive.

This issue was highlighted in Selin Maden's interview with Süleyman İrvan about earthquake reporting. İrvan stated that (i) Türkiye lacks a journalistic approach that can detect earthquake precursors, proactively shape public opinion, and advocate for preemptive measures, (ii) the media focuses on post-earthquake intervention rather than preemptive warning, (iii) earthquake reporters must have a solid understanding of earthquake-related technical concepts and be careful when using them. In this context, earthquake reporting systems should adopt a proactive warning approach that addresses fault lines and expert analyses of structures located on these lines (Maden, 2023).

## **Aim and methodology**

The earthquakes that struck Türkiye on February 6, 2023, with its epicentre located in Kahramanmaraş, had a profound impact on 11 provinces. This study adopts a quantitative research method incorporating a survey administered to people who experienced the earthquake across the 11 affected provinces. The study universe encompasses the provinces of Adana, Adıyaman, Diyarbakır, Elazığ, Gaziantep, Hatay, Kahramanmaraş,

Kilis, Malatya, Osmaniye, and Şanlıurfa. According to data from the Turkish Statistical Institute (TSI), the combined population of these provinces was 14,013,196 as of 2022 (TSI, 2023). From this universe, the sample should be at least 385 people in total with 95 percent reliability level of 95% and a margin of error (SurveyMonkey, 2024). In this direction, a total of 472 people were reached by a simple random sampling method, and 22 open-ended, closed-ended, and Likert-type questions were asked to the participants. In this study, which aims to evaluate earthquake-related news created from the perspective of earthquake survivors and to reveal their expectations from such news, answers to the following questions were sought:

1. What are the communication and practices of people who have experienced earthquakes and what challenges do they encounter when using these tools?
2. How do people who have experienced earthquakes perceive the selection of topics, guests, and news presentation styles in earthquake-related news coverage?
3. What elements are considered important in earthquake-related news coverage by survivors?

The questionnaire employed in the study comprised three sections: the first section focused on the demographic characteristics of the earthquake survivors, the second section explored their communication and media tool usage practices, and the third section solicited their opinions on the production, presentation, and content characteristics of earthquake-related news coverage. Data analysis was conducted using frequency and descriptive analysis methods.

Ethical approval for this study was obtained from the Ethics Committee of Atatürk University on 04.09.2023, under approval number E.88656144-000-2300269518 and meeting number 16/219.

## Findings

The demographic characteristics of the participants were 472 individuals, with 52% being male and 48% being female. Examination of the age distribution indicates that 15% of participants fall within the 20- and below age group, 33% in the 21-30 age range, 28% in the 31-40 age bracket, 16% in the 41-50 age category, and 8% aged 51

and above. These observations suggest that young participants are predominant. Regarding marital status, 45% of participants were single, 1% were divorced, 52% were married, and 2% were widowed, indicating that the majority of married individuals were among the participants. In terms of educational attainment, 7% had completed primary education, 25% had secondary education, 13% held associate degrees, 36% had undergraduate degrees, and 19% had graduate-level education, indicating a predominantly high level of education. Among the participants who experienced the earthquake across the 11 provinces, 16% were from Kahramanmaraş, 15% from Adıyaman, 13% from Malatya, 11% from Hatay, 10% from Gaziantep, 8% from Osmaniye, 7% from Elazığ and Şanlıurfa, 5% from Diyarbakır, 4% from Adana, and Kilis. This distribution highlights Kahramanmaraş as the province with the highest representation among participants, reflecting its status as the epicentre of the 2011–2012 earthquake.

### **Use of media tools and expectations from these tools**

Some elements stand out regarding the effectiveness of GSM operators' post-earthquake activities. For example, 56% of the participants evaluated the activities of GSM operators as completely unsuccessful. 28% of the participants found GSM operators successful. Regarding the DEMP emergency mobile application, 37% of participants affirmed that the application was available, 54% did not, and 9% were unaware of its existence. This indicates that most respondents did not use the DEMP application. In terms of social media platforms used to communicate with relatives under rubble, 62% reported using *WhatsApp*, 20% faced communication challenges, 6% had no relatives under rubble, and 5%, 4%, and 3% used *Twitter*, *Instagram*, and *Facebook*, respectively. Concerning the provision of free phone and internet service for earthquake victims, 77% strongly agreed, 12% agreed, 3% were undecided, and 8% disagreed or strongly disagreed, demonstrating a consensus favouring this provision. Regarding the effectiveness of different communication tools for voicing post-earthquake problems, 39% strongly agreed, 25% agreed that social media was effective, and only 22% strongly agreed for television. The majority of respondents believed that social media was more effective than television. Regarding restrictions on social media after the earthquake, 45% disagreed or strongly disagreed, indicating a stance against such restrictions. When asked about measures to counter disinformation after the earthquake, 95% supported action, with 70% favouring criminal sanctions. Regarding news sources, 57% followed news primarily on social media, 25% on television, and 18% on newspapers/internet newspapers. Additionally, 48% perceived earthquake news on social media as more

realistic than on television, indicating a preference for social media over traditional media for news consumption. These findings underscore the increasing importance of social media as an alternative to traditional media in terms of news dissemination and perception.

### **Opinions on earthquake news**

It was observed that 23% of the participants strongly agree, 16% agree, 25% are undecided, 15% disagree, and 21% strongly disagree with the statement 'Live broadcasting of search and rescue operations disturbs me.' These findings indicate that most participants did not find the live broadcasting of search and rescue operations disturbing. Regarding the statement 'I do not find it right to show the desperate situation of earthquake victims in the broadcasts,' 37% of the participants strongly agreed, 19% agreed, 17% were undecided, 9% disagreed, and 18% strongly disagreed. Concerning the statement 'Broadcasting images of looting and looters disturbs me,' 33% of the participants strongly agreed, 11% agreed, 22% were undecided, 8% disagreed, and 26% strongly disagreed. This finding suggests that the majority of participants were uncomfortable with the broadcasting of images of looting and looters in the news. Regarding the statement 'After the earthquake, the statements made by earthquake experts in broadcasts attract my attention,' 41% of the participants strongly agreed, 28% agreed, 16% were undecided, 8% disagreed, and 7% strongly disagreed. This finding shows that most participants paid attention to the statements of earthquake experts after the earthquake. When asked at which time intervals the number of dead and injured should be announced, 3% of the participants answered that it should not be announced, 48% answered every hour, 32% answered every 2-6 hours, 12% answered every 7-12 hours, and 5% answered every 24 hours. This finding reveals that a majority of participants believe it is appropriate to announce the number of dead and wounded every hour.

### **Discussion and conclusion**

Urbanisation processes that neglect potential disaster risks often overlook fundamental disaster mitigation aspects. According to the existing literature, disaster mitigation generally comprises three key phases: pre-disaster, during disaster, and post-disaster. Media is recognised as a pivotal tool that should be integrated into all phases, wielding significant influence. Media outlets, which play a crucial role in preparing society for

disasters, must also prepare themselves for such events to effectively contribute to social recovery efforts during and after disasters.

Effective disaster communication is essential at every stage of disaster response and requires meticulous organisation. Disaster communication plans that involve collaboration among official authorities, telecommunication companies, and media entities are vital for countering misinformation and alleviating confusion that may arise during these phases. Access to accurate information is a primary requirement for both disaster victims and their families during and after a disaster. Media outlets, operating with a sense of responsibility, must prioritise disaster journalism, and even specialise in various types of journalism tailored to specific disasters based on geographical risks. In this context, earthquake journalism has emerged as a specialisation area that demands attention. However, it is evident that disaster or earthquake journalism in Türkiye predominantly focuses on search and rescue operations during disasters, often neglecting pre-disaster preparedness and post-disaster recovery efforts, except during specific periods. Consequently, ethical and technical dilemmas arise concerning the coverage of news reports during these phases.

Türkiye faces significant risks related to both natural and human disasters. The recent earthquakes centred in Kahramanmaraş on February 6th, 2023, underscored the extent of these risks and highlighted the country's lack of preparedness. It appears that the Turkish media, like other institutions, has not fully fulfilled its role as a driving force in disaster preparedness. Criticisms directed at the media during such events, along with responses from earthquake survivors, corroborate this observation. Initially, the Turkish media showed significant interest in the earthquake, contributing to social cohesion and support for the affected region. However, interest waned over time, highlighting the media's tendency to align with societal interest and emotional intensity.

One of the immediate needs following an earthquake is effective communication with their immediate surroundings and relatives, and accessing the necessary information. The first research question of the study focused on the people who have experienced earthquake usage practises of communication tools and their experiences with these tools during the process. Considering the need for access to information and communication after disasters, it seems that GSM operators cannot properly prepare for such disasters. In addition, people who have experienced earthquakes have intensively used *WhatsApp* and other social media applications to communicate with each other. The fact that such

applications are used in disaster communication demonstrates that such applications should be used to create a disaster action plan, similar to traditional media. According to data obtained from the field, earthquake victims appear to perform such actions through social media platforms rather than traditional media in terms of accessing information or voicing their problems. The majority of the participants preferred social media and found it effective in following news about the earthquake and voicing the problems experienced after the earthquake. The fact that television news is found to be less realistic than social media news in terms of reality also reveals the trust problem experienced by the participants with traditional media tools; accordingly, traditional media tools must place the level of interaction with the audience on a more realistic level.

After the earthquake, intense disinformation was observed on social media platforms, especially where control became difficult. For this reason, claims that access to these platforms is restricted from time to time have also come to the fore. Although the participants did not find the alleged restrictions on social media, which they used extensively after the earthquake, to be correct, they stated that a more effective fight against disinformation in these media should be pursued and, if necessary, criminal sanctions should be imposed. Based on this, relevant institutions must make their presence felt strongly on social media in terms of combating disinformation, which is one of the most important pillars of post-disaster communication. Therefore, the importance of not allowing any information gaps and ensuring a continuous flow of accurate information rather than restrictions comes to the fore. In addition, the fact that the DEMP Emergency mobile application, which is a communication application developed by DEMP for use in such difficult times, has not been used by the majority of earthquake survivors makes it necessary to take action as soon as possible to increase the awareness of such applications, if necessary, through advertising or public spots and to establish a central communication network. It is important to develop ways to benefit from this application.

The second and third research questions of the study aimed to reveal how people who have experienced earthquake responded to news about an earthquake. In particular, broadcasting images of post-earthquake rescue efforts and the resulting destruction in the news may be the subject of ethical debate. However, the perspectives of people who have experienced earthquake, which are central to these debates, are sometimes overshadowed. On the other hand, in the data obtained from the field, the meaningful majority of the participants stated that they were disturbed by the presentation of

helpless images of earthquake victims, dramas at the scene, screams/help voices, and images of looting. While the majority of earthquake survivors were not disturbed by the live broadcasts made from the scene, they were reluctant to have these broadcasts made directly in front of the debris. They stated that the earthquake experts' speeches on the screens attracted their attention very much. Undoubtedly, the media must fulfill their public responsibilities, such as drawing public attention to the disaster area, ensuring increased aid, and mobilising public authorities by revealing deficiencies.

Türkiye's earthquake situation requires media workers and audiences to be conscious of earthquake journalism and literacy. In this respect, raising awareness about earthquake news among journalism professionals and audiences is among the contributions of this study to the field. This study has some limitations. The first approach is to reach earthquake victims directly affected by the earthquake centred in Kahramanmaraş, a sample was created from 11 provinces where the effects of the earthquake were experienced. The second limitation is that there are no previous studies that have evaluated media content by people who have experienced earthquakes in Türkiye. Therefore, this situation made it difficult to create a dataset for the conceptual framework and hypothesis development of the study. The findings of this study will provide data for future research in this area. In this sense, while the study offers a perspective on earthquake-related news from the perspectives of those affected by the earthquake, a comparison with the perspectives of those who were not earthquake victims is among the issues that can be addressed in future studies. It is predicted that the media's perspective on earthquake news will change as a result of the focus group discussions with media professionals.

While the media should fulfil its public responsibilities, including raising awareness and mobilising support, it must do so with empathy and ethical considerations, avoiding sensationalism. Media outlets should specialise not only in disaster coverage but also in preparedness and recovery phases, particularly in earthquake journalism. They should prioritise risk awareness, public vigilance, and disaster communication planning. Ethical standards in earthquake journalism must be upheld, and media organisations practice self-regulation and prioritising public responsibilities.



**Ethics Committee Approval:** Ethical approval for this study was obtained from the Ethics Committee of Atatürk University on 04.09.2023, under approval number E.88656144-000-2300269518 and meeting number 16/219

**Informed Consent:** Informed consent was obtained from the participants before the data collection process

**Peer-review:** Externally peer-reviewed.

**Author Contributions:** Conception/Design of study: Y.Y., R.B., S.Ç.; Data Acquisition: Y.Y., R.B., S.Ç.; Data Analysis/ Interpretation: Y.Y., R.B., S.Ç.; Drafting Manuscript: Y.Y., R.B., S.Ç.; Critical Revision of Manuscript: Y.Y., R.B., S.Ç.; Final Approval and Accountability: Y.Y., R.B., S.Ç.

**Conflict of Interest:** The author has no conflict of interest to declare.

**Grant Support:** The author declared that this study has received no financial support.

**Etik Kurul Onayı:** Bu makalenin etik kurul onayı Atatürk Üniversitesi'nde 04.09.2023 tarih, E.88656144-000-2300269518 sayı ve 16/219 toplantı numarası ile alınmıştır.

**Bilgilendirilmiş Onam:** Veri Toplama süreci öncesinde katılımcılardan bilgilendirilmiş onam alınmıştır.

**Hakem Değerlendirmesi:** Dış bağımsız.

**Yazar Katkısı:** Çalışma Konsepti/Tasarımı: Y.Y., R.B., S.Ç.; Veri Toplama: Y.Y., R.B., S.Ç.; Veri Analizi /Yorumlama: Y.Y., R.B., S.Ç.; Yazı Taslağı: Y.Y., R.B., S.Ç.; İçeriğin Eleştirel İncelemesi: Y.Y., R.B., S.Ç.; Son Onay ve Sorumluluk: Y.Y., R.B., S.Ç.

**Çıkar Çatışması:** Yazarlar çıkar çatışması bildirmemiştir.

**Finansal Destek:** Yazarlar bu çalışma için finansal destek almadığını beyan etmiştir.

## References

- Antunes, M. N., Pereira, S. d., Zêzere, J. L., & Oliveira, A. E. (2022). Disaster journalism in print media: Analysis of the top 10 hydrogeomorphological disaster events in Portugal, 1865–2015. *International Journal of Disaster Risk Science*, (13), 521-535. <https://doi.org/10.1007/s13753-022-00425-2>
- Bolat, A. G. (2023). Afet döneminde medyada özdenetim ve özdenetim uygulamaları. *Yeni Medya Elektronik Dergi*, 7(3), 175-197. [https://doi.org/10.17932/IAU.EJNM.25480200.2023/ejnm\\_v7i3001](https://doi.org/10.17932/IAU.EJNM.25480200.2023/ejnm_v7i3001)
- Budak, E. (2023). Türk medyasının depremle imtihanı: Kahramanmaraş depremini afet haberciliği üzerinden değerlendirmek. *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi*, 11(2), 1087-1113. <https://doi.org/10.19145/e-gifder.1287043>
- Disaster and Emergency Management Presidency. (2023). Açıklamalı afet yönetimi terimleri sözlüğü. Retrieved from <https://www.afad.gov.tr/aciklamali-afet-yonetimi-terimleri-sozlugu>.
- Fraustino, J. D., Brooke, L., & Yan, J. (2012). Social media use during disasters: A review of the knowledge base and gaps. Final Report to Human Factors/Behavioral Sciences Division, U.S. Department of Homeland Security, Science and Technology Directorate. Retrieved from [https://www.start.umd.edu/sites/default/files/publications/local\\_attachments/START\\_SocialMediaUseduringDisasters\\_LitReview.pdf](https://www.start.umd.edu/sites/default/files/publications/local_attachments/START_SocialMediaUseduringDisasters_LitReview.pdf).
- Houston, J. B., Schraedley, M. K., Worley, M. E., Reed, K., & Saidi, J. (2019). Disaster journalism: fostering citizen and community disaster mitigation, preparedness, response, recovery, and resilience across the disaster cycle. *Disasters*, 43(3), 591-611. <https://doi.org/10.1111/disa.12352>
- Koç Akgül, S. (2017). Olağanüstü durumlar, iletişim ve habercilik yaklaşımları. *TRT Akademi*, 2(3), 6-47.

- Koç, S. (2006). 1923-2000 yılları arasında Türkiye'de yaşanan doğal afetlere ilişkin Türk basınında haber yapılması ve afet söylemleri. *Kocaeli Üniversitesi İletişim Fakültesi Araştırma Dergisi*, (8), 83-114.
- Kütükoğlu, E. (2021). Afet gazeteciliğine gündem belirleme kuramı ve İzmir depremi haberlerinden bakış. *Uluslararası Medya ve İletişim Araştırmaları Hakemli Dergisi*, 4(2), 211-233. <https://doi.org/10.33464/medij.994871>
- Le Roux, T., & Van Niekerk, D. (2020). Challenges in stakeholders self-organising to enhance disaster communication. *Corporate Communications: An International Journal*, 25(1), 128-142. <https://doi.org/10.1108/CCIJ-07-2019-0078>
- Li, M., Wu, X., & Chao, N. (2022). Exploring the evolution of Chinese earthquake news from the constructive journalism perspective based on Chinese news of 35 significant earthquakes in China from 1966 to 2020. *Telematics and Informatics Reports*, 8, 1-13. <https://doi.org/10.1016/j.teler.2022.100021>
- Maden, S. (2023). 6 Şubat 2023'te Kahramanmaraş'ta yaşanan depremler ekseninde Türkiye'de deprem haberciliği'ne bakış: Prof. Dr. Süleyman İrvan ile söyleşi. *Etkileşim*, (11), 406- 420. <https://doi:10.32739/etkilesim.2023.6.11.202>
- NTV. (2024). *Bakan Yerlikaya: Depremlerde 53 bin 537 canımızı kaybettik*. Retrieved from <https://www.ntv.com.tr/turkiye/bakan-yerlikaya-depremlerde-53-bin-537-canimizi-kaybettik,GI-ts1LfSEoi7DeGWNxEig>.
- Nugent, T., Petroni, F., Raman, N., Carstens, L., & Leidner, J. L. (2017). A comparison of classification models for natural disaster and critical event detection from news. *2017 IEEE International Conference on Big Data*, pp. 3750-3759, Boston, MA, USA. <https://doi: 10.1109/BigData.2017.8258374>
- Sreedharan, C., Thorsen, E., & Sharma, N. (2019). *Disaster journalism building media resilience in Nepal*. Kathmandu: Anweshan by Bournemouth University & UNESCO .
- SurveyMonkey. (2024). *Sample size calculator*. Retrieved from <https://tr.surveymonkey.com/mp/sample-size-calculator/>.
- Tarakçı, H. N. (2023). Afet iletişimi ve Twitter: Kahramanmaraş depremi özelinde bir içerik ve duygu analizi araştırması. *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi*, 11(2), 1816-1850. <https://doi.org/10.19145/e-gifder.1353553>
- Turkish Statistical Institute. (2023). 2022 Adrese dayalı nüfus rakamları. Retrieved from <https://data.tuik.gov.tr/Bulten/Index?p=49685#:~:text=T%C3%BCrkiye%20n%C3%BCfusu%2085%20milyon%20279%20bin%20553%20ki%C5%9Fi%20oldu&text=Erkek%20n%C3%BCfusu%2042%20milyon%20704,9'unu%20ise%20kad%C4%B1nlar%20olu%C5%9Fturdu>.
- Widyastuti, D. A. (2021). Using new media and social media in disaster communication. *Jurnal Komunikator*, 13(2), 100-111. <https://doi.org/10.18196/jkm.12074>
- Yalçın, E. (2023). Doğal afetlerin doğal olmayan sonuçları: gazetelerin deprem haberciliği. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, (78), 188-210. <https://doi.org/10.51290/dpusbe.1336124>

- Yurdigül, A., & Erdoğan Çakar, B. (2019). Sovyet Basınında Türkiye ve Türkiye Cumhuriyeti'nin İlanı: Pravda ve İzvestiya gazeteleri örneği. *Selçuk Üniversitesi Türkiyat Araştırmaları Dergisi*(47), 273-294. <https://doi.org/10.21563/sutad.855821>
- Yılmaz, S. (2019). Afet içerikli haberlerin afetlere karşı toplumsal kapasite geliştirmeye etkisi. *Artvin Çoruh Üniversitesi Doğal Afetler Uygulama ve Araştırma Merkezi Doğal Afetler ve Çevre Dergisi*, 5(2), 257-271. <https://doi.org/10.21324/dacd.463237>

