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Have the Best Interests of the Child Been Ensured in a Natural Disaster? The Case of the February 6, 2023 Earthquake in Turkey

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Abstract

Adults such as child's parents, caregivers or child development specialists and teachers around the child will reduce the negative situations and the risk of maltreatment that the child will face. This study is aiming to reveal the experiences of preschool teachers and child development specialists who work voluntarily with children in the earthquake area, interacted with and supported children after the earthquake on February 6, 2023 about child rights and children's welfare. This study is basic qualitative research and gathered data from four child developers and four preschool teachers. The findings of the study were categorized under the themes of "right to education", "right to shelter", "right to health" and "right to protection". Social systems, which are usually in place to protect children, collapse because of disasters, increasing the risk of rights violations, particularly when it comes to child abuse. It has also been observed that children's rights to participation, access to a suitable education, knowledge, housing, a nutritious diet, and water are at risk due to the vulnerability of children and infrastructure to natural catastrophes. Children need to be taught about natural disaster preparedness, mitigation, prevention, response, and recovery to reduce their vulnerability to disasters, both structural and non-structural safeguards must be put in place. Ensuring a child-centered, rights-based approach in disaster preparedness and response is crucial to safeguarding children's well-being and promoting their resilience in the face of future crises.

Keywords Child right · Preschool teachers · Child development specialist · Earthquake

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1 Introduction

Turkey is known for its history of major earthquakes, with the most recent being the Kahramanmaraş earthquake on February 6, 2023 (Şenol et al., 2023). As a result of the two consecutive major earthquakes that occurred in Turkey on February 6, 2023, many people lost their lives, were injured, became disabled, and faced various physical or psychological disorders. The earthquakes caused widespread destruction, with numerous buildings collapsing or being heavily damaged, and many individuals trapped under rubble (AFAD, 2023). In an official written statement by the Ministry of Interior of Turkey (2024), it was reported that the Kahramanmaraş Earthquake on February 6, 2023 resulted in a total of 53,537 fatalities, with 107,213 individuals injured. Due to the high number of affected provinces, the fact that more than 14 million people were directly affected, delayed aid and lack of coordination, serious problems were experienced, and the situation turned into chaos. Although all individuals were negatively affected in this chaotic environment, it can be said that children were the most affected. Since children's development is still ongoing, their developmental vulnerabilities are significantly higher compared to adults. In particular, children aged 0–18 who experience an earthquake and endure its chaotic aftermath may face disruptions in their emotional, cognitive, and social development, as exposure to stressful and unstable environments can have long-term detrimental effects on their mental health and overall well-being. One of the most critical factors contributing to children's heightened susceptibility to major disasters such as earthquakes is their limited coping mechanisms compared to adults. Their ability to process and make sense of their emotions in the aftermath of such traumatic events is often restricted, making it difficult for them to express their feelings effectively. Moreover, in highly chaotic and stressful situations, children are more likely than adults to experience intensified fear, anxiety, and distress (Karakan & Çolak, 2024; Korkmaz & Altınsoy, 2023; Ronen, 2021).

The Kahramanmaraş Earthquake, which struck on February 6, 2025, impacted a total of 11 provinces, including Kahramanmaraş as the epicenter, as well as Hatay, Adıyaman, Gaziantep, Malatya, Osmaniye, Adana, Diyarbakır, Şanlıurfa, Kilis, and Elazığ. In the wake of this disaster, to mitigate the negative psychological effects on children, teachers and child development specialists in the affected regions, alongside other professionals, collaborated actively to design and implement a variety of programs specifically aimed at supporting children. Subsequently, experts in the field of child development or education from non-earthquake-affected cities, either individually or through different organizations and associations, were assigned and supported these efforts (AFAD, 2023; UNICEF, 2024a, b; Yılmazer & Yavuz, 2024). In this study, teachers and child development specialists who worked with children in the post-earthquake region for short or long term were interviewed. Although Turkey is an earthquake zone, the biggest problem in this process is the lack of child-centered and standardized programs and the lack of experts trained in the field of development and education of children affected by disasters. This study is important for understanding the experiences of preschool teachers and child development specialists who have observed the post-earthquake process and worked one-on-one with earthquake-affected children. It aims to create more effective and useful intervention

programs based on these findings. Furthermore, it serves as a guide for individuals who will work in earthquake zones during future possible earthquakes.

1.1 6 February 2023 Kahramanmaraş Earthquakes

On 6 February 2023, two major earthquakes with magnitudes of 7.7 and 7.6, which occurred one after the other in Pazarcık and Elbistan districts of Kahramanmaraş, were recorded as one of the most devastating natural disasters of the century in Turkey with the highest loss of life. (Kılıç Ekici, 2023). These strong earthquakes were felt in 11 provinces and caused great loss of life and property (Salik Ata, 2023). In the June 2023 report published by the Turkish Ministry of Interior Disaster and Emergency Management Presidency (AFAD), it was reported that 37,984 buildings collapsed and 50,784 people lost their lives, and in the statement dated 2 February 2024, it was stated that the death toll increased to 53,537. According to the Earthquake Report of the Chamber of Architects of Turkey, the number of people affected by the earthquake was over 14 million, corresponding to 16.4 percent of Turkey's population. According to the data of the Presidency of Strategy and Budget of the Republic of Turkey, there were 4.8 million children and the earthquake directly affected 2.6 million young people in the earthquake zone on 6 February and these children and young people. Individuals who survived after the earthquake needed many physiological needs. Especially in earthquakes with high death and injury rates, the most basic needs of survivors are food and shelter (Aydın, 2024).

The 6 February 2023 earthquake led to significant challenges in accessing safe water, food, and hygiene materials, with issues in shelter, sanitation, and waste management. The Ministry of Family and Social Services of Turkey deployed over 26,000 lorries, 445 helicopters, and 42 aircraft to deliver essential aid, including clean water, blankets, and food (Aile ve Sosyal Hizmetler Bakanlığı, 2023). UNICEF (2024a, b) provided mental health support to 1,556,846 children, safe water to over 3 million people, and hygiene kits to 758,000 individuals. Education was also a critical concern, with 3.92 million students and 220,000 teachers affected. The Ministry of National Education responded by assigning additional teachers and setting up 728 container classrooms (Anadolu Ajansı, 2023). UNICEF (2024a, b) facilitated access to formal and non-formal education for 947,334 children and provided educational materials to 1.1 million children between February and December 2023.

1.2 Effects of Earthquakes on Children

Children are among the groups most affected by earthquakes, experiencing significant physical, mental, social-emotional, and psychological impacts that can lead to traumatic effects (Mavrouli et al., 2023; Tang et al., 2014). Earthquakes often trigger fear and anxiety in children, which can manifest in various physical and psychological issues, such as sleep disturbances, eating disorders, speech problems, bedwetting, and hygiene issues (Çiçekli Taşdemir et al., 2023). A study by Abalı et al. (2002) on children and adolescents following the Gölcük Earthquake in Turkey on 17 August 1999 revealed common issues such as fear of being alone, a desire to stay close to parents, and anxiety about future earthquakes. Additional problems included acute

stress disorder, major depression, speech disorders, and obsessive–compulsive disorder. Zhang et al. (2011) noted that children often exhibit symptoms of post-traumatic stress disorder (PTSD) after natural disasters like earthquakes. In a study by Hsu et al. (2002) involving 323 students aged 12–14 in the Chungliao region of Taiwan, which was severely impacted by a 7.3 magnitude earthquake on 21 September 1999, 21.7% of participants were diagnosed with PTSD six weeks post-disaster. PTSD was more prevalent among children who suffered physical injuries or lost a primary family member due to the earthquake.

Following the 6 February 2023 earthquake, studies primarily focused on the physical health impacts on children. Akkaya et al. (2024) found that initial admissions occurred 19 h post-earthquake, mainly for upper respiratory infections, acute gastroenteritis, and otitis media. Children trapped under debris faced more severe health issues. Isbir et al. (2023) reported that 43 children treated in the Pediatric Surgery Clinic had extremity, abdominal, and thoracic trauma, with 37.2% suffering extremity soft tissue injuries, 74.4% abdominal skin abrasions, and 46.5% thoracic skin abrasions; 12.5% underwent amputations. Post-amputation, children often experienced depression, anxiety, and grief (Adarsh et al., 2022; Rosça et al., 2021; Sahu et al., 2016). Mavrouli et al. (2023) highlighted that the earthquake created conditions conducive to infectious diseases due to a lack of fresh water and emergency resources, particularly affecting children.

Earthquakes adversely affect both the physical and psychological health of children. Darga (2023) found that children exposed to earthquakes experienced significant trauma, showing emotional and behavioral changes such as fear of the earthquake, fear of death, reluctance to return home, sleep issues, anger outbursts, and dependency on their mothers. Akyıldız and Topal (2024) reported that women and girls experienced more intense trauma during the 6 February earthquake. Cömertoğlu Arslan (2024) analyzed data from 52 children and adolescents at a Child and Adolescent Psychiatry Clinic, identifying common issues such as anxiety, adjustment disorders, ADHD, acute stress disorder, depressive disorder, and tic disorder. Eroğlu et al. (2024) found that children with autism spectrum disorder exhibited increased irritability and hyperactivity post-earthquake, while their mothers experienced elevated depression, stress, and low quality of life.

1.3 Child Rights Violations in the Aftermath of the February 6, 2023 Earthquake

Every child is an equal and dignified individual with inherent rights from birth. Therefore, ensuring the protection and safeguarding of these rights under all circumstances is a fundamental necessity. The United Nations Convention on the Rights of the Child (UNCRC) was adopted in 1989 to provide this protection, establishing an international framework that imposes significant obligations on states to uphold and safeguard children's rights (Theobald, 2019). Every child's right to life is protected by this convention, guaranteeing both their survival and their access to environments that support normal growth. While the right to housing requires the provision of a safe and healthy living environment, the right to education ensures that children have equal chances to receive high-quality education. Regarding the right to health, the convention promotes general well-being and guarantees access to essential medical

services. Furthermore, protecting children from exploitation, abuse, and neglect is another goal of the right to protection. In addition, the right to nondiscrimination ensures that all children receive the same treatment, irrespective of their socioeconomic background, gender, color, religion, or language. While the right to participation enables children to participate in decision-making processes, the right to freedom of thought and expression is acknowledged to guarantee children's freedom of speech. According to the United Nations (1989), these rights encourage children to actively participate in society and assist their development as healthy individuals. It is the duty of states and communities to uphold and advance the rights of children and to take the appropriate actions to improve their quality of life (Pais & Bissell, 2006).

However, many children experience numerous abuses of their fundamental rights, and not all children have equal access to them. A society's cultural, political, and social circumstances can have an impact on the creation of these infractions, and environmental variables are also important (Landsdown, 1999). Changes brought about by human activity or natural occurrences are referred to as environmental factors (Jansen, 2017). Environmental concerns that might result in violations of children's fundamental rights, such as housing, healthcare, and education, include earthquakes and the structural damage they produce (Safi & Al-Hassan, 2024). In particular, children's access to their rights was severely limited by the February 6, 2023, Kahramanmaraş Earthquake and its aftermath. Children were denied their rights to protection, education, housing, and medical care as a result of these disturbances (Kovancı, 2023; Özyurt et al., 2025; UNICEF, 2024a, b; Yiğitbaş & Karyağdı, 2025).

Soygüt et al. (2023) conducted a study on the challenges of being a child in the earthquake-affected region following the February 6, 2023 earthquake. Their findings revealed that many families in central areas struggled to secure tents for shelter, while in non-central locations, multiple families were forced to share single tents. The study emphasized that this situation constituted a significant violation of children's right to adequate housing. The Post-Earthquake Child Rights Violations Observation Report, prepared under the leadership of the Istanbul Bar Association and reported by Bulut et al. (2023), highlights the widespread neglect of children's rights following the February 6, 2023 earthquake. The report identifies security deficiencies and infrastructure inadequacies in tent cities, which have hindered children's ability to maintain a healthy living environment. Additionally, it points out the insufficient housing conditions, forcing children to live in overcrowded settings. Regarding the right to health, the report states that children faced limited access to healthcare services due to the inadequate number of hospitals and pharmacies. In terms of the right to education, many children were unable to continue their schooling and faced difficulties accessing educational materials, resulting in a lack of equal educational opportunities. Furthermore, interviews conducted with children revealed that they did not feel safe and only felt comfortable sharing their concerns with their families.

Various studies conducted on the 6 February 2023 Kahramanmaraş earthquake have revealed that children's fundamental rights were significantly violated. These studies indicate that particular challenges were faced in relation to the violation of children's rights to shelter, education, health, and protection (Aral, 2023; Arslan, 2023; Darga, 2023; Özmen et al., 2024). The observed violations of these rights can be attributed to a combination of factors, including Turkey's status as a developing

country, its economic difficulties, and the socioeconomically disadvantaged nature of the regions impacted by the earthquake. Moreover, these findings raise an important issue that necessitates a deeper examination of the rights violations experienced by children in the aftermath of such disasters. In the present study, the experiences of participating preschool teachers and child development specialists primarily focus on these four fundamental rights of children. As direct witnesses to the trauma and violations that children faced in the aftermath of the earthquake, these specialists offer valuable insights into their experiences and observations related to the infringement of these rights.

1.4 The Present Study

The present study aims to conduct an in-depth examination of the experiences of preschool teachers and child development specialists interacting with children following the earthquakes that occurred in Turkey on February 6, 2023. The research addresses the impacts on children's fundamental rights to education, shelter, health, and protection in the earthquake-affected regions, the challenges faced in cases of violations of these rights, and the interventions implemented to address these issues. This study seeks to contribute to the development of child rights-sensitive and effective intervention programs, particularly in the fields of education and care, to safeguard children's psychological and physical health during natural disasters. Interventions conducted with a focus on the best interests of the child aim to ensure the optimal protection and support of children's development. In line with the points emphasized by Lazarus et al. (2003), the necessity of providing a safe and stable environment and ensuring continuous support from specialists enhances the effectiveness of post-disaster interventions in safeguarding children's best interests. The direct observation of violations of children's rights by preschool teachers and child development specialists working in post-disaster areas, along with their development of various strategies to address these violations, will form a significant foundation for the research. These specialists provide valuable data regarding the psychological, social, and physical challenges faced by children in the aftermath of disasters and offer field experiences aimed at alleviating these issues. Furthermore, this study is expected to provide guidance on strategies and policies to support and protect children after disasters, while prioritizing their best interests. It will enhance our understanding of the roles of educators and specialists in the protection of children's rights and will propose recommendations to improve the effectiveness of specialists in post-disaster intervention processes. In this context, the main question of this study is;

- What are the experiences of preschool teachers and child development specialists who volunteered to work with children in the earthquake zone after February 6, 2023 about whether the best interests of the child and children's rights were experienced in the post-earthquake period?

2 Method

2.1 Research Design

This study is basic qualitative research that aims to reveal the process-related experiences of preschool teachers and child development experts who work voluntarily with children in the earthquake area, in the context of the best interest of the child. Basic qualitative research, which is used in education and social sciences to understand people's experiences, attitudes, behaviors and interactions, not only focuses on and understands the process, but also enables the subject to be seen from the perspectives of the people involved (Merriam, 2013; Pathak et al., 2013; Yıldırım, 1999). The data for the study was collected between May 6, 2023, and June 5, 2023, three months after the earthquake. Considering the likelihood of participants being exposed to acute post-traumatic stress disorder (PTSD) according to DSM IV.

2.2 Study Group

Right after the earthquake, ministries such as the Ministry of National Education, the Ministry of Health, and the Ministry of Family and Social Policies called on their employees to provide support to earthquake victims in the affected areas according to their fields of expertise. Some employees of these ministries voluntarily responded to this call. The participants of the study consist of those who supported this call.

Participants of the study were recruited using criterion sampling and snowball sampling techniques. In the criterion sampling technique, the researcher investigates all situations that meet certain criteria to obtain the best data for his/her purpose (Patton, 2014). During the data collection phase of the study, the researchers determined a series of criteria. These criteria are as follows:

- Not living in the earthquake-affected area
- Not having been exposed to the earthquake
- Being a preschool teacher or child development specialist working as a volunteer in the earthquake-affected area

Then, to identify people who met these criteria, one of the researchers made an announcement on her social media accounts (Instagram and Twitter) and asked people who met the criteria to contact him. Some of the participants formed the working group through this social media announcement. These participants helped the researcher in reaching other participants. Thus, the snowball technique was used also. Snowball sampling is expressed as asking the interviewees who or who should be interviewed to reach people or situations from which a lot of information can be obtained, interviewing the people reached in this direction, and repeating the process to make the snowball grow (Patton, 2014).

Within the scope of this study, the participant group was formed with eight individuals who had volunteered to work with children during the earthquake. This selection was based on data saturation, meeting the criteria, and the willingness of participants reached through social media. The participants aged 23 to 38, included eight

females, with four working as child development specialists and four as preschool teachers. Educationally, three held master's degrees, and five had bachelor's degrees. Their professional experience ranged from 2 months to 17 years. They volunteered in Hatay, Kahramanmaraş, and Gaziantep for periods of 10 days to 3 months, interacting with 40 to 300 children. Most participants were from Istanbul.

2.3 Data Collection and Ethical Principles

The data of the research were collected using a semi-structured interview form and demographic information form. The demographic information form included questions such as the ages of the volunteers working in the region, their educational status, how many days they worked in the region, and how many children they came into contact within the region. The semi-structured interview form includes 10 main questions and 8 sub-questions have been prepared to elaborate on observations regarding children's fundamental rights, such as education, shelter, health, and nutrition, especially in the post-earthquake period. These questions aim to identify any disruptions, determine the possible causes of these shortcomings, and gather insights on the issue.

After the researchers in accordance with the purposes of the research prepared the semi-structured interview questions, one of the data collection tools, they were presented to expert opinion, the necessary arrangements were made, and the interviews started. For example, in the semi-structured form presented for expert opinion, participants were asked the questions,"What are your solution proposals regarding the process?"and"In which areas did you find yourself most competent/incompetent during the process?"However, these questions were removed following expert review, as they were considered outside the scope of the study.

During the data collection process, a pilot interview was conducted with a preschool teacher who works in independent kindergartens and is in her seventh year in the profession. The purpose of the pilot study is to test whether the semi-structured interview questions are understood and whether they are suitable for the purpose. The pilot interview lasted 52 min and 2 sec. The interview data of the teacher who participated in the pilot interview were transcribed, and he was also asked to evaluate the questions in terms of clarity, comprehensibility, and scope. Since no negative feedback was received, no revisions were made at this stage. The researcher corresponded with the participants privately via their mobile numbers and an appointment was arranged on a day and time that was convenient for them. Before the interview, participants were given a trigger warning, and it was stated that they had the right to interrupt or stop the interview if they felt uncomfortable at any point during the study or if there were events or situations that could trigger their trauma. During the interview, information was given that audio and video recording would be made (optional), and the interview started after the necessary approval was received. All interviews were conducted via Google Meets, and audio recordings were made during the interviews. One of the researchers in the study conducted all interviews. The shortest conversation lasted 21 min and 59 sec, and the longest conversation lasted 01 h, 24 min and 3 sec. The difference in the length of the interviews is due to the variations in the duration of the participants'stay in the earthquake-affected area and

the difference in the number of children they interacted with during this period. These characteristics of the participants were mentioned when defining the study group.

Ethical approval was obtained from the Hamidiye Scientific Research Ethics Committee of the University of Health Sciences with the document number 20.04.2023–17434.

Multiple strategies were employed in the study to ensure reliability and validity. First, during the data collection phase of the research, only one researcher was responsible for conducting the study. This researcher has experience in conducting and leading qualitative interviews. Also, her master and doctoral thesis and most of her study, designed with qualitative approach. Throughout the study, the researchers focused solely on the participants'observations and experiences, setting aside personal biases and experiences. The first step in controlling subjectivity is being aware of the researcher's background and experiences related to the topic. In this research, all the researchers were born and raised in Turkey and completed their undergraduate and graduate education in Turkey. They are familiar with the educational policies and child protection systems in Turkey and have the knowledge and experience to evaluate the policies, whether implemented or not, in the context of the child's best interests. When starting this study, the researchers were aware that there was no systematic practice or preparation for the protection of children in emergency and disaster situations. Understanding this as an issue that needed to be addressed, they designed the study with the belief that, at the very least, a child-focused policy for disaster situations should be developed. Furthermore, strategies such as prolonged engagement with the collected data, obtaining feedback from participants, using participants'statements without alteration, and checking notes and audio recordings were implemented. In addition, procedures such as providing clear information about the study to participants, ensuring participants'confidentiality, and obtaining consent for audio recording were followed.

2.4 Analysis of Data

In the first stage of the analysis of the research data, the voice recordings recorded with the participants were listened to repeatedly to avoid data loss, and all data were transcribed without any changes and subjected to descriptive analysis. In the descriptive analysis method, codes and themes were determined after the audio recordings were prepared as text. The data were placed according to themes and codes, and direct quotations were presented (Yıldırım & Şimşek, 2016). The statements made by each participant during the online semi-structured interviews were carefully recorded and transcribed verbatim without any changes. After the data was transcribed, the last author of the study studied with the second author to analyze the interviews. Both authors initially analyzed two interviews together, identifying codes, subthemes, and quotations. These were then presented to the other two authors for feedback. Based on the feedback from the other two authors, the theme of'recommendations'was extracted, and the analysis process continued with full agreement. Four steps were taken in the analysis of the research data. Coding the data is the first step. To determine which concept each segment represented, researchers analyzed the gathered data and separated it into meaningful segments. Determining categories and themes

is the second step. This step involved classifying the codes under particular headings and identifying themes that could characterize the dataset more broadly based on the codes found in the original analysis. The steps to generate code, category, and theme from an extract are listed below (Table 1).

Sorting the data by codes, categories, and themes is the third step in the analytical process. Additionally, the fourth and last step of the analysis entails interpreting the data that has been gathered, elucidating the connections between findings, establishing cause-and-effect relationships, drawing conclusions from the findings, and explaining the significance of the results that have been obtained.

3 Findings

The study aims to shed light on the experiences of preschool teachers and child developers who volunteered with the children in the earthquake region in the context of the best interests of the child.

The findings of the study are grounded in four main themes. The right to education, the right to protection, the right to shelter, and the right to health. The theme of the right to education comprises four sub-themes: role in education, content of training, communication, and educational rights violation. The theme of the right to pro-

Table 1 Data analysis process

Extract	Code	Category	Theme
'Every week… they came from different provinces as volunteers, worked for a week and then left. This made the children very, very sad. Every time a teacher left, at least three of our children got angry and locked themselves in their tents. This was very, very bad.' (Participant 3)	Communication with the children	Communication	Right to Education
'It seemed like their needs were being met, but of course not like in normal times… You know, they are distributed as needed, etc. *So, of course, I don't find it enough… The children's faces could not be seen in the tent city because of the dirt.' (Participant 2)*	Clean water	Hygiene	Right to Health

tection consists of five sub-themes: psychological exploitation, exposure to anger by a parent, wear, addiction to reward, and special area. The theme of the right to health includes three sub-themes: nutrition, hygiene, and mental health. Lastly, the theme of the right to shelter encompasses two sub-themes: tent quality and ethnic identity. Each of these themes is presented under separate headings in Fig. 1.

3.1 Right to Education

Regarding children's right to education, preschool teachers and child development professionals volunteering in earthquake zones focused on the 3–6 age group, emphasizing routines and guidance while prioritizing communication with children and their families. However, they noted a lack of systematic support for children with special needs and those aged 0–3, who are often neglected. Figure 2 was generated through the analysis of responses collected from volunteer child development specialists and early childhood educators who worked during the earthquake. These responses focused on key aspects such as prioritizing the best interests of the child in the post-disaster period and the measures taken to support children's education following the disaster. Detailed findings on'Role in Education', 'Violation of Right to Education', 'Content of Education', and 'Communication' are presented Fig. 2 as below.

3.1.1 Role in Education

The majority of the participants explained their duties and roles when they came together with the children who faced the earthquake using terms such as'Establishing a routine','Focusing on life/Normalization','Observation', and 'Guidance'.

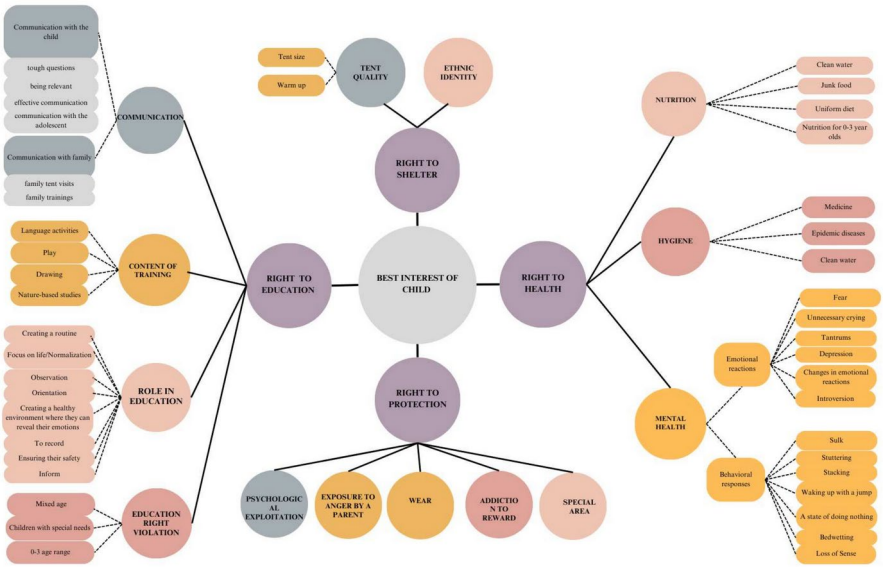

Fig. 1 Themes, sub-themes and codes

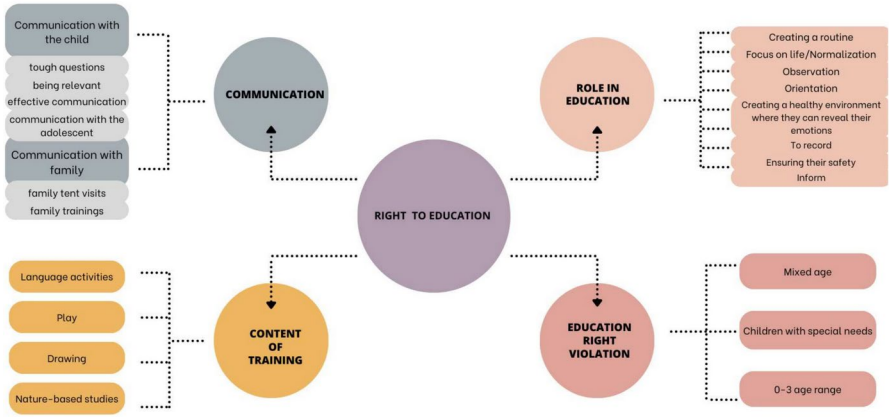

Fig. 2 Right to education

'I think preschool teachers have a big role to play at least for the children to play games there and to heal them, to reduce the effects of this earthquake even a little bit. Because they know the child. They know how to touch children.' (Participant 1).

'Our role is actually to continue the process that the existing children are already used to...I was actually an observer there, and I had the role of rebuilding the routine activities, the routine, and reassuring them about the continuity of life.' (Participant 6).

Some participants framed their role in terms such as'Creating a healthy environment to provide them express their feelings','Ensuring their safety', and'Providing information'.

'...Safety is very important here. We don't send the children anywhere alone.' (Participant 2).

'...Families assure their children that there will be no earthquakes when we move to other cities, but you know that this is not possible. To overcome such misconceptions, I think it is necessary to first make a professional explanation…' (Participant 8).

3.1.2 Content of Training

Participants implemented some activities during their contact with children. These activities generally consisted of'Language Activities','Play', 'Art Activities', and'Nature Based Studies'.

'We tried to implement frequent plays, group plays, and activities that could make children free and express themselves, as much as we could.' (Participant 1).

'I read stories, we drew pictures, we played. They talk a lot. They are so eager to tell…' (Participant 2).

'We were mostly doing nature-based studies like this…we were going out, when the weather was nice, we were trying to make kites…' (Participant 8).

When the participants'responses are examined, it is seen that preschool teachers and child development specialists implement art and nature-based semi-structured activities to children who were victims of the earthquake, with the awareness that children should not suppress their emotions to return to regular life, in which they can reveal their emotions.

3.1.3 Communication

The communication theme from participants includes'Difficult Questions', 'Establishing a Bond', 'Effective Communication', and'Communication with Adolescents'under'Communication with the Child', and'Family Trainings', 'Tent Visits', and'Communication with the Family'. Participants reported good communication with children but struggled with answering difficult questions, particularly those about death. Pedagogical and emotional inadequacies were cited as factors contributing to these difficulties. Participant 5 and 8 shared their experiences with addressing children's questions as follows:

'A boy I interviewed said this… "I had a great day today. But I will definitely write it down somewhere today." He even asked me for a pen and paper. "Because, you know, all my friends are dead. There can be an earthquake tomorrow and I can die. But let something remain from me in this world. For example, he said,"Let everyone know that I am happy today."How could I react when I heard this sentence? What could I say? You know, I had so many goosebumps. You know, I don't feel competent enough to talk about death…' (Participant 5).

'Of course, the thing I can't forget the most was this... Well, he was drawing a picture with a child. I sat next to him, he said who is this, he was talking about his family. Then he drew such a curved building, it was curved... He drew this, I said, what is this?"They have a cousin in a collapsed building,"he said,"This thing is a collapsed building."He said it like"my cousins are left behind", I'm in tears now... I didn't know what to say to the child…' (Participant 8).

The majority of the participants stated that connecting with children negatively affected both themselves and the children, even if they had an idea about how to answer such questions.

'Every week... they came from different provinces as volunteers, worked for a week and then left. This made the children very, very sad. Every time a teacher left, at least three of our children got angry and locked themselves in their tents. This was very, very bad.' (Participant 3).

Some participants indicated that there was no communication with the child herself (Participant 8) and that they had problems especially with the communication of the adolescent group (Participant 6).

'... We never gave the children the opportunity to express themselves. In fact, I realized this when you asked. Adults are interviewed, but children are never interviewed one by one. For example, we met with only one person from the family, on behalf of those four people, he gives information and needs of everything. But ask the child what you want, how you feel, what you need…' (Participant 8).

'There are a lot of intubated children, by the way, there are a lot of intubated mothers and fathers in the field, there are siblings, especially the adolescent group... they cannot be reached right now...the teenage group is completely absorbed. He also rarely communicates with us.... because many of them also lost very close friends…' (Participant 6).

While some of the participants stated that they did not observe any work related to families, others stated that only families in need of psychological support received support from psychological support tents.

'I did not observe any studies on families… I did not observe any one-on-one studies.' (Participant 8).

'…With the families… There were mostly clinical psychologists coming from different units. Generally, they held events. They usually did activities with the mothers in the evenings. They would have conversations around the stove... sometimes they would have a movie night, mixed with men and women, etc., projected on a big screen.' (Participant 4).

3.1.4 Educational Right Violation

Educational rights violations are categorized into'Mixed Age', 'Children with Special Needs', and'0–3 Age Range'. While preschool education has received attention, insufficient focus has been given to the 0–3 age group and older children. Many staff members, particularly those not in exam periods, took the initiative to include these children in their classes but faced challenges, especially in finding suitable activities for mixed age groups. Participant statements on these issues are presented below:

'The age group is three to six years old, and we will continue like that, but there was no area established for children over the age of six, there was no area created for them. Likewise, unfortunately, there was no playground for groups under the age of three…' (Participant 4).

'There is only one classroom in the preschool. They must use it as primary school in the morning and preschool in the afternoon. I take the small group, then their older sisters and brothers look through the window. "Teacher, should we come too?" saying."We are cold". They came too. It was a mixed group. So, there are sixth, fourth and fifth grades, as well as preschool groups...' (Participant 2).

While various works were carried out for children with special needs in some regions, some regions were inadequate in this regard and children with special needs could not benefit from education. One of the participants stated that they saw that there were tents for children with special needs, but they did not have information about exactly what kind of activities were carried out in the tents.

'So, among the children with special needs, there was a child with Down Syndrome. Of course, some of the children develop speech retardation, stuttering, etc. You know, we didn't do anything. We were trying to include the child with Down Syndrome. Sometimes we took special care of him like that, when there were few children, etc. So, we didn't do anything specifically to them, but we were trying to include them in the class. There is no Rehabilitation Center, I think RAM has a tent, Family Social Policies but I don't really know what they do in terms of activities.' (Participant 1).

The participants either did not specify anything regarding the inclusion of children between the ages of 0–3 in education, and those who stated said that nothing was done for this age group.

'Regarding the age of 0–3, 0–3 years old were always in the mother's arms, you know, 0 1 2 month-old babies are always there, they are obvious. There was only one thing in the area, a playground. I generally saw 0–3-year-olds in that area.' (Participant 6).

When the findings obtained from the participants are examined, the right to education for normally developing preschool children is respected; however, children between the ages of 0–3, children with special needs and school age children who are not in the exam period are deprived of their right to education.

3.2 Right to Shelter

During the interviews with the participants, serious findings were obtained regarding the violation of children's right to housing. Figure 3 was generated through the analysis of responses collected from volunteer child development specialists and early

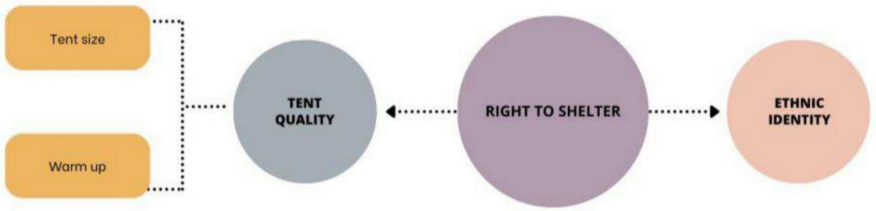

Fig. 3 Right to shelter

childhood educators who worked during the earthquake. These responses focused on key aspects such as the challenges they faced and the support they needed the most, as well as considerations for prioritizing the best interests of the child in future disaster situations. In the study, the right to shelter was grouped around the themes of'Tent Quality'and'Ethnic Identity' you can see Fig. 3 as below.

When the views on children's right to shelter are examined, the right to shelter is generally provided through tents, but this has also brought about some problems arising from tents.

3.2.1 Tent Quality

Tents are affected by weather conditions such as rain, wind, and natural disasters such as floods due to not being positioned in suitable places and, more than one family stays in the same tent, and the tents are crowded. Due to the material, they are made of tents receive too much sun and are affected by weather conditions such as wind and rain.

> *'I am talking about Hatay and Maraş. There is an incredibly dirty wind, it is always crazy hot for these times, the inside of the tent areas is incredibly like a steam bath, they cannot stay in it, so they go out because the sun is out… Regarding tent areas for shelter, the places are not distributed equally…They said they would make it prefabricated, but it didn't happen yet.'* (Participant 6).

> *'…When it rained, for example, water was entering the tent, and they were doing something. You know, "Teacher, water got into our tent," they were afraid when it rained, etc.'* (Participant 1).

3.2.2 Ethnic Identity

Children's rights were compromised by neglecting ethnic identities in tent placement decisions. Local residents were allocated closed areas like fairgrounds, while Syrians and Afghans were placed in open areas. The latter faced harsher conditions, undermining their right to adequate shelter.

> *'While they were badly affected by weather conditions such as rain and cold, they did not have lamps and had to turn on the stove, those inside lived in*

slightly different conditions. So, I could observe two situations… the ones inside are not as much as the ones outside… While stoves are used here, we use heaters inside…' (Participant 7).

When the findings regarding children's right to housing are examined, it has been determined that there are inappropriate sheltering conditions, the tents have sound and heat problems, and there are serious injustices between the settlement and quality of the tents between the local people in the region and immigrants with different ethnic identities.

3.3 Right to Health

It was stated that post-earthquake health services were generally accessible, but some families needed guidance to benefit from these rights. Figure 4 was generated through the analysis of responses obtained from volunteer child development specialists and early childhood educators who worked during the earthquake regarding the child's right to health. These responses focused on key aspects such as prioritizing the best interests of the child in the post-disaster period, the challenges faced and the support needed, as well as measures that should be implemented differently to ensure the child's well-being in future disaster situations. Regarding the right to health, participants mostly focused on'Nutrition','Hygiene', and'Mental Health'. You can see Fig. 4 as below.

3.3.1 Nutrition

Particularly in terms of nutrition, the prominent topics are the problems in supplying clean drinking water, the uncontrolled and irregular distribution of junk food, the repetition of mostly the same type of food, and the insufficient content regarding the nutrition of 0–3-year-olds. Regarding nutrition, the participants particularly emphasized the insufficient protein intake and the almost complete absence of foods such as fruit and healthy choices.

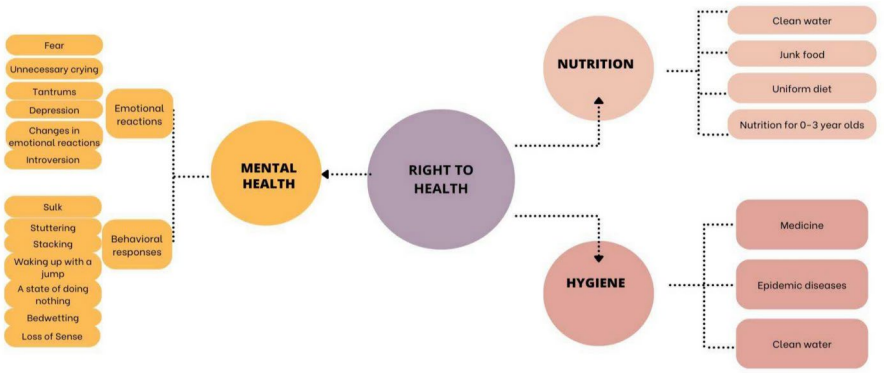

Fig. 4 Right to health

'...Let me speak for the Hatay region, the biggest injustice done to children is that so much sugar, chocolate, and different things that have no nutritional value have been brought to children by us or by people coming from outside, people from outside the earthquake zone. They were exposed to food, which I think they have never eaten so much in their entire lives. I think this is a violation to children.' (Participant 6).

'There was an incredibly unplanned snack distribution...Because their digestive systems, their immune systems were incredibly collapsed, they were constantly, excuse me, diarrhea, vomiting, etc. It was happening a lot…' (Participant 4).

'So, of course, there were many nutritional deficiencies… There were some sick children, and their nutrition could not be met. There was a lot of trouble, especially in the younger age group. There were many difficulties in the period up to the age of three.' (Participant 3).

3.3.2 Hygiene

In the hygiene theme, toilet and bathroom problems and the lack of machines to wash the laundry were the prominent topics. Among the problems encountered are the fact that children cannot go to the toilet alone because the toilets are far from residential areas, and it was inevitable that there would be problems with cleaning due to the inability to take a bath, and that these would turn into many epidemic diseases such as lice.

'It seemed like their needs were being met, but of course not like in normal times... You know, they are distributed as needed, etc. So, of course, I don't find it enough... The children's faces could not be seen in the tent city because of the dirt.' (Participant 2).

'There's a never-ending health thing going on. The child was getting a fever… they were getting a lot of infections. Because you can't excrete.' (Participant 3).

'...cough, flu, nits, lice, these are the things I observed the most.' (Participant 4).

3.3.3 Mental Health

Mental health is categorized into'Emotional Reactions', and'Behavioral Reactions'. Common emotional reactions include'fear', and'anger'while'crying', 'depression'(in adolescents),'emotional changes', and'introversion'were less frequent. Behavioral reactions observed include'sulking', 'stuttering', 'waking up startled', 'apathy', 'bed-wetting', 'loss of sensation', and'hoarding'. For the emotional reactions participant 8 and 4 observations were as follows:

'I noticed that children at that time were asking questions such as fear of death...some of them were very introverted by my teacher. He acted as if nothing like this had ever happened. Some of them, how should I put it, revealed this at night, for example by crying, waking up suddenly, and jumping.' (Participant 8).

'They were having tantrums (unintelligible). There were children there who threw fits over the smallest thing because they couldn't get over it. Somehow, they could not reveal their emotions' (Participant 4).

For the behavioral reactions of the participant 1, 5 and 3 observations were as follows:

'...we are not a language therapist for children. I have seen many deficiencies in language in children... and then some children stutter.' (Participant 1).

'...Something had happened, and in fact, one of the children had experienced a loss of sensation. You know, when someone touched their body, they couldn't feel it, and their mother was very upset about it. He cried a lot…' (Participant 5)

'...in a very exuberant moment, they would suddenly say,'Come on, play us some crazy music, let's dance!'But after engaging in that behavior, they would withdraw to the side, doing nothing, as if they were sulking...' (Participant 3).

When the findings regarding the right to health are examined, it is observed that children do not have access to healthy and balanced food or clean drinking water. There are issues in meeting bathroom and toilet needs, and the earthquake has seriously affected children's mental health. It has been found that children face emotional and behavioral problems, but studies on this issue are limited.

3.4 Right to Protection

The right to protection refers to the child's right to be protected against all kinds of situations, including economic ones, that may harm the child's health or physical, mental, spiritual, moral or social development. Figure 5 was generated through the analysis of responses obtained from volunteer child development specialists and early childhood educators who worked during the earthquake regarding the child's right to protection. These responses focused on key aspects such as the challenges faced and the support needed, as well as the measures that should be implemented differently to ensure the best interests of the child in future disaster situations. The theme of the right to protection is grouped under the headings'Psychological Exploitation','Special Area','Addiction to Reward','Wear', and'Exposure to Anger by Parents' are presented Fig. 5 as below.

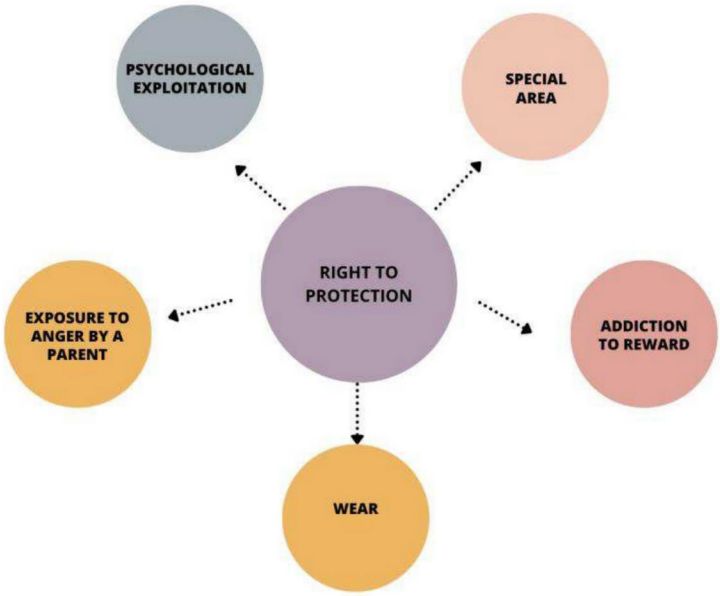

Fig. 5 Right to protection

3.4.1 Psychological Exploitation

The heading of psychological exploitation reflects situations where some adults, sometimes the children's own parents and sometimes individuals who come to the area for aid, use the child as a tool for their own well-being or popularity. It has been determined that some adults used children as a tool of exploitation in the post-earthquake period and that no legal measures were taken regarding this. People who come to the area just to take photos are committing psychological exploitation of children with their actions.

> *'The part where it is abused is that feeding the children nonsense things that have no nutritional value by saying"I brought this book so they can be happy, let me take a photo for a few minutes so that they can be happy"is also harmful to the children, so there is abuse there..."If you are going to give something, I will attend your event."says. We taught this to the child... Because they said,"Here, I'm giving you this, let's take photos."'* (Participant 6).

> *'Unfortunately, it was also highly susceptible to exploitation. Yes, children had access to food, shelter, and other basic needs, but at the same time, the situation was very open to being exploited by society. You know, nowadays, many things are lost to social media. It was very easy for people to come, give toys or clothes to children just for the sake of sharing it on social media, and then leave.'* (Participant 4).

Also, some families used their child for their own well-being as below.

'Unfortunately, the same issue was present among earthquake-survivor families as well. We were giving socks to the children so they could receive more later, but there were times when they sent the children to us without socks. In this sense, the children were exploited a lot. Because you can reason with an adult, but with a child, it's harder since they evoke more compassion, making it easier to manipulate emotions. I don't think children's best interests were always considered. However, there was more aid directed toward children compared to adults. Their needs for food and clothing were greater.' (Participant 4).

3.4.2 Special Area

Families were in tents after the earthquake, and the tents were not reserved for just one family, causing more than one family to stay in the same tent. This situation has caused children's needs such as dressing, undressing, and sleeping to be met in the presence of other adults. The fact that children do not have a private living space for themselves, and their families shows that individual boundaries and individual spaces are violated.

'... those who stayed in the tent also had big problems…this was also an issue that was very open to abuse. Three or four families can stay in one tent. There is no private space now anyway…He changes his clothes there. He sees that others are always changing their clothes there, because most people do not pay attention to this...' (Participant 3).

'...It may not be a deliberate negligence, but people cannot take shelter. Five or six people are in a tent. Here are more crowded, there are shared toilets and bathrooms. These children have a right to privacy. These rights to being alone etc. were not respected there... Children are not respected.' (Participant 4).

3.4.3 Addiction to Reward

Some practices in the post-earthquake period have inadvertently made children dependent on rewards. For instance, the frequent distribution of junk food like candy and chocolate has led children to expect these rewards from field staff, even for participating in activities.

'...that the children listen to our words…they are used to just taking, they wait with their hands like this…children are used to plundering here. They got used to taking, they believed that they could get it by crying and crying when it was not given.' (Participant 7).

'...gifts and rewards are given too often. Right now, there are so many people coming to them and giving them gifts, and so on. Children get used to taking

so much. There are even people who like my bag and want to buy it so they can keep it for me…This time, the children were wondering if someone brought a gift…' (Participant 2).

3.4.4 Clothing

Participants have reported that children living in tent cities often lack adequate clothing. Even in cold weather, children are not dressed warmly enough for the season, leading to health issues such as runny noses.

'But their faces and eyes are covered in dirt. For example, we are cold. We dressed warmly, the children wore slippers, their noses were running, they dressed us in layers like this... Heating is also insufficient, it is not provided much. Something is being done, but it is very crowded. It doesn't reach everyone.' (Participant 2).

'They don't wear socks on their feet at work, especially because they don't wear shoes. They all have slippers on their feet, no socks, in order not to get them dirty when entering and exiting.' (Participant 6).

'There was even rubble dust on them, there were tears in their clothes, etc. for a long time. They even couldn't change clothes etc. for the first week. Later, help arrived…' (Participant 1).

3.4.5 Exposure to Anger by Parents

Participants stated that the incident had a high impact on the parents and that the authorities ignored the fact that it could have significant effects if it was indirectly reflected on the child.

'...for example, a child who has never wet the bed now wets his pants every night, the mother is already in the tent, there is no way to dry or wash it all the time, the mother gets angry at the child. For example, a mother cried and said,"I have never done anything physical to my child before, but I did this yesterday,"she said, crying.' (Participant 6).

Especially in extraordinary situations such as earthquakes, women are crushed under their existing traditional roles. Mothers are also earthquake victims and try to continue their caregiving roles but could direct their anger towards their children due to inappropriate physical and existing psychological conditions. The results of the examination of the child's right to protection show that children are exposed to violence and exploitation, that those who commit acts of violence and exploitation do so unintentionally, that children are not legally protected from these circumstances, and that those who engage in these activities face no consequences.

4 Discussion and Conclusion

This research aims to explore the experiences of preschool teachers and child development professionals who volunteer with young children in earthquake-stricken areas, focusing on the best interests of the child. In the aftermath of the February 6, 2023, earthquake in Turkey, the study highlights significant violations of children's rights, particularly in education, shelter, health, and protection. Preschool teachers and child development specialists who worked with affected children observed severe disruptions in access to education, inadequate shelter conditions, limited healthcare services, and increased exposure to neglect. Children faced emotional distress, behavioral challenges, and insufficient support systems to help them cope with trauma. The findings emphasize the urgent need for systematic, child-centered disaster response strategies, including structured educational interventions, improved shelter conditions, and better mental health support. Moving forward, policies must prioritize the best interests of the child, ensuring that disaster preparedness and recovery efforts safeguard their fundamental rights and well-being. According to the United Nations International Strategy for Disaster Reduction (UNISDR, 2009), a disaster is a severe breakdown in a community's functioning that results in significant impacts on people, infrastructure, and the environment. This definition includes natural catastrophes, conflicts, and humanitarian crises. The United Nations Children's Fund (UNICEF, 2014) notes that children are the most at risk during such events. Over 530 million children, or a quarter of the global child population, live in disaster-affected areas (Boyd et al., 2017). Disasters can disrupt societal structures that typically protect children, increasing their exposure to risks and the likelihood of rights violations, particularly violence against children. In the earthquake zone, some activities were allocated and supported by child development and education specialists to provide the well-being of the children, either directly or through various organizations and associations (UNICEF, 2024a, b; Yılmazer & Yavuz, 2024).

Preschool teachers and child development specialists engaged in voluntary work with children in earthquake-stricken areas emphasize the importance of the right to education, particularly during the preschool years, which encompass the age range of 3 to 6. The findings under the title of the right to education are elaborated below in detail, encompassing themes such as'Role in Education', 'Violation of Educational Rights', 'Educational Content', and'Communication'. Similar to this research, the results show that while children's fundamental rights should be protected and guaranteed according to the Convention on the Rights of the Child (Theobald, 2019), disasters such as earthquakes cause loss of even the most basic rights of children such as life, shelter and education (Safi & Al-Hassan, 2024). While importance was given to education for preschool children, there was not enough emphasis on education for children aged 0–3 and those beyond the age of 6. Especially during exam periods, many educators took the initiative to admit school-age children not currently attending formal education into their classrooms and tried to keep them engaged in educational activities. However, they also mentioned facing various challenges in doing so. The most significant difficulty they encountered with mixed-age groups was finding activities suitable for each age group. Similarly, Mudavanhu (2014) in the research found that children perform poorly academically as a result of floods because they

lose instructional time, lose trained staff, see an increase in waterborne illnesses, have high absenteeism rates, and don't complete the entire curriculum. The incidents mentioned by the kids ranged from lack of food to expulsion from school. The rights of children and their access to a top-notch education are at risk due to these issues.

Natural disasters, significantly affect children's socio-economic well-being, yet there is limited research on how these events affect children's access to and right to high-quality education (Masese et al., 2012). Participants described their roles in working with earthquake-affected children in terms such as establishing routines, promoting normalization, observation, and guidance. Some emphasized creating a safe environment for emotional expression, ensuring safety, and providing information. Schools are ideal for fostering disaster preparedness and instilling communal values (ADPC, 2007). After disasters, children may experience bedwetting, thumb sucking, excessive fondness for parents, fear, sleep disorders, avoidance behaviors, constant questions about disasters, and playing games that remind them of the events. During this period, the child should be comforted, his/her anxiety should be reduced and appropriate answers should be given to his/her questions to reassure the child (Karabulut & Bekler, 2019). A safe and protective environment should be created in areas such as home and school, and psycho-social support should be provided to the child and, if available, the adults around the child (Girardi et al. 2020). While participants generally reported good communication with children, they noted challenges in addressing difficult questions, especially those related to death. This difficulty was attributed to both pedagogical and emotional inadequacies in responding to challenging inquiries. The child should be informed about the disaster s/he has experienced/seen. The child should be given the opportunity to draw and play related to the disaster, and the game should be continued with creative ideas that can positively affect the results of disasters to feel comfort (Zara, 2011).

In the interviews with the participants, significant findings related to the violation of children's right to shelter were obtained. Within the study, the right to shelter is gathered around the themes of'Tent Conditions'and'Ethnic Identity.'When examining children's perspectives on the right to shelter, it is observed that shelter is generally provided through tents; however, this situation has also brought along certain problems due to the nature of the tents. The campaign emphasized two reasons why a school should be made safe and as school buildings have the potential to save lives, and as a refuge, as schools can serve as shelters during times of emergency after natural disaster (ADPC, 2007). One participant noted significant neglect of children's ethnic identities in tent placement. Local populations were given enclosed areas like fairgrounds, while Syrians and Afghans were placed in open spaces, exposing children in these areas to harsher conditions and undermining their right to adequate shelter. These issues, compounded by pre-existing inequalities, disproportionately affected vulnerable and minority children, including Syrians, Roma, and those with special needs. Social discrimination also exacerbated the violations of the right to life for Syrian children post-earthquake (Koman & Orak, 2023).

Access to post-earthquake healthcare services has generally been attainable, but it has been noted that some families require guidance to benefit from these rights. One of them is difficulty in reaching nutrition and also, fresh water for the children. The participants, especially concerning nutrition, have highlighted challenges regarding

obtaining clean drinking water, uncontrolled and irregular distribution of snacks, repeated availability of the same types of meals, and insufficient efforts related to nutrition for children. Children rely on their parents or other caregivers for access to things like food, clothing, housing, security, and medical treatment (UNICEF, 2014). Helldén and others (2021) indicated the effects of climate change on children's lives, and they focused on reaching food and water similarly. Ayieko (2006), who reported that children frequently assist their families in obtaining food during disasters, missing school in the process and ultimately performing poorly because of inconsistent learning, further supported this. Finally, it should also be discussed the right to nutrition and health. Children need access to clean, healthy, reliable, and fresh food. It's been six months, and there are still ongoing issues with nutrition. Moreover, viable solutions are not being produced. Except for the limited number of people residing in camp areas, access to nutrition and the right to health for children outside these areas is severely restricted. Years after the earthquake, in research conducted on the development of children in the region, it is highly likely that developmental delays and stunted growth will become evident (Koman & Orak, 2023). Upon reviewing the findings related to the right to health, it can be stated that children lack access to healthy and balanced food and clean drinking water, and encounter challenges in meeting their bathing and toilet needs.

Under the theme of hygiene, issues with toilets, bathing facilities, and insufficient washing machines for laundry were prominent. The inability to maintain cleanliness can lead to disease outbreaks, such as lice infestations. Mudavanhu (2014) indicates that floods increase children's risk of health issues, with stagnant water consumption leading to diseases like cholera and malaria. Cholera is reported as the leading cause of child mortality, followed by malaria, particularly in low socioeconomic areas (UNICEF, 2009; Ochola, 2009). These epidemics result in more child deaths than any other illnesses in disaster zones. Natural disasters impact vulnerable children in various ways, with poor conditions exacerbating health problems. Under the theme of mental health, participants noted emotional reactions such as fear, anger outbursts, excessive crying, and depressive states in adolescents, emotional withdrawal, and behavioral changes like stuttering, apathy, bedwetting, and hoarding. Additionally, climate change is linked to mental health issues, including depression, PTSD, and anxiety, especially among disadvantaged children (Dean & Stain, 2010; Friel et al., 2014). Natural disasters significantly affect children as the most vulnerable group, and adults often observe emotional and behavioral impacts. So, in a such difficult period, it is necessary for the child to spend time with activities that the child has done before, to play with the child, and for adults to be able to control their own emotions and thoughts as in other periods. Creating environments where the child can come together with his/her peers and guiding the child to play or social activities are among the measures that can be taken (Yorulmaz & Karadeniz, 2021).

The right to protection encompasses safeguarding the child from any situation that could harm their health or physical, mental, emotional, moral, or social development, including all forms of harm, both economic and non-economic. The theme of the right to protection is divided into subtopics and some of them are'Psychological Expl oitation,"Privacy,'and'Exposure to Parental Anger.'Because of the difficult conditions, the presence of families in tents after the earthquake has led to multiple families shar-

ing the same tent, causing children's needs such as changing clothes, sleeping, and undressing to be met in the presence of other adults. In a research, a large number of families in central regions had difficulty obtaining tents for shelter, whilst in non-central areas, several families were compelled to share a single tent, which was a serious violation of children's right to decent housing (Soygüt et al., 2023). Article 19 of the Convention on the Rights of the Child specifically focuses on the protection of children from abuse and dangerous situations (Theobald, 2019). In this context, the process that occurs after any natural disaster contains many risk situations for children, and the aftermath of the Kahramanmaraş earthquake also contains such risks, and it is of great importance that teachers and field experts who first come into contact with children consider the risks and address the development of knowledge and skills in this regard. The lack of a private living space for children and their families indicates that individual boundaries and personal space are violated. Another abusive situation is children's exposure to parental anger and conflicts is an issue of concern. It is crucial to address this aspect of their well-being in the context of the right to protection. Parents committed most cases of child maltreatment and abuse in emergencies. Mothers abused their children more psychologically than dads did physically (Biswas et al., 2010; Flynn-O'Brien et al., 2016; Rubenstein & Stark, 2017; Saile et al., 2014). This shows us children are the most vulnerable group to face different types of abuse and the most frequent predictors included lack of access to food and shelter, poorer socioeconomic position, and a history of violence exposure. Koman and Orak (2023) emphasize that a systematic approach involving the government, civil society, academia, local authorities, and the private sector is essential to address children's needs and protect them from harassment and abuse while ensuring access to food, shelter, health, and education services.

While the research findings provide valuable insights into the experiences of preschool teachers and child development professionals, they should be interpreted with caution, considering the contextual and methodological constraints. Future research should aim to address these limitations by expanding sample sizes, including diverse geographical and cultural contexts, employing mixed methods, and ensuring longitudinal follow-up to capture the evolving nature of post-disaster recovery and its impact on children's rights and well-being. It has been also noted that schoolchildren and infrastructure are susceptible to natural disasters, jeopardizing the children's rights to participation, access to a proper education, shelter, healthy nutrition, and water. The curriculum for schooling must include catastrophe risk reduction. Natural disaster preparedness, mitigation, prevention, response, and recovery must be taught to children. It is necessary to implement both structural and non-structural measures to lessen the susceptibility of schools and children to disasters. Policymakers must enforce building laws and standards to prevent the use of subpar structures and construction materials, which endanger the lives of children and teachers. Planning for land use and zoning are necessary before establishing any public structures to prevent habitation of sensitive areas. To ensure that reaching the children of the most vulnerable group is crucial to support their rights and prevent the abuse of them in different types.

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Data Availability The authors may share data on request.

Declarations

Ethics Approval and Consent to Participate This research had institutional approval to conduct the study. Ethical approval was obtained from the Hamidiye Scientific Research Ethics Committee of the University of Health Sciences with the document number 20.04.2023–17434. All methods were performed in accordance with the ethical standards as laid down in the Declaration of Helsinki and its later amendments or comparable ethical standards.

Consent for Publication Written informed consent for publication was obtained.

Competing interests The authors declare no conflict of interest.

References

Abalı, O., Tüzün, Ü., Göktürk, Ü., & Gürkan, K. (2002). Acute psychological reactions of children and adolescents after the Marmara Earthquake: A brief preliminary report. *Clinical Child Psychology and Psychiatry, 7*(2), 283–287. https://doi.org/10.1177/1359104502007002013

Adarsh, H., Sahoo, S., Sachdeva, D., Tripathy, S., & Kumar, R. (2022). Post-traumatic stress disorder following traumatic limb amputation in an 8-year-old female child and its management through play therapy. *Asian Journal of Psychiatry, 78*, 1–4. https://doi.org/10.1016/j.ajp.2022.103304

AFAD (2023). *06 Şubat* 2023 *Pazarcık-Elbistan Kahramanmaraş Depremleri Raporu.* Deprem ve Risk Azaltma Genel Müdürlüğü Deprem Dairesi Başkanlığı. https://deprem.afad.gov.tr/assets/pdf/Kahramanmara%C5%9F%20Depremi%20%20Raporu_02.06.2023.pdf

Aile ve Sosyal Hizmetler Bakanlığı. (2023). *Bakanımız Derya Yanık: "Depremlerden etkilenen vatandaşlar için bugüne kadar 1 milyar 851 milyon TL kaynak aktardık".* Retrieved June 10, 2023, from https://www.aile.gov.tr/haberler/bakanimiz-derya-yanik-depremlerden-etkilenen-vatandaslar-icin-bugune-kadar1-milyar-851-milyon-tl-kaynak-aktardik/

Akkaya, B., Öztürk, B., İnan, C., Güneylioğlu, M. M., Yaradılmış, R. M., Aydın, O., Aydoğmuş, Y. H., Güngör, A., Kulalı, F., & Tuygun, N. (2024). Reflections of children victims of the Turkey earthquake on February 6, 2023 to a pediatric emergency department far away. *Turkish Journal of Pediatric Disease, 18*, 235–239. https://doi.org/10.12956/tchd.1438227

Akyıldız, D., & Topal, S. (2024). *Deprem afetlerinde kadınlar ve kız çocuklarının yaşadıkları sağlık ve güvenlik sorunları.* In Kahramanmaraş Sütçü İmam Üniversitesi 6 Şubat Kahramanmaraş Depremi Sağlık Disiplinleri Afet Sempozyumu 'Koordinasyon ve Acil Müdahale' Kahramanmaraş, Turkey. https://koordinasyonacilmudahale.ksu.edu.tr/depo/belgeler/%C3%96ZET%20B%C4%B0LD%C4%B0R%C4%B0%20K%C4%B0TABI_2403152118134664.pdf

Anadolu Ajansı, A. (2023). *Deprem bölgesindeki 1168 öğretmen için ders zili konteynerlerde çalıyor.* Retrieved from https://www.aa.com.tr/tr/asrin-felaketi/deprem-bolgesindeki-1168-ogretmen-icin-ders-zili-konteynerlerde-caliyor/3062434

Aral, N. (2023). Depremin çocuklara etkileri. *Çocuk ve* Gelişim *Dergisi, 6*(11). https://doi.org/10.36731/cg.1299175

Arslan, M. (2023). Okul müdürlerinin 6 Şubat Kahramanmaraş depremi sonrası okullarda karşılaştıkları sorunlar ve bu sorunlara ilişkin çözüm önerileri. *International Journal of Social and Humanities Sciences Research, 10*(97), 1550–1559. https://doi.org/10.5281/zenodo.8200750

Asian Disaster Preparedness Center (ADPC). (2007). *Child-focused disaster risk reduction,* Module 6: Community disaster risk reduction implementation. 16th Community-based disaster risk management course, Bangkok, 16–27 July. https://www.preventionweb.net/files/9543_doc1ChildFocusedDisasterRiskReducti.pdf

Aydın, A. (2024). 6 Şubat 2023 depremlerinde sosyal yardımlar: Sosyal yardımlaşma ve dayanışma vakıflarının rolü. *Akademik Yaklaşımlar Dergisi, 15*(1), 235–260.

Ayieko, P. (2006). Guidebook for planning education in emergencies and reconstruction. *International Institute for Education and Planning*. https://inee.org/sites/default/files/resources/190223eng.pdf

Biswas, A., Rahman, A., Mashreky, S., Rahman, F., & Dalal, K. (2010). Unintentional injuries and parental violence against children during flood: A study in rural Bangladesh. *Rural and Remote Health, 10*(1), 1–12. Available from: http://www.rrh.org.au

Boyd, A. T., Cookson, S. T., Anderson, M., Bilukha, O. O., Brennan, M., Handzel, T.,... Colorado, C. N. (2017). Centers for Disease Control and Prevention public health response to humanitarian emergencies, 2007–2016. *Emerging Infectious Diseases, 23*(1), 196–202. https://doi.org/10.3201/eid2313.170473

Bulut, Ç. G., Aydemir, H. B., Topuzoğlu, A., Üstündağ, M., Ateşci, K., Çanak, K., Kıvçak, E. E., Uygun, A., & Boşnak, R. (2023). *Deprem* bölgesinde *çocuk hak ihlalleri gözlem raporu*. https://www.istanbulbarosu.org.tr/files/docs/6SUBATDEPREMISONRASINDACOCUKHAKLARIIHLALIIGOZLEMRAPORU.pdf

Çiçekli Taşdemir, T., Kuloğlu, Ç., & Aslan Ucuzoğlu, F. (2023). Effects of earthquake on children's health and responsibilities of nurses. *International Journal of Emerging Trends in Health Sciences, 7*(2), 33–39.

Cömertoğlu Arslan, S. (2024). *6 Şubat 2023 Kahramanmaraş depreminden sonra depremin merkezinde ilk ay çocuk ve* ergen *psikiyatri başvurularının incelenmesi.* In Kahramanmaraş Sütçü İmam Üniversitesi 6 Şubat Kahramanmaraş Depremi Sağlık Disiplinleri Afet Sempozyumu 'Koordinasyon ve Acil Müdahale' Kahramanmaraş, Turkey. https://koordinasyonacilmudahale.ksu.edu.tr/depo/belgeler/%C3%96ZET%20B%C4%B0LD%C4%B0R%C4%B0%20K%C4%B0TABI_2403152118134664.pdf

Darga, H. (2023). 6 Şubat Kahramanmaraş depremlerinde çocukların yaşadıkları ve ebeveynlerinde tanık olduğu duygu durumları. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 68*, 213–248. https://doi.org/10.21764/maeuefd.1341292

Dean, J. G., & Stain, H. J. (2010). Mental health impact for adolescents living with prolonged drought. *Australian Journal of Rural Health, 18*(1), 32–37. https://doi.org/10.1111/j.1440-1584.2009.01107.x

Eroğlu, M., Efendi, G. Y., Temeltürk, R. D., & Yaksi, N. (2024). Living on with autism after a devastating earthquake: Experiences of children and adolescents in Turkey. *International Journal of Developmental Disabilities, 1*(11), 766–776. https://doi.org/10.1080/20473869.2023.2301184

Flynn-O'Brien, K. T., Rivara, F. P., Weiss, N. S., Lea, V. A., Marcelin, L. H., Vertefeuille, J., & Mercy, J. A. (2016). Prevalence of physical violence against children in Haiti: A national population-based cross-sectional survey. *Child Abuse & Neglect, 51*, 154–162. https://doi.org/10.1016/j.chiabu.2015.10.021

Friel, S., Berry, H., Dinh, H., O'Brien, L., & Walls, H. L. (2014). The impact of drought on the association between food security and mental health in a nationally representative Australian sample. *BMC Public Health, 14*, 1–11. https://doi.org/10.1186/1471-2458-14-1102

Girardi, F. J., Miconi, D., Lyke, C., & Rousseau, C. (2020). Creative expression workshops as psychological first aid (PFA) for asylumseeking children: An exploratory study in temporary shelters in Montreal. *Clinical Child Psychology and Psychiatry, 25*(2), 483493. https://doi.org/10.1177/1359104519891

Helldén, D., Andersson, C., Nilsson, M., Ebi, K. L., Friberg, P., & Alfvén, T. (2021). Climate change and child health: A scoping review and an expanded conceptual framework. *The Lancet Planetary Health, 5*(3), e164–e175. https://doi.org/10.1016/S2542-5196(20)30274-6

Hsu, C. C., Chong, M. Y., Yang, P., & Yen, C. F. (2002). Posttraumatic stress disorder among adolescent earthquake victims in Taiwan. *Journal of the American Academy of Child & Adolescent Psychiatry, 41*(7), 875–881. https://doi.org/10.1097/00004583-200207000-00022

İsbir, C., Kıllı, İ, Taşkınlar, H., & Naycı, A. (2023). Kahramanmaraş ve Hatay depremleri sonrasında çocuk cerrahisi kliniği'nde tedavi edilen hastaların özellikleri: Bir üniversite hastanesi örneği. *Mersin Üniversitesi Tıp Fakültesi Lokman Hekim Tıp Tarihi ve Folklorik Tıp Dergisi, 13*(3), 750–757. https://doi.org/10.31020/mutftd.1344174

Jansen, M. (2017). Children and the right to grow up in an environment supporting their health and well-being: A sound environment, provided for and encapsulated in the Convention on the Rights of the Child. In *The right of the child to a clean environment* (pp. 209–228). Routledge.

Karabulut, D., & Bekler, T. (2019). Doğal afetlerin çocuklar ve ergenler üzerindeki etkileri. *Doğal Afetler ve Çevre Dergisi, 5*(2), 368–376. https://doi.org/10.21324/dacd.500356

Karakan, H. İ., & Çolak, O. (2024). *Depremden etkilenen çocuklar üzerindeki rekreasyonel aktivitelerin etkisine ilişkin uzman görüşleri üzerine bir çalışma* (pp. 6–8). I. Uluslararası İstiklal Sempozyumu, February 2024, Kahramanmaraş, Türkiye.

Kılıç Ekici, Ö. (2023). *6 Şubat 2023* depremleri. TÜBİTAK Bilim ve Teknik Dergisi. https://bilimteknik.tubitak.gov.tr/system/files/makale/6_subat.pdf

Koman, E., & Orak, E. (2023). *6 Şubat Depremleri Çocuk Haklarını İzleme Bülteni- I.* Retrieved from https://bulten.cocukhaklarimerkezi.org.tr/2023/09/06/depremlerde-cocuklarin-yasam-hakki/

Korkmaz, B. C., & Altınsoy, M. G. (2023). A review on the effects of the earthquake on preschool children: An elaboration of certain psychological and social concepts. *Fenerbahçe University Journal of Social Sciences, 3*(2), 264–279. https://doi.org/10.58620/fbujoss.1356438

Kovancı, E. (2023). Tracing the connections between human rights and post-earthquake. *Kapanaltı Dergisi,* (4), 77–94. https://dergipark.org.tr/tr/pub/kmfed/issue/80423/1348881

Landsdown, G. (1999). Progress in implementing the convention on the rights of the child: Factors helping and hindering that process. *Prospects, 29*(2), 191–201. https://doi.org/10.1007/BF02736912

Lazarus, P. J., Jimerson, S. R., & Brock, S. E. (2003). Helping children after a natural disaster: Information for parents and teachers. *National Association of School Psychologists, 1*, 1–10.

Masese, A., Opiyo, R., Okayo, J., & Ombui, N. M. (2012). Impact of floods on attainment of education for all (EFA) and vision 2030 in Nyando Basin, Kisumu County. *International Journal of Disaster Management and Risk Reduction, 4*(2), 19–31. https://doi.org/10.4102/jamba.v6i1.138

Mavrouli, M., Mavroulis, S., Lekkas, E., & Tsakris, A. (2023). The impact of earthquakes on public health: A narrative review of infectious diseases in the post-disaster period aiming to disaster risk reduction. *Microorganisms, 11*(2), 419. https://doi.org/10.3390/microorganisms11020419

Merriam, S. B. (2013). *Nitel araştırma: Desen ve uygulama için bir rehber* (Qualitative research: A guide to design and implementation) (S. Turan, Çev. Ed., 3. Basım). Nobel Yayın.

Mudavanhu, C. (2014). The impact of flood disasters on child education in Muzarabani District, Zimbabwe. *Jàmbá: Journal of Disaster Risk Studies, 6*(1), 1–8. https://doi.org/10.4102/jamba.v6i1.138

Ochola, S. O. (2009). *Integrated flood hazard, vulnerability and risk assessment in Nyando River Catchment, Kenya: Options for land use planning.* Deutsche Nationalbibliothek. https://books.google.com.tr/books/about/Integrated_Flood_Hazard_Vulnerability_an.html?id=JRQnQwAACAAJ&redir_esc=y

Özmen, S., Gül, M. K., Sertkaya, B., & Demirci, E. (2024). Kahramanmaraş depremi sonrasında depremzede çocuklarda görülen psikiyatrik bulgular, sosyodemografik özellikler, akut stres belirtileri. *Türk Çocuk Ve Ergen Ruh Sağlığı Dergisi, 31*(2), 168–173. https://doi.org/10.4274/tjcamh.galenos.2024.58561

Özyurt, G., Totur, G., Üzüm, Ö., Karagöz Tanıgör, E., Başaran, C., Mutlubaş, F., Kasap Demir, B., Alaygut, D., Keskin, M. Z., & Olgaç Dündar, N. (2025). Psychiatric characteristics of child survivors after the Kahramanmaraş double earthquake. *Pediatrics International, 67*(1), e15830. https://doi.org/10.1111/ped.15830

Pais, M. S., & Bissell, S. (2006). Overview and implementation of the UN convention on the rights of the child. *The Lancet, 367*(9511), 689–690. https://doi.org/10.1016/S0140-6736(06)68267-6

Pathak, V., Jena, B., & Kalra, S. (2013). Qualitative research. *Perspectives in Clinical Research, 4*(3), 192. https://doi.org/10.4103/2229-3485.115389

Patton, M. Q. (2014). *Nitel araştırma ve* değerlendirme *yöntemleri (Qualitative Research & Evaluation Methods*) (M. Bütün & S. Beşir Demir, Çev. Ed.). Pegem.

Ronen, T. (2021). The role of coping skills for developing resilience among children and adolescents. In *The Palgrave handbook of positive education* (pp. 345–368). Springer International Publishing.

Roşca, A. C., Baciu, C. C., Burtăverde, V., & Mateizer, A. (2021). Psychological consequences in patients with amputation of a limb. An interpretative-phenomenological analysis. *Frontiers in Psychology, 12*, 537493. https://doi.org/10.3389/fpsyg.2021.537493

Rubenstein, B. L., & Stark, L. (2017). The impact of humanitarian emergencies on the prevalence of violence against children: An evidence-based ecological framework. *Psychology, Health & Medicine, 22*, 58–66. https://doi.org/10.1080/13548506.2016.1271949

Safi, I., & Al-Hassan, M. (2024). Reassessing disaster and emergency management: A child rights perspective. *Sch Bull, 10*(2), 32–38. https://doi.org/10.23880/phoa-16000281

Sahu, A., Sagar, R., Sarkar, S., & Sagar, S. (2016). Psychological effects of amputation: A review of studies from India. *Industrial Psychiatry Journal, 25*(1), 4–10. https://doi.org/10.4103/0972-6748.196041

Saile, R., Ertl, V., Neuner, F., & Catani, C. (2014). Does war contribute to family violence against children? Findings from a two-generational multi-informant study in Northern Uganda. *Child Abuse & Neglect, 38*, 135–146. https://doi.org/10.1016/j.chiabu.2013.10.007

Salik Ata, N. (2023). Kahramanmaraş merkezli 6 Şubat depremlerinin kriz yönetimi bağlamında değerlendirilmesi. *The Meric Journal, 7*, 59–77. https://doi.org/10.54707/meric.1327520

Şenol, A. F., Akbaş, A., & Çalışkan, Ö. (2023). *Türkiye'de son yüzyılda (1923–2023) meydana gelen yıkıcı depremler ve kullanılan deprem yönetmelikleri.* In B. Akdemir (Ed.), Mühendislikte Yenilikçi Çalışmalar. Duvar Yayınları.

Soygüt, M. B., Gündoğdu, H., Kılıç, Z., & Tekin, E. Ö. (2023). Deprem bölgesinde çocuk olmak. *Reflektif Journal of Social Sciences, 4*(2), 419–435. https://doi.org/10.47613/reflektif.2023.114

Tang, B., Liu, X., Liu, Y., Xue, C., & Zhang, L. (2014). A meta-analysis of risk factors for depression in adults and children after natural disasters. *BMC Public Health, 14*(1), 623–635. https://doi.org/10.1186/1471-2458-14-623

Theobald, M. (2019). UN Convention on the Rights of the Child: "Where are we at in recognising children's rights in early childhood, three decades on…?" *International Journal of Early Childhood, 51*(3), 251–257. https://doi.org/10.1007/s13158-019-00258-z

Türkiye İçişleri Bakanlığı. (2024). Türkiye'nin birlik ve dayanışma gücü depremle sınandı, asrın felaketi asrın dayanışmasına dönüştü. https://www.icisleri.gov.tr/turkiyenin-birlik-ve-dayanisma-gucu-depremle-sinandi-asrin-felaketi-asrin-dayanismasina-donustu8

UNICEF (2024a). Türkiye *Consolidated Emergency Report 2023*. https://open.unicef.org/sites/transparency/files/2024-05/T/C3/BCrkiye/20Earthquake/20Response/20CER/202023.pdf

UNICEF. (2024b). *İnsani Durum Raporları: 6 Şubat 2023 Depremleri.*https://www.unicef.org/turkiye/raporlar/i%CC%87nsani-durum-raporlar%C4%B1-6-%C5%9Fubat-2023-depremleri

United Nations. (1989). *Convention on the rights of the Child*. Geneva: Ofce of high commissioner for human rights (OHCHR). Retrieved from https://www.ohchr.org/EN/ProfessionalInterest/Pages

United Nations Children's Fund. (UNICEF). (2009). *Floods devastate Agadez Region of northern Niger with lingering effects.* Retrieved August 22, 2023, from http://www.unicef.org/infobycountry/niger_51221.html

United Nations Children's Fund. (UNICEF). (2014). *Hidden in plain sight: A statistical analysis of violence against children.* Retrieved August 22, 2023, from https://www.unicef.org/publications/files/Hidden_in_plain_sight_statistical_analysis_EN_3_Sept_2014.pdf

United Nations International Strategy for Disaster Reduction. (UNISDR). (2009). *Terminology on disaster risk reduction.* United Nations. Retrieved August 22, 2023, from https://www.unisdr.org/we/inform/terminology

Yiğitbaş, C., & Karyağdı, D. (2025). Approaches to children's rights by volunteer and professional workers responding to disasters: A quantitative research in Turkey. *Children and Youth Services Review*, 108173. https://doi.org/10.1016/j.childyouth.2025.108173

Yıldırım, A. (1999). Nitel araştırma yöntemlerinin temel özellikleri ve eğitim araştırmalarındaki yeri ve önemi. *Eğitim Ve Bilim, 23*(112), 7–17.

Yıldırım, A., & Şimşek, H. (2016*). Nitel araştırma yöntemleri.* Seçkin Yayıncılık.

Yılmazer, Y., & Yavuz, E. C. (2024). Kahramanmaraş Depremi sonrası akut dönemde psikososyal destek uygulamalarında görev alan çocuk gelişimcilerin mesleki deneyimlerine yönelik görüşlerinin incelenmesi: Sağlık kuruluşları örneği. *Çocuk ve Gelişim Dergisi, 7*(13), 23–37. https://doi.org/10.36731/cg.1404457

Yorulmaz, D. S., & Karadeniz, H. (2021). Afetlerin mental sağlığa etkisi. *Doğal Afetler ve Çevre Dergisi, 7*(2), 392–398. https://doi.org/10.21324/dacd.786048

Zara, A. (2011). *Krizler ve travmalar,* Yaşadıkça Psikolojik Sorunlar ve Başa Çıkma Yolları'nın İçinde (Zara A., Ed.), İmge Kitabevi Yayınları.

Zhang, N., Zhang, Y. Q., Wu, K. K., Zhu, Z. H., & Dyregrov, A. (2011). Factor structure of the Children's Revised Impact of Event Scale among children and adolescents who survived the 2008 Sichuan earthquake in China. *Scandinavian Journal of Psychology, 52*, 236–241. https://doi.org/10.1111/j.1467-9450.2010.00867.x

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