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# 6th February Kahramanmaraş Earthquake Metaphor Study of Teachers' Perception of Earthquake, Place of Living and Future

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Keywords	Abstract
Earthquake Teacher	Turkey experienced two major earthquakes on 6 February 2023 with epicentres in Pazarcık and Elbistan districts of Kahramanmaraş, respectively.
Metaphor	In the 11 provinces affected by these two major earthquakes, a severe
Education	picture emerged that interrupted human life in terms of socio-economic, psychological and spatial aspects. The negative effects of earthquakes, which
Article Info:	resulted in great damage and losses, continue for many years from the
Received : 13-06-2023	moment they occur and are not erased from the memory of individuals. In
Accepted : 14-11-2023	this study, metaphors were used to determine the heavy pictures
Published : 31-12-2023	experienced by the people who experienced the earthquake of 6 February, which was described as the "Disaster of the Century", and to analyse the psychological situation they were in, and teachers who experienced the earthquake were selected as the study group. Based on the situations in which the teachers are in, it is foreseen that they can also be decisive for the improvement of other individuals. According to the data obtained from 164 teachers participating in the study, the participants produced 65 metaphors for the concept of earthquake, 74 metaphors for the concept of future and 86 metaphors for the concept of home. In line with the metaphors created by the participants, it is seen that the earthquake is perceived as a doomsday-like effect, despair and disaster; the future after the earthquake
DOI:	is perceived as uncertainty, hopelessness and pessimism; and the place of
	residence is perceived as an unsafe, fearful grave.

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### INTRODUCTION

At different times in the world, various natural events have occurred outside the ordinary course of life and people who have experienced these events have had to struggle with many difficulties. These negative natural events, which cannot be prevented, can cause great damage to people's lives and property, thus causing countries to face both material and moral difficulties. When the literature is examined, the negative consequences of these unpreventable natural events are called "disaster". In the simplest way, the Turkish Language Association defines the concept of disaster as "*destruction caused by various natural events*" (TDK, 2022).

When the literature is analysed, we come across many definitions related to the concept of disaster. Ergünay (2008) defined the concept of disaster as events caused by natural, technological and human-induced factors that cause physical, social and economic losses and adversely affect societies by disrupting human activities and normal life (Ergünay, 2008). In addition, according to AFAD Annotated Glossary of Terms, disaster is defined as "natural, technological or human-induced events that cause physical, economic and social losses for the whole or certain segments of the society, stop or interrupt normal life and human activities, and the coping capacity of the affected society is not sufficient".

When the definitions are analysed, it can be said that these natural events, which cannot be prevented, turn into disasters if they cause destruction. In fact, disaster is not the natural, technological and human-induced event itself, but the negative consequences that occur after the event (ilerisoy, Gökşen, Soyluk, & Takva, 2022). In line with the conceptual explanations, natural disasters can be defined as natural disasters. Although natural disasters cannot be prevented, their negative effects can be reduced. In this context, the harmful effects of disasters can be prevented with the measures to be taken before, during and after the disasters with all the elements of the country starting from the individual, which is the smallest building block of the society, and with the right interventions to be made, while a sustainable development can be achieved socially (Erkal & Değerliyurt, 2009).

Among natural disasters, earthquakes are the natural phenomena that affect human life and social development the most in terms of the magnitude of their destructive effects (Karakuş, 2013; Rij, 2016). The reason for this is that earthquakes are unpredictable, unpreventable and cause great loss of life and property. Earthquakes are natural phenomena that occur as a result of fractures in the earth's crust and cause short-term ground motion (Baytiyeh and Naja, 2013; İzbırak, 1991). Şahin and Sipahioğlu (2002) define earthquake as a short-term ground motion occurring deep in the earth's crust.

Considering the destructive effects of earthquakes, the countries most affected by earthquakes are geographically located in the earthquake zone. Turkey is also among these countries. Turkey is geographically located on the Alpine-Himalayan earthquake belt, one of the active earthquake belts of the world (Aksoy and Sözen, 2014). Alpine-Himalayan belt is the most active earthquake belt where approximately 20% of the earthquakes in the world are observed (Özdemir, Ertürk, & Güner, 2001). Due to its young geological structure, earthquakes occur frequently in Turkey (Özel and Solmaz, 2012). For this reason, earthquakes are the natural disasters that cause the greatest loss of life and property in terms of their negative effects in Turkey (AFAD, 2018; Özkul & Karaman, 2007).

Two major earthquakes with magnitudes of 7.7  $M_w$  and 7.6  $M_w$ , with epicentres in Pazarcık and Elbistan districts of Kahramanmaraş on 6 February 2023 (AFAD, 2023). According to official figures, at least 50,783 people lost their lives and more than 122,000 people were injured as a result of the earthquakes in Turkey (www.icisleri.gov.tr). The earthquakes caused major damage in an

area of approximately 350,000 km<sup>2</sup> (140,000 square miles) and 14 million people, 16 per cent of Turkey's population, were adversely affected. In the 11 provinces (Kahramanmaraş, Kilis, Diyarbakır, Adana, Osmaniye, Gaziantep, Şanlıurfa, Adıyaman, Malatya, Hatay, Hatay and Elazığ) affected by these two major earthquakes, a severe picture emerged that disrupted human life in socio-economic, psychological and spatial terms.

The negative effects of earthquakes, which result in great damage and losses, continue for many years from the moment they occur and are not erased from the memory of individuals. When the researches on the subject are examined, it is seen that individuals who have suffered from earthquakes cannot get rid of the effects of the event despite the passage of years and have great problems in psychological well-being (Karakuş, 2013).

It is known that the most important element in the hierarchy of human needs after physical needs is the need for security. Individuals do not worry about the safety of their environment if they have not experienced a catastrophe with severe consequences such as an earthquake throughout their lives since birth. Therefore, they believe that the environment is safe, they do not think about the possibility of sudden death of people close to them, and their trust and beliefs are shaped and developed accordingly. A long time is needed for this process. Sudden changes in life cause people to question the trust and belief they have built up over a long period of time. The memories formed in the minds of the people with whom life is shared cause conflicting feelings due to the losses that occur after the sudden earthquake, and as a result, individuals experience great psychological problems (Nakajima, 2012).

The physical strength of individuals, the support of the environment, their confidence in themselves, their controllability, their prior knowledge and beliefs are effective in their level of struggle against earthquakes. For this reason, it is very important that each individual is informed about disasters in order to prevent natural events from turning into great destruction (Kıvrak, 2019).

In line with these explanations, metaphors were used in the study in order to determine the heavy tables experienced by the people who experienced the earthquake of 6 February, which was described as the "Disaster of the Century", and to analyse the psychological situation they were in, and teachers were selected as the study group. It is predicted that this study to be conducted on teachers can be a source for the precautions to be taken and the studies to be carried out on earthquake, and it can also be decisive for the improvement of other individuals based on the situations that teachers are in.

The concept of metaphor is a word of French origin and is defined as "a word used in a sense other than its real meaning as a result of an interest or analogy" in TDK dictionary (TDK, 2022). Metaphors have started to be used frequently in describing individuals' perceptions of a particular subject. Metaphors are also widely used in education in order to better understand the perceptions of individuals towards certain concepts (Hacıfazlıoğlu, Karadeniz, & Dalgıç, 2011).

# Purpose of the Study

With this research, it is aimed to determine the perceptions of teachers who experienced the 6 February Kahramanmaraş-based earthquake, which is described as the "Disaster of the Century", about earthquake, future and place of residence (home) through metaphors. With the resulting metaphors, it is aimed to determine the psychological conditions of the teachers, and from this point of view, it is aimed to reveal which aspects of support should be provided to individuals. In addition, since earthquake awareness is an important issue that should be gained from an early age, it is foreseen that studies conducted with teachers, who are the most effective group in this regard, may be more decisive. In addition, it is aimed to contribute to the literature and researchers with the metaphors obtained with this study.

### **Research Problems**

In the research, answers to the following questions were tried to be sought:

- What are the metaphors that teachers who experienced the earthquake put forward about the earthquake concept?
- What are the metaphors created by teachers who experienced the earthquake about the concept of future?
- What are the metaphors created by the teachers who experienced the earthquake about the concept of place (home)?
- What is the relationship between the metaphors created and the loss situations in the earthquake?
- Which categories will be formed with the metaphors?

### **Importance of Research**

When the studies in which the effects of material and moral negativities caused by the earthquake are determined through metaphors are examined, it is seen that metaphors give very good findings about the experiences of individuals in the field subject to the research (Bozkurt, 2020). When the literature was examined, it was seen that the studies conducted through metaphors were related to education and students. In addition, although there are metaphor studies on prospective teachers in the literature, there are no metaphor studies directly on teachers (Aksoy, 2013; Doğan, Nacaroğlu, & Ablak, 2021; Karakuş, 2013; Değirmenci, 2019).

In this context, there are no studies in the literature in which disasters such as earthquakes, whose material and moral effects last for many years, are investigated through metaphors, especially through teachers. In addition, it can be evaluated that the fact that the participants who constitute the study group of the research are teachers is important in terms of allowing more qualified findings in the determination of metaphors. In line with these issues explained, it can be said that the findings to be obtained from the research are important in terms of guiding future studies.

# METHOD

In this section, the research model, study group, data collection tools and statistical techniques used in the evaluation of the data are discussed. The ethical permission of the research was obtained at the meeting of Sakarya University Educational Research and Publication Ethics Committee dated 12.04.2023 and numbered 18 "No: E-61923333-050.99-238178" and dated 13.04.2023. Since the research will be conducted by teachers who experienced the earthquake in 12 provinces, "Informed Voluntary Consent Form" was signed.

# **Research Design**

6 February Kahramanmaraş earthquake experienced teachers' metaphorical perceptions of the concepts of earthquake, future and the place where they live, phenomenology design, which is a qualitative research method, was used in this study. When the literature is examined, phenomenology is defined as examining in depth situations where detailed information cannot be reached (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2016; Creswell, 2007). In this design, phenomena are tried to be interpreted within the framework of the perspectives of people or groups that best reflect this phenomenon (Patton, 2002).

### Working Group

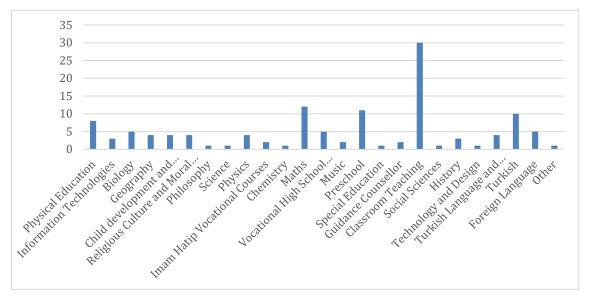
164 teachers who experienced the 6 February Kahramanmaraş earthquake constitute the study group of this research. In the process of determining the participants of the study, maximum diversity sampling method was used from the purposeful sampling method. The main purpose of

this method is to study different people and events that are similar among themselves (Büyüköztürk et al., 2016). In this context, volunteer teachers who differ in terms of gender, branch and the city of earthquake are included in the study. The demographic characteristics of 164 participants in the study are given in Table 1.

	51, ,	,	
Variables	Demographic Characteristics	f	%
Gender	Woman	82	50.00
Gender	Male	82	50.00

**Table 1.** Demographic Information of the Participants

When Table 1 is analysed, it is seen that 50% of the participants are female and 50% are male teachers. The branches of the teachers participating in the study are shown in Graph 1.



Graph 1. Participants' Branch Information

When the graph is analysed, it is seen that 30 classroom teachers contributed the most to the study.

The years of seniority of the volunteer teachers participating in the study are given in Table 2.

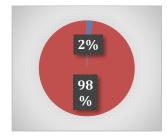
Variables	Demographic Characteristics	f	%
Year in Profession	1-5	27	16
	6-10	37	23
	11 and above	100	61

 Table 2. Participants' Years of Professional Seniority

When the data in Table 2 are analysed, it is understood that teachers with 10-20 years of professional seniority participated in the study the most.

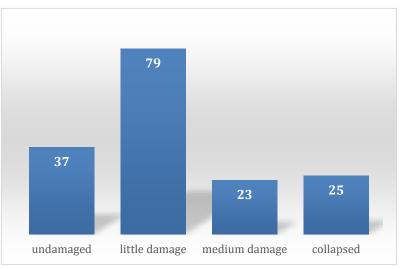
The loss of a relative of the teachers who experienced the earthquake participating in the study is given in Graph 2.

Graph 2. Bereavement Status of the Participants



When the data in Graph 2 are examined, it is seen that 2% of the teachers who experienced the 6 February Kahramanmaraş earthquake lost a relative.

The damage status of the place where the teachers who experienced the earthquake participated in the research live is given in Graph 3.

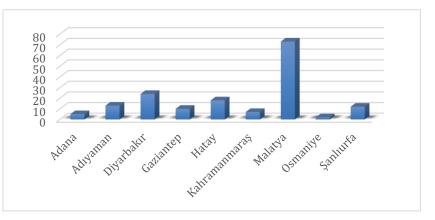


Graph 3. Participants' House Damage Status After the Earthquake

When the data on the damage status of the houses are analysed, it is seen that the houses of the participants are mostly slightly damaged.

The city where the participants experienced the earthquake is **shown** in Graph 4.

**Graph 4.** Information on the city where the participants experienced the earthquake



When the data in Graph 3 are analysed, it is seen that the highest participation in the research was from Malatya province with 73 teachers.

### **Data Collection Tools**

The data related to this research were collected with a form created in electronic environment. The instruction, in which the necessary explanations about filling out the form were made, was added to the beginning of the form. While creating the form, which is the data collection tool of the research, previous metaphor studies in the literature were examined (Bozkurt, 2020; Bozdağ & Dinç, 2020; Saban, 2008; Eraslan, 2011). The form was finalised by taking expert opinion. In the study, a two-part open-ended questionnaire form was used to collect metaphorical information about the earthquake from teachers who experienced the earthquake on 6 February. The form consisting of two sections was presented to the participants online. In the first part, there are questions describing the gender, branch, city where the earthquake was experienced, years of working in the profession, house damage and loss of relatives of the teachers participating in the research. The second part consists of three parts: "Earthquake is like / resembles .......", which was created in the first part to determine the metaphors that the participants have about the earthquake concept. Because, ......"; in the second part, "After the earthquake, the future is like ...... for me. Because, ......"; in the third part, the phrases "The place (house) where I live after the earthquake is like/similar to ...... for me. Because, ...... phrases are included. In these phrases, it is aimed to reveal the connection between the metaphor and its source with the expression "like" and to explain the reason for the analogy with the expression "because" (Tok, 2018). Teachers were given an example with the concept of "distance education" as an example in the form instructions, and then teachers were asked to fill out the form based on this example.

#### **Data Collection Process**

The metaphorical perception form was shared online with the volunteer teachers who participated in the research and the instruction with the necessary explanations for filling out the form was added as an explanation part. The forms were shared with the participants through teachers on 14.04.2023. The form filling process was finalised on 05.05.2023. The total time allocated for data collection was 21 days.

# Validity and Reliability

As a result of expert opinion, it was decided to use the concept of "earthquake" in the metaphor form. In this study, credibility, transferability, consistency and confirmability strategies were used to ensure validity and reliability (Shenton, 2004). In addition, in order to increase the credibility related to internal validity, the teachers' responses were directly quoted in the findings section. Within the scope of transferability, which is related to the external validity of the research, purposive sampling method was used in the study (Lincoln & Guba, 2013). In addition, the data collection and data analysis process was described in detail. The data obtained within the scope of consistency, which is related to the replicability and reliability of the research (Lincoln & Guba, 2013), were analysed separately by the researchers and then together. As a result of these studies, common categories and codes were determined. A vocabulary concept was also prepared for the evaluation of the data. In order to ensure the reliability of the research, expert opinion was consulted to determine whether the metaphors given under the 8 conceptual categories reached as a result of the research represent the conceptual categories in question. The metaphor lists of the participants created by the researchers and the lists containing the conceptual categories were examined by the expert. Then, the mappings made by the expert and the categories created by the researchers were compared. As a result of the comparisons, common categories and codes were finalised. They were tabulated and presented in the research report.

### Analysing the Data

In this study, teachers who experienced the earthquake were asked to produce metaphors about their perceptions of the earthquake and the concepts of future and place (home) in this process. In the process of analysing the data obtained from the participants, "content analysis" technique was used. In the content analysis technique, similar information obtained in the research is brought together under a title that reflects this information and categories are created. The organised data are interpreted in an understandable way (Yıldırım & Şimşek, 2008; Büyüköztürk et al., 2008). In this study, the data were first analysed, and the forms that were not justified or not associated with metaphor were identified and excluded. After the eliminations, the teachers' forms were numbered as K K K<sub>1, 2, 3</sub> ... for the remaining 164 data. The forms were listed one by one and the metaphors with similar meanings were brought together and matched with the relevant categories based on the explanations made after "because" in the category stage. The frequency and percentage rates of repetition of metaphors belonging to each category were expressed in tables and interpreted in the findings section. In the research, m e taphors related to earthquake, future and place of living were collected in 8 categories.

# FINDINGS

In this section, the metaphors produced by the teachers participating in the study for the earthquake they experienced and the perceptions of the future and the place (home) in this process and the conceptual categories created based on the explanations of these metaphors are presented in tables. While explaining the metaphors they produced, sample expressions of the participants were included. The findings obtained as a result of the analysis of the data were organised in a systematic and understandable way.

## Metaphors of Teachers Who Experienced the Earthquake About the Concept of Earthquake

When the data obtained in the study were analysed, it was seen that 65 metaphors that were considered valid were produced. The frequency of each metaphor was given by calculating how many teachers used the metaphor. Four of the participants left the section on earthquake perception metaphor generation unanswered. The metaphors produced by the teachers who experienced the earthquake for earthquake perception and the frequency values of these metaphors are given in Table 3.

Metaphor Order	Metaphor	f	Metaphor Order	Metaphor	f
1	Apocalypse	38	34	Thin line	1
2	Disaster	14	35	Heart	1
3	Despair	8	36	Black Hole	1
4	Demolition	7	37	Massacre	1
5	Indescribable	6	38	Shaking	1
6	Nightmare	5	39	Bridge of Sira	1
7	Armageddon	5	40	Drowning in water	1
8	Death	4	41	Enemy	1
9	Starting again	3	42	Loneliness	1
10	Gap	3	43	Orphan child	1
11	Accident	3	44	Lightning	1
12	Fear	2	45	Mentality revolution	1
13	Explosion	2	46	Chilli pepper	1
14	Cliff	2	47	Evening	1
15	Life	2	48	Atomic Bomb	1
16	The Beast	2	49	Uncertainty	1
17	Nature Event	2	50	Bomb	1
18	Hell	2	51	Dev	1
19	Life	2	52	Buried alive	1
20	War	2	53	Dominoes	1
21	Last	2	54	Engel	1

**Table 3.** Metaphors Produced by the Participants for the Concept of Earthquake

International Journal of Trends and Developments in Education, 3(2), 2023, 15-39

22	Pain	1	55	Imagination	1
23	Disaster	1	56	Being Destroyed	1
24	Fire	1	57	Heart Attack	1
25	Separation	1	58	Killer	1
26	End	1	59	Horror Film	1
27	Falling into the void	1	60	Melting cotton candy	1
28	Homicide	1	61	Waking up from a dream	1
29	Churning	1	62	Lightning	1
30	More violent than an earthquake	1	63	Trauma	1
31	Bottomless Void	1	64	Waking up	1
32	The Well	1	65	Disappearance	1
33	Mixer	1			
Total					160

When Table 2 is analysed, it is revealed that the teachers who participated in the research produced a total of 65 types of metaphors for the concept of "earthquake" and expressed a total of 160 opinions. Among the metaphors produced by the teachers who experienced the earthquake, the most repeated ones are listed as "Apocalypse" (f=38), "Disaster" (f=14), "Despair" (f=8), while 45 metaphors were repeated once.

The concept map of the metaphors developed by the teachers who experienced the earthquake about earthquake, future and the place where they live is presented in Figure 1.

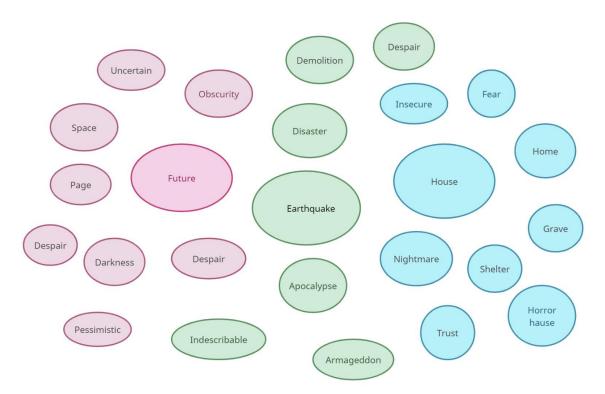


Figure 1. Concept Map for Earthquake, Future and Home Metaphors

# Categories Formed by the Common Features of the Metaphors Produced by Teachers Regarding the Concept of "Earthquake"

When 65 different metaphors produced by teachers who experienced the earthquake were analysed and evaluated, metaphors were brought together and categories were formed based on the similarity aspects of the metaphors produced. When the explanations of some metaphors were examined, it was seen that although the same metaphor was used, a relationship was established by justifying it from different aspects, and because of this situation, they were included in different categories. The categories formed by the metaphors produced by the teachers for the concept of earthquake and the frequencies and percentages of these categories are presented in Table 3.

Category name	Metaphor	Metapho r Type	Frequenc y (f)	Per cent (%)
Religious imagery	Death(4), The bridge of Sırat(1), Hell(2), Buried alive(1), Destruction(1), Resurrection(38), Judgement(5)	7	52	%33
End	End(1), Abyss(2), The End(2), Separation(1), Extinction(1), Black Hole(1), Destruction(7), Despair(8)	8	23	%14
Natural phenomenon	Disaster(1), Natural phenomenon(2), More severe than earthquake(1), Catastrophe(14), Lightning(1), Lightning(1), Evening(1), Shaking(1)	8	22	%14
Psychological factors	Pain (1), Heart(1), Fear(2), Loneliness (1), Orphan child(1), Chilli pepper(1), Nightmare (5), Heart attack(1), Horror film(1), Melting cotton candy(1), Trauma(1), Dream (1), Waking up from a dream(1), Turbulence(1), Thin line(1), Obstacle(1)	16	21	%13
Unexpected unpredictable	Falling into the void(1), Bottomless void(1), Drowning in water(1), Accident(3), Well(1), Ineffable(6), Void(3), Uncertainty(1)	8	17	%11
Destroying power	Fire(1), Massacre(1), Murder(1), Explosion(2), Atomic bomb(1), Killer(1), Giant(1), Bomb(1), War(2), Monster(2), Enemy(1)	11	14	%9
Start	Awakening(1), Life(2), Mentality Revolution(1), Starting Again(3)	4	7	%4
Goods/equipment	Alarm clock(1), mixer(1), Dominoes (1)	3	3	%2
Total		65	160	100,00%

 Table 3. Categories of Metaphors Formed by Teachers Who Experienced the Earthquake Regarding the Concept of "Earthquake"

When it is analysed in Table 3, it is seen that the earthquake metaphors created by the teachers are gathered in 8 conceptual categories according to their similarities and the category of "Religious images" is the category with the highest frequency of metaphor development.

The categories created from the metaphors created by the teachers for the perception of earthquake were explained and sample expressions were given.

# Category 1: "Religious Images"

Seven of the metaphors created by the teachers who experienced the earthquake were associated with the characteristics of the earthquake being related to the belief of the person and these metaphors were grouped under the category of religious images. It is seen that there are seven metaphors in this category (death, the bridge of order, hell, being buried alive, perishing, doomsday, and judgement) and 52 teachers who created these metaphors. The most recurrent metaphor in this category is the "Doomsday" metaphor (f=38). In order to make the metaphors more understandable, the sample teacher opinions of the metaphors in the category are as follows:

"An earthquake is like Armageddon. Because you're alone with yourself and your helplessness."

"An earthquake is like the apocalypse because it involves death."

# Category 2: "Finish"

Eight of the metaphors created by teachers who experienced the earthquake were associated with the terminating qualities of the earthquake. Therefore, these metaphors were grouped under the ending category. It is seen that there are eight metaphors (end, abyss, end, separation, extinction, black hole, destruction, helplessness) and 23 teachers who created these metaphors. The most recurring metaphor in this category is "helplessness" metaphor (f=8). In order to better understand the similes in the metaphors produced by the teachers, teacher expressions were included. Direct <u>quotation</u> sample sentences for the metaphors that teachers stated under the ending category are as follows:

"An earthquake is like **helplessness**. Because when an earthquake happens, there is nothing you can do."

"An earthquake is the epitome of helplessness. because you can only pray for the shaking to stop."

"An earthquake is like **a black hole**. Because you don't know when it will end and what will happen at the end.

" Earthquake is like walking on the edge of a cliff. Because you're facing death at any moment."

"An earthquake is like a cliff. Because you realise your life is over when you fall."

### Category 3: "Natural phenomenon"

Eight of the metaphors created by teachers who experienced the earthquake were associated with the naturalness of the earthquake and these metaphors were grouped under the category of natural phenomenon. In this category, there are seven metaphors (disaster, natural event, more severe than earthquake, catastrophe, lightning, thunder, evening) and 21 students who created these metaphors. The most recurring metaphor in this category is "disaster" metaphor (f=14).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"An earthquake is like lightning. Because it burned the place where it fell."

"An earthquake is **like a flash of lightning**, because it strikes suddenly and has a very negative effect"

"An earthquake is similar to a natural phenomenon because it is a natural event."

# Category 4: "Psychological Factors"

Among the earthquake perception metaphors created by the teachers who experienced the earthquake, 16 of them were associated with the characteristics of the earthquake leaving a mark on the individual. Therefore, these metaphors were grouped under the category of psychological factors. In this category, there are sixteen metaphors (pain, heart, fear, loneliness, orphan child, hot pepper, nightmare, heart attack, horror film, melting of cotton candy, trauma, dream) and 16 students (25.4%) who created these metaphors. The most recurrent metaphor in this category is "Nightmare" metaphor (f=5).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"An earthquake is like **a heart** attack. Because it happens suddenly and you can't do anything, either nothing happens or it kills you."

"An earthquake is like **cotton candy** thrown into water and **suddenly melted away**. Because most of what we had was gone in seconds."

# Category 5: "Unexpected, Unpredictable"

Considering the characteristics of the earthquake, it is seen that 8 of the metaphors produced by teachers who experienced the earthquake are related to this situation. Therefore, these metaphors were grouped under the category of unexpected, unpredictable. It is seen that there are seven metaphors (falling into the void, bottomless void, drowning in water, accident, well, indescribable, void) and 16 teachers who created these metaphors. The most recurring metaphor in this category is the "ineffable" metaphor (f=6).

In order to make the metaphors more understandable, the sample teacher views of the metaphors in the category are as follows:

"An earthquake is like drowning in water. because you feel you can't breathe for fear."

"An earthquake is similar to a road accident, because they both happen unexpectedly"

"An earthquake **is like** an emptiness, because afterwards you fall into such an emptiness that you feel a sense of what will happen next."

"An earthquake is like **a plane crash**, because it affects everyone on board, either killing, maiming or separating them from their loved ones.

### Category 6: "Destructive Power"

Eleven of the metaphors created by teachers who experienced the earthquake were associated with the destructive qualities of the earthquake. Therefore, these metaphors were grouped under the category of destructive power. In this category, there are 11 metaphors (death, bridge of ranks, hell, being buried alive, being destroyed, doomsday, judgement) and 14 students (25,4%) who created these metaphors. The most recurrent metaphor in this category is "Monster", "War" and "Explosion" metaphor (f=2).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"An earthquake is like a blind **camel** that shakes you by the shoulders. Because it stops when it wants to and you are thrown to an unexpected place and continue your life there."

"An earthquake is like a bloody war. Because it kills."

"An earthquake is like a bomb. Because it turned our lives upside down. It destroyed everything."

"An earthquake is like a killer. because it took our loved ones from us."

## Category 7: "Beginning"

Four of the metaphors created by the teachers who experienced the earthquake were associated with the qualities of the earthquake causing something new. Therefore, these metaphors were grouped under the category of beginning. It is seen that there are 4 metaphors (waking up, life, mentality revolution, starting again) and 7 teachers who created these metaphors in the ending category. The most repeated metaphor in this category is the metaphor of "starting over" (f=3).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"An earthquake is like **a rebirth**. Because we survived the disaster of the century. It feels like another life has been granted."

"An earthquake is like **waking up**, because realising the reality of the possibility that you are going to die is a kind of awakening."

"An earthquake is like walking on the edge of a cliff. Because you're facing death at any moment."

### Category 8: "Goods/Supplies"

Three of the earthquake perception metaphors created by the teachers who experienced the earthquake were associated with the similar qualities of the earthquake and these metaphors were grouped under the category of objects/instruments. In this category, there are three metaphors (alarm clock, mixer, domino stones) and 3 students (25,4%) who created these metaphors.

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"An earthquake is like an alarm clock . Because it can wake up even from the deepest sleep."

"Earthquake is like **dominoes**. Because the destruction in its area of influence affects people in every aspect."

### Metaphors of Teachers Who Experienced the Earthquake About the Concept of Future

When the data obtained in the study were analysed, it was seen that 66 metaphors, which were thought to be valid, were produced. The frequency of each metaphor was given by calculating how many teachers used the metaphor. Four of the participants left the section on earthquake perception metaphor generation unanswered. The metaphors produced by the teachers who experienced the earthquake for earthquake perception and the frequency values of these metaphors are given in Table 4.

Metaphor	Metaphor	f	Metaphor	Metaphor	f
Order		-	Order		
1	Indeterminate	22	38	Nothing.	1
2	New start/page	9	39	Story	1
3	Despair	8	40	Butterfly Wing	1
4	Gap	8	41	Normal	1
5	Despair	6	42	Hourglass	1
6	Darkness	5	43	Dream	1
7	Uncertainty	5	44	A foggy road	1
8	Unplanned	5	45	Distress	1
9	Pessimistic	4	46	Reached	1
10	Start	3	47	Moment in time	1
11	Норе	3	48	Demolition	1
12	Difficulty	3	49	Road	1
13	Meaningless	3	50	Belief in the Hereafter	1
14	Imagination	3	51	Brightness	1
15	Meaningful	2	52	Same	1
16	End	2	53	Bomb	1
17	Tunnel	2	54	One Night Stand	1
18	Fear	2	55	Puzzle	1
19	Enquiry	2	56	Bottomless pit	1
20	Anxiety	2	57	Different	1
21	Winter	2	58	Diamond	1

**Table 4.** Metaphors Produced by the Participants for the Concept of Future

International Journal of Trends and Developments in Education, 3(2), 2023, 15-39

22	Important	2	59	History	1
23	Sad	2	60	Ruin	1
24	Second chance to live	1	61	Life Goes On	1
25	Day of purification	1	62	Life	1
26	Separation	1	63	Lighted House	1
27	Simple	1	64	Pencil	1
28	Waiting	1	65	Anxiety	1
29	Stock Exchange	1	66	Candlelight	1
30	Pipe Dream	1	67	Unhappiness	1
31	Today	1	68	Wind	1
32	Wavy Sea	1	69	Colourless World	1
33	Yesterday	1	70	Fog Cloud	1
34	Sun	1	71	Starting from	1
				Scratch	
35	Concern	1	72	Stress	1
36	Temporary	1	73	<b>Requires Treatment</b>	1
37	Preparation	1	74	None	1
Total					156

According to the data in Table 4, it is seen that the teachers who participated in the research produced a total of 74 types of metaphors for the perception of "future" and expressed a total of 156 opinions. <u>Among the metaphors produced by the teachers who experienced the earthquake about the concept of "future", the most repeated ones are listed as "Uncertain" (f=22), "New Beginning/Page" (f=9), "Helpless i k" (f=8), "Void" (f=8), while 51 metaphors were repeated once.</u>

# Categories Formed by Teachers in Terms of Common Characteristics of Metaphors Produced by Teachers Regarding the Concept of "Future"

When 74 different metaphors produced by teachers who experienced the earthquake for the concept of "future" were analysed and evaluated, metaphors were brought together and categories were formed based on the similarity aspects of the metaphors produced. When the explanations of some metaphors were analysed, it was seen that although the same metaphor was used, a relationship was established by justifying it from different aspects. Due to this situation, they were placed in different categories. The categories formed by the metaphors produced by the teachers who experienced the earthquake for the concept of "future" and the frequencies and percentages of these categories are presented in Table 5.

Category name	Metaphor	Metapho	Frequenc	Per cent
		r	У	(%)
		Туре	(f)	
	Simple (1), Expectation (1),			
	Pipe Dream(1), Worry(1), Temporary(1),			
	<pre>Dream(3), Pessimistic(4), Story(1),</pre>			
	Butterfly Wing(1), Fear(2), Dream(1),			
Psychological	Boredom(1)			
factors	Colourless World(1), Important(2)	33	53	%34
	Unhappiness(1), Sadness(2),			
	Hopelessness(6), Difficulty(3), Stress(1),			
	Anxiety(2), Requiring Treatment(1),			
	Reached(1), Distress(1), Questioning(2),			
	Meaningful(2), Normal(1), Different(1),			
	Ruin (1), Anxiety(1), Hope(3), Same(1),			
	The Moment(1), Overnight Stay(1)			

 Table 5. Metaphor categories that teachers who experienced the earthquake have for the concept of

"future"

International Journal of Trends and Developments in Education, 3(2), 2023, 15-39

Unexpected	Unknown (5), Unplanned (5),			
unpredictable	Meaningless (3), Uncertain (22),	7	45	%29
	Void(8), Bottomless Pit(1), Nothing(1)			
Start	Second Chance to Live (1), Beginning			
	(3), Life Goes On(1), Starting From	7	17	%11
	Scratch(1), New Page(9), Life(1),			
	Preparation(1)			
Natural	Today (1), Wavy Sea (1), Yesterday (1),	10		
phenomenon	Sun (1),		15	%10
	Foggy Road(1), Light(1), Dark(5),			
	Winter(2), Wind(1), Fog Cloud(1)			
	End (2), None (1),			
End	Separation (1), Destruction(1),	5	13	%8
	Despair(8)			
	Stock Exchange (1), Tunnel (2),			
Goods/equipment	Hourglass (1), Puzzle(1), Diamond(1),	9	10	%6
	Pen(1), Candlelight(1), Lighted			
	House(1), Road(1)			
Religious imagery	Purification Day (1),			
	Belief in the Hereafter (1)	2	2	%1
Destroying power	Bomb (1)	1	1	%1
Total		74	156	100,00%

When the data in Table 5 are examined, it is seen that the metaphors created by the teachers who experienced the earthquake on 6 February about the concept of future were collected in 8 categories (Psychological factors, Unexpected, unpredictable, Beginning, Natural event, End, Goods/instruments/equipment, Religious images and Destructive power). Among the categories created, it was seen that the category of "Psychological Factors" was the category with the highest frequency of metaphor development (f=53). The categories created from the metaphors created by the teachers who experienced the earthquake about the perception of the future were explained and sample expressions were given.

### Category 1: "Psychological Factors"

Among the future perception metaphors created by the teachers who experienced the earthquake, 33 of them were associated with the quality of being related to the perception of the future in the individual. Therefore, these metaphors were grouped under the category of psychological factors. In this category, there are 33 metaphors (simple, waiting, empty dream, anxiety, temporary, dream, pessimistic, story, butterfly wing, fear, dream, distress, colourless world, important, unhappiness, sad, hopelessness, difficulty, stress, uneasiness, requiring treatment, reached, distress, questioning, meaningful, normal, different, ruin, anxiety, hope, same, moment experienced, overnight stay) and 53 teachers who created these metaphors. In this category, "Hopelessness" metaphor is the most repeated metaphor (f=6).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"The future after the earthquake is like **hopelessness** for me. Because I have no home, no home."

"The future after the earthquake is like **a dream** for me because I will imagine life again."

"The future after the earthquake is like a butterfly wing for me, because I was given a second life."

"The future after the earthquake is like a story for me, because you start to write the ending yourself."

### Category 2: "Unexpected, Unpredictable"

Seven of the metaphors created by teachers who experienced the earthquake were associated with the unpredictability of the future. Therefore, these metaphors were grouped under the category of unexpected, unpredictable. In this category, there were 45 teachers who created seven metaphors (falling into the void, bottomless void, drowning in water, accident, well, indescribable, void) and these metaphors. The most recurring metaphor in this category is the "uncertain" metaphor (f=22).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"After the earthquake, the future **is** very **uncertain** for me. Because we can experience anything at any moment."

"After the earthquake, the future is like a **void** for me. Because all your hard work has been wasted and fear has taken its place."

## Category 3: "Beginning"

Seven of the future perception metaphors created by the teachers who experienced the earthquake were associated with the quality of the future as containing the new. Therefore, these metaphors were categorised under the category of beginning. In this category, it is seen that there are seven metaphors (second chance to live, beginning, life continues, starting from scratch, new page, life, preparation) and 17 teachers who created these metaphors. In this category, the "New Page" metaphor was repeated the most (f=9).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"The future after the earthquake is like a **rebirth** for me. Because it is necessary to savour every moment of our life to thank God."

"The future after the earthquake is like **a new beginning** for me. Because everything that is destroyed must be replaced."

"The future after the earthquake is like **a new life** for me. Because we learn from many events."

# Category 4: "Natural phenomenon"

Ten of the future perception metaphors created by teachers who experienced the earthquake were associated with the natural qualities of the future. Therefore, these metaphors were grouped under the category of natural phenomenon. In this category, there are ten metaphors (today, wavy sea, yesterday, sun, foggy road, light, darkness, winter, wind, fog cloud) and 15 teachers who created these metaphors. The most repeated metaphor in this category is "Darkness" metaphor (f=5).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"The future after the earthquake is like winter for me. Because my hopes have not yet blossomed."

"The future after the earthquake is like **the wind** for me, because you don't know where you are blown."

"After the earthquake, the future is like **a cloud of fog** for me. Because the future is uncertain. It's pointless to plan."

### Category 5: "Finish"

Five of the future perception metaphors created by teachers who experienced the earthquake were associated with the terminating nature of the earthquake. Therefore, these

metaphors were grouped under the ending category. It is seen that there are five metaphors (end, separation, no, destruction, helplessness) and 13 students who created these metaphors. The most recurring metaphor in this category is the "helplessness" metaphor (f=8).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"The future after the earthquake is like **destruction** for me. Because everything will not be the same as before.

# Category 6: "Goods/Supplies"

Among the future perception metaphors created by the teachers who experienced the earthquake, 9 of them were associated with the similar qualities of the future. For this reason, these metaphors were grouped under the category of goods/tools/equipment. In this category, there are 9 metaphors (stock exchange, tunnel, hourglass, puzzle, diamond, pencil, candle light, house with extinguished light, road) and 10 teachers who created these metaphors. In this category, "tunnel" metaphor is the most repeated metaphor (f=2).

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"For me, the future after the earthquake **is like a house whose light has gone out**. Because there are no families left in that house that radiate light."

"After the earthquake, the future is more like a simple **puzzle** for me. Because after the earthquake I realised that things that cause anxiety are less important."

"The future after the earthquake is like a dark tunnel for me. Because I can't see ahead."

"The future after the earthquake is like **the stock market** for me. Because I don't know what awaits me."

"The future after the earthquake is like **a pen** for me. Because we will write again."

# Category 7: "Religious Images"

Two of the metaphors created by the teachers who experienced the earthquake were associated with the characterisation of the future according to one's beliefs. Therefore, these metaphors were categorised under the category of religious images. In this category, there are two metaphors (purification day, belief in the hereafter) and 2 teachers who created these metaphors. Both metaphors were repeated once.

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"The future after the earthquake is like **a day of purification** for me, because God showed me again that this world is empty."

# Category 8: "Destructive Power"

One of the future perception metaphors created by the teachers who experienced the earthquake was associated with the quality of destruction. Therefore, this metaphor was categorised under the category of destructive power. It is seen that there is 1 metaphor (bomb) in this category and 1 teacher who created this metaphor.

In order to make the metaphors more understandable, sample teacher views of the metaphors in the category are as follows:

"For me, the future after the earthquake is like **a** bomb with the pin pulled. Because it causes us to remain alert at all times."

# Metaphors of Teachers Who Experienced the Earthquake About the Concept of Place of Residence

When the data obtained in the study were analysed, it was seen that the teachers who experienced the earthquake produced 86 metaphors for the concept of "place of residence", which were thought to be valid. The number of metaphors used by each teacher was calculated and the frequencies of each metaphor were given. Four of the participants left the part of creating metaphor for the perception of the place where they lived unanswered. The metaphors produced by the teachers who experienced the earthquake for earthquake perception and the frequency values of these metaphors are given in Table 6.

Metaphor Order	Metaphor	f	Metaphor Order	Metaphor	f
1	Insecure	8	44	Jewellery	1
2	Fear	8	45	Hotel	1
3	Nest	8	46	Orphaned child	1
4	Nightmare	5	47	Important	1
5	Shelter	5	48	Ordinary	1
6	Safety Deposit	4	49	Praise	1
7	House of Horrors	4	50	Норе	1
8	Grave	4	51	None	1
9	Trust	3	52	Not a Home	1
10	Starting Again	3	53	Dungeon	1
11	Paradise	3	54	No belonging	1
12	Debris	2	55	Golden Cage	1
13	Temporary	2	56	Meaningful	1
14	Palace	2	57	Indeterminate	1
14	Anxiety	2	57	Empty	1
	Anxiety	Z			T
16	Foreigner	2	59	It's not even a house.	1
17	Alienated	2	60	Worthless	1
18	Shelter	2	61	Dress	1
19	Enemy	2	62	Concern	1
20	The Most Beautiful Place on Earth	2	63	Just Like Before	1
21	Coffin	2	64	Treasury	1
22	Dangerous	2	65	Uninhabited	1
23	Virane	2	66	Work	1
24	Stables	1	67	Cage	1
25	Habit	1	68	Cannot stay	1
26	Memories	1	69	Darkness	1
27	Neglected Hotel	1	70	Crashed car	1
27	Where I'll Put My	1	70 71	Precious	1
20	Head	T	/1	Frecious	I
29	Concrete Pile	1	72	Horror Film	1
30	Blank Paper	1	73	Hometown	1
31	Tent	1	74	Guest House	1
32	More Valuable	1	75	Break	1
33	Experience	1	76	Blessing	1
34	Ghost	1	77	Death Field	1
35	Hobby	1	78	Swing	1
36	Kabir	1	79	Just a Place	1
37	Paper	1	80	Distressed	1
38	Shield	1	81	Cold Storage	1
39	Missing	1	82	Wild Horse	1
40	Broken plate	1	83	Prohibited	1
41	Comfort zone	1	85	Difficulty	1
41	When I was little	1	84	Save time	1
74	when i was hule	-	05	Save time	-

**Table 6.** Metaphors Produced by the Participants for the Concept of Place of Residence (Home)

International Journal of Trends and Developments in Education, 3(2), 2023, 15-39

43	Visiting	1	
Total			143

When the data in Table 6 are analysed, it is seen that the teachers participating in the study produced a total of 85 types of metaphors for the concept of "place of residence" and expressed a total of 143 opinions. 21 of the participants left this question unanswered. Among the metaphors produced by the teachers who experienced the earthquake about the concept of "home", the most repeated ones were listed as "Insecure" (f=8), "Home" (f=8), "Fear" (f=8), and 62 metaphors were repeated once.

# The Categories Formed by the Common Features of the Metaphors Produced by Teachers Regarding the Concept of "Place of Residence"

When 86 different metaphors produced by teachers who experienced the earthquake were analysed and evaluated, metaphors were brought together and categories were formed based on the similarity aspects of the metaphors produced. When the explanations of some metaphors were analysed, it was seen that although the same metaphor was used, a relationship was established by justifying it from different aspects. Due to this situation, they were placed in different categories. The categories formed by the metaphors put forward by the teachers for the concept of "place of residence" and the frequencies and percentages of these categories are presented in Table 7.

Category name	Metaphor	Metapho r Type	Frequenc y (f)	Per cent (%)
Psychological factors	Habit(1), Memories(1), More Valuable(1), Relic(4), Temporary(2), Hobby(1), Insecure(8), Ghost(1), Nightmare(5), Lost(1), House of Horrors(4), My childhood(1), Visiting(1), Orphan child(1), Anxiety(2), Stranger(2), Alienation(2), Hope(1), Worry(1), Fear(8), Trust(3)	21	51	%50
Goods/equipment	Barn(1), Hotel(1), Place to Lay My Head(1), Pile of Concrete(1), Tent(1), Paper(1), Broken Plate(1), Jewellery(1), Palace(2), Shelter(2), Cage(1), Accident Car(1), Swing(1), Guest House(1), Nest(8), Cold Storage(1), Dress(1)	16	25	%25
Religious imagery	Kabir(1), Mezar(4), Death Field(1), Coffin(2), Paradise(3), Gratitude(1)	6	14	%14
Unexpected unpredictable	Blank(1), Indeterminate(1), Dungeon(1)	3	3	%3
Destroying power	Dangerous(2), Wild Horse(1), Enemy(1)	3	3	%3
Start	Starting Over (3)	1	3	%3
End	None(1)	1	1	%1
Natural phenomenon	Darkness(1)	1	1	%1
Total		55	100	100,00%

When the data in Table 7 are examined, it is seen that the metaphors created by the teachers who experienced the earthquake on 6 February about the concept of the place (home) are gathered in 8 categories ("Psychological factors", "Objects/instruments/equipment", "Religious images", "Unexpected-unpredictable", "Destructive power", "Beginning", "End" and "Natural event") and among these categories, the category of "Psychological factors" is the category with the highest frequency of metaphor development. The categories formed from the metaphors created by the teachers about the perception of the place (home) where they live are explained and sample expressions are given.

## Category 1: "Psychological Factors"

Among the metaphors of the place (house) created by the teachers who experienced the earthquake, 21 of them were associated with the quality of the place of residence to create perception in the individual. Therefore, these metaphors were grouped under the category of psychological factors. In this category, there are 21 metaphors (habit, memories, more valuable, entrusted, temporary, hobby, insecure, ghost, nightmare, loss, house of fear, my childhood, hospitality, orphan child, uneasiness, stranger, alienation, hope, anxiety, fear, trust) and 51 teachers who created these metaphors. In this category, "Insecure" and "Fear" are the most recurrent metaphors (f=8).

In order to make the metaphors more understandable, sample teacher opinions of the metaphors in the category are as follows:

"The place where I lived after the earthquake is like my **childhood** for me. Although there are some bad memories, people often find peace in their childhood."

"The place where I live after the earthquake is an **orphaned** child for me. Because we left him, now he is alone, orphaned."

"The place where I lived after the earthquake is like a sense of **uneasiness** for me. Because it is a structure that creates uneasiness"

# Category 2: "Goods/Supplies"

Among the metaphors of the perception of the place (home) created by the teachers who experienced the earthquake, 16 of them were associated with the quality of being similar. For this reason, these metaphors were grouped under the category of goods/tools/equipment. In this category, there are 16 metaphors (barn, hotel, place to put my head in, concrete pile, tent, paper, broken plate, jewellery, palace, shelter, cage, car with accident, swing, guest house, nest) and 24 teachers who created these metaphors. In this category, "nest" is the most repeated metaphor (f=8).

In order to make the metaphors more understandable, sample teacher opinions of the metaphors in the category are as follows:

"The place where I live after the earthquake is like **a cold storage** for me. Because the old warmth is gone and everything has lost its value."

"The place where I live after the earthquake is like **a golden cage** for me. Because I have to stay here."

"The place where I lived after the earthquake **is like a palace** for me, because we sought happiness in luxury houses."

"After the earthquake, I realised that the place I lived in was meaningful and valuable for me like a **jewel**, like a mine, and I understood how luxurious a house I lived in."

"The place where I lived after the earthquake is like **a dress** for me. Because I was naked without it."

"The place where I live after the earthquake is like **a broken plate** for me, because I don't know whether to glue the pieces and continue to use it in case my hand is cut or to look for a new one. So many glassware and ornaments were broken and spilt that my wife and I don't plan to put any hush-hush items in the house from now on. We feel uneasy as if there will be a new earthquake at any moment."

"The place where I lived after the earthquake is like a lost **memory** for me. Because it is heavy to watch the destruction of one's experiences."

# Category 3: "Religious Images"

Six of the metaphors of the perception of the place (home) created by the teachers who experienced the earthquake were associated with the nature of the earthquake. Therefore, these metaphors were categorised under the category of religious images. In this category, there are 6 metaphors (grave, tomb, death area, coffin, heaven, gratitude) and 14 teachers who created these metaphors. In this category, "grave" metaphor is the most repeated metaphor (f=4).

In order to make the metaphors more understandable, sample teacher opinions of the metaphors in the category are as follows:

"The place where I live after the earthquake is like **heaven** for me. Because it is a situation brought about by desperation."

# Category 4: "Unexpected, Unpredictable"

Three of the metaphors created by the teachers who experienced the earthquake about the perception of the place (home) were associated with the unknown nature of the earthquake. Therefore, these metaphors were grouped under the category of unexpected, unpredictable. In this category, there are 3 metaphors (empty, uncertain, dungeon) and 3 teachers who created these metaphors. The metaphors in this category were repeated once.

In order to make the metaphors more understandable, sample teacher opinions of the metaphors in the category are as follows:

"After the earthquake, the place where we live **is** uncertain for me, because we can't see ahead of us."

"The house I live in after the earthquake **is empty** for me. Because I can't feel it as a house, it is a big void"

# Category 5: "Destructive Power"

Three of the metaphors of the perception of the place (home) created by the teachers who experienced the earthquake were associated with the quality of destruction. Therefore, these metaphors were grouped under the category of destructive power. In this category, there are 3 metaphors (dangerous, wild horse, enemy) and 3 teachers who created these metaphors. In this category, "dangerous" metaphor is the most repeated metaphor (f=2).

In order to make the metaphors more understandable, sample teacher opinions of the metaphors in the category are as follows:

"The place where I live after the earthquake is like **an enemy** for me. Because I think it will harm my loved ones."

"The place where I lived after the earthquake is like **an enemy** for me. Because at any moment those walls can cause my death."

# Category 6: "Beginning"

One of the metaphors of the perception of the place (home) created by the teachers who experienced the earthquake was associated with the quality of being the place where the place is lived. Therefore, these metaphors were grouped under the category of beginning. It is seen that

there is 1 metaphor (starting over) and 3 teachers who created this metaphor in the category of beginning.

In order to make the metaphors more understandable, sample teacher opinions of the metaphors in the category are as follows:

"The place where I live after the earthquake is like **starting over** for me. Because it is very precious."

### Category 7: "Finish"

One of the metaphors of the place (house) created by the teachers who experienced the earthquake was associated with the quality of the place being finished. Therefore, this metaphor was evaluated in the ending category. It is seen that there is 1 metaphor (none) in the ending category and 1 teacher who created this metaphor.

In order to make the metaphors more understandable, sample teacher opinions of the metaphors in the category are as follows:

"The place where you live after an earthquake is **no** more for me. Because it will be demolished."

# Category 8: "Natural phenomenon"

One of the metaphors created by the teachers who experienced the earthquake about the perception of the place (house) where they lived was associated with the naturalness of the place where they lived. Therefore, this metaphor was included in the natural phenomenon category. In this category, there is 1 metaphor (darkness) and 1 teacher who created this metaphor.

In order to make the metaphors more understandable, sample teacher opinions of the metaphors in the category are as follows:

"After the earthquake, the place where I live is like **darkness** for me. Because you can't see anything."

# **DISCUSSION, CONCLUSION**

According to the data obtained from the research findings, the participants created 65 metaphors for the concept of earthquake, 74 metaphors for the concept of future and 86 metaphors for the concept of home. In line with the metaphors created by the participants, it is seen that the earthquake is perceived as a doomsday-like effect, helplessness and disaster; the future after the earthquake is perceived as uncertainty, hopelessness and pessimism; and the place of residence is perceived as an unsafe, fearful grave.

When we look at the metaphor categories that emerged depending on the metaphors created by the participants; in the category of "Religious Images", which contains the most metaphors, the majority of the participants likened the earthquake to concepts such as doomsday, judgement, death, destruction, hell, being buried alive. The helplessness and fear of death experienced in the face of earthquake may cause people to have these thoughts. When the literature is examined, the findings of the research are similar to the studies conducted by Aksoy (2013), Demirkaya (2008) and Faiz (2009). According to the results of the study conducted by Aksoy, it was found that the participants perceived the earthquake as death and disaster, according to the results of the study conducted by Faiz (2009), the participants experienced fear of death during the earthquake, and in the study conducted by Demirkaya (2008), it was concluded that religious beliefs took place due to the fear of death experienced in people's perceptions of earthquakes. The study is similar to the literature with this scope.

Another category in which the most metaphors were produced in the categories related to the earthquake is "End". It can be thought that the metaphors of helplessness and destruction in this category may have emerged as a result of the helplessness experienced by individuals as a result of the great destruction and losses caused by the earthquake. The most repeated disaster metaphor in the "natural event" category can be accepted as a reflection of the severe consequences of this earthquake, which caused great destruction. This earthquake, which has very severe consequences and is described as the Disaster of the Century, may have caused great psychological problems in the individuals who witnessed the process and aftermath of the earthquake, could not get rid of the effects of what they experienced, and may have caused them to interpret everything that happened as a nightmare. This result of the study is similar to the study of Sönmez (2022). In his study, Sönmez (2022) states that trauma may occur and many psychological disorders may develop after destructive earthquakes. The emergence of the psychological factors category in the study and the predominance of the nightmare metaphor in this category overlap with Sönmez's study.

Another category that emerged in the research is "destructive power". This great earthquake, which destroyed everything and took away everything that people had, makes us think that teachers can form this category. Another category that emerged as a result of this research conducted with teachers after this great disaster is "Beginning". The emergence of this category may be due to the fact that the teachers perceived the earthquake as the survival of themselves and their relatives and the beginning of a new life.

When the findings obtained in the study are analysed, it is seen that the categories created as a result of the metaphors about earthquake, future and place of living are the same. The difference between the categories is due to the metaphors created. The common point of the three concepts is that the most metaphors are found in the category of "psychological factors". This situation suggests that the heavy consequences of the earthquake, the worries of the people who experienced the earthquake about the future, and the tent life, which the people whose houses were damaged had never experienced before and did not know when it would end, affected them psychologically the most.

Another important result of the findings obtained in the study is that the degree of loss did not make a significant difference in the metaphors produced by the teachers considering their loss status after the earthquake. This situation can be interpreted as the commonality of the negative emotions and fear experienced by the teachers who experienced the earthquake at the time of the earthquake and that they focused on the moment they experienced in the process of producing metaphors.

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