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# DETERMINING THE RELATIONSHIP BETWEEN LEVELS OF HOPELESSNESS AND PERCEIVED SOCIAL SUPPORT OF WOMEN WHO EXPERIENCED THE TÜRKİYE EARTHQUAKE DISASTER

DEPREM BÖLGESİNDE YAŞAYAN KADINLARIN UMUTSUZLUK DÜZEYLERİ İLE ALGILANAN SOSYAL DESTEK DURUMLARI ARASINDAKİ İLİŞKİNİN BELİRLENMESİ

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# ABSTRACT

**Aim:** This study was conducted to determine the relationship between levels of hopelessness and the social support status of women living in 11 provinces declared as earthquake zones in Türkiye. **Method:** This descriptive and correlational research design study was conducted with 384 women. The data were collected using the "Questionnaire on sociodemographic and some other characteristics", "Beck Hopelessness Scale", and "Multidimensional Perceived Social Support Scale".

**Results:** The result of the correlation analysis showed that there was a statistically significant lowlevel negative relationship between the Beck Hopelessness Scale scores and Multidimensional Perceived Social Support Scale scores of the participants (r=-0.255). The perceived social support is found to affect the hopes of women who experienced the earthquake.

**Conclusion:** It is advisable to initiate, sustain, and expand research concerning the establishment of centers that can provide women with professional social support in a coordinated and rapid manner during natural disasters.

Keywords: Disasters, Earthquake, Hopelessness, Social Support, Türkiye

# ÖZET

Amaç: Bu çalışma, Türkiye'de deprem bölgesi olarak ilan edilen 11 ilde yaşayan kadınların umutsuzluk düzeyleri ile sosyal destek durumları arasındaki ilişkinin belirlenmesi amacıyla yapılmıştır.

Gereç ve Yöntem: Tanımlayıcı ve ilişkisel araştırma tasarımına sahip bu çalışma 384 kadınla gerçekleştirilmiştir. Veriler "Sosyodemografik ve diğer bazı özellikler anketi", "Beck Umutsuzluk Ölçeği" ve "Çok Boyutlu Algılanan Sosyal Destek Ölçeği" kullanılarak toplanmıştır.

**Bulgular:** Korelasyon analizi sonucunda katılımcıların Beck Umutsuzluk Ölçeği puanları ile Çok Boyutlu Algılanan Sosyal Destek Ölçeği puanları arasında istatistiksel olarak anlamlı düşük düzeyde negatif bir ilişki olduğu görülmüştür (r=-0,255). Algılanan sosyal desteğin deprem yaşayan kadınların umutlarını etkilediği tespit edilmiştir.

**Sonuç:** Doğal afetlerde kadınlara koordineli ve hızlı bir şekilde profesyonel sosyal destek sağlayabilecek merkezlerin kurulmasına yönelik araştırmaların başlatılması, sürdürülmesi ve genişletilmesi önerilmektedir.

Anahtar kelimeler: Afetler, Deprem, Sosyal Destek, Türkiye, Umutsuzluk

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## **INTRODUCTION**

Earthquakes pose a significant threat to human lives all over the world. On February 6th, 2023, Turkey experienced two major earthquakes, the first with a magnitude of 7.7 and the second with a magnitude of 7.6, both centered in the province of Kahramanmaraş. The earthquakes resulted in the loss of over 50 thousand lives and affected several cities (http://sbb.gov.tr, 2023). Experiencing natural disasters can exert detrimental effects on mental health, potentially contributing to the development of psychiatric disorders such as anxiety and depression in both the short and long term (Morganstein and Ursano, 2020).

The concept of hope plays an important role in addressing these mental health issues (Küsgülü, 2014). Hope is defined as a person's belief in his or her ability to achieve goals, especially when he or she can influence the outcome by using his or her skills or strengths (Rand et al., 2012). Hope is regarded as a significant factor that empowers individuals to navigate through challenges, cope with adversity, and transcend grief, thereby playing a crucial role in their emotional well-being (Doğan and Kelleci, 2004). Moreover, it is believed that enhancing individuals' levels of hope has a significant impact on mitigating mental health issues (Küsgülü, 2014).

Hopelessness, which is the opposite of hope, harms individuals and can lead to a variety of mental health problems (Dilbaz and Seber, 1993). Hopelessness was approved as a nursing diagnosis by the North America Nursing Diagnosis Association (NANDA) in 1986 and is defined as "a situation in which the individual sees limited or no alternatives or personal options and cannot exert energy for his or her benefit (Birol, 1997; NANDA, 2009; Öz, 2004). However, negative life events and lack of social support can also lead to hopelessness (Abramson et al., 1989; Sezer, 2000; Tan et al., 2005). Social support is one of the most important factors that positively remedy hopelessness (Kocaman, 2008).

Social support is generally defined as the perceived comfort, care, help, and respect an individual receives from others (Wallston et al., 1983). Social support leads individuals to believe in themselves (Dreyer and Schwartz-Attias, 2014). A study revealed that individuals who receive social support from their social network have better physical and mental well-being compared to those with insufficient social support (Gölalmış, 2005). Reduced social support can lead to mental health problems such as post-traumatic stress symptoms, anxiety, and depression (Norris et al., 2002; Zhang et al. 2012). Many studies show that social support is important in maintaining an individual's health during physical and mental illness (Chalise et al., 2007; Holmen and Furukawa, 2002; Oxman Berkman et al., 1999; Prince et al., 1997). Earthquakes, a natural disaster, negatively affect people's mental health. Especially after natural disasters such as earthquakes, if a woman is a mother, a wife or responsible for caring someone, the process is more difficult for them. Stuck between hope and despair need some support. However, no research investigates the level of hopelessness and social support of individuals during natural disasters. Thus, the present study aims to determine the relationship between levels of hopelessness and perceived social support among women residing in 11 provinces declared as earthquake zones in Turkey.

# **MATERIAL AND METHOD**

#### **Research Design**

This study employs a descriptive and correlational research design. Due to the unknown population size of women residing in the earthquake-affected provinces, the study sample size was determined as 384 women with a 95% confidence interval using the unknown sampling technique.

#### **Participants**

The study population consisted of women residing in 11 provinces designated as earthquake areas in Türkiye. The study sample size was calculated as 384 individuals, but a total of 463 participants participated in the study. The inclusion criteria specified that participants must be female, reside in the earthquake zone, and be 18 years of age or older. The exclusion criteria was women not live in the earthquake zone. However, nine participants were excluded from the study due to not meeting the sampling criteria, and the research was calculated using the data collected from 454 participants.

#### **Data Collection**

The data collection was performed between March and April 2023. Since the conditions in the earthquake zone are not favorable for face-to-face interviews, the data collection tools were administered

through Google Docs. Data collection forms were distributed to women online through email and social media platforms (such as Facebook, Instagram, and WhatsApp), requesting their completion and subsequent sharing with individuals in their social networks. The research employed the "snowball sampling method," a form of non-random sampling. Data collection proceeded until the target sample size was achieved.

### Instruments

The data were collected using the "Questionnaire on sociodemographic and some other characteristics", "Beck Hopelessness Scale", and "Multidimensional Perceived Social Support Scale".

*Questionnaire on Sociodemographic and Some Other Characteristics:* This form, which was prepared by the researchers in line with the literature, consists of a total of 27 items on items about sociodemographic characteristics and the earthquake.

*Beck Hopelessness Scale:* The Beck Hopelessness Scale was developed by Aaron T. Beck et al. in 1974 (Beck et al., 1974). It is a scale designed to measure negative perspectives about the future. The test consists of 20 items that can be answered with "Yes" or "No". A score of 1 point is assigned to each item that corresponds to a "Yes" response in 11 of the items and a "No" response in 9 of the items, totaling a maximum achievable score of 20. Hopelessness is categorized based on the scores obtained, with a range of 0-3 considered minimal, 4-8 points categorized as mild, 9-14 points categorized as moderate, and 15-20 points categorized as severe hopelessness. The Beck Hopelessness Scale consists of the factors "Feelings about the future", "Loss of motivation", and "Hope - Expectations about the future" (Beck et al., 1974). The initial Turkish adaptation of the Beck Hopelessness Scale involved an assessment of its validity and reliability, yielding a Cronbach's alpha coefficient of 0.86 for the entire scale (Seber et al., 1993). In this study, the Cronbach's alpha value was found to be 0.88.

*Multidimensional Perceived Social Support Scale (MSPSS):* This scale was developed by Zimet et al. in 1988. It is a scale for determining the elements of social support perceived by individuals. Its Turkish validity and reliability studies were conducted by Eker and Arkar (1995) and the Cronbach's alpha coefficient of the scale was found to be 0.78-0.92. In the present study, however, cronbach's alpha value was found to be 0.88. It's a 7-point likert-type scale consisting of 12 items in total. The scale has three sub-scales, each consisting of four items, reflecting the individual's sources of support, namely family support, friend support, and support from a significant other. The lowest and highest scores that can be obtained from the scale total are 12 and 84, respectively. A high score indicates a higher perceived social support (Eker and Arkar, 1995; Eker, Arkar and Yaldız, 2001).

# **Data Analysis**

The data were analyzed using SPSS for Windows (version 26.0, IBM Corp, Armonk, NY, USA). The data were analyzed using numbers, percentages, means, and standard deviations. To examine differences between two independent groups, the independent samples t-test was used, while the one-way analysis of variance (ANOVA) was used to assess differences between more than two independent groups. In case of a difference as a result of the one-way analysis of variance (ANOVA), the group causing the difference was determined by Tukey multiple comparison test. Relationships between two independent numerical variables were interpreted using Pearson's correlation coefficient. Simple linear regression analysis was used to investigate the effect of one numerical variable on another numerical variable. P<0.05 was accepted as the level of statistical significance.

# **Ethical Considerations**

Before using the scales in this study, written permission was obtained from the respective authors. Approval was obtained from the Ethics Committee for Non-Interventional Studies of Kafkas University Faculty of Health Sciences (no: 81829502.903/43, date: March 17th, 2023). A form with detailed information about the purpose and method of the research was sent online to the individuals who agreed to participate in the research, and their consent was obtained. This study was carried out following the ethical principles of the Declaration of Helsinki. Voluntary women were included in the study and their identities were kept confidential.

# RESULTS

Table 1 shows that 41.2% of the participants are in the 18-25 age group, 31.1% in the 31-40 age group, and 27.8% in the 41-65 age group. In addition, the average age and standard deviation of the individuals was  $39.17\pm10.26$ . Of them, 57.5% had a university degree. Of them, 48.7% were unemployed. Of the participants, 56.2% had an income lower than expenses. Of the participants, 22% were students, 21.1% were healthcare professionals, 9% were academicians/teachers, 22.2% were housewives, 8.8% were civil servants, and 16.7% were in other occupational groups.

	n=454	%
Age (mean±SD=39.17±10.26)		
19-30 Age Group	187	41.2
31-40 Age Group	141	31.0
41-65 Age Group	126	27.8
Marital Status		
Single	263	57.9
Married	191	42.1
Educational Status		
Primary-Secondary Education	94	20.7
High School	64	14.1
University	261	57.5
Postgraduate	35	7.7
Employment Status		
Yes	221	48.7
No	233	51.3
Income Status		
Income is lower than expenses	255	56.2
Balanced Income	166	36.6
Income is higher than expenses	33	7.2
Occupation		
Student	100	22.1
Healthcare Professional	96	21.1
Academic/Teacher	41	9.1
Housewife	101	22.2
Officer	40	8.8
Other (workers, retirees, freelancers, cooks and cleaners)	76	16.7

**Table 1.** Distribution According to Demographic Characteristics

Table 2 shows the distribution of the responses of the women who participated in the study to the statements related to the earthquake event.

	n=454	%
Perception of Earthquake		
A test from God	45	9.9
It's a terrible situation	125	27.5
Disaster	54	11.9
Apocalypse	81	17.8
Natural Disaster	35	7.7
Pain, Grief, Trauma	19	4.2
Loss and Death	51	11.2
Helplessness	44	9.7
Earthquake Province		
Malatya	21	4.6
Kahramanmaraş	10	2.2
Adıyaman	27	5.9
Hatay	249	54.8
Gaziantep	16	3.5
Kilis	4	0.9
Elazığ	8	1.8

Table 2. Distribution of Responses to Statements Regarding the Experienced Earthquake

Osmaniye	8	1.8
Adana	45	9.9 7.0
Diyarbakır Sanlarfa	36 30	7.9
Şanlıurfa Financial Loga in Forthquaka	50	6.6
Financial Loss in Earthquake Yes	258	56.8
No	196	43.2
<sup>+</sup> Financial Loss in Earthquake	170	73.2
House	238	92.2
Car	52	20.2
Furniture	58	22.5
Workplace	43	16.7
Job	20	7.8
Loss of First-Degree Relatives in the Earthquake		
Yes	48	10.6
No	406	89.4
Loss of Relatives Except First-Degree Relatives in the Earthquake	100	07.1
Yes	329	72.5
No	125	27.5
Deceased Relative		_/
Parents and Siblings	72	21.9
Relatives, Friends, etc.	257	78.1
Being Under Debris in the Earthquake		
Yes	22	4.8
No	432	95.2
Injury due to Earthquake		
Yes	54	11.9
No	400	88.1
Extremity Loss due to Earthquake		
Yes	16	3.5
No	438	96.5
Lost Extremity due to the Earthquake (n=16)		
Leg	10	62.5
Arm	6	37.5
Post-Earthquake Physical Health		
Good	181	39.9
Medium	187	41.2
Poor	86	18.9
Post-Earthquake Psychological Health	10	
Good	10	2.2
Medium	110	24.2
Poor	334	73.6
Actions Taken during the Earthquake		
I Rushed Outside	133	29.3
I Created a Triangle of Life	128	28.2
I couldn't do anything	161	35.5
I tried to bring all my family together in the same room	14	3.1
I tried to save my child	18	4.0
<sup>+</sup> Feelings during the Earthquake I Panicked	328	100.0
Shocked	261	99.2
I was afraid	333	99.2 100.0
I cried	201	100.0
I was so sorry	197	99.5
I was so sorry I was in confusion	197	100.0
I was calm	98	100.0
Other	3	100.0
Acceptance of the Event	-	
Yes	235	51.8
No	219	48.2

Religious Faith       58       24.7         Presence of my Family and Children       31       13.2         Helplessness       31       13.2         Natural Disaster       35       14.9         Life Goes On       80       34.0         Method of Coping with the Event       81       17.8         By praying       81       17.8         I had to be Strong for my Family       88       19.4         Earthquake survivors gave me hope       31       6.8         I prayed / I had to be strong for my family /       86       18.9         Earthquake survivors gave me hope       7       10       24.2         I prayed / Land to be strong for my family /       86       18.9       89.9         Source of social support       7       15.2       8         Yes       46       10.1       No       23.9         Source of social support (n=46)       10       21.7       7       15.2         Voluntary social support organizations       10       21.7       7       15.2         Pseychiatristybaychologist support       7       15.2       39.2         Hope for the Future       25       62.8       37.2         Reasons for hopelessness about t	Method of accepting the event (n=235)		
Helplessness       31       13.2         Natural Disaster       35       14.9         Life Goes On       80       34.0         Method of Coping with the Event       81       17.8         By praying       81       17.8         I had to be Strong for my Family       88       19.4         Earthquake survivors gave me hope       31       6.8         I prayed / I had to be strong for my family /       86       18.9         Earthquake survivors gave me hope       58       12.8         Received any social support       46       10.1         No       408       89.9         Source of social support (n=46)       10       21.7         Family / Friends Support       7       15.2         Psychiatrist/psychologist support       7       15.2         Psychiatrist/psychologist support       11       23.9         AFAD       18       39.2         Hope for the Future       169       37.2         Yes       285       62.8         No       169       37.2         Reasons for hopelessness about the future (n=169)       169       37.2         I can die any moment       55       32.5       13       40	Religious Faith	58	24.7
Natural Disaster         35         14.9           Life Goes On         80         34.0           Method of Coping with the Event         80         34.0           By praying         81         17.8           I had to be Strong for my Family         88         19.4           Earthquake survivors gave me hope         31         6.8           I prayed / I had to be strong for my family /         86         18.9           Earthquake survivors gave me hope         7         86           I prayed / Earthquake survivors gave me hope         7         86           I prayed / Earthquake survivors gave me hope         7         10           I prayed / Earthquake survivors gave me hope         7         12.8           Received any social support         46         10.1           No         408         89.9           Source of social support on ganizations         10         21.7           Paychiatrist/psychologist support         7         15.2           Psychiatrist/psychologist support         7         15.2           Psychiatrist/psychologist support         11         23.9           AFAD         18         39.2           Hope for the Future         285         62.8 <td< td=""><td>Presence of my Family and Children</td><td>31</td><td>13.2</td></td<>	Presence of my Family and Children	31	13.2
Life Goes On       80       34.0         Method of Coping with the Event       31       7.8         By praying       81       17.8         I had to be Strong for my Family       88       19.4         Earthquake survivors gave me hope       31       6.8         I prayed / I had to be strong for my family /       86       18.9         Earthquake survivors gave me hope       58       12.8         Received any social support       7       10         Yes       46       10.1         No       408       89.9         Source of social support (n=46)       7       15.2         Voluntary social support organizations       10       21.7         Family / Friends Support       7       15.2         Psychiatrist/psychologist support       7       15.2         Psychiatrist/psychologist support       11       23.9         AFAD       18       39.2         Hope for the Future       169       37.2         Reasons for hopelessness about the future (n=169)       11       23.9         I can die any moment       55       32.5       1         I am hopeless       74       43.8       10       23.7         Having Future	Helplessness	31	13.2
Method of Coping with the Event         81         17.8           By praying         81         17.8           I had to be Strong for my Family         88         19.4           Earthquake survivors gave me hope         31         6.8           I prayed / I had to be strong for my family /         86         18.9           Earthquake survivors gave me hope         86         18.9           Earthquake survivors gave me hope         7         58           I prayed / Earthquake survivors gave me hope         58         12.8           Received any social support         46         10.1           No         408         899           Source of social support (n=46)         7         15.2           Voluntary social support organizations         10         21.7           Family / Friends Support         7         15.2           Psychiatrist/psychologist support         11         23.9           AFAD         18         32.2           Hope for the Future         169         37.2           Reasons for hopelessness about the future (n=169)         1         32.6           I can die any moment         55         32.5         32.5           I am hopeless         74         43.8         33.2	Natural Disaster	35	14.9
By praying $81$ $17.8$ I had to be Strong for my Family $88$ $19.4$ Earthquake survivors gave me hope $31$ $6.8$ I prayed / I had to be strong for my family $110$ $24.2$ I prayed / I had to be strong for my family / $86$ $18.9$ Earthquake survivors gave me hope $1$ $110$ $24.2$ I prayed / Earthquake survivors gave me hope $58$ $12.8$ Received any social support $46$ $10.1$ NoYes $46$ $10.1$ No $89.9$ Source of social support (n=46) $10$ $21.7$ Voluntary social support organizations $10$ $21.7$ Family / Friends Support $7$ $15.2$ Psychiatrist/psychologist support $7$ $15.2$ No $10$ $21.7$ Family / Friends Support $7$ $15.2$ Psychiatrist/psychologist support $7$ $15.2$ No $10$ $21.7$ Family / Friends Support $7$ $15.2$ Psychiatrist/psychologist support $7$ $15.2$ Psychiatrist/psychologist support $7$ $15.2$ Psychiatrist/psychologist support $7$ $15.2$ Reasons for hopeless about the future (n=169) $11$ $23.9$ I can die any moment $55$ $32.5$ I am hopeless $74$ $43.8$ Uncertainty $40$ $23.7$ Having Future Plans $194$ $42.7$	Life Goes On	80	34.0
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Earthquake survivors gave me hope5812.8I prayed / Earthquake survivors gave me hope5812.8Received any social support1010.1No40889.9Source of social support (n=46) $10$ Voluntary social support organizations1021.7Family / Friends Support715.2Psychiatrist/psychologist support1123.9AFAD1839.2Hope for the Future $285$ 62.8No16937.2Reasons for hopelessness about the future (n=169) $11$ 23.7I can die any moment5532.5I am hopeless7443.8Uncertainty4023.7Having Future Plans19442.7		110	24.2
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No         408         89.9           Source of social support (n=46)             Voluntary social support organizations         10         21.7           Family / Friends Support         7         15.2           Psychiatrist/psychologist support         11         23.9           AFAD         18         39.2           Hope for the Future             Yes         285         62.8           No         169         37.2           Reasons for hopelessness about the future (n=169)             I can die any moment         55         32.5           I am hopeless         74         43.8           Uncertainty         40         23.7           Having Future Plans          40           Yes         194         42.7	Received any social support		
Source of social support (n=46)       10       21.7         Voluntary social support organizations       10       21.7         Family / Friends Support       7       15.2         Psychiatrist/psychologist support       11       23.9         AFAD       18       39.2         Hope for the Future       11       23.9         Yes       285       62.8         No       169       37.2         Reasons for hopelessness about the future (n=169)       1       23.7         I can die any moment       55       32.5         I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       7       42.7	Yes	46	10.1
Voluntary social support organizations10 $21.7$ Family / Friends Support7 $15.2$ Psychiatrist/psychologist support11 $23.9$ AFAD18 $39.2$ Hope for the Future $V$ Yes285 $62.8$ No169 $37.2$ Reasons for hopelessness about the future (n=169) $V$ I can die any moment55 $32.5$ I am hopeless74 $43.8$ Uncertainty40 $23.7$ Having Future Plans $Y$ $Y$	No	408	89.9
Family / Friends Support715.2Psychiatrist/psychologist support1123.9AFAD1839.2Hope for the Future $V$ Yes28562.8No16937.2Reasons for hopelessness about the future (n=169) $V$ I can die any moment5532.5I am hopeless7443.8Uncertainty4023.7Having Future Plans $V$ 42.7	Source of social support (n=46)		
Psychiatrist/psychologist support       11       23.9         AFAD       18       39.2         Hope for the Future       285       62.8         No       169       37.2         Reasons for hopelessness about the future (n=169)       1       10         I can die any moment       55       32.5         I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       194       42.7	Voluntary social support organizations	10	21.7
AFAD       18       39.2         Hope for the Future       285       62.8         Yes       285       62.8         No       169       37.2         Reasons for hopelessness about the future (n=169)       1         I can die any moment       55       32.5         I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       194       42.7		7	
Hope for the Future       285       62.8         Yes       285       62.8         No       169       37.2         Reasons for hopelessness about the future (n=169)       7       7         I can die any moment       55       32.5         I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       7       42.7	Psychiatrist/psychologist support	11	
Yes       285       62.8         No       169       37.2         Reasons for hopelessness about the future (n=169)       55       32.5         I can die any moment       55       32.5         I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       74       42.7	AFAD	18	39.2
No       169       37.2         Reasons for hopelessness about the future (n=169)       7       32.5         I can die any moment       55       32.5         I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       7       42.7	Hope for the Future		
Reasons for hopelessness about the future (n=169)       55       32.5         I can die any moment       55       32.5         I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       74       42.7		285	62.8
I can die any moment       55       32.5         I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       74       42.7		169	37.2
I am hopeless       74       43.8         Uncertainty       40       23.7         Having Future Plans       74       42.7	<b>Reasons for hopelessness about the future (n=169)</b>		
Uncertainty4023.7Having Future Plans4023.7Yes19442.7		55	
Having Future Plans Yes 194 42.7	I am hopeless	74	43.8
Yes 194 42.7	Uncertainty	40	23.7
	Having Future Plans		
	Yes	194	42.7
No 260 57.3	No	260	57.3
Future Plans (n=194)	Future Plans (n=194)		
Having a good job 75 38.7		75	38.7
Living in a Secure House 51 26.3		51	26.3
Give my children a good future 20 10.3		20	10.3
I want to have a better life 48 24.7		48	24.7

+:Participants were able to give more than one answer to this question.

According to Table 3, the result of the correlation analysis showed that there was a statistically significant low-level negative relationship between the BHS scores and MSPSS scores of the participants (r=-0.255).

**Table 3.** Investigation of the relationships between the Beck Hopelessness Scale and its sub-scale scores and the

 Multidimensional Perceived Social Support Scale total and sub-scale scores.

		Multidimensional			Support from a
		Perceived Social	Family Support	Friends Support	Significant Other
		Support Scale			Significant Other
Beck Hopelessness Scale	r	255**	192**	221**	276**
	р	<0.001	<0.001	<0.001	<0.001
Feelings Regarding	r	199**	152**	165**	221**
Future	р	<0.001	0.001	<0.001	<0.001
Loss of Motivation	r	210**	152**	189**	228**
	р	<0.001	0.001	<0.001	<0.001
Hope - Expectations	r	254**	201**	220**	266**
Regarding Future	р	<0.001	<0.001	<0.001	<0.001

r: Pearson correlation coefficient \*\*:p<0.01

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According to Table 4, BHS scores showed a statistically significant difference (p<0.05) according to experiencing financial loss in the earthquake, losing a first-degree relative in the earthquake, being injured due to the earthquake, physical health after the earthquake, psychological health after to the earthquake, accepting the experienced event, receiving any social support, hoping for the future, having a plan for the future, and future plans; however, there was no statistically significant difference between MSPSS scores and statements related to the earthquake event (p>0.05).

**Table 4.** Examination of Differences in BHS and MSPSS Scores According to Women's Statements about the

 Earthquake Event Experienced

	BHS	MSPSS
	Mean±SD	Mean±SD
Perception of Earthquake		
A test from God	7.91±3.41	51.11±16.26
It's a terrible situation	8.18±5.24	59.46±16.35
Disaster	8.91±5.35	54.67±17.42
Apocalypse	8.93±4.30	58.33±19.08
Natural Disaster	$7.26 \pm 4.25$	57.09±20.84
Pain, Grief, Trauma	8.47±6.17	60.16±19.86
Loss and Death	8.57±4.62	57.04±16.89
Helplessness	8.05±5.73	58.50±19.05
F;p	0.624;0.736	1.345;0.227
Financial Loss in Earthquake		
Yes	8.85±4.71	56.66±17.71
No	$7.68 \pm 5.03$	58.25±18.09
t;p	2.546; <b>0.011*</b>	-0.942;0.347
Loss of First-Degree Relatives in the Earthquake		
Yes	$10.02 \pm 5.04$	54.23±20.21
No	8.15±4.83	57.71±17.57
t;p	-2.532; <b>0.012</b> *	-1.277;0.202
Loss of Relatives Except First-Degree Relatives in		
the Earthquake		
Yes	8.55±4.87	57.24±17.87
No	$7.80{\pm}4.88$	57.62±17.94
t;p	1.465;0.144	-0.206;0.837
Being Under Debris in the Earthquake	1	0.200,0.007
Yes	9.86±4.82	51.95±16.13
No	9.80±4.82 8.27±4.88	$51.95 \pm 10.13$ $57.62 \pm 17.93$
	1.499;0.134	-1.452;0.147
t;p Inium due to Forthquele	1.499,0.134	-1.432,0.147
Injury due to Earthquake Yes	10.54±5.33	53.56±17.57
No	$10.34\pm 3.33$ $8.05\pm 4.75$	
		57.86±17.88
t;p Dest Fortherical Borrisel Health	3.563; <b>0.000</b> *	-1.662;0.097
Post-Earthquake Physical Health Good	7.33±4.59	58.88±18.38
Medium	7.33±4.39 8.39±5.14	$56.55 \pm 16.90$
Poor	$8.39\pm 3.14$ 10.40±4.26	
		55.84±18.81
F;p Difference	12.104; <b>0.000</b> *	1.165;0.313
	3>1.2	-
Post-Earthquake Psychological Health	4 70 + 2 40	62.40±13.42
Good	$4.70\pm3.40$	
Medium	6.04±4.52	55.63±19.70
Poor	9.21±4.74	57.76±17.34
F;p	22.282; <b>0.000</b> *	0.997;0.370
Difference	3>1.2	
Actions Taken during the Earthquake	7.07 4.50	ET E2 10 42
I Rushed Outside	7.97±4.52	57.53±18.43
I Created a Triangle of Life I couldn't do anything	$7.85 \pm 4.85$	57.37±17.29
	9.16±5.21	$57.44{\pm}18.01$

Determining The Relationship Between Levels of Hopelessness and Perceived Social Support of Women Who Experienced The Türkiye Earthquake Disaster

I tried to bring all my family together in the same		
	7.71±4.92	54.36±15.73
room I tried to save my child	$7.83{\pm}4.03$	57.28±19.80
F;p	1.752;0.138	0.102;0.982
Difference	1.752,0.150	0.102,0.902
Acceptance of the Event	_	_
Yes	$7.09 \pm 4.39$	56.26±18.14
No	$9.69 \pm 5.02$	58.51±17.55
t;p	-5.872;0.000*	-1.345;0.179
Method of Accepting the Event	2.072,00000	1.5 15,01175
Religious Faith	$6.34{\pm}4.00$	56.29±18.13
Presence of my Family and Children	$7.90 \pm 4.18$	$57.81 \pm 17.51$
Helplessness	7.16±4.35	58.68±15.86
Natural Disaster	6.11±5.30	54.77±20.20
Life Goes On	$7.58 \pm 4.20$	55.46±18.54
F;p	1.380;0.242	0.288;0.885
Method of Coping with the Event	· , - ·	
By praying	9.53±5.72	53.95±17.90
I had to be Strong for my Family	8.23±5.51	$57.28 \pm 18.40$
Earthquake survivors gave me hope	9.19±4.81	55.29±19.26
I prayed / I had to be strong for my family	$7.86{\pm}4.10$	59.15±16.95
I prayed / I had to be strong for my family /	7 (0) 4 07	57.66±18.40
Earthquake survivors gave me hope	$7.69 \pm 4.87$	
I prayed / Earthquake survivors gave me hope	8.29±3.73	59.38±17.14
F;p	1.696;0.134	1.046;0.390
Difference	-	-
Received any social support		
Yes	6.17±4.96	56.30±21.46
No	8.59±4.82	57.46±17.45
t;p	-3.213; <b>0.001</b> *	-0.416;0.678
Hope for the Future		
Yes	$6.10 \pm 3.69$	$58.48 \pm 17.87$
No	$12.13 \pm 4.28$	55.43±17.77
t;p	-15.274; <b>0.000</b> *	1.759;0.079
<b>Reason for Hopelessness for the Future</b>		
I can die any moment	$12.35 \pm 4.52$	55.73±18.84
I am hopeless	$12.19 \pm 4.30$	$56.24 \pm 18.10$
Uncertainty	$11.73 \pm 3.97$	53.53±15.82
F;p	0.254;0.776	0.312;0.732
Having Future Plans		
Yes	5.85±4.13	57.96±18.78
No	10.21±4.56	56.88±17.19
t;p	-10.644; <b>0.000</b> *	0.638;0.524
Future Plans	5 0 5 0 0 4	
Having a good job	5.05±3.94	58.56±20.66
Living in a Nata Housa		$55.00 \pm 17.83$
Living in a Safe House	7.16±4.05	
Give my children a good future	$5.55 \pm 4.36$	$62.00{\pm}18.67$
Give my children a good future I want to have a better life	5.55±4.36 5.81±4.21	62.00±18.67 58.50±16.74
Give my children a good future	$5.55 \pm 4.36$	$62.00{\pm}18.67$

t: Independent Samples T-Test F:One-Way Analysis of Variance (ANOVA) Difference: Tukey \*:p<0.05

#### DISCUSSION

Since this study is the first in this area to investigate the relationship between hopelessness and perceived social support among earthquake survivors, the topic has been compared in different studies that employed the same scale.

In the study, the first three statements used by women to describe the earthquake were "a terrible situation", "apocalypse", and "disaster." People generally experience hopelessness in the face of unknown and unexpected events. The level of hopelessness can vary from low to high depending on the

severity of the situation. In this natural disaster, which has been called the disaster of the century, people have experienced many aftershocks. Therefore, they repeatedly experienced the same traumatic events. However, it was found that the majority of the women had suffered financial losses, and losses other than first-degree relatives. It was found that their physical health was moderate, their psychological health was poor, and most of them were afraid after the earthquake (Table 2). In line with these findings, it is considered inevitable that women's hopelessness will increase. It is also very important to provide social support for these women. It is believed that by implementing appropriate plans, professionals providing social support services to earthquake victims can potentially mitigate the level of hopelessness experienced by women.

In this study, it was found that women who experienced the earthquake had moderate levels of hopelessness ( $8.34\pm4.88$ ) and perceived social support ( $57.34\pm17.87$ ). In different studies conducted during COVID-19, which is a sudden and unexpected situation, it was observed that participants reported mild levels of hopelessness (Lok et al. 2023; Mittal and Nagendran, 2021; Aylaz et al., 2022; Jamili et al., 2022). Accordingly, it can be stated that the level of hopelessness was higher in our study. However, Kurt and Gülbahçe concluded that the scores of the Multidimensional Perceived Social Support Scale were "moderate" in their study of students who experienced the earthquake. In a study conducted by Dizer (2008), investigating the association between the perceived trauma of the Marmara earthquake among adolescents, their perceived need for social support, and symptoms of hopelessness regarding the future, the findings revealed that earthquake victims reported a moderate level of overall perceived social support. This finding is similar to our study.

While low perceived social support and a lack thereof have been found to contribute to psychological problems and hopelessness among women affected by the earthquake, robust social support plays a crucial role in facilitating the coping process in the face of adverse experiences (Tel, 2011; Başaran et al., 2016). In a study conducted by Zhou et al. (2021) on individuals who were exposed to the Ya'an earthquake in China, social support was identified to have a positive impact on posttraumatic hope. In this study, a low-level negative relationship was observed between hopelessness and perceived social support (Table 3). As the level of perceived social support increases, the level of hopelessness decreases. In the study conducted by Jia et al. (2017) following the Wenchuan earthquake, it was observed that the earthquake and its psychological consequences had a notable detrimental effect on social support.

In Avan's study, it was observed that an increase in social support provided by a significant other during the divorce process was associated with a decrease in the level of hopelessness among women (Avan, 2019). In a study conducted on hemodialysis patients, Büyükbayram et al., found that there was a negative and moderately significant relationship between the MSPSS and BHS scores (p<0.05). In a study conducted on Iranian cancer patients, Madani et al., (2018) found that there was a negative relationship between the level of the hopelessness of patients and the level of social support provided by their families and friends. Ottilingam Somasundaram and Devamani (2016) conducted a study involving patients undergoing treatment and receiving palliative care, which revealed a negative correlation between patients' level of hopelessness and their perceived level of social support. In different studies conducted with patients with cancer in Turkey, a negative relationship was found between the level of hopelessness of patients and the level of social support. In different studies conducted with patients with cancer in Turkey, a negative relationship was found between the level of hopelessness of patients and the level of social support received (Akgün Şahin et al., 2013; Öztunç et al., 2013). The state of hopelessness that arises according to the level of perceived social support is also effective in the processes of coping with and adapting to the life changes they experience. Moreover, considering the profound influence of disasters on individuals and communities, perceived social support is believed to be a significant factor in post-disaster recovery and rehabilitation.

However, in line with the statements provided by the women regarding the earthquake, the present study revealed that levels of hopelessness were significantly higher among those who encountered financial losses, experienced the loss of a first-degree relative, had injuries during the earthquake, exhibited poor physical and psychological well-being, struggled to accept the traumatic event, lacked social support, harbored no hope for the future, lacked future plans, and expressed a desire to reside in a secure house in the future (Table 4). The perception of low levels of hopelessness among women can be attributed to the prevalence of negative consequences and evaluations resulting from the earthquake, which caused significant changes in their lives and overshadowed the positive assessments since these women were confronted with the adverse aftermath of the earthquake daily. Moreover, the

findings may be attributed to the fact that the quality of social support holds greater importance than its quantity, and the lack of assured continuity in social support may contribute to these outcomes.

## CONCLUSION

In this study, hopelessness and perceived social support were found to be moderately and negatively correlated at a low level. The perceived social support is found to affect the hopes of women who experienced the earthquake. Social support was found to be a protective shield for women, and when it is inadequate, women were found to experience hopelessness inevitably. In this context, the social support resources of women who do not have sufficient social support should be enhanced. It is necessary to reach these women and their relatives to provide help to cope with their problems. Healthcare professionals should define their personal qualities well and plan their interventions accordingly when providing care for women who feel hopeless during natural disasters. It is advisable to initiate, sustain, and expand research concerning the establishment of centers that can provide women with professional social support in a coordinated and rapid manner during natural disasters. This is because women's health is important for the health of families, children, and communities.

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