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Author (s):	Hüseyin Okur, Melek Çelik İnce, and Ali Cançelik
Affiliation (s):	Kocaeli University, Turkey
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Measuring the Impact of Understanding Precaution and Trust (*Tawakkul*) in the Face of Natural Disasters on the Consciousness of Responsibility: The Case of Türkiye

Hüseyin Okur*
Melek Çelik İnce
Ali Cançelik
Faculty of Theology, Department of Islamic Law,
Kocaeli University, Kocaeli,
Türkiye

Abstract

This study aims to explore how the concepts of precaution, reliance on Allah (*tawakkul*), and a sense of responsibility, as understood in Islamic belief, are reflected in individuals' lives when faced with natural disasters. The study, conducted using a scale with individuals from various regions of Türkiye who have experienced earthquakes, seeks to determine the impact of these concepts on their sense of responsibility. A quantitative method was used to assess how precaution and *tawakkul* influence the sense of responsibility during natural disasters. Data were collected from 405 participants using the Responsibility Sense and Behavior Scale, Disaster Preparedness Scale and Reliance on Allah (*Tawakkul*) Scale, which included 53 questions. Participants were also asked about their experiences with natural disasters to analyze their attitudes toward precaution, *tawakkul*, and responsibility. The results show that while individuals in Türkiye demonstrate high levels of *tawakkul*—entrusting outcomes to Allah after fulfilling their responsibilities—their disaster preparedness and precautionary measures remain low, regardless of personal experience with disasters. This study is one of the first to empirically examine the intersection of Islamic concepts and disaster preparedness. It contributes to the literature by evaluating whether reliance on Allah enhances or hinders disaster readiness. The findings highlight the need for educational initiatives that align religious teachings with risk mitigation strategies.

***Keywords*:** awareness of responsibility, caution, natural disasters, *tawakkul*, Türkiye

Introduction

Natural disasters are among the most serious challenges that people face. These disasters can lead to various issues, including loss of life and property, psychological problems, economic difficulties, disruptions in social life, and scarcity of resources.[1] It is well known that Türkiye has been exposed to numerous natural and man-made disasters, particularly destructive ones such as earthquakes, over the years, and that there is always a risk of exposure in the current period.[2] Türkiye frequently encounters major natural disasters due to its unfavorable terrain, landforms, and meteorological conditions. Natural disasters inflict significant damage on Türkiye's economic and social structure.

*Correspondence concerning this article should be addressed to Hüseyin Okur, Associate Professor, Faculty of Theology, Department of Islamic Law, Kocaeli University, Kocaeli, Türkiye at huseyin.okur@kocaeli.edu.tr

[1]Ebru Sabırsız, and Mesut Şöhret, "Macroeconomic, Social, and Environmental Impacts of the February 6 Earthquakes on the Turkish Economy," *Journal of Academic Approaches*, (January 4, 2024), https://doi.org/10.54688/ayd.1390984.

[2]Ramazan Avdar, and Reyhan Avdar, "Macroeconomic, Social, and Environmental Impacts of the February 6 Earthquakes on the Turkish Economy," *Journal of Academic Approaches* 5, no. 1 (June 20, 2022): 1–12, https://doi.org/10.35341/afet.1032084.

Human beings encounter many events throughout their lives, both desired and undesired. Islam regards every event that an individual faces as a test. According to Islam, life and death themselves are also tests. The emotional losses, and material and immaterial (moral) losses, experienced after negative events can profoundly shake a person. Natural events are just one type of these negative occurrences. Even though humans were not created with the power to directly prevent these natural events, they were endowed with the ability to minimize potential losses through the blessing of reason. After doing their best, the person who always wants the best for themselves will prevent the spiritual shaking that may be experienced by taking refuge in Allah.

This study is among the first empirical investigations to examine the impact of reliance on Allah (*tawakkul*) and precaution (*tadbīr*) on disaster preparedness and responsibility awareness. The frequent occurrence of earthquakes in Türkiye necessitates an understanding of individuals awareness of disasters and how their religious beliefs interact with risk management. Existing literature lacks a systematic evaluation of the relationship between *tawakkul* and disaster preparedness. This study aims to fill this gap by analyzing how individuals' perceptions of *tawakkul* influence their sense of responsibility.

"Earthquake and Responsibility Awareness in the Context of *Tawakkul* and Destiny," by Fikret Karaman theoretically examines the relationship between *tawakkul* and responsibility awareness.[3] Additionally, Muhammed Usame Gondal et al.'s "Mediating Role of *Tawakkul* Between Religious Orientation and Stress Among Muslim Adults"[4] explores the role of *tawakkul* using a scale, while their study "Development and Validation of *Tawakkul* Scale for Muslim Adults in Pakistan"[5] focuses on developing and validating a *tawakkul* scale. Meryem Şahin's study, "Development of *Tawakkul* Orientation Scale: A Study of Validity and Reliability,"[6] examines the development of the *Tawakkul* Orientation Scale and its reliability analysis. However, none of these studies have empirically measured the impact of precaution (*tadbīr*) and *tawakkul* on responsibility consciousness in the face of natural disasters. This research aims to bridge this gap by providing empirical findings on how these concepts influence disaster preparedness and responsibility awareness.

The study consists of three parts. The first part addresses natural disasters. The second part discusses the concepts of precaution, *tawakkul*, and responsibility consciousness. The third part includes a scale study measuring the reflection of the understanding of precaution and *tawakkul* in the face of natural disasters on the awareness of responsibility.

1.1. Research Subject and Problem

Tawakkul is defined as the act of entrusting the outcome to Allah after fulfilling one's responsibilities within one's own sphere of influence and internalizing and accepting whatever

[3]Fikret Kahraman, "Earthquake and Responsibility Awareness in the Context of *Tawakkul* and Destiny," *Diyanet Academic Journal* 56 (2020): 903–36.

[4]Muhammad Usama Gondal et al., "Mediating Role of *Tawakkul* Between Religious Orientation and Stress Among Muslim Adults," *Mental Health, Religion and Culture* (March 16, 2023), https://www.tandfonline.com/doi/abs/10.1080/13674676.2023.2226600.

[5]Muhammad Usama Gondal et al., "Development and Validation of *Tawakkul* Scale for Muslim Adults in Pakistan," *Journal of Religion and Health* 61, no. 4 (August 1, 2022): 3470–91, https://doi.org/10.1007/s10943-021-01449-6.

[6]Meryem Şahin, "Development of *Tawakkul* Orientation Scale: A Study of Validity and Reliablity," *Journal of Values Education* 18, no. 40 (December 25, 2020): 345–69, https://doi.org/10.34234/ded.768176.

happens.[7] Allah has commanded humans to always be prepared for every situation and to do their best with the gift of reason.[8] In this way, a human with limited power, fulfils their part of the responsibility in matters that concern them. What belongs to Allah is beyond that, and a human is only accountable for what is within their capacity.[9]

Although the understanding of *tawakkul* is as described, it has sometimes been misinterpreted, leading to the neglect of precaution. Relying solely on Allah without making any effort and expecting a favorable outcome is not *tawakkul*. Abandoning precaution directly results in the abandonment of *tawakkul*. According to the principles of true faith, neither does precaution require the abandonment of *tawakkul*, nor does *tawakkul* require the abandonment of precaution. Precaution and *tawakkul* are both necessities of human responsibility. Living a cautious life while maintaining an awareness of *tawakkul* means being responsible. Being conscious of responsibility, in turn, is the result of having respect for oneself and for Allah.

This study aims to determine the relationship between precaution and *tawakkul* in the face of natural disasters and to observe how prepared people living in earthquake-prone zones in Türkiye are for earthquakes and whether they possess *tawakkul*. Thus, the study seeks to measure the effect of the understanding of precautions and *tawakkul* on the awareness of responsibility.

The introductory section of this study provides general information about the research. The first section offers an overview of natural disasters in Türkiye. The second section includes the definitions of the concepts of responsibility consciousness, precaution, and *tawakkul*. The third section presents information and analyses related to measuring how the understanding of precaution and *tawakkul* reflects on responsibility consciousness.

2. Methodology and Scope of the Research

This research is limited to individuals reached through the survey study conducted in 2024 and includes 405 participants. The data collection tools utilized in the study include the Responsibility Feeling and Behavior Scale,[10] the Disaster Preparedness Scale,[11] and the Reliance on Allah Scale (*tawakkul*).[12] A total of 53 questions were administered online to the participants. The data collected through the scales were processed and analyzed using SPSS 17.0 software. Frequency and percentage techniques were employed to perform descriptive statistical analyses of the participants' personal characteristics.

The principles of voluntariness and confidentiality were strictly adhered to during the application of the scales. Ethical approval for the study was obtained from the Social and Human Sciences Ethics Committee of the Rectorate of Kocaeli University, Republic of Türkiye.

[7]Kasım Karataş, and Mustafa Baloğlu, "The Psychological Reflections of *Tawakkul*," *Çukurova University Faculty of Theology Journal* 19, no. 1 (June 26, 2019): 110–18, https://doi.org/10.30627/cuilah.545806.

[8]al-Baqarah 2:44.

[9]al-Baqarah 2:285-286.

[10]Yener Özen, "Development, Reliability, and Validity of the Responsibility Feeling and Behavior Scale," *Gümüşhane University Journal of Social Sciences Electronic*, no. 7 (2013), https://dergipark.org.tr/tr/pub/gumus/issue/7516/99066.

[11]Barış Şentuna and Fahri Çakı, "A Scale Development Study in the Balıkesir Sample: Disaster Preparedness Scale," *İdiealkent* 11, no. 31 (December 31, 2020): 1959–83, https://doi.org/10.31198/idealkent.728896.

[12]Hakan Zafer, "*Tawakkul* Scale (TÖ): Validity and Reliability Study – Summary," 2016.

3. Natural Disasters in Türkiye

A disaster is defined as 'any kind of natural event that causes physical, economic, and social losses for people, affects societies by stopping or interrupting normal life, and cannot be managed with local resources.' Although natural disasters are essentially natural events, they can become disasters when they pose risks to human life. For example, an earthquake is a completely natural phenomenon. However, human actions and preparedness are primarily responsible for determining whether the negative effects of an earthquake occur. For instance, while an earthquake measuring 6 on the Richter scale in Japan typically manifests as a natural phenomenon with limited impact, in Turkey, it often leads to significant loss of life and property, thereby taking on the characteristics of a disaster.[13]

Türkiye frequently encounters major natural disasters due to its land structure, landforms, and unfavourable meteorological conditions. In our country, which has a large geographical area and different climatic zones, many severe meteorological events that turn into disasters are observed. Meteorological disasters such as storms, floods, hail, forest fires, frost, snow, avalanches, and droughts occur quite frequently in Türkiye and cause significant loss of life and property. Among the natural disasters in Türkiye, earthquakes have an impact of 64%, floods 15%, landslides 16%, fires 4%, avalanches 1%, and others 1%.[14]

Earthquakes are the type of disaster that causes the greatest loss of life and property in Türkiye. A substantial sixty percent of the loss of life due to disasters is attributed to earthquakes.[15] Earthquakes have been the natural disasters causing the highest loss of life and property in Türkiye. On February 6, 2023, a 7.7-magnitude earthquake centered in Kahramanmaraş struck, followed by aftershocks in Gaziantep and surrounding areas. Later the same day, another major earthquake with a magnitude of 7.6 occurred. These earthquakes caused massive destruction in the provinces of Kayseri, Elazığ, Kahramanmaraş, Gaziantep, Osmaniye, Malatya, Adıyaman, Adana, Diyarbakır, Kilis, Hatay, and Şanlıurfa, directly affecting 14 million people across an area of 120,000 square kilometers. More than 50,000 people lost their lives, and 124 districts, along with 6,929 villages and neighborhoods in 11 provinces, suffered severe damage. Impacting an area of approximately 500 kilometers—larger than the land area of many countries—this disaster was recorded as one of the most devastating in history and was described by experts as the "disaster of the century."[16]

[13]Yavuz Değirmenci, and İlhan İlter, "The Natural Disasters in the Geography Teaching Curriculum," *Marmara Coğrafya Dergisi*, no. 28 (2013): 276–303.

[14]E. Ayşe Erkan, *Risk Reduction in Disaster Management and Problems Encountered in Turkey* (Ankara: Devlet Planlama Teşkilatı, 2010), 2812.

[15]Miran Walika et al., "Outbreaks Following Natural Disasters: A Review of the Literature," *Disaster Medicine and Public Health Preparedness* 17 (2023): e444, https://doi.org/10.1017/dmp.2023.96.

[16]Stefano Salata, and Taygun Uzelli, "The Uncertain Certainty of a Nightmare: What If Another Destructive Earthquake Strikes Izmir (Türkiye)?," *Sustainability* 16, no. 2 (January 2024): 2–3, https://doi.org/10.3390/su16020635.

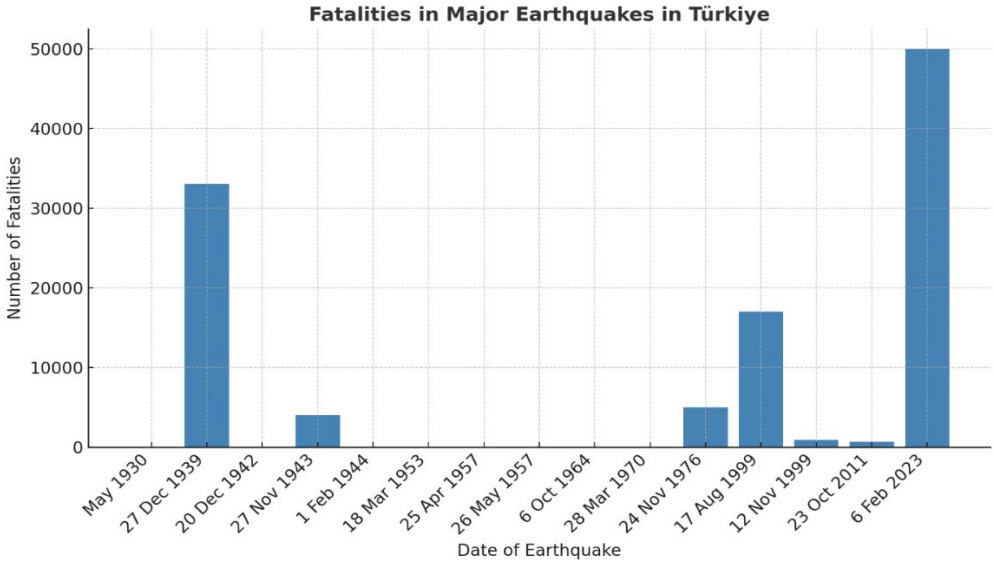


Figure 1. Major Earthquakes of 7 and Above and Loss of Life in Türkiye

4. Awareness of Responsibility (*Tadbīr*), Caution and *Tawakkul*

4.1. Responsibility and Awareness of Responsibility

Responsibility means assuming accountability for one's own actions or the consequences of any event that falls within one's jurisdiction. There are three factors that control a person's voluntary behavior. These three authorities can also be defined as types of responsibility:

1- The authority of conscience resides within the individual's personal and spiritual structure. This is also referred to as 'conscientious responsibility'[17] or 'moral responsibility.'

2- A person's responsibility towards their immediate and distant environment can be termed "social responsibility." Responsibility refers to the legal liability arising from an individual's actions or omissions.

3- The responsibility imposed on human beings by religion is called "religious obligation" and can also be referred to as "religious responsibility." Islam does not categorize conscientious and legal responsibility separately, as sanctions encompass both worldly and otherworldly aspects.[18]

Islam encourages believers to act with a sense of responsibility. This awareness gives meaning to life, maintains world order, and ensures a continuous connection with Allah. An individual who understands the consequences of their actions neither acts selfishly nor neglects their duties.

[17]Bedia Akarsu, *Dictionary of Philosophical Terms* (Ankara: Turkish Language Association Publications, 1975), 408.

[18]Abdulaziz Sachedina, "Introduction," in *Islamic Ethics: Fundamental Aspects of Human Conduct*, ed. Abdulaziz Sachedina (Oxford University Press, 2022). https://doi.org/10.1093/oso/9780197581810.003.0001.

Moreover, the sense of responsibility grants individuals a degree of autonomy in their actions, enabling them to recognize the worldly and otherworldly consequences of their deeds.

Responsibility means fulfilling what is expected of a person both morally and legally. In essence, responsibility is a duty. When a person fails to perform their required duties under certain circumstances, they are held accountable for it.

The sense of responsibility in a person is made possible by the combination of innate disposition, reason, will, and the individual's psychological makeup. Therefore, religion plays a significant role in the acquisition and development of a sense of responsibility. Religion guides people's actions and provides them with a sense of purpose. In line with these purposes, it also imposes certain responsibilities on them.

Awareness of responsibility is a fundamental value for the healthy functioning of society and for individuals to lead a successful and fulfilling life. This awareness encompasses the ability to take responsibility for the consequences of one's actions, to keep one's promises, and to fulfill one's duties towards society. Developing a sense of responsibility, which has profound effects at both personal and societal levels, plays a critical role in building a better future. This level of awareness aims to achieve the same goal at the conscientious, legal, and religious levels.

4.1.1. Precaution (*Tadbīr*)

Tadbīr, in Islamic terminology, refers to the preparatory measures taken to ensure the successful completion of a task.[19] In worldly life, a person's behaviour encompasses the dimensions of precaution (*tadbīr*), *tawakkul*, and divine decree (*takdīr*).[20] Of these, precaution and *tawakkul* are the responsibility of the servant, while divine decree is the responsibility of Allah. Precaution involves material actions, while *tawakkul* involves spiritual reliance. In situations where a person needs to take precautions, it is appropriate for them to use their intellect, think carefully, and act cautiously. Being cautious also entails accepting the laws established by Allah and striving to understand them as fully as possible.

The purpose of precaution is to prevent potential risks and negative consequences that may arise in the context of an event or situation. The Islamic faith also advocates moderation in taking precautions. Through religious teachings and social experiences, people have aimed to prevent negative outcomes. However, there will be situations where human efforts are insufficient. Natural disasters are among the events that can be considered in this context. Nevertheless, it is not appropriate for human beings to remain passive without making any effort, despite their helplessness. From the perspective of human responsibility, minimizing the damage that may occur in certain negative situations is a fundamental duty. Here, precaution means making every possible effort before disasters occur.

Islamic thought interprets the relationship between precaution and *tawakkul* as trusting in Allah while taking necessary precautions. To interpret situations that befall us without any precaution as 'this is Allah's decree' is contrary to the principles set forth by the Qur'ān. When we look at the practices of both the Qur'ān and the Prophet (SAW) abandoning precautions is not endorsed. The Prophet (SAW) always warned Muslims to take precautions against possible disasters. When the news reached the Prophet (SAW) that a house in Medina had burned down with its occupants, he

[19]Sayyid Sharīf al-Jurjānī Abū al-Ḥasan ʿAlī b. Muḥammad, *Al-Taʿrīfāt* (Beirut: Dār al-Kutub al-ʿIlmiyya, 1983).

[20]Saliha Körükcü, "Example Understanding of Respect of the Prophets in the Quran," *Nisar*, no. 1 (2022): 65–99.

said: "This fire is your enemy. Put it out when you sleep so that it will not harm you."[21] It has even been stated that there will be religious and moral responsibility regarding these measures and precautions.

Another example occurred in the eighteenth year of the Hijrah, when Hz. Umar (RA) came to the region called Serğ, with a group of soldiers to support the army in Damascus. Upon learning that thousands of people had lost their lives in the city due to the plague, Hz. Umar (RA) decided not to enter it. When some objected, saying, "O Commander of the Believers! Are you fleeing from Allah's decree?", he replied, "Yes, I am fleeing from Allah's decree to His decree again."[22]

4.1.2. *Tawakkul*

In Islamic terminology, *tawakkul* means entrusting the outcome to Allah and relying on Him after exhausting all means. According to the Qur'ān, *tawakkul* is a trait of the believer and a requirement of faith. A believer depends solely on Allah; thus, *tawakkul* is a sign of faith. *Tawakkul* is a core concept in Islamic thought, signifying reliance on Allah after making all necessary efforts. It involves taking responsibility, making preparations, and then entrusting the outcome to Allah's will.[23] True *tawakkul* reflects spiritual maturity and trust in Allah, providing inner peace and fulfillment through the balance of effort and reliance.[24]

According to Islamic belief, nothing moves, nor does any event occur without Allah's knowledge and will.[25] This situation demonstrates that mankinds role in what is happening in the world can only be what his Lord wills. Human actions have two aspects: one that pertains to the individual himself and another that pertains to his Lord. In the aspect that concerns himself, a person should take precautions by doing his utmost, and having fulfilled his responsibilities, he should then entrust the outcome to the will of Allah, which is above his own will, and patiently await the results.[26] According to Islamic belief, one must understand that whatever outcome Allah decrees will always be the best and most favorable.[27] Even if a person does their best and makes the greatest effort, the result may not always align with their desires.[28]

Earthquakes represent one of the most enduring natural disasters that humanity has continually faced throughout history. As a universal problem, earthquakes are remembered for the damage they cause. Although they are perceived as catastrophic events, earthquakes also remind people of their own helplessness.

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[21]Muhammad b. Ismāʿīl al-Bukhārī, *Sahîh Al-Bukhârî* (Beirut: Dār al-Kotob al-Ilmiyah, 2014), chap. Istiʾdhān, 49.

[22]al-Bukhārī, chap. Tibb, 30.

[23]L. Lewisohn, "*Tawakkul*," in *Encyclopaedia of Islam New Edition Online (EI-2 English)* (Brill), accessed February 10, 2025, https://doi.org/10.1163/1573-3912_islam_SIM_7447; Miftachul Huda et al., "Strengthening Divine Values for Self-Regulation in Religiosity: Insights from *Tawakkul* (Trust in God)," *International Journal of Ethics and Systems* 35, no. 3 (June 12, 2019): 325, https://doi.org/10.1108/IJOES-02-2018-0025.

[24]Muhammad Usama Gondal, Adnan Adil, and Anam Khan, "*Tawakkul* Mediates Between Personality Traits, Depression, and Anxiety in Pakistani Muslim Adults," *Journal of Religion and Health* 63, no. 1 (February 1, 2024): 582, https://doi.org/10.1007/s10943-023-01771-1.

[25]al-Nahl 16:40.

[26]al-Anʿām 6:17-18.

[27]Süleyman Gümrükçüoğlu, "Basic Qur'ānic Concepts for Religious Education in Dealing with Natural Disaster," *Turkish Journal of Religious Education Studies*, no. 16 (December 30, 2023): 79–109, https://doi.org/10.53112/tudear.1331610.

[28]al-Baqarah 2:216.

Attempting to explain the phenomenon of earthquakes solely from the perspective of divine punishment risks further deepening the perception of threat posed by natural disasters. Viewing such calamities exclusively as a matter of Allah's decree and punishment, without considering human intervention, may lead individuals to neglect their duties of precaution and trust in Allah (*tawakkul*). These approaches emphasize the importance of individuals upholding both their religious responsibilities and ensuring their safety in the face of natural disasters. Regarding the Prophet's (peace be upon him) act of quickening his pace when passing by a wall about to collapse, a companion asked, "Are you fleeing from Allah's decree?" The Prophet responded that he was fleeing from Allah's decree to His destiny.[29] From this, we understand that alongside Allah's decree, there is a role for human precaution and responsibility. In Muslim societies, while precaution (*tadbīr*) and reliance on Allah (*tawakkul*) are emotionally internalized, material responsibility awareness is not fully practiced. This study examines their reflections.

5. Findings

In this section of the study, the statistical results of the information obtained through the scale are analysed. First, the demographic characteristics of the participants were examined and presented using frequency analysis. Subsequently, the percentage data for the responses to the questions from the 'Sense of Responsibility and Behaviour Scale,' 'Disaster Readiness Scale,' and '*Tawakkul* Scale,' which were developed to address the main and sub-problems of the research, are presented. Interpretations and evaluations were made based on the findings obtained.

5.1. Participants' Experiences with Natural Disasters and Their Preparedness Behaviors

The table below presents the percentages of survey participants who have experienced a disaster, whether they suffered any loss of life or property, and their level of preparedness during the disaster.

Table 1. Participants Attitudes and Experiences Regarding Natural Disasters

		n	%
Have you experienced a natural disaster before?	Yes	229	56.5
	No	176	43.5
	Total	405	100.0
Which natural disaster have you experienced in recent years?	Izmit Earthquake	145	63.9
	Great Kahramanmaras Earthquake	36	15.9
	1999 Duzce Earthquake	19	8.4
	Other	27	11.9
	Total	227	100.0
Have you suffered any loss of life or property as a result of a natural disaster?	Yes	72	31.4
	No	157	68.6
	Total	229	100.0
Do you feel responsible for the outcomes of the disaster?	Yes	12	5.2
	No	174	76.0
	Partially	43	18.8
	Total	229	100.0
Were you prepared for the natural disaster you experienced?	Yes	12	5.2
	No	167	72.9
	Partially	50	21.8
	Total	229	100.0

[29]Abū Isā Muhammad ibn Isā Tirmidhī, *Sunan Al-Tirmidhī* (Beirut: Mü'assasat al-Risālah, 2013), chap. Qadar, 3.

When the participants' previous experiences with natural disasters are analyzed, 56.5% of the participants have experienced a natural disaster. Among them, 63.9% have experienced the Izmit Earthquake, 15.9% have experienced the Great Kahramanmaraş Earthquake, and 8.4% have experienced the 1999 Düzce Earthquake. The proportion of those who experienced loss of life or property as a result of a natural disaster is 31.4%. While 5.2% of the participants feel fully responsible for the disaster, 18.8% feel partially responsible. The percentage of individuals well-prepared for the natural disaster is 5.2%, those who were partially prepared is 21.8%, and not prepared at all is 72.9%.

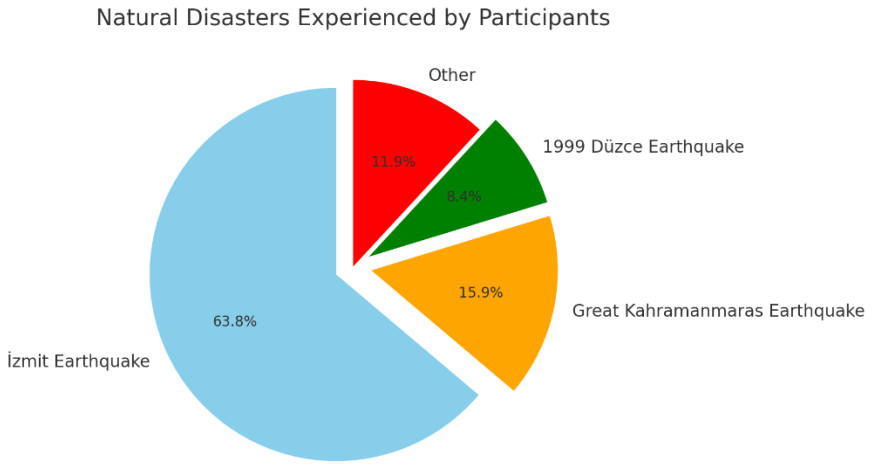


Figure 2. Percentage Distribution of Natural Disasters Experienced by Participants

5.2. Normality Tests of Scales

Table 2. Distribution of Data Obtained from the Normality Tests of the Scales

	N	Minimum	Maximum	Average	Standard Deviation	Skewness	Kurtosis
Tawakkul Scale	405	27	95	77.80	7.40	-0.99	0.18
Responsibility Behavior	405	45	72	63.04	6.25	-0.42	-0.65
Self-Oriented Responsibility Behavior	405	20	36	30.41	3.84	-0.32	-0.76
Other-Oriented Responsibility Behavior	405	23	36	32.63	2.88	-0.74	-0.12
Sense of Responsibility	405	46	72	63.13	6.17	-0.40	-0.68
Self-Oriented Sense of Responsibility	405	29	48	41.77	4.36	-0.39	-0.72
Other-Oriented Sense of Responsibility	405	13	24	21.37	2.25	-0.59	-0.25
Disaster Preparedness	405	19	60	36.88	5.91	0.48	1.83

	N	Minimum	Maximum	Average	Standard Deviation	Skewness	Kurtosis
Disaster Physical Protection	405	7	28	16.72	3.09	0.23	1.46
Disaster Planning	405	3	12	7.17	1.91	0.46	0.41
Disaster Relief	405	5	12	8.37	1.45	0.36	0.21
Disaster Warnings and Signals	405	2	8	4.62	1.11	0.64	1.26

5.3. Changes in *Tawakkul* Scale, Responsibility Behavior, Sense of Responsibility, and Disaster Preparedness Scales According to Natural Disaster Experience

The averages of the scales according to the status of experiencing a natural disaster were analyzed, and whether the difference between these averages was significant was assessed using one-way analysis of variance.

Table 3. Distribution of Data Obtained Based on the Natural Disaster Experience of Respondents to the *Tawakkul* Scale

Have you ever experienced a natural disaster?		*N*	Average	*SD*	*t*	*p*
Tawakkul Scale	Yes	229	77.76	7.07	-0.096	0.924
	No	176	77.84	7.84		

When the change in the *Tawakkul* scale was analyzed according to the status of experiencing a natural disaster, no significant difference was observed ($p > 0.05$). In other words, the *tawakkul* levels of those who have experienced a natural disaster before and those who have not are similar.

Table 4. Distribution of Data Based on the Natural Disaster Experience of Respondents to the Sense of Responsibility and Behavior Scale

Have you ever experienced a natural disaster?		*N*	Average	*SD*	*t*	*p*
Responsibility Behavior	Yes	229	63.01	5.86	-0.104	0.917
	No	176	63.07	6.74		
Self-Oriented Responsibility Behavior	Yes	229	30.34	3.70	-0.399	0.690
	No	176	30.49	4.03		
Other-Oriented Responsibility Behavior	Yes	229	32.67	2.67	0.306	0.760
	No	176	32.58	3.14		
Sense of Responsibility	Yes	229	63.11	5.79	-0.074	0.941
	No	176	63.16	6.65		
Self-Oriented Sense of Responsibility	Yes	229	41.73	4.16	-0.203	0.839
	No	176	41.82	4.62		
Sense of Responsibility Towards Others	Yes	229	21.38	2.07	0.192	0.848
	No	176	21.34	2.46		

When the changes in behavioral responsibility and sense of responsibility were analyzed according to the status of having experienced a natural disaster before, it was observed that the scale and its sub-dimensions did not show a significant difference ($p>0.05$). In other words, the levels of behavioral responsibility and sense of responsibility are the same for those who have experienced a natural disaster before and those who have not.

Table 5. Distribution of the Data Obtained According to the Natural Disaster Experience of the Respondents to the Disaster Readiness Scale

Have you experienced a natural disaster before?		*N*	Average	*SD*	*t*	*p*
Disaster Preparedness	Yes	229	37.08	6.05	0.765	0.445
	No	176	36.63	5.74		
Disaster Physical Protection	Yes	229	16.76	3.18	0.256	0.798
	No	176	16.68	2.98		
Disaster Planning	Yes	229	7.21	1.95	0.584	0.560
	No	176	7.10	1.85		
Disaster Relief	Yes	229	8.44	1.50	1.048	0.295
	No	176	8.28	1.38		
Disaster Warning and Signals	Yes	229	4.67	1.12	0.991	0.322
	No	176	4.56	1.09		

When the change of the disaster preparedness scale was analysed according to the status of experiencing a natural disaster before, the overall scale and its sub-dimensions did not differ significantly (p>0.05). The general level and sub-dimensions of disaster preparedness of those who have experienced a natural disaster and those who have not are at the same level.

5.4. Changes in *Tawakkul* Scale, Responsibility Behaviour, Sense of Responsibility and Disaster Preparedness Scales According to the Natural Disaster Experienced

One-way analysis of variance was used to analyse the averages of the scales based on the type of natural disaster experienced and to determine whether the difference between these averages was significant.

Table 6. Distribution of the Data Obtained According to the Natural Disaster Experienced by the Respondents to the *Tawakkul* Scale

		N	Average	*SD*	*F*	*p*
Tawakkul Scale	İzmit Earthquake	145	77.08	7.23	3.224	0.023
	Great Kahramanmaras Earthquake	36	80.47	5.67		
	1999 Düzce Earthquake	19	79.42	6.25		
	Other	27	76.00	7.34		
	Total	227	77.69	7.04		

When the change in the *tawakkul* scale was analyzed according to the type of earthquake experienced, a significant difference was observed (p<0.05). According to the results of the Tukey test conducted to determine which group contributed to this difference, the level of *tawakkul* among those who experienced the Great Kahramanmaraş Earthquake is significantly higher than among those who experienced the Izmit Earthquake or other natural disasters.

Table 7. Distribution of the Data Obtained According to the Natural Disaster Experienced by the Respondents to the Responsibility Behaviour and Emotion Scale

		N	Average	*SD*	*F*	*p*
Responsibility Behaviour	İzmit Earthquake	145	62.81	5,.3	0.594	0.620
	Great Kahramanmaras Earthquake	36	64.14	6.26		

		N	Average	*SD*	*F*	*p*
	1999 Düzce Earthquake	19	62.68	5.09		
	Other	27	62.44	5.63		
	Total	227	62.97	5.87		
Self-Responsibility Behaviour	İzmit Earthquake	145	30.23	3.79	0.587	0.624
	Great Kahramanmaras Earthquake	36	31.03	3.70		
	1999 Düzce Earthquake	19	30.32	3.13		
	Other	27	29.89	3.68		
	Total	227	30.32	3.70		
Responsible Behaviour towards Others	İzmit Earthquake	145	32.59	2.67	0.462	0.709
	Great Kahramanmaras Earthquake	36	33.11	3.06		
	1999 Düzce Earthquake	19	32.37	2.48		
	Other	27	32.56	2.38		
	Total	227	32.65	2.68		
Sense of Responsibility	İzmit Earthquake	145	62.90	5.84	0.568	0.636
	Great Kahramanmaras Earthquake	36	64.22	6.25		
	1999 Düzce Earthquake	19	62.79	5.03		
	Other	27	62.67	5.62		
	Total	227	63.07	5.80		
Sense of Self-Responsibility	İzmit Earthquake	145	41.57	4.24	0.432	0.730
	Great Kahramanmaras Earthquake	36	42.42	4.31		
	1999 Düzce Earthquake	19	41.74	3.65		
	Other	27	41.44	4.03		
	Total	227	41.70	4.16		
Sense of Responsibility towards Others	İzmit Earthquake	145	21.33	2.03	0.739	0.530
	Great Kahramanmaras Earthquake	36	21.81	2.32		
	1999 Düzce Earthquake	19	21.05	1.96		
	Other	27	21.22	2.04		
	Total	227	21.37	2.07		

When changes in the responsibility behaviour and sense of responsibility scales were examined based on the type of natural disaster experienced, it was found that the scale and its sub-dimensions did not differ significantly (p>0.05).

Table 8. Distribution of the Data Obtained According to the Natural Disaster Experienced by the Respondents to the Disaster Readiness Scale

Dimension	*N*	Average (*SD*)	*F*	*p*
Disaster Preparedness	227	37.07 (6.08)	1.258	0.290
Disaster Physical Protection	227	16.73 (3.18)	1.794	0.149
Disaster Planning	227	7.22 (1.96)	1.477	0.222
Disaster Relief	227	8.44 (1.51)	0.341	0.796
Disaster Warning and Signals	227	4.68 (1.12)	0.355	0.786

When the change in the disaster preparedness scale based on the type of natural disaster experienced was analyzed, no significant difference was found ($p > 0.05$). The preparedness levels of individuals who experienced different disasters were similar, with an overall average score of 37.07 ($SD = 6.08$), physical protection at 16.73 ($SD = 3.18$), and disaster relief at 8.44 ($SD = 1.51$). These results indicate that disaster preparedness levels do not vary based on the type of disaster experienced.

5.5. Variation of *Tawakkul* Scale, Responsibility Sense and Behaviour Scale and Disaster Readiness Scales According to the Loss of Life and Property in a Natural Disaster

One-way analysis of variance was used to analyze the averages of the scales based on whether there was loss of life or property as a result of the natural disaster, and whether the difference between these averages was significant.

Table 9. Distribution of Trust Scale Scores Based on Losses Experienced in Natural Disasters

		N	Average	*SD*	*t*	*p*
Tawakkul Scale	Yes	72	78.71	6.79	1.883	0.171
	No	157	77.33	7.17		
	Total	229	77.76	7.07		

When the variation of the *tawakkul* scale according to the status of experiencing loss of life or property in a natural disaster was analyzed, the *tawakkul* levels of those who experienced loss of life and property and those who did not experience loss are at the same level.

Table 10. Distribution of the Data Obtained from the Responsibility Sense and Behaviour Scale Respondents Regarding the Loss of Life and Property as a Result of a Natural Disaster

		N	Average	*SD*	*t*	*p*
Responsibility Behaviour	Yes	72	63.81	5.86	1.948	0.164
	No	157	62.64	5.84		
	Total	229	63.01	5.86		
Self-Responsibility Behaviour	Yes	72	30.88	3.71	2.208	0.139
	No	157	30.10	3.67		
	Total	229	30.34	3.70		
Responsible Behaviour towards Others	Yes	72	32.93	2.57	1.013	0.315
	No	157	32.55	2.72		
	Total	229	32.67	2.67		
Sense of Responsibility	Yes	72	63.90	5.82	1.958	0.163
	No	157	62.75	5.76		
	Total	229	63.11	5.79		
Sense of Self-Responsibility	Yes	72	42.38	4.19	2.552	0.112
	No	157	41.43	4.12		
	Total	229	41.73	4.16		

		N	Average	*SD*	*t*	*p*
Sense of Responsibility towards Others	Yes	72	21.53	2.00	0.504	0.478
	No	157	21.32	2.10		
	Total	229	21.38	2.07		

When examining the variation in responsibility behaviour and sense of responsibility according to whether individuals have experienced a loss of life or property in a natural disaster, it can be said that the levels of responsibility behaviour and sense of responsibility are at the same level for both those who have and those who have not experienced such a loss.

Table 11. Distribution of the Data Obtained from the Respondents to the Disaster Preparedness Scale Regarding the Loss of Life and Property as a Result of a Natural Disaster

		N	Average	*SD*	*t*	*p*
Disaster Preparedness	Yes	72	37.88	6.81	1.825	0.178
	No	157	36.71	5.66		
	Total	229	37.08	6.05		
Disaster Physical Protection	Yes	72	17.15	3.59	1.645	0.201
	No	157	16.57	2.97		
	Total	229	16.76	3.18		
Disaster Planning	Yes	72	7.47	2.00	1.841	0.176
	No	157	7.10	1.93		
	Total	229	7.21	1.95		
Disaster Relief	Yes	72	8.56	1.45	0.654	0.419
	No	157	8.38	1.53		
	Total	229	8.44	1.50		
Disaster Warning and Signals	Yes	72	4.69	1.10	0.040	0.841
	No	157	4.66	1.13		
	Total	229	4.67	1.12		

When the change of the disaster preparedness scale was analysed according to the status of experiencing loss of life or property in a natural disaster, it was seen that the overall scale and its sub-dimensions did not differ significantly (p>0.05).

5.6. Variation of *Tawakkul* Scale, Responsibility Behaviour, Sense of Responsibility and Disaster Preparedness Scales According to the State of Feeling Responsible for the Results of the Natural Disaster Experienced

The averages of the scales, according to the state of feeling responsible for the consequences of the natural disaster experienced, and the significance of the difference between these averages were analyzed using a one-way analysis of variance.

Table 12. Distribution of the Data Obtained Regarding Whether the Respondents to the Scale of *Tawakkul* Feel Responsible for the Results of Natural Disasters

		N	Average	*SD*	*F*	*p*
Tawakkul Scale	Yes	12	81.25	5.97	1.549	0.215
	No	174	77.58	6.91		
	Partially	43	77.53	7.82		
	Total	229	77.76	7.07		

When the change in the scale of *tawakkul* was analysed in relation to responsibility for the outcomes of the natural disaster, it was seen that the scale did not show a significant difference (p>0.05). In other words, the *tawakkul* levels of those who feel responsible for the results of the

natural disaster, those who do not feel responsible, and those who partially feel responsible are similar.

Table 13. Distribution of Data on Whether Respondents Feel Responsible for the Results of Natural Disasters (Simplified Version)

Variable	*N*	Average	*SD*	*F*	*p*
Responsibility Behaviour	229	63.01	5.86	3.655	0.027
Self-Responsibility Behaviour	229	30.34	3.70	3.602	0.029
Responsible Behaviour Towards Others	229	32.67	2.67	2.437	0.090
Sense of Responsibility	229	63.11	5.79	3.695	0.026
Sense of Self-Responsibility	229	41.73	4.16	3.287	0.039
Sense of Responsibility Towards Others	229	21.38	2.07	3.006	0.051

An analysis of the change in responsibility behavior and sense of responsibility, based on whether individuals felt responsible for the outcomes of the natural disaster, showed significant differences in the sub-dimensions of responsibility behavior: self-oriented responsibility behavior, sense of responsibility, and self-oriented sense of responsibility. According to the results of the Tukey test conducted to determine which group contributed to this difference, the average scores for responsibility behavior, self-oriented responsibility behavior, and sense of responsibility were significantly higher among those who feel responsible for the outcomes of the natural disaster than among those who do not feel responsible or feel partially responsible.

Table 14. Distribution of Data on Whether Respondents to the Disaster Preparedness Scale Feel Responsible for the Results of Natural Disasters (Simple Version)

Variable	*N*	Average	*SD*	*F*	*p*
Disaster Preparedness	229	37.08	6.05	0.619	0.539
Disaster Physical Protection	229	16.76	3.18	1.678	0.189
Disaster Planning	229	7.21	1.95	0.188	0.829
Disaster Relief	229	8.44	1.50	0.133	0.876
Disaster Warning and Signals	229	4.67	1.12	0.955	0.386

When the change of the disaster preparedness scale was analysed based on feeling responsible for the results of the natural disaster experienced, it was seen that the scale did not show a significant difference ($p>0.05$).

5.7. Changes in *Tawakkul* Scale, Responsibility Behaviour, Sense of Responsibility and Disaster Preparedness Scales According to Being Prepared for a Natural Disaster

The averages of the scales, based on preparedness for natural disasters, and the significance of these averages were analyzed using one-way analysis of variance.

Table 15. Distribution of the data obtained according to the preparedness of the respondents to the *Tawakkul* scale for Natural Disasters

		N	Average	Standard Deviation	*F*	*p*
Tawakkul Scale	Yes	12	82.00	7.79	2.310	0.102
	No	167	77.50	6.90		
	Partially	50	77.64	7.26		
	Total	229	77.76	7.07		

When the change in the scale of *tawakkul* in response to preparedness for a natural disaster was analyzed, it was seen that there was no significant difference ($p>0.05$). In other words, the *tawakkul*

scale levels of those who were caught prepared, partially prepared, and unprepared for natural disasters are similar.

Table 16. Distribution of Data According to Respondents' Preparedness for Natural Disasters (Simple Version)

Variable	*N*	Average	*SD*	*F*	*p*
Responsibility Behaviour	229	63.01	5.86	0.591	0.555
Self-Responsibility Behaviour	229	30.34	3.70	0.669	0.513
Responsible Behaviour Towards Others	229	32.67	2.67	0.336	0.715
Sense of Responsibility	229	63.11	5.79	0.623	0.537
Sense of Self-Responsibility	229	41.73	4.16	0.743	0.477
Sense of Responsibility Towards Others	229	21.38	2.07	0.278	0.757

When the variation of the responsibility behaviour and sense of responsibility scales was examined according to the state of preparedness for the disaster, it was seen that the scale sub-dimensions did not differ significantly (p>0.05). In other words, the levels of responsible behavior and sense of responsibility of those who were caught prepared, partially prepared, and not prepared for a natural disaster are at the same level.

Table 17. Comparison of Disaster Preparedness Scale Scores by Preparedness Status

Dimension	Prepared	Not Prepared	Partially Prepared	*F*	*p*
Disaster Preparedness	39.17 (7.71)	36.53 (6.21)	38.42 (4.74)	2.675	0.071
Disaster Physical Protection	18.17 (3.51)	16.45 (3.28)	17.44 (2.56)	3.176	0.044
Disaster Planning	7.42 (1.98)	7.07 (2.00)	7.64 (1.74)	1.705	0.184
Disaster Relief	8.50 (1.68)	8.38 (1.50)	8.60 (1.48)	0.408	0.665
Disaster Warning and Signals	5.08 (1.44)	4.62 (1.15)	4.74 (0.90)	1.069	0.345

When the change in the disaster preparedness scale scores was analyzed based on respondents' preparedness status, a significant difference was found only in the disaster physical protection sub-dimension ($p < 0.05$). For example, the average score for the physical protection dimension was higher in the 'Prepared' group (18.17, $SD = 3.51$) compared to the 'Not Prepared' group (16.45, $SD = 3.28$). Other dimensions did not show significant differences ($p > 0.05$).

5.8. Relationships Among Scales

To elucidate the relationships among the scales, a correlation analysis was performed, yielding Pearson correlation coefficients.

The *tawakkul* scale exhibited a significant positive correlation with responsibility behavior of 23.5%, self-oriented responsibility behavior of 24%, other-oriented responsibility behavior of 18.9%, sense of responsibility of 24.7%, and sense of responsibility towards others of 16.2%. No significant correlation was observed between the *tawakkul* scale and the disaster preparedness scale.

The responsibility behavior scale demonstrated a significant positive relationship with disaster preparedness of 25.5%, disaster physical protection of 22.9%, disaster planning of 17.6%, disaster assistance of 17.4%, and disaster warning signals of 19.3%.

The self-oriented responsibility behavior scale revealed a significant positive relationship with disaster preparedness 23.7%, disaster physical protection 23.0%, disaster planning 16.7%, disaster relief 13.7%, and disaster warning signals 15.7%.

The scale of responsibility behavior towards others has a significant positive correlation with disaster preparedness at 23.7% disaster physical protection at 18.9% disaster planning at 16% disaster assistance at 19.5% disaster warning signals at 20.9%.

The sense of responsibility scale has a significant positive correlation with disaster preparedness at 25.4%; disaster physical protection at 22.6%; disaster planning at 17.6%; disaster assistance at 17.7%; disaster warning signals at 19.1%.

The scale of sense of responsibility towards oneself exhibits a significant positive correlation with disaster preparedness at 24.6%, disaster physical protection at 23%, disaster planning at 17.5%, disaster assistance at 15.9%, and disaster warning signals at 16.4%.

The scale of sense of responsibility towards others has a significant positive correlation with: disaster preparedness at 22%, disaster physical protection at 17.5%, disaster planning at 14.3%, disaster assistance at 17.9%, and disaster warning signals at 20.6%.

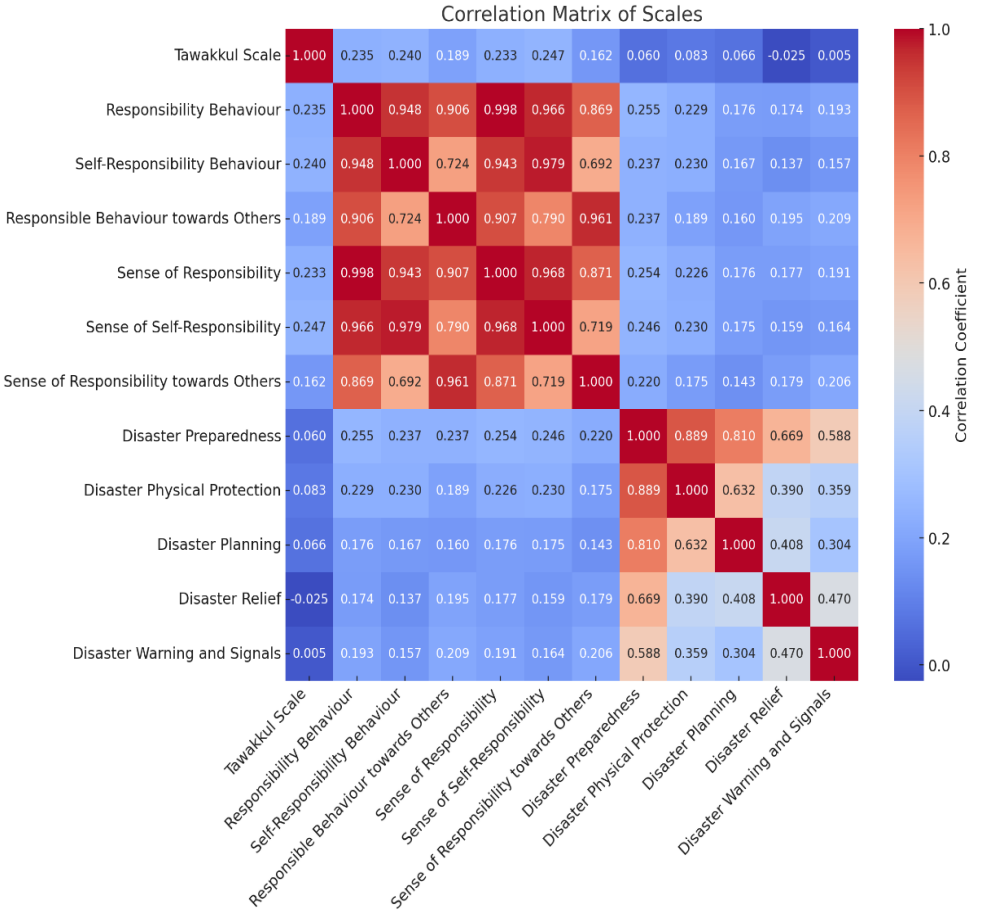


Figure 3. Correlation Matrix of Scales

This heatmap visualizes the correlations between the scales. Each cell represents the correlation coefficient, indicating the relationship between two scales.

6. Discussion

The findings of this study highlight important insights into the relationship between *tawakkul* (reliance on God), sense of responsibility, and disaster preparedness in Türkiye, a country frequently affected by earthquakes. No specific limitations were imposed on participants regarding age, gender, marital status, educational background, or economic status, allowing for a broad understanding of attitudes toward these concepts.

The results indicate that 56.5% of participants had previously experienced a natural disaster, with the 1999 İzmit earthquake (63.9%), the 2023 Kahramanmaraş earthquake (15.9%), and the 1999 Düzce earthquake (8.4%) being the most frequently encountered. Despite these experiences, only 5.2% of participants felt fully responsible for disaster consequences, while 18.8% felt partially responsible, and 70% reported no sense of responsibility at all. Moreover, only 5.2% of participants reported being adequately prepared for a disaster, while 72.9% admitted they were unprepared. These findings suggest that the concepts of responsibility awareness and precaution, which are fundamental in Islamic teachings, may not be fully internalized among the respondents.

Analysis of gender differences showed no significant impact on *tawakkul* or responsibility levels, as both men and women demonstrated similar attitudes in these areas. However, in the disaster preparedness scale, men exhibited higher levels of physical protection and disaster warning and signaling behaviors than women. This difference could be linked to traditional gender roles in disaster preparedness and risk management.

Regarding age groups, the study found that *tawakkul* levels increased significantly with age. However, the level of caution and preparedness did not show a similar increase with advancing age. This suggests that while older individuals may have a stronger sense of reliance on God, this does not necessarily translate into a greater emphasis on precautionary measures. Similarly, married participants exhibited higher levels of responsibility compared to single individuals, indicating that being part of a family unit reinforces the sense of responsibility.

Educational background did not influence *tawakkul* levels, reaffirming that *tawakkul* is fundamentally a spiritual concept rather than one influenced by education. However, in the responsible behavior and emotion scale, high school graduates exhibited significantly higher levels of responsible behavior than other education groups. Economic status was also found not to be a determining factor in responsibility consciousness.

Surprisingly, participants who had previously experienced a natural disaster did not demonstrate increased levels of responsibility, behavior change, or preparedness compared to those who had not. Similarly, experiencing loss of life or property did not enhance awareness of responsibility or serve as a motivating factor for taking precautions. These findings suggest that lessons from past disasters are not being sufficiently internalized, and a tendency exists to forget past disasters and assume that future catastrophes will not affect individuals personally.

The study further revealed that whether individuals felt responsible for the consequences of a natural disaster or not did not affect their level of *tawakkul*. This implies that many individuals may misunderstand the relationship between precaution and *tawakkul*, believing that relying on God absolves them of the responsibility to take preventive measures.

Overall, these findings indicate that while *tawakkul* is strongly embedded in peoples beliefs, precautionary actions and disaster preparedness remain insufficient. This reflects a misinterpretation of *tawakkul*, as Islamic teachings emphasize that reliance on God should come only after all necessary measures have been taken.

6.1. Conclusion

This study provides crucial insights into the intersection of Islamic concepts of *tawakkul*, responsibility awareness, and disaster preparedness in Türkiye. The findings suggest that while the level of *tawakkul* is high among the population, disaster preparedness and precautionary measures are notably low. This discrepancy highlights a misunderstanding of the relationship between precaution and *tawakkul*, as Islamic teachings emphasize that reliance on God must follow a proactive approach to risk mitigation.

Given these results, several policy recommendations emerge:

- Increase awareness campaigns to enhance understanding of responsibility and precaution in disaster-prone areas.
- Develop educational programs that explicitly link *tawakkul* and precaution, reinforcing that preparation is an integral part of faith.
- Promote risk management training at the community level to improve disaster preparedness.
- Implement legal and social policies to strengthen individuals sense of responsibility in disaster management.

For future research, further studies should:

- Examine the relationship between *tawakkul* and disaster preparedness across different socio-economic groups and educational backgrounds.
- Conduct long-term studies on psychological and spiritual responses to disasters, analyzing how experiences shape responsibility awareness.
- Investigate the integration of Islamic values into disaster management policies, which could provide practical guidance for improving societal preparedness.

This research contributes to the growing field of Islamic perspectives on disaster preparedness and highlights the need for a comprehensive approach that bridges religious beliefs with practical risk management strategies.

The Role of Islamic Responsibility in Sustainable Disaster Management: The Sustainable Development Goals (SDGs) emphasize resilience, risk reduction, and social responsibility. In this context, Islamic principles of responsibility, precaution (*tadbīr*), and reliance on Allah (*tawakkul*) can support sustainable disaster management by fostering awareness and preparedness. While *tawakkul* strengthens responsibility, findings indicate low disaster preparedness, highlighting the need for a balanced approach that integrates faith with practical measures. Educational programs and awareness campaigns aligning Islamic values with risk management strategies can help individuals fulfill both spiritual and material responsibilities, promoting a more resilient society.

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

Data Availability Statement

The corresponding author will provide the data associated with this study upon request.

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Bibliography

Abū al-Ḥasan ʿAlī b. Muḥammad, Sayyid Sharīf al-Jurjānī. *Al-Taʿrīfāt*. Beirut: Dār al-Kutub al-ʿIlmiyya, 1983.

Akarsu, Bedia. *Dictionary of Philosophical Terms*. Ankara: Turkish Language Association Publications, 1975.

Avdar, Ramazan, and Reyhan Avdar. "Macroeconomic, Social, and Environmental Impacts of the February 6 Earthquakes on the Turkish Economy." *Journal of Academic Approaches* 5, no. 1 (June 20, 2022): 1–12. https://doi.org/10.35341/afet.1032084.

Bukhārī, Muhammad b. Ismāʿīl al-. *Sahîh Al-Bukhârî*. Beirut: Dār al-Kotob al-Ilmiyah, 2014.

Değirmenci, Yavuz., and İlhan İlter. "The Natural Disasters in the Geography Teaching Curriculum." *Marmara Coğrafya Dergisi*, no. 28 (2013): 276–303.

Erkan, E. Ayşe. *Risk Reduction in Disaster Management and Problems Encountered in Turkey*. Ankara: Devlet Planlama Teşkilatı, 2010.

Gondal, Muhammad Usama., Adnan Adil, and Anam Khan. "*Tawakkul* Mediates Between Personality Traits, Depression, and Anxiety in Pakistani Muslim Adults." *Journal of Religion and Health* 63, no. 1 (February 1, 2024): 582–94. https://doi.org/10.1007/s10943-023-01771-1.

—., Adnan Adil, Sultan Shujja, and Anam Yousaf. "Mediating Role of *Tawakkul* Between Religious Orientation and Stress Among Muslim Adults." *Mental Health, Religion & Culture*, March 16, 2023. https://www.tandfonline.com/doi/abs/10.1080/13674676.2023.2226600.

—., Adnan Adil, Ghulam Yasin, and Sultan Shujja. "Development and Validation of *Tawakkul* Scale for Muslim Adults in Pakistan." *Journal of Religion and Health* 61, no. 4 (August 1, 2022): 3470–91. https://doi.org/10.1007/s10943-021-01449-6.

Gümrükçüoğlu, Süleyman. "Basic Qur'ānic Concepts for Religious Education in Dealing with Natural Disaster." *Turkish Journal of Religious Education Studies*, no. 16 (December 30, 2023): 79–109. https://doi.org/10.53112/tudear.1331610.

Huda, Miftachul., Ajat Sudrajat, Razaleigh Muhamat, Kamarul Shukri Mat Teh, and Burhanuddin Jalal. "Strengthening Divine Values for Self-Regulation in Religiosity: Insights from *Tawakkul* (Trust in God)." *International Journal of Ethics and Systems* 35, no. 3 (June 12, 2019): 323–44. https://doi.org/10.1108/IJOES-02-2018-0025.

Kahraman, Fikret. "Earthquake and Responsibility Awareness in the Context of *Tawakkul* and Destiny." *Diyanet Academic Journal* 56 (2020): 903–36.

Karataş, Kasım., and Mustafa Baloğlu. "The Psychological Reflections of *Tawakkul*." *Çukurova University Faculty of Theology Journal* 19, no. 1 (June 26, 2019): 110–18. https://doi.org/10.30627/cuilah.545806.

Körükcü, Saliha. “Example Understanding of Respect of the Prophets in the Qur'ān.” *Nisar*, no. 1 (2022): 65–99.

Lewisohn, L. “*Tawakkul*.” In *Encyclopaedia of Islam New Edition Online (EI-2 English)*. Brill. Accessed February 10, 2025. https://doi.org/10.1163/1573-3912_islam_SIM_7447.

Özen, Yener. “Development, Reliability, and Validity of the Responsibility Feeling and Behavior Scale.” *Gümüşhane University Journal of Social Sciences Electronic*, no. 7 (2013). https://dergipark.org.tr/tr/pub/gumus/issue/7516/99066.

Sabırsız, Ebru., and Mesut Şöhret. “Macroeconomic, Social, and Environmental Impacts of the February 6 Earthquakes on the Turkish Economy.” *Journal of Academic Approaches*. (January 4, 2024). https://doi.org/10.54688/ayd.1390984.

Sachedina, Abdulaziz. “Introduction.” In *Islamic Ethics: Fundamental Aspects of Human Conduct*, edited by Abdulaziz Sachedina, 0. Oxford University Press, 2022. https://doi.org/10.1093/oso/9780197581810.003.0001.

Şahin, Meryem. “Development of *Tawakkul* Orientation Scale: A Study of Validity and Reliablity.” *Journal of Values Education* 18, no. 40 (December 25, 2020): 345–69. https://doi.org/10.34234/ded.768176.

Salata, Stefano., and Taygun Uzelli. “The Uncertain Certainty of a Nightmare: What If Another Destructive Earthquake Strikes Izmir (Türkiye)?” *Sustainability* 16, no. 2 (January 2024): 635. https://doi.org/10.3390/su16020635.

Şentuna, Barış., and Fahri Çakı. “A Scale Development Study in the Balıkesir Sample: Disaster Preparedness Scale.” *İdiealkent* 11, no. 31 (December 31, 2020): 1959–83. https://doi.org/10.31198/idealkent.728896.

Tirmidhī, Abū Isā Muhammad ibn Isā. *Sunan Al-Tirmidhī*. Beirut: Mü’assasat al-Risālah, 2013.

Walika, Miran., Maria Moitinho De Almeida, Rafael Castro Delgado, and Pedro Arcos González. “Outbreaks Following Natural Disasters: A Review of the Literature.” *Disaster Medicine and Public Health Preparedness* 17 (2023): e444. https://doi.org/10.1017/dmp.2023.96.

Zafer, Hakan. “*Tawakkul* Scale (TÖ): Validity and Reliability Study – Summary.” 2016.