e-ISSN: 2757 - 5489

Cilt 5 Sayı 3 Ay Ekim Yıl 2024
Volume Issue Month October Years

TOPLUM, EKONOMİ VE YÖNETİM DERGİSİ
JOURNAL OF SOCIETY, ECONOMICS AND MANAGEMENT

INVESTIGATION OF DISASTER LITERACY LEVELS OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION STUDENTS

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Abstract

Disaster literacy can be expressed as the level of receiving, reading, understanding and correctly using information that provides the basis for people to make correct decisions in disaster management processes. In this study, it was aimed to determine the disaster literacy levels of Political Science and Public Administration students. The population and sample of the study consisted of students enrolled in a university's Political Science and Public Administration Program. The data of the study was collected by survey technique between 05.12.2022-07.02.2023. The research was completed with the participation of 107 (72% of the universe) out of 149 participants registered in the relevant program. In the study, a significant a difference was found between the mitigation scores of the participants and their class levels ($p<0.05$). It was determined that the mitigation scores of first graders were significantly lower than those of fourth graders. No significant difference was found between age and mitigation, preparedness, response, recovery and disaster literacy scores ($p>0.05$). There is no significant difference between gender and mitigation, preparedness, response and recovery scores ($p>0.05$). According to the findings, it was evaluated that increasing people's disaster literacy levels will significantly contribute to the development of social disaster resilience.

Keywords

Disaster
Disaster Management
Political Science and Public Administration
Disaster Literacy
Management Sciences

Article Info
Research Article

Received : 22.07.2023
Accepted : 09.11.2023
Online Published : 15.10.2024
DOI : 10.58702/teyd.1331205

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e-ISSN: 2757 - 5489
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SİYASET BİLİMİ VE KAMU YÖNETİMİ ÖĞRENCİLERİNİN AFET OKURYAZARLIK DÜZEYLERİNİN İNCELENMESİ

Öz

Afet okuryazarlığı kişilerin afet yönetim süreçlerinde doğru kararlar alabilmesine zemin hazırlayan bilgiyi alma, okuma, anlama ve doğru bir şekilde kullanma düzeyi olarak ifade edilebilir. Yapılan bu çalışmada Siyaset Bilimi ve Kamu Yönetimi öğrencilerinin afet okuryazarlık düzeylerinin belirlenmesi amaçlanmıştır. Çalışmanın evren ve örneklemini bir üniversitenin Siyaset Bilimi ve Kamu Yönetimi Programına kayıtlı öğrenciler oluşturmuştur. Çalışmanın verileri 05.12.2022-07.02.2023 tarihleri arasında anket tekniği ile toplanmıştır. Araştırma ilgili programa kayıtlı 149 katılımcıdan, 107 (Evrenin %72'si) kişinin katılımı ile tamamlanmıştır. Çalışmada katılımcıların zarar azaltma puanları ile sınıf düzeyleri arasında anlamlı bir fark bulunmuştur ($p<0.05$). Birinci sınıfta olanların, dördüncü sınıfta olanlara göre zarar azaltma puanlarının anlamlı derecede düşük olduğu tespit edilmiştir. Yaş ile zarar azaltma, hazırlık, müdahale, iyileştirme ve afet okuryazarlık puanları arasında anlamlı bir fark tespit edilememiştir ($p>0.05$). Cinsiyet ile zarar azaltma, hazırlık, müdahale ve iyileştirme puanları arasında anlamlı bir fark bulunmamaktadır ($p>0.05$). Elde edilen bulgulara göre kişilerin afet okuryazarlık seviyelerinin artırılmasının toplumsal afet dirençliliğinin geliştirilmesine önemli derecede katkı sunacağı değerlendirilmiştir.

Anahtar Kelimeler

Afet
Afet Yönetimi
Afet Okuryazarlığı
Siyaset Bilimi ve Kamu Yönetimi
Yönetim Bilimleri

Makale Hakkında

Araştırma Makalesi

Gönderim Tarihi	: 22.07.2023
Kabul Tarihi	: 09.11.2023
E-Yayın Tarihi	: 15.10.2024
DOI	: 10.58702/teyd.1331205

Citation Information: Usta, G., Celik, İ.H. ve Yilmaz, G. (2024). Investigation of disaster literacy levels of political science and public administration students. *Journal of Society, Economics and Management*, 5 (3), 437-453.

Kaynakça Gösterimi: Usta, G., Çelik, İ.H. ve Yılmaz, G. (2024). Siyaset bilimi ve kamu yönetimi öğrencilerinin afet okuryazarlık düzeylerinin incelenmesi. *Toplum, Ekonomi ve Yönetim Dergisi*, 5 (3), 437-453.

INTRODUCTION

Disasters can be characterised as the results of natural and human / technology-induced events that cause social, physical and economic losses where they occur, interrupt or stop normal life, and where local facilities are insufficient (AFAD, 2014, p. 23; Keeney, 2004, p. 2). In recent years, it is known that there has been an increase in the frequency of disasters occurring with the effect of various factors (Sauerborn and Ebi, 2012, p. 6; Cappelli et al., 2021, p. 11). Therefore, it is necessary to increase social resilience in order to minimise the negative effects of the disasters we frequently encounter (Saja et al., 2021, p. 802; P. S. S Lin and W. C. Lin, 2020, p. 14; Kafle, 2012, p. 315). The main component of increasing social resilience is education (Johnson et al., 2014, p. 121; Shiwaku et al., 2007, p. 584-585).

Education contributes to increasing information and awareness about disasters and therefore improving social resilience (Shaw et al., 2004, p. 48). It is important to follow technological developments, organizing disaster awareness trainings and develop strategies for preparedness and response processes in increasing social resilience against disasters and reducing disaster risk (Carr, 1932, p. 210-214; Munawar et al., 2022, p. 11-12; Sarker et al., 2020, p. 7). Because pre-disaster preparedness work and disaster awareness training can be an effective way to minimize the negative effects of possible disasters (Chacko et al., 2019, p. 17-22; Samah et al., 2019, p. 55-58; Righi et al., 2021, p. 14; Tsai et al., 2020, p. 8).

One of the factors that are effective in minimizing disaster damages and increasing social resilience is disaster literacy (Jumiyati et al., 2024, p. 8; Vu et al., 2023, p. 12). Disaster literacy is necessary for the society to have information about disasters, to be prepared before disasters, to exhibit correct behaviours during disasters and to take an active role in the reconstruction process after disasters (Kesumaningtyas et al., 2022, p. 6; Agustinova and Syamsi, 2021, p. 5; Zhang et al., 2024, p. 5). Disaster literacy plays an important role in increasing individuals' disaster preparedness capacity in terms of knowledge, attitude and behaviour (Logayah et al., 2023, p. 4969). Individuals who are trained in disaster management and have high levels of interaction can significantly contribute to a successful disaster management process and mitigation efforts in the event of a possible disaster (Maryani, 2021, p. 7). Although the subject of disaster literacy has become popular, its integration into education and training processes is still at a low level (Mufit et al., 2020, p. 9). For this reason, it can be said that disaster literacy and disaster awareness trainings are of great importance in reducing the negative effects of disasters and increasing social resilience (Jose and Dufrene, 2014, p. 550; Farzanegan et al., 2024, p. 16).

It can be stated that studies on disaster literacy in the literature have increased in recent years (Brown et al., 2014, p. 267-275; Çalışkan and Üner, 2021, p. 518-527; Zhang et al., 2021, p. 216-222; Hutagalung et al., 2023, p. 18-26; Genc et al., 2022, p. 1-9). Although people continue to obtain information about disasters through traditional mass media and social media networks, it has been evaluated that preparedness for disasters is inadequate and the reasons for this situation are not fully understood (Veil et al., 2009, p. 449-451). If it is accepted that increasing social disaster resilience and reducing vulnerability are among the basic principles of disaster literacy (Çalışkan and Üner, 2021, p. 520-526), investigating the factors affecting the level of disaster literacy and the roles of managers regarding this issue is considered an important question to be answered. Because in disasters, relevant stakeholders and managers

have different roles to support victims, individuals and communities (Oostlander et al., 2020, p. 7). In many studies on disaster management and extraordinary situations (Paton and Flin, 1999, p. 266; Jackson and Nowell, 2021, p. 2399; Salamati Nia and Kulatunga, 2017, p. 243; Kapucu, 2008, p. 257-258) it is mentioned that managers have important responsibilities in disaster management processes, such as increasing social resilience, responding quickly to events, reducing vulnerability, and accelerating the recovery process.

In this study, it was purposed to determine the disaster literacy levels of Political Science and Public Administration students who may be in managerial positions in the future and to reveal the different effects of the factors that constitute disaster literacy from a scientific point of view.

High disaster awareness of Political Science and Public Administration students, who have a high potential to be managers in the future in disaster management processes, can be an important factor in reducing the effects of possible disasters to a minimum and increasing the preparedness of the society for disasters. However, the fact that the factors affecting disaster literacy are not fully understood scientifically makes this issue worthy of researching.

1. Method

1.1. Type of Research

In this research, the study was carried out in a descriptive manner, as it was aimed to evaluate the disaster literacy levels of political science and public administration students, who have high potential to become managers in the future, in terms of varying factors.

1.2. Population and Sample

The population of the study consists of students enrolled in the Political Science and Public Administration Program of a university in Türkiye. It was observed that there were 149 students enrolled in the relevant programme during the period when the data were collected. No sample selection was made in the study. It was aimed to reach the entire population. In this direction, the study was completed with 107 participants over the age of 18 who declared that they wanted to participate in the study voluntarily.

1.3. Data Collection Tool

The Disaster Literacy (DLS) Scale used in the study was developed by Çalışkan and Üner (2022, p. 1-7). The scale was developed to determine the level of disaster literacy of the participants. The scale was prepared in 5-point Likert type. There are 61 items in total in the scale. The total score that can be obtained from the scale varies between 61-305. Each item in the scale was determined between 1 point (very difficult) and 5 points (very easy). The higher scores of the participants on the scale items indicate that they have a better disaster literacy level. It was observed that there were no reverse items in the scale. The scale sub-dimensions and items are as follows (Çalışkan and Üner, 2022);

Mitigation sub-dimension (Items: 1,2,3,4,4,5,5,6,7,7,8,9,10,10,11,12,12,13,14,15,16,17)

Preparedness sub-dimension (Items: 18,19,20,21,22,22,23,24,25,26,27,28,29,30,31,32,33)

Response sub-dimension (Items: 34,35,36,37,37,38,38,39,40,41,42,43,44,45,46)

Recovery sub-dimension (Items: 47,48,49,50,51,52,53,54,55,56,57,58,59,60,61)

1.4. Data Collection

The data of the study was collected between 05.12.2022-07.02.2023. The data were collected from students enrolled in the Political Science and Public Administration programme of the Faculty of Economics and Business Administration of a university in Türkiye. The participants were first informed about the study. After the information was given, they were asked whether they would voluntarily participate in the study. Face-to-face questionnaire forms were distributed to the students who volunteered to participate in the study, and they were expected to answer the questions. The Free Google Online Form was used to get in touch with those who were unable to attend in person. The participants received Google Forms created by the researchers through social media (WhatsApp, Instagram, etc.). The research form was prepared in two parts. In the first part, socio-demographic data such as gender, age, grade level, disaster training, disaster experience and frequency of following social media were included. In the other part, there were 61 questions belonging to the disaster literacy scale.

The application stages of the Google form prepared online are arranged as follows; the prepared form is divided into two parts. In the first section, detailed information about voluntary participation and the study was presented. In addition, in this section, there was a confirmation icon where the participants declared whether they would continue the study or not. Those who did not want to participate in the study ended the form. Those who wanted to participate in the research voluntarily had access to the questions in the second section by ticking the confirmation icon. To prevent participants from filling out the data form repeatedly, relevant arrangements were made on the Google Forms site. This practice increases the reliability of the study by ensuring that the data are collected accurately and consistently. Out of 149 participants enrolled in the Political Science and Public Administration program, 107 (72% of the population) responded to the survey voluntarily. The average time it took for participants to answer the survey was 10-15 minutes. Convenience sampling was preferred in the study (Malhotra, 2004, p. 321).

1.5. Statistical Analysis

The licensed SPSS 25 package program was used to analyze the data collected for this investigation. The normality of the variables was assessed by looking at their kurtosis and skewness coefficients. For a normal distribution, skewness and kurtosis values within the range of -1.50 and +1.50 were considered acceptable (Tabachnik and Fidell, 2013, p. 320-328). Cronbach's Alpha value was taken into consideration for reliability. The reference values for the reliability coefficient are as follows (Kalaycı, 2010, p. 355-359);

Unreliable: $0.00 \leq \alpha < 0.40$

Low confidence: $0.40 \leq \alpha < 0.60$

Highly reliable: $0.60 \leq \alpha < 0.80$

Highly reliable: $0.80 \leq \alpha < 1.00$

Considering the mentioned values, it was determined that the mitigation dimension (0.954), preparedness dimension (0.960), response dimension (0.965), and recovery dimension (0.970) were highly reliable in our study. Similarly, the internal consistency coefficient of the disaster literacy scale was found to be highly reliable with 0.988.

In the study, ANOVA and t tests were used since it was accepted that the data showed normal distribution. The t test was used to compare the averages of two groups (Kim, 2015, p. 540). When it was determined that there was a difference as a result of ANOVA test, Tukey test was applied considering the homogeneous distribution of variances and differences were determined. Pearson correlation test was used in the relationship evaluation in terms of continuous variables. The values obtained from the data of our study are given in Table 1.

Table 1. Reliability and Normality Table for Disaster Literacy Scale

	Mean	Minimum	Maximum	SD	Skewness	Kurtosis	Cronbach's Alpha
Mitigation	62.45	17	85	13.58	-1.169	-1.481	0.954
Preparedness	58.56	16	80	14.05	-0.986	0.881	0.960
Response	48.37	13	65	11.63	-1.021	0.665	0.965
Recovery	54.54	15	75	13.62	-0.876	0.395	0.970
Disaster Literacy Scale	223.93	61	305	50.26	-1.121	1.194	0.988

2. Results

It is seen that 25.20% of the participants have inadequate, 26.20% have limited, 35.50% have adequate and 13.10% have excellent disaster literacy level (Table 2).

Table 2. Limits of the Disaster Literacy Scale

		n	%
Disaster Literacy Categorical	Inadequate	27	25.20
	Limited	28	26.20
	Adequate	38	35.50
	Perfect	14	13.10

Of the individuals participating in the study, 52.34% were female, 47.66% were male, 32.71% were in 1st grade, 3.74% were in 2nd grade, 24.30% were in 3rd grade and 39.25% were in 4th grade. Grade, 49.53% experienced a disaster, 55.14% received disaster-related training, 43.93% followed disaster-related social media accounts, and when the age values were analyzed, it was seen that there was a distribution between 18-29 with an average of 22.17±2.23 (Table 3).

Table 3. Information on Socio-Demographic Characteristics of Participants

		n	%
Gender	Female	56	52.34
	Male	51	47.66
Grade Level	1st Grade	35	32.71
	2nd Grade	4	3.74
	3rd Grade	26	24.30
	4th Grade	42	39.25

Table 3. (Continued) Information on Socio-Demographic Characteristics of Participants

		n	%
Disaster Survival Status	Yes	53	49.53
	No	54	50.47
Receiving Disaster-Related Training	Yes	59	55.14
	No	48	44.86
Following Social Media Related to Disaster	Yes	47	43.93
	No	60	56.07
		Mean±SD	Min.-Max
Age		22.17±2.23	18-29

It was found that there was no significant difference between the scores of mitigation, preparedness, response, recovery and disaster literacy and gender variable (p>0.05) (Table 4).

Table 4. Comparison of Disaster Literacy Scale with Gender

		Gender		t-test	
		Mean	SD	t	p
Mitigation	Female	62.50	12.75	0.041	0.967
	Male	62.39	14.56		
Preparedness	Female	58.93	12.69	0.283	0.778
	Male	58.16	15.53		
Response	Female	48.55	10.80	0.167	0.868
	Male	48.18	12.58		
Recovery	Female	54.32	13.07	-0.175	0.862
	Male	54.78	14.33		
Disaster Literacy Level	Female	224.30	45.80	0.081	0.935
	Male	223.51	55.20		

It was found that there was a significant difference between the mitigation scores of the participants and their grade levels (p<0.05). It was found that the mitigation scores of those in the first grade were significantly lower than those in the fourth grade. However, it was found that preparedness, response and recovery sub-dimensions and disaster literacy scores did not differ according to grade level (p>0.05) (Table 5).

Table 5. Comparison of Disaster Literacy Scale with Grade Levels

		Grade Level		ANOVA		
		Mean	SD	F	p	Difference**
Mitigation	1st Grade (1)	57.09	15.90	3.062	**0.031***	1<4
	2nd Grade (2)	66.25	8.02			
	3rd Grade (3)	63.46	10.97			
	4th Grade (4)	65.93	12.24			
Preparedness	1st Grade (1)	54.71	17.05	1.368	0.257	-
	2nd Grade (2)	59.00	6.38			
	3rd Grade (3)	59.77	10.48			
	4th Grade (4)	60.98	13.41			

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Volume Issue Month October Years

Table 5. (Continued) Comparison of Disaster Literacy Scale with Grade Levels

		Mean	SD	F	p	Difference**
Response	1st Grade (1)	46.51	13.70	0.567	0.638	-
	2nd Grade (2)	47.00	6.63			
	3rd Grade (3)	50.27	8.54			
	4th Grade (4)	48.88	11.85			
Recovery	1st Grade (1)	52.94	15.61	0.475	0.7	-
	2nd Grade (2)	50.50	11.24			
	3rd Grade (3)	56.54	10.19			
	4th Grade (4)	55.02	14.09			
Disaster Literacy Level	1st Grade (1)	211.26	60.68	1.137	0.338	-
	2nd Grade (2)	222.75	29.26			
	3rd Grade (3)	230.04	38.73			
	4th Grade (4)	230.81	47.86			

**p<0.05; ** Tukey Test*

There is a significant difference between the participants' disaster experience and their mitigation, preparedness, response and disaster literacy scores ($p<0.05$). People with disaster experience have higher levels of mitigation, preparedness, response and disaster literacy (Table 6).

Table 6. Comparison of Disaster Literacy Scale with Disaster Experiences

		Disaster Survival Situation		t-test	
		Mean	SD	t	p
Mitigation	Yes	66.72	10.43	3.388	**0.001***
	No	58.26	15.03		
Preparedness	Yes	62.08	12.26	2.639	**0.010***
	No	55.11	14.92		
Response	Yes	50.94	10.47	2.311	**0.023***
	No	45.85	12.24		
Recovery	Yes	56.75	12.69	1.679	0.096
	No	52.37	14.26		
Disaster Literacy Level	Yes	236.49	41.95	2.633	**0.010***
	No	211.59	54.88		

**p<0.05*

In the study, there is no significant difference between the educational status of the participants and their mitigation, preparedness, response, recovery and disaster literacy scores ($p>0.05$) (Table 7).

Table 7. Comparison of Disaster Literacy Scale with the Status of Receiving Disaster Related Training

		Status of Receiving Disaster Related Training		t-test	
		Mean	SD	t	p
Mitigation	Yes	63.58	14.18	0.952	0.343
	No	61.06	12.81		
Preparedness	Yes	59.58	14.25	0.828	0.41
	No	57.31	13.84		

Table 7. (Continued) Comparison of Disaster Literacy Scale with the Status of Receiving Disaster Related Training

		Mean	SD	t	p
Response	Yes	48.98	11.63	0.599	0.55
	No	47.63	11.70		
Recovery	Yes	55.34	13.63	0.669	0.505
	No	53.56	13.68		
Disaster Literacy Level	Yes	227.47	51.10	0.809	0.421
	No	219.56	49.39		

It was found that there was no significant difference between the participants' status of following disaster-related social media accounts and their mitigation, preparedness, response, recovery and disaster literacy scores ($p>0.05$) (Table 8).

Table 8. Comparison of Disaster Literacy Scale with Following Disaster Related Social Media Accounts

		Following Social Media Related to Disaster		t-test	
		Mean	SD	t	p
Mitigation	Yes	62.62	14.14	0.113	0.910
	No	62.32	13.23		
Preparedness	Yes	58.34	14.64	-0.143	0.887
	No	58.73	13.69		
Response	Yes	47.55	12.24	-0.644	0.521
	No	49.02	11.19		
Recovery	Yes	53.68	14.23	-0.577	0.565
	No	55.22	13.20		
Disaster Literacy Level	Yes	222.19	52.20	-0.314	0.754
	No	225.28	49.09		

There is no significant relationship between age values and levels of mitigation, preparedness, response, recovery and disaster literacy ($p>0.05$) (Table 9).

Table 9. The Relationship of Disaster Literacy Scale with Age Values

		Age
Mitigation	r	0.093
	p	0.342
Preparedness	r	0.021
	p	0.833
Response	r	-0.053
	p	0.591
Recovery	r	-0.083
	p	0.398
Disaster Literacy Level	r	-0.004
	p	0.970

3. Discussion

The information and abilities required to improve people's capacity to survive and swiftly return to normal life in the case of a potential disaster were conceptualized as disaster literacy in this study, and experiences connected to this literacy were studied. The level of community disaster literacy can affect individuals' pre-disaster preparedness and post-disaster recovery processes. The results of the participants' reply to the disaster literacy scale are discussed in this section of the study.

In this study, there is no significant difference between gender variable and mitigation, preparedness, recovery and disaster literacy scores. According to research done on aspiring science teachers, there was no gender difference in the participants' scores on the natural disaster behaviour scale (Uygun-Seven, 2022, p. 57). In a study conducted on elderly individuals, no significant difference was found between gender and post-disaster awareness score (Karakaş, 2022, p. 36-40). In another study, it was found that there was no significant difference between the gender of the candidates and the earthquake zone knowledge sub-dimension (Türksever, 2021, p. 2692-2694). According to a survey on high school students, there are no noticeable differences between high school students' opinions on earthquake education based on gender (Aksoy and Sözen, 2014, p. 289-291). It is seen that there are similarities between the data of our study on disaster literacy levels and the literature data in terms of gender. However, some studies reveal that disaster literacy may differ in terms of gender. Therefore, it is thought that this situation should be evaluated not only in terms of gender, but also together with other factors that may affect it.

In the study, it was found that there was no significant difference between the participants' status of following disaster-related social media accounts and their mitigation, preparedness, response, recovery and disaster literacy scores. However, while examining disaster education and disaster literacy issues in the literature, it has been observed that social media tools have an important role in information acquisition and transfer of information (Toyoda et al., 2021, p. 6; Widyastuti, 2021, p. 109; Brown et al., 2014, p. 267-275; Romo-Murphy and Vos, 2014, p. 81). In this context, it is possible to assert that the media plays a significant role in disaster education, or the learning of terms and information related to disasters.

It was determined that 25.20% of the participants were inadequate, 26.20% were limited, 35.50% were sufficient, and 13.10% had excellent disaster literacy levels. According to a study done in China, instructors and students who took part in the study had inadequate disaster prevention literacy. Despite having positive attitudes about disasters, these individuals lacked disaster prevention skills (Zhu and Zhang, 2017, p. 1025-1027). In a study conducted in Nepal; It was determined that the majority of the participants were insecure against any disaster situation. It was determined that more than 30% of the respondents were familiar with the facts about disasters. About 80% of the participants stated that training on disaster risk is important for them (Tuladhar et al., 2015, p. 8-10). In a study conducted in Taiwan; It has been determined that the disaster prevention skills of the participants are high, but their disaster prevention knowledge is low. In the same study, the effect of variables such as age, disaster experience, education level on disaster literacy was mentioned (Chung and Yen, 2016, p. 203-204). In our study, it was evaluated that the disaster literacy levels of the participants were generally limited or insufficient. Therefore, it is important to increase the

literacy level of individuals. In this regard, it has been noted that a large number of research in the literature concentrate on the growth of disaster literacy, disaster literacy, and the variables influencing an individual's disaster literacy (Uygun-Seven, 2022, p. 57-59; Zhu and Zhang, 2017, p. 1025-1029; Shiwaku et al., 2016, p. 336-337; Shaw et al., 2004, p. 39-40). In our study, it was found that the mitigation score levels of first year students were significantly lower than those of fourth year students. For this reason, it is thought that the initiatives for disaster awareness training considering various variables in the literature are important (Gouda and Yang, 2023, p. 1063; Duong, 2009, p. 91; Asharose and Sasi, 2015, p. 8981). Considering both the literature data and the data of our study, it is thought that providing disaster awareness trainings by taking into account the variables affecting individual learning is important in creating a society resistant to disasters.

In the study, there was no significant relationship between age variable and levels of mitigation, preparedness, response, recovery and disaster literacy. According to research on middle-aged women's disaster health literacy, disaster literacy can help them build resilience and reduce disaster risk (Seifi et al., 2018, p.153). To increase the disaster literacy of vulnerable people, the study on disaster literacy mentions the need for piloting and assessment methodologies in the selection of media type, message, and contact point (Brown et al., 2014, p. 270-273). In the studies in the literature, the effect of age factor on disaster preparedness, disaster education and disaster literacy has been mentioned (Mishra and Suar, 2012, p. 1077-1078; Daramola et al., 2017, p. 22; Jung et al., 2020, p. 141-142; Genc et al., 2022, p. 7). It has been evaluated that the data of our study differ from the literature data in terms of age and disaster literacy. It is thought that the reason for this situation is that the participants of our study were university students of the same age group. It was observed that the studies in the literature included in our research were carried out on age groups, which are generally considered as vulnerable groups. Therefore, it is thought that this situation is effective in the difference between the data of our study and the literature data.

In this study, a significant difference was found between the participants' disaster experience and mitigation, preparedness and response scores. Similarly, there is a significant difference between disaster experience and disaster literacy ($p<0.05$). Disaster survivors had much greater levels of disaster literacy. According to research on teacher candidates, the geographic disparities and general responses to natural disasters depend significantly on whether the pre-service teachers had had personal experience with them (Sözcü, 2019, p. 151-153). In a study on teachers, it has been stated that the natural disaster literacy behaviour level average score of the participants who have not experienced any natural disasters is higher than the participants who have experienced a disaster before (Demirdelen, 2018, p. 60-62). In a study conducted in Türkiye; it was stated that these experiences of the teachers who experienced the disaster or visited the region after a disaster made a great contribution to the lectures of the students who want to better understand better and be prepared for the effects of disasters (Taş, 2003, p. 155-158). According to research on the elderly, those who have experienced disasters in the past have less access to knowledge than those who have not (Karakaş, 2022, p. 36-42). According to research made on future science teachers, there is no difference between pre-service teachers who have encountered natural disaster and those who have not in terms of their awareness of these events (Uygun-Seven, 2022, p. 58-60). Literary

evidence can be used to support the differences between disaster survivors and non-survivors. It may be claimed that disaster awareness has grown when compared to those who visited disaster regions but did not experience disasters. This explains why disaster awareness training is essential for everyone, both before and after disasters.

CONCLUSIONS AND RECOMMENDATIONS

It is thought that people will be more aware of disaster and behave more efficiently in disaster situations if they are educated about disaster management. The assessments indicate that it is crucial to plan awareness-raising events appropriate for each grade level and to include more disaster management and education into the curricula at educational institutions. It is advised to do further study to completely comprehend how gender impacts disaster literacy and to take other influencing factors into account. Involving people of all ages will be vital in the future. As a result, data on disaster literacy levels among different age groups is more thorough and extensive. It is crucial to make disaster education accessible to everyone, both those who have experienced disaster and those who have not, in order to invest more in disaster education and raise disaster awareness. Additionally, it is anticipated that the establishment of training programs for disaster education and media coverage of disaster education would contribute to raising public awareness.

Ethical Principles and Publication Policy

We declare that we have obtained the data, information, and documents we present in this study within the framework of academic and ethical rules, that I have presented all information, documents, evaluations, and results in accordance with the rules of scientific ethics and ethics, that I have cited and referenced all the works I have used in the study, and that the study is original. Otherwise, we declare that we accept all loss of rights that may arise against me.

Limitations of the Research

This study has some limitations. These include the fact that the study was conducted in a single centre, that it covered only one academic year and that the data collection tool was limited only to the disaster literacy scale. These limitations may limit the generalisability of the research results. However, it may prepare the ground for further studies on this subject in terms of different variables.

Ethics Committee Approval

The ethical suitability of the study was accepted by Artvin Çoruh University Scientific Research and Publication Ethics Board with the decision dated 02.12.2021 and numbered E-18457941-050.99-31192. Participants were informed about the study and their consent was obtained. In addition, permission was obtained via e-mail from the responsible author of the scale used in the research.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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