Original Research

Acil Yardım ve Afet Yönetimi Bölümü Öğrencilerinin Afet Bilinci Algı Düzeyinin Belirlenmesi

[Determination of Disaster Awareness Perception Level of Emergency Aid and Disaster Management Students]

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Özet

Giriş: Afet bilinci algısı, afet yönetim sürecinde yaralanmaların ve ölümlerin azaltılması yönünden önem taşımaktadır.

Amaç: Çalışmanın amacı, Acil Yardım ve Afet Yönetimi Bölümü öğrencilerinin afet bilinci algı düzeyini belirlemektir.

Yöntem: Verilerin toplanması amacıyla araştırmacılar tarafından geliştirilen "veri toplama formu" ile "Afet Bilinci Algı Ölçeği" kullanıldı. Formlar Google Formlar uygulaması üzerinden çalışmanın yürütüleceği birimlerdeki öğrencilere ulaştırılarak uygulandı. Çalışmanın analizinde frekans, yüzdelik, en küçük ve en büyük değerler, ortalama, standart sapma, t testi, Mann Whitney U testi ve ANOVA testi kullanıldı.

Bulgular: Öğrencilerin afet bilinci algı düzeylerinin yüksek olduğu tespit edildi. Sınıf, afet ilişkili aktivite/organizasyonlara katılım, birey/aile afet planı bulundurma ve birey/aile acil çantası bulundurma afet bilinci algı düzeyini etkilemektedir.

Sonuç: Bazı değiştirilebilir durumlar, öğrencilerin afet bilinci algı düzeyini etkileyebilmektedir. Öğrencilerin afetle ilgili etkinliklere katılımını sağlamak ve derslerde afet yönetimine dair daha ayrıntılı konulara değinmek afet bilinci algısını geliştirme üzerinde fayda sağlayacaktır.

Abstract

Introduction: The perception of disaster awareness is crucial in reducing injuries and fatalities during the disaster management process.

Purpose: The study aims to determine the disaster awareness perception level of the students of the Emergency Aid and Disaster Management Department.

Method: The "data collection form" developed by the researchers and the "Disaster Awareness Perception Scale" was used to collect the data. The students received the forms for the study via Google Forms.. To analyze the study, frequency, percentage, minimum and maximum values, mean, standard deviation, t-test, Mann Whitney U test, ANOVA and Kruskall Wallis Test were used.

Findings: It was determined that the disaster awareness perception levels of the students were high. During the academic year, participation in disaster-related activities/organizations, having an individual/family disaster plan and having an individual/family emergency bag affect the level of disaster awareness.

Conclusions: The level of perception of disaster awareness among students can be influenced by various situational factors that may change over time. Ensuring students' participation in disaster-related activities and addressing detailed issues on disaster management in lessons can improve disaster awareness.

Disasters are defined as events that occur naturally or due to human intervention, which affect persons in a physical, social, psychological and economic manner, causing injuries and deaths.[1-4] Natural hazards are quite common in Turkey. In the Eastern Black Sea region of Turkey, where this research was conducted, the most common disasters are landslides, floods, and overflows.[5]

The disaster preparedness of societies can be measured by the degree to which they are affected by disasters and how quickly the post-disaster process can be restored.[6] It is impossible to prevent disasters completely. However, it is possible to minimize the damage caused by them. The way to reduce the impact of disasters on the public is by organizing disaster training and raising disaster awareness through the participation of the public sector, private sector, non-governmental organizations and society in disaster plans and training. Therefore, it is necessary to spread disaster preparedness to the public, starting from the most minor that make up the society. University students, who are among the vulnerable groups, are also one of the elements that constitute a society.[7-9]

Disaster awareness provides benefits to people in terms of being prepared before disasters, exhibiting the right behaviors to protect themselves and those around them during disasters, and minimizing the damages of disasters by participating in recovery activities after disasters.[7] At this point, it is necessary to discuss about the factors affecting disaster awareness. Because of the different factors that affect disaster awareness (like education, age, disaster history, etc.), this issue has been the subject of many academic studies.[4,10,11] Looking at the relevant literature, the most influential factor that may positively affect disaster awareness is education.[3, 10, 12] Disaster history, age, and education level are the other factors. At this point, it was emphasized that comprehensive disaster education to be given in schools is effective in reducing disaster damage and creating disaster awareness.[13] In other words, providing qualified disaster education from the individual to the society and from the society to the institutions is the essential requirement of creating disaster awareness.[14]

The awareness level of university students to disasters has also been the subject of many scientific studies.[2, 3, 10, 11, 15, 16] When the literature was reviewed, it was seen that research was conducted on disaster awareness and perception of nursing, medical school, emergency management system and engineering department students, which will be critical components in disaster management when they start the profession.[12, 17, 18, 19] In addition, similar studies were conducted with other university department students.[4, 20] However, studies to determine the disaster awareness of the Emergency Aid and Disaster Management Department (EADM) students, who are expected to take part in critical points of the disaster management system of Turkey in the future, are rare in the literature. With this study, this gap in the literature was tried to be filled.

The theory of planned behavior is essential in the disaster management process. According to the theory of planned behavior, the intention is required for a behavior to be exhibited. Attitude towards behavior, subjective norms and perceived behavioral control are essential for forming an intention. The level of awareness of individuals about disasters, on the other hand, has an impact on attitudes towards behavior. For this reason, it is necessary to determine the disaster awareness of individuals.[21]

MATERIAL AND METHODS

Type of Research

This research was a descriptive type.

Purpose

The study aims to determine the disaster awareness perception level of Emergency Aid and Disaster Management students.

The hypotheses of the research are as follows: H0: The level of disaster awareness perception of students who had experienced a disaster is not higher than that of the students who had not experienced a disaster.

H1: The level of disaster awareness perception of students who have experienced a disaster is higher than that of the students who have not experienced a disaster.

Population and sampling

The population of this study consisted of first, second, third- and fourth-year students at the Faculty of Health Sciences, Department of Emergency Aid and Disaster Management of three state universities in the Eastern Black Sea Region of Turkey (n=297). Studying at the relevant department and volunteering to participate in the study were the inclusion criteria. In this study, no sample selection was made, and the aim was to reach the whole population. The study was completed with the participation of 155 students. The participation rate was 52.1%.

Data collection tool

The study data were collected using the "data collection form" developed by the researchers based on literature screening and the "Disaster Awareness Perception Scale" developed by Dikmenli, Yakar and Konca.[23] It was made possible to fill in the data collection form and scale online with the Google Forms application. Lecturers working at the relevant universities shared them with the department students.

Data collection form

After conducting a literature review, a data collection form comprised 12 questions. The participants are asked about their gender, age, educational level, their interest in studying at the department, and if they have ever experienced a disaster or lost a loved one due to a disaster.[2, 3, 11, 22]

Disaster awareness perception scale

The scale was developed by Dikmenli, Yakar and Konca and consists of 36 items and four sub-factors. The five-point Likert scale is scored as follows: a "1" for "strongly disagree", "2" for "disagree", "3" for "undecided", "4" for "agree", and "5" for "strongly agree". The scale contains 27 positive and nine negative items. The negative items are numbers 12, 22, 23, 24, 25, 26, 27, 28 and 29 and are scored in reverse. A minimum of 36 points and a maximum of 180 points can be obtained from the scale. A total of 36-84 points indicate a low perception of disaster awareness, 85-132 points a medium and 133-180

points a high perception.[23] The scale contains four subcategories consisting of "disaster education awareness" (13 items), "pre-disaster awareness" (8 items), "false disaster awareness" (8 items) and "post-disaster awareness" (7 items). A factor analysis was performed to evaluate the validity of the scale, and item factor total correlations and item differentiation values were calculated. In the reliability study, the internal consistency and stability levels were calculated, and the Cronbach alpha reliability coefficient was found to be 0.722.[23, 24] In our study, the Cronbach alpha reliability coefficient was found to be 0.843.

Data analysis

The data were analyzed with the Statistical Package for Social Sciences (SPSS) 18.0 program. Percentages, frequency, mean, standard deviation, minimum and maximum values were used in the analysis of the data. Normal distribution was tested by the One-Sample Kolmogorov-Smirnov test. In addition, in the comparison of the averages of two independent variables that corresponded to a normal distribution, the t-test was used in independent groups, ANOVA was used in groups with three or more independent variables, the Mann-Whitney U test was used in groups with two independent variables that did not correspond to a normal distribution, and the Kruskall Wallis test was used in groups with three or more independent variables.

RESULTS

The study was completed with the participation of 155 Emergency Aid and Disaster Management students. The sociodemographic features and disaster-related features of participants are shown in Table 1- Sociodemographic Features of Emergency Aid and Disaster Management Students and Table 2-Disaster Related Features of Emergency Aid and Disaster Management Students.

Table 1. Socio-demographic features of emergency aid and disaster management students

Socio-Demographic Features	n	%
Age		
17-21	112	72.3
22-25	43	27.7
Sex		
Female	110	71.0
Male	45	29.0
Year		
1	35	22.6
2	80	51.6
3	2	1.3
4	38	24.5
Voluntarily chose the study		
Did voluntarily choose it	142	92.8
Did not voluntarily choose it	11	7.2

Table 2. Disaster related features of emergency aid and disaster management students

	n	%
Previously experienced a disaster		
Yes	34	21.9
No	121	78.1
Type of disaster experienced		
Earthquake	27	79.4
Flood	5	14.7
Fire	2	5.9
Previously helped disaster victims		
Yes	46	30.1
No	107	69.9
Losing a loved one due to a disaster		
Yes	9	6.1
No	146	93.9
Loved one lost due to a disaster		
Relative	6	66.7
Neighbor	3	33.3
Basic disaster awareness training		
Yes	67	43.2
No	88	56.8
Source of basic disaster awareness training		
AFAD	24	42.1
Red Crescent	6	10.5
Bachelor degree	34	59.6
Participated in disaster-related activities/ organizations		
Yes	37	23.9
No	118	76.1
Participation in disaster-related activities/ organizations		
AFAD	25	73.5
Red Crescent	13	38.2
Fire department	4	11.8
Participation in disaster drills		
Yes	63	40.6
No	92	59.4
Type of disaster drill participated in		
Earthquake	33	68.8
Fire	19	39.6
Chemical attack	4	8.3
Search & rescue	1	3.1
Personal/ family disaster preparation plan present		
Yes	38	24.7
No	116	75.3
Personal/ family emergency kit present		
Yes	33	21.4
No	121	78.6

It was determined that 72.3% of the students were between

the ages of 17-21, 71.0% were female, and 51.6% consisted of second-year students. A percentage of 92.8% of the participants voluntarily chose the Department of Emergency Aid and Disaster Management, and 21.9% had experienced a disaster in the past. It was observed that 79.4% of the students who had experienced a disaster before encountered an earthquake. A percentage of 69.9% of the students had never helped any disaster victims, and 6.1% lost a relative due to a disaster. Of those who lost a loved one due to a disaster, 66.7% lost a relative. It was determined that 43.2% of the participants received basic disaster awareness training and that 59.6% of the trainees received training during their undergraduate education.

A rate of 23.9% of the students took part in disaster-related activities/organizations. A percentage of 73.5% of the students who took part in the activities/organizations were active in AFAD (Disaster and Emergency Management Presidency). Of these participants, 40.6% participated in a disaster-related exercise.

Table 3. Disaster awareness perception scale sub-dimension and total score averages

Sub-Dimension	Minimum-Maximum	Mean±Standard Deviation
Disaster education awareness	36-65	56.78±4.60
Pre-disaster awareness	24-40	34.52±3.38
False disaster awareness	9-40	34.76±4.35
Post-disaster awareness	9-35	27.07±4.22
Total	*127-178*	*153.15±11.65*

Table 4. The disaster awareness perception scale sub-dimension and total Score averages according to the socio-demographic characteristics

Socio-Demographic Characteristic	Disaster Education Awareness	Pre-Disaster Awareness	False Disaster Awareness	Post-Disaster Awareness	Total
	Mean±Standard Deviation	Mean±Standard Deviation	Mean±Standard Deviation	Mean±Standard Deviation	Mean±Standard Deviation
Sex*					
Female	56.90±4.13	34.77±3.28	34.84±4.23	26.80±3.96	153.31±10.56
Male	56.51±5.63	33.91±3.60	34.57±4.69	27.75±4.78	152.75±14.07
	F=4.482	F=0.025	Z=-0.79	Z=-1.688	F=5.542
	p=0.635	p=0.151	p=0.937	p=0.091	p=0.786
Age*					
17-21	56.61±4.29	34.35±3.49	34.75±4.55	26.49±4.44	152.21±12.00
22-25	57.23±5.36	34.95±3.07	34.81±3.83	28.60±3.14	155.60±10.41
	F=0.593	F=0540	Z= -0.197	Z=-3.336	F= 1.003
	p= 0.457	p= 0.328	p= 0.844	**p= 0.001**	p= 0.105
Year**					
1st year	53.97±4.43	32.85±3.15	35.08±3.52	24.22±2.62	146.14±8.69
2nd year	58.06±3.65	35.18±3.45	34.71±4.95	27.81±4.21	155.77±12.20
3rd year	60.50±2.12	36.50±0.70	38.00±1.41	24.00±5.65	159.00±7.07
4th year	56.50±5.45	34.55±3.05	34.42±3.77	28.31±4.27	154.78±10.60
	F= 7.797	**F= 4.337**	F=0.509	**KW= 32.363**	**F=6.386**
	p= 0.000	**p= 0.006**	p= 0.677	**p=0.000**	**p= 0.000**
Voluntarily chose the study*					
Yes	56.89±4.60	34.60±3.34	34.75±4.38	27.27±4.01	153.52±11.61
No	55.50±4.68	33.58±3.89	34.91±4.18	24.75±5.98	148.75±11.71
	F=0.041	F=1.433	Z=-0.087	Z=-1.083	F=0.187
	p=0.315	p=0.319	p=0.930	p=0.279	p=0.174

** t test was used in the comparison of the averages of two independent variables that corresponded to normal distribution and the Mann Whitney U test was used in groups with two independent variables that did not correspond to a normal distribution. **ANOVA was used in groups with three or more independent variables, and the Kruskall Wallis test was used in groups with three or more independent variables.*

The scale sub-dimension and total score averages of the participants are given in Table 3- Disaster Awareness Perception Scale Sub-Dimension and Total Score Averages. The mean score of the "disaster education awareness" of students was 56.78±4.60, the mean score of the "pre-disaster awareness" was 34.52±3.38, the mean score of "false disaster awareness" was 34.76±4.35 and the mean score of "post-disaster awareness" was 27.07±4.22. The total score average of the participants on the scale was 153.15±11.65.

The Disaster Awareness Perception Scale sub-dimension and total score averages according to the sociodemographic characteristics and disasterrelated features of the participants are given in Table 4- The Disaster Awareness Perception Scale Sub-Dimension and Total Score Averages According to The Sociodemographic Characteristics and Table 5-The Disaster Awareness Perception Scale Sub-Dimension and Total Score Averages According to The Disaster Related Features. According to the study findings, age, academic year, previously having helped victims, receiving basic disaster awareness training, participating in disaster-related activities/organizations, participating in disaster drills, having a personal/ family disaster plan in place and having a personal/ family emergency kit present causes significant changes to the perception of disaster awareness. The post-disaster awareness sub-dimension mean score of 22-25-year-old students was found to be significantly higher than that of 17-21-year-old students, students who had helped victims compared to those who had not and those who received basic disaster awareness training compared to those who did not was found to be significantly higher (p=0.001, p=0.006, p=0.008). It was determined that the disaster education awareness of first-year students was lower than second-year students (p=0.000), the pre-disaster awareness sub-dimension mean score of first year students was lower than the second-year student (p=0.003) and post-disaster awareness sub-dimension mean score of first-year student was lower than second (p=0.000) and fourth-year student (p=0.000). Also, the total score average of first-year students was significantly lower than students in the second (p=0.000) and fourth-year (p=0.019). It was determined that the false disaster awareness sub-dimension averages and total score averages of students involved in disaster-related activities/organizations were significantly higher than those who were not involved in activities/organizations (p=0.044, p=0.010). The disaster education awareness and pre-disaster awareness sub-dimension mean scores of students who participated in disaster drills were significantly higher than those of students who did not (p=0.034, p=0.033). Finally, the post-disaster awareness sub-dimension score average and the total dimension score average of students who had a personal/family disaster plan in place were significantly higher compared to students who did not have a plan in place (p=0.000, p=0.025), the pre-disaster awareness and post-disaster awareness sub-dimension mean scores and total score averages of students who had a personal/ family emergency kit were significantly higher than those who did not have an emergency kit (p=0.044, p=0.000, p=0.012).

DISCUSSION

In the study, disaster awareness perception levels of Emergency Aid and Disaster Management students were examined. It can be expected that EADM students' disaster awareness would be high. In addition, university administrations are responsible for their safety against disasters. The students' safety can be enhanced by explaining the subjects related to the deficiencies of students about disasters. The results of the study is useful to understand the deficiencies about disaster awareness of the students. Therefore, the outputs of this study can enable the managers of the departments providing disaster management education to review their curricula and concern the units responsible for disaster management at universities.

According to the findings, the scale total score average of the students was 153.15±11.65, and it was observed that they had a high level of disaster awareness perception. The study by Tekin and Dikmenli (2021) used the "Disaster Awareness Perception Scale" with regard to candidate elementary school teachers, and the study by Şahin, Lamba and Öztop (2018) used a questionnaire prepared by researchers with regard to Economics and Administrative Sciences students, the participants had high levels of disaster awareness perception.[4, 15] Özkazanç and Yüksel (2015) on the other hand, found that the perception of disaster awareness was moderate in the study they conducted on candidate teachers.[3] Our research results were consistent with the information found in the literature. From our study, the conclusion can be drawn that the high level of disaster awareness perception of students is a result of intensive basic disaster awareness education at the undergraduate level and theoretical and practical training activities by disaster-related institutions, especially AFAD.[25, 26]

It was observed that the post-disaster awareness sub-dimension mean score increased significantly with higher age. In addition, it was determined that the level of perception of disaster awareness increased in general, although not significantly. Similar to the findings of our study, Gerdan's (2014) study on university staff and students concluded that individuals aged 40 and higher had a significantly higher level of attitude towards disasters than younger age groups.[12] It is thought that older individuals had a higher disaster awareness perception due to the possibility of having participated in more training and having experienced the effects of disasters more frequently due to advanced age.

In our study, the level of disaster awareness perception of first-year students was found to be significantly lower than second- and third-year students. On the other hand, fourth-year students 'level of disaster awareness perception was lower than second- and third-year students. But the difference was not significant. Similar to our study, Gerdan (2014) found that the level of perception increased significantly as the year increased.[12] Yakar and Dikmenli (2019) also found that as the grade increased, the level of disaster awareness perception increased significantly.[14] The rise in perception levels observed alongside each academic year can be attributed to the fact that all participants in our study were enrolled in the Department of Emergency Aid and Disaster Management, where their disaster knowledge and skills were consistently expanding.

Table 5. The disaster awareness perception scale sub-dimension and total score averages according to the disaster related features

Previously experienced a disaster*	Yes	56.91±5.78	35.29±3.69	35.26±3.83	27.44±4.24	154.91±13.07
	No	56.75±4.24	34.30±3.28	34.62±4.49	26.97±4.23	152.66±11.22
		F=1.363	F=1.356	Z=-0.567	Z=-0.411	F=2.518
		p=0.859	p=0.133	p=0.571	p=0.681	p=0.321
Previously helped disaster victims*	Yes	57.41±4.09	34.52±3.79	34.80±4.40	28.69±3.95	155.43±12.62
	No	56.51±4.84	34.57±3.22	34.71±4.38	26.43±4.18	152.24±11.22
		F=1.676	F= 0.256	F= 0.008	**Z= -2.751**	F= 0.967
		p= 0.273	p=0.924	p=0.903	**p=0.006**	p=0.123
Loved one lost due to a disaster*	Yes	58.33±3.35	35.00±5.12	35.22±4.79	28.33±4.52	156.88±15.32
	No	56.68±4.69	34.53±3.27	34.70±4.36	27.04±4.21	152.97±11.48
		Z=-0.990	F=1.551	Z=-0.649	Z=-0.573	F=1.104
		p=0.322	p=0.665	p=0.516	p=0.567	p=0.323
Received basic disaster awareness training*	Yes	56.61±5.08	34.67±3.39	35.08±3.48	27.85±4.48	154.22±11.83
	No	56.91±4.25	34.44±3.40	34.49±4.94	26.54±3.93	152.40±11.56
		F=0.871	F=0.006	Z=-0.219	**Z=-2.666**	F=0.006
		p=0.681	p=0.634	p=0.826	**p=0.008**	p=0.320
Participation in disaster-related activities/ organizations*	Yes	57.13±4.44	35.05±3.42	36.02±3.12	29.21±3.65	157.43±10.66
	No	56.67±4.67	34.35±3.37	34.37±4.61	26.40±4.18	151.81±11.66
		F=0.319	F=0.477	**F=2.116**	Z=-0.163	**F=0.283**
		p=0.600	p=0.276	**p=0.044**	p=0.871	**p=0.010**
Participation in disaster-related drills*	Yes	57.36±5.15	35.22±3.22	34.87±3.38	27.53±3.99	155.00±11.00
	No	56.38±4.19	34.06±3.44	34.67±4.95	26.76±4.39	151.89±12.03
		Z=-2.125	**F=0.003**	F=3.681	F=0.000	F=0.209
		p=0.034	**p=0.033**	p=0.804	p=0.261	p=0.103
Personal/ family disaster preparation plan present*	Yes	57.05±4.11	35.26±3.23	35.18±4.32	29.31±3.74	156.81±11.52
	No	56.69±4.78	34.30±3.42	34.61±4.39	26.35±4.14	151.96±11.54
		F=0.949	F=0.349	F=0.007	**Z=-3.802**	**F=0.140**
		p=0.684	p=0.121	p=0.499	**p=0.000**	**p=0.025**
Personal/ family emergency kit present*	Yes	56.87±5.59	35.57±3.25	35.39±4.11	29.78±3.68	157.63±12.04
	No	56.76±4.32	34.23±3.37	34.59±4.42	26.34±4.07	151.94±11.28
		F=0.309	**F=0.119**	F=0.017	**Z=-4.329**	**F=0.178**
		p=0.898	**p=0.044**	p=0.354	**p=0.000**	**p=0.012**

** t test was used in the comparison of the averages of two independent variables that corresponded to normal distribution and the Mann Whitney U test was used in groups with two independent variables that did not correspond to a normal distribution.*

In this study, the post-disaster awareness sub-dimension score average of the students who had previously helped victims was found to be significantly higher than those who had not. In addition, although the total mean score of the scale was not statistically significant, it was higher in students who had helped victims. Research suggests that individuals who have assisted disaster victims have a heightened awareness of post-disaster protocols, including which emergency numbers to call, which institutions to contact, and where to gather in the aftermath of a crisis. This heightened awareness is not as prevalent in individuals who have not previously aided disaster victims.

Students who received basic disaster awareness training had

significantly higher post-disaster awareness scores than those who did not receive training. In addition, students who received education had higher average scores on the scale, although the difference was not statistically significant. In Türksever's (2021) study, the level of disaster awareness perception of students who attended conferences or panels on disasters was found to be higher than those who did not participate in these scientific activities.[5] In addition, the false disaster awareness sub-dimension mean score was found to be significantly higher in the group that had received education. Similar to our study, Ayvazoglu et al. (2020) reported that the disaster risk perception and preparedness level of university students who received disaster training was significantly higher than those who did not.[25] According to İnal et al. (2019), individuals who received disaster training were found to have a higher belief that they were prepared for disasters.[10] Our findings are supported by the literature.

The average false disaster awareness sub-dimension score and total score of students participating in disaster-related activities/organizations were significantly higher than those not involved. In our country, many organizations, such as the Red Crescent and AFAD, organize educational activities to raise awareness about disasters among the public.[26, 27] Students participating in disaster-related activities can improve their theoretical and practical knowledge about disasters, leading to higher disaster awareness perception.

In the study, the disaster education awareness and pre-disaster awareness sub-dimension score averages of the students who participated in disaster-related exercises were found to be significantly higher than those of students who did not participate in these exercises. Disaster drills raise the disaster awareness of participants by allowing them to experience possible situations necessary for taking precautions for disaster management before disasters occur. In the study of Dinçer and Kumru (2021), it was determined that participants in disaster and emergency drills were significantly more prepared for disasters as a result of increased awareness.[28] In another study, it was determined that the knowledge levels of hospital disaster teams participating in disaster drills were significantly higher.[29] It is thought that the exercises increase the level of knowledge of individuals and raise awareness about disasters.

A disaster plan is important in terms of acting consciously in the management of a disaster. Our study found that students who had a disaster plan in place had significantly higher average scores on both the post-disaster awareness sub-dimension and the total score compared to those who did not have a plan. Also, it was found that students who had prepared an emergency kit had significantly higher pre-disaster and post-disaster awareness scores and total scores than those who did not. In the study of Dinçer and Kumru (2021), in parallel with our study, it was observed that people involved in drafting and updating a disaster and emergency plan were more prepared for disasters because they were more aware of it.[27]

Limitations

This study was conducted in the Eastern Black Sea region of Turkey. Landslides, floods and overflows generally occur, while a natural hazards such as earthquake which effect a big part of the country, is rare in this region. Different natural hazards may affect the disaster awareness perception. So, new studies should be done by participating university students from various regions.

CONCLUSION AND RECOMMENDATIONS

In this study, it has been determined that the disaster awareness level of the students was high. But some factors are effective on the awareness level. Some of these factors are changeable factors such as participating in disaster-related activities/organizations and basic disaster awareness education, etc.. The level of disaster awareness perception of Emergency and Disaster Management students can be increased by intervening in changeable factors such as helping disaster victims, receiving basic disaster awareness education, participating in disaster-related activities/organizations, participating in disaster-related drills, and having personal/family disaster preparation plan and emergency kit. Based on this information, the following suggestions can be made:

- Starting from the first year of the Emergency Aid and Disaster Management studies, the subjects that will increase disaster awareness should be included more intensively in the curriculum,
- Increasing the motivation of students regarding the profession by cooperating with AFAD, the Red Crescent, the Fire Department, etc. and increasing their participation in disaster-related activities/organizations.

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Ethics

Ethics Committee Approval: In order to carry out the study, permission was granted by the ethics committee (No: 31157) of the Artvin Çoruh University Ethics Board and institutional permission (No: 26304; No: 58340; No: 2100035813) was granted by the three Health Sciences Faculties where the study was conducted. In addition, permission was obtained for the use of the "Disaster Awareness Perception Scale".

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Conflict of Interest

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