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Evaluation of Professional Awareness Levels of Interior Architecture Students with Practice Assignment

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Abstract

This study was conducted to determine the effect of earthquake awareness training for non-structural elements in the interior, which was conducted in the undergraduate program of the faculty of architecture, on the level of knowledge of the students, with a practice assignment that will increase the professional awareness of interior architecture students. When pilot study and practice study were compared, it was discovered that the practice study had a higher value with an increase of 7.67. The increase in this rate may also indicate that it has an impact on students' professional awareness, particularly following the 6 February earthquake. Consequently, both in the pilot study and the practice study, there was a considerable improvement in students' professional awareness of non-structural aspects in the interior. Thus, it has been demonstrated that 11 modules are effective in disclosing hazards, risks, and precautions while investigating structural applications in the teaching process.

Keywords: *Earthquake, non-structural elements, earthquake awareness.*

İç Mimarlık Öğrencilerinin Mesleki Farkındalık Düzeylerinin Uygulama Ödevi ile Değerlendirmesi

Öz

Bu araştırma, mimarlık fakültesi lisans programında yürütülen iç mekanda yapısal olmayan elemanlar açısından deprem farkındalığı eğitiminin iç mimarlık öğrencilerinin depreme karşı mesleki farkındalıklarını arttıracak uygulama ödevinin öğrencilerin bilgi düzeyine etkisini belirlemek amacıyla hazırlanmıştır. Bu kapsamda, pilot çalışma ve uygulama çalışması karşılaştırıldığında uygulama çalışmasının 7.67 katlık artışı ile daha yüksek bir değere sahip olduğu görülmüştür. Bu oranın artması özellikle 6 şubat depremi sonrası öğrencilerin mesleki farkındalıklarını etkilediğini de gösterebilir. Sonuç olarak hem pilot çalışmada hem de uygulama çalışmasında öğrencilerin iç mekanda yapısal olmayan elemanlar konusunda mesleki farkındalıklarında önemli bir artış olduğu görülmüştür. Böylece ders verme sürecinde yapıların uygulamaları incelenirken tehlike, risk ve önlemlerin ortaya konması için 11 modülün etkili olduğunu göstermiştir.

Anahtar kelimeler: *Deprem, yapısal olmayan elemanlar, deprem farkındalığı.*

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1. Introduction

Earthquakes are one of the deadliest natural disasters. Globally, earthquakes have resulted in enormous economic losses and thousands of fatalities, frequently resulting in terrible damage, loss of life, and subsequent economic and social destruction. Researchers from various nations have increased their study of earthquake disaster risk reduction in recent years to increase awareness and lessen the potential effects of future earthquakes (Han et al., 2022; Koukis, 2016; Bhuiya & Shao, 2022). The effect of the earthquake on the structures creates various hazards and risks such as causing loss of life and property, causing injuries, stopping the ongoing activities, and creating a fire hazard (FEMA, 2011). These hazards and risks are classified according to structural and non-structural elements. The elements that cover the structural system of the building are defined as structural, while the elements outside the structural system are defined as non-structural elements. Earthquake damages vary according to these elements. With the developing engineering technologies and interior design, the damage of buildings against earthquakes is decreasing. However, there is still hazards and risks from non-structural elements that a seismic movement could knock over or dislodge (Winkler & Meguro 1996). These all demonstrate the necessity of both seismic surveys and the building's structural durability. Additionally, it highlights the significance of lowering the risk by taking the necessary safety precautions with regards to non-structural elements. Although structural elements account for the majority of the risks brought on by earthquakes, non-structural elements also have a significant impact. Along with the precautions that society can take in the face of these risks, interior architects who actively participate in the interior production, design, and management of the building must also take important precautions. With the adequate and useful information, interior architects can acquire during their education will ensure their ability to implement these precautions. Consequently, it is essential to consider how earthquakes integrate into the education of interior architects. According to Karakuş (2013) earthquake education is a lifelong process that begins in the preschool years. The best places for the community to receive earthquake education are in schools (Adiyoso & Kanegae, 2012; Johnston et al., 2011; Maryani, 2021; Tekin & Dikmenli, 2021). Because it has been observed that students who learn about the earthquake outside of the classroom, such as from their families, their environments, or the media, frequently have misconceptions and hold onto some false beliefs.

Disaster preparedness and management is multidisciplinary and covers areas such as civil engineering, architecture, city, and regional planning (Shaw et al., 2011). For this reason, different approaches to disasters are being developed. The Hyogo Framework for Action (HFA) is a 10-year global disaster risk reduction plan that made at the World Conference on Disaster Risk Reduction by 168 member states of the United Nations in January 2005. This strategy, which includes disaster education, aims to increase safety and resilience at all levels through knowledge, innovation, and education (UNISDR, 2005). In Japan, a nation that is always at risk for earthquakes, disaster education is incorporated into the curriculum with the goal of fostering a lifelong awareness and readiness for emergencies (Sakurai, 2016). Disaster education in schools plays a crucial role in promoting awareness and effective management (Wei et al., 2020). Disaster education is crucial for raising students' awareness on both a personal and professional level, especially in institutions that offer vocational education, like universities. It is important that the courses on subjects like system design, geosciences, and disaster management have a certain scope and quality for architecture/interior architecture students involved in design, production, and inspection activities to have enough knowledge, experience, and awareness in pre-earthquake "disaster preparedness" and post-earthquake "rehabilitation" and "reconstruction" studies, disaster and earthquake planning, and engineering (Metin, 2018).

The roles, responsibilities, education, and application areas of interior architects should be addressed to ensure that they serve with these competencies. It is noticeable that to make sure that interior architects serve with these competencies, the roles, responsibilities, education, and application areas of interior architects should be addressed. Conferences, seminars, meetings, and education sessions for interior architects are vital methods for avoiding uncertainties and deficiencies and boosting the knowledge of architects and interior architects about the hazards, risks, and safety precautions that need to be taken for the non-structural elements during an earthquake. This calls for the rapid

development of the educational resources, technological applications, and education programs in interior architecture that are required.

The group of professionals in charge of developing interior designs is known as interior architecture and is a relatively new profession in the world. In the fundamental areas of architecture, there is also a growing student population worldwide (Türkkan & Bezci, 2019). Future predictions indicate that interior equipment will become increasingly significant in terms of non-structural elements (Mondal & Jain, 2005). The largest group of professionals with knowledge and skills in interior design are interior architecture students in the faculties of architecture, fine arts, and design. In terms of lessening the risks in the event of an earthquake in the design of non-structural elements, interior architects are believed to have the greatest potential to play an initiative-taking role in disasters in the future.

According to research, interior architecture education does not offer enough courses or education programs for earthquake education and awareness of the hazards and risks caused on by non-structural elements during earthquakes worldwide (Dereci & Ertaş Beşir, 2022). When the course materials are examined, it becomes clear that most of the instruction focuses on structural elements; in addition, it becomes clear that there are few course materials that raise the knowledge and awareness levels needed to support the project processes for non-structural elements.

Interior architecture students need to systematically update their theoretical and practical knowledge about the hazards and risks created by non-structural elements resulting from earthquakes to meet sectoral, individual, and social needs with vocational education and developing technology. The need for program renewal has arisen because of the evolving demand for education. Otherwise, the needs will not be addressed because the education programs stay the same in the face of these changes (Karabulut & Marul, 2011). For this reason, the relationship between earthquake, design, and environment should be established in project courses, where diverse topics and subjects are applied practically, and the creation of correct designs that minimize the destructive effect of the earthquake should be ensured with updated education and practices (Akıncıtürk, 2003). In terms of "risk-damage reduction," "disaster preparedness," and post-disaster "rehabilitation" and "reconstruction" phases where the earthquake has not yet occurred, future architects who will participate in planning, design, production, and audit activities have sufficient knowledge, tools, and experience during the education phase. Gaining the foundation of awareness, sensitivity, and consciousness is essential (Ayyıldız Potur & Metin, 2021). Therefore, training in earthquake knowledge in Terms of Non-Structural Elements will help to raise the professional knowledge of interior architect candidates. Especially with the addition of reinforcing activities to the course curriculum, the student can receive training not only theoretically but also practically.

The purpose of this study was to determine the effect of earthquake awareness training in terms of non-structural elements in the interior, which was conducted in the undergraduate program of the faculty of architecture, on the level of knowledge of the students, as well as the practice assignments activity that will increase the professional awareness of interior architecture students against earthquakes. As a result, the efficiency of the uniçDEF training model based on "Earthquake Awareness in terms of Non-Structural Elements" will be investigated.

1.1. Development Steps of the uniçDEF Education Program

It has been noted that a variety of models are employed in the field of education when developing curriculum. The dynamic relationships between the purpose, content, learning-teaching process, and evaluation elements of the curriculum can be used to define curriculum development. Another definition of curriculum development is a study that examines the theories, practices, and activities used to determine and realize the program's operationally relevant objectives in a healthy, effective, and efficient manner (Varış, 1988, p. 21). Activities for developing curriculum are implemented either to meet a new need or when it is determined that the current applications are insufficient and a new option is needed (Erişen, 1998). The most common of these models are Taba and Tyler models. The System Approach Model was created based on some features of these models (Demirel, 2009). The "uniçDEF" education program was created using the System Approach Model, which treats the

educational process as a system and advises that each of its constituent parts function harmoniously and effectively to achieve the desired results. In this regard, 3 main categories and 11 modules were created as an outcome of the study in which 20 experts participated (Table 1).

Table 1. Main categories and modules proposed in the call conference

Main Categories	Modules
Architectural Elements	Windows (W)
	Doors (D)
	Interior Walls (IW)
	Suspended Ceilings (SC)
	Interior Finishes (IF)
	Interior Stairs (IS)
Furniture and Accessories	Furniture (F)
	Accessories (A)
Electromechanical Equipment	Lighting Elements (LE)
	Equipment (E)
	Elevators (EL)

The Saskatchewan Education (1991)'s definition of five types of teaching strategies, methods, and techniques was adopted in the education content, and teaching resources and tools were chosen. The uniçDEF Education Program's content is focused on the hazards caused by non-structural elements during the earthquake process, potential risks associated with them, and the precautions a designer should take to minimize those risks. Four different teaching tools and materials were used consisting of 2D and 3D visual materials (drawings, perspectives, and 3D renderings), written materials, models (models), modern tools (video and presentation) used in interior architecture education in the learning-teaching process, which covers a theoretical, practical, and experiential course process (Figure 1).

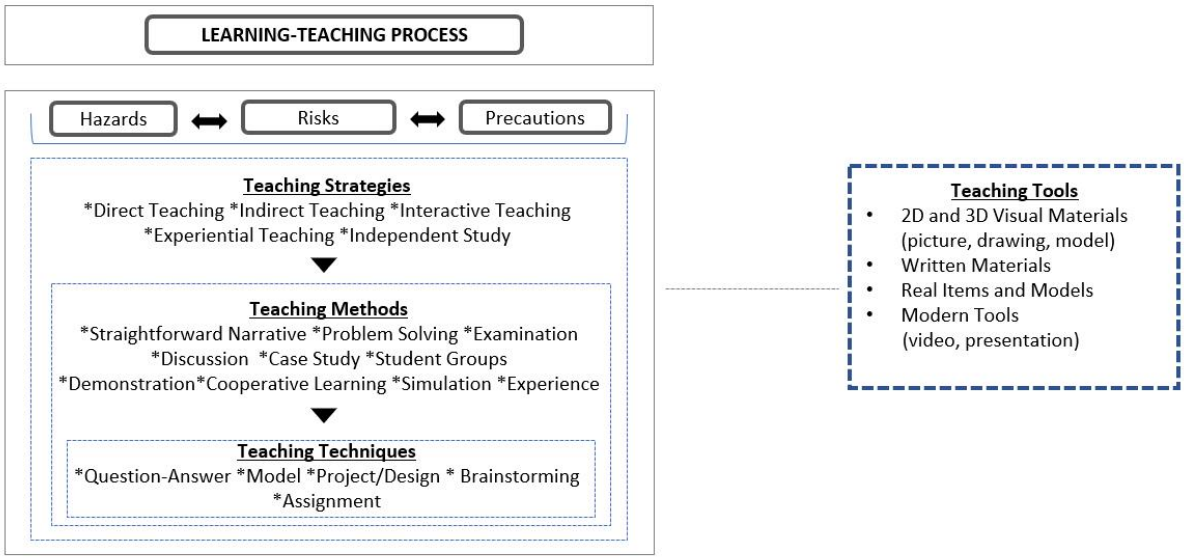


Figure 1. uniçDEF learning-teaching process

While determining the aims and objectives of the module, it is expected that when the students graduate, they would have gained knowledge and awareness about the hazards, risks, and precautions in designing interior equipment for the prevention of earthquakes. The modules that comprise the uniçDEF training program were assigned 114 goals in total. The modules' achievements were determined to be 160 and they are consisting of the phrases 'they have knowledge of the modules,

know the hazards and risks, have awareness, and know the precautions'. Three distinct activities were conducted in response to these specified goals and achievements (Table 2).

Table 2. Activities for the pilot and practice studies

Activities for Goals and Achievements				
	Activity	**Goal**	**Pilot**	**Practice**
1	Practice Assignment	• Measuring professional awareness • Determining of knowledge level	X	X
2	Creating a Scenario with video	• Explaining hazards, risks and precautions with video • Creating an earthquake scenario • Presenting precautionary suggestions for the scenario created	X	X
3	Furniture Design for Disadvantaged Groups	• Drawing attention to vulnerable groups	X	X
4	Risk Score Calculation	• Evaluating the risk situations of buildings		X

The practice assignment was the first activity. It attempts to measure the student's level of knowledge by evaluating professional awareness before and after education. Another task is to produce videos using hazards, risks, and precaution statements from all modules, as well as to write histories about the earthquake and create videos about it, and then to take precautions for this scenario. The final activity is designing furniture for disadvantaged groups. While designing furniture, the purpose is to focus students' attention on the most vulnerable groups during an earthquake. These activities are shared by both pilot and practice studies. In addition, a new activity has been introduced to the practice study for manually calculating the risk scores of the buildings. As a result of their education, students are also exposed to the risk status of buildings.

2. Material and Method

2.1. Study Model

The students in both the pilot and practice studies completed the same practice assignment, permitting the two studies to be compared. The practice assignment for the study required the students to choose a location from their school, classify the interior non-structural elements as "architectural elements, furniture and accessories, electromechanical equipment," and determine the hazards caused on by the non-structural elements during the earthquake process in that location. In addition to the steps a designer should take to reduce these risks in the design of the offered layout, free expression approach should be used. Accordingly, checklists of what they regard as non-structural components, how they identify risks and hazards, and the kinds of precautions they recommend are examined.

2.2. Material

The study is divided into two research groups: pilot and practice. When the earthquake-disaster courses of the architecture and interior architecture departments in Turkey are examined, 33% are third graders, 33% are fourth graders, and 33% are master students, which is why the pilot study was conducted with fourth graders and the practice study with third graders. The first group comprises of fourth grade students from the pilot study, which took place at both Akdeniz and Altınbaş Universities as part of the selective course "Earthquake Awareness in Indoor Equipment" that began in the autumn semester of 2022-2023. Courses were conducted at Akdeniz University between 20.09.2022-03.01.2023 and at Altınbaş University between 11.10.2022-27.01.2023. While the courses at Altınbaş University were conducted remotely, the face-to-face education at Akdeniz University was conducted as an elective course. Thus, two different learning environments were tried and the requirements for

supporting these environments were determined. The education that started with 24 students at Altınbaş University was completed with 23 students because one student dropped out of the course during the semester.

The second group consists of practice study conducted at Akdeniz University, Karadeniz Technical University, Mimar Sinan Fine Arts University, and Altınbaş University during the spring semester of 2022-2023. The practice study, which began at Akdeniz University on February 28, 2023, was concluded on June 20, 2023. Karadeniz Technical University started on February 5, 2023, concluded on May 17, 2023. Mimar Sinan Fine Arts University started on March 4, 2023, and was concluded on May 31, 2023. Altınbaş University started on February 27, 2023, and concluded on June 7, 2023. All four universities offered distance education. 24 Akdeniz University students, 28 Karadeniz Technical University students, 22 Mimar Sinan Fine Arts University students, and 7 Altınbaş University students selected courses in the practice study. All the student names that participated in the studies are listed in the acknowledgement section of the paper.

The 44 students who took part in the pilot study at Akdeniz and Altınbaş universities ranged in age from 19 to 25. Figure 2 shows that 52.3% of the students are from Altınbaş University and 47.7% are from Akdeniz University.

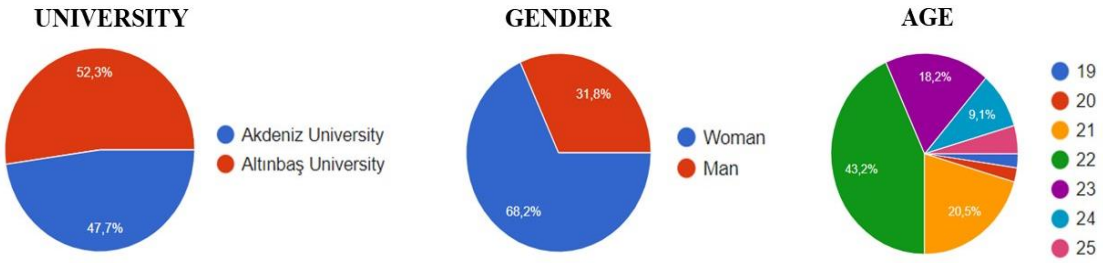


Figure 2. Demographic information of students participating in the pilot study

The 81 students that took part in the practice study at Akdeniz, Karadeniz Technical, Mimar Sinan Fine Arts, and Altınbaş University ranged in age from 20 to 52. Figure 3 shows that 37.5% of the students are from Karadeniz Technical, 30% from Akdeniz University, 27.5% from Mimar Sinan, and 5% from Altınbaş University.

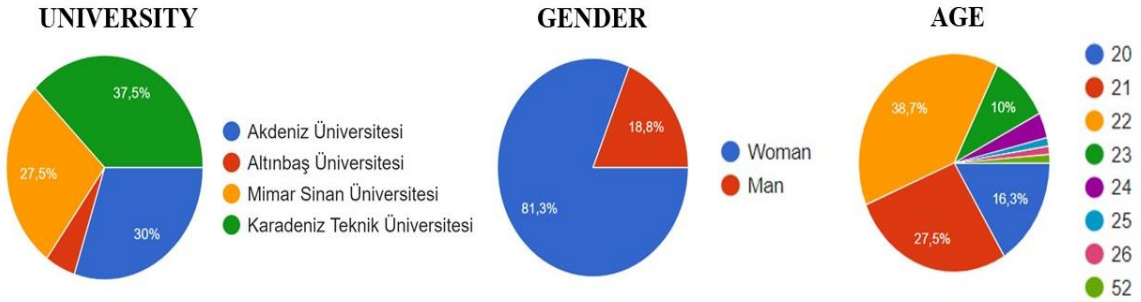


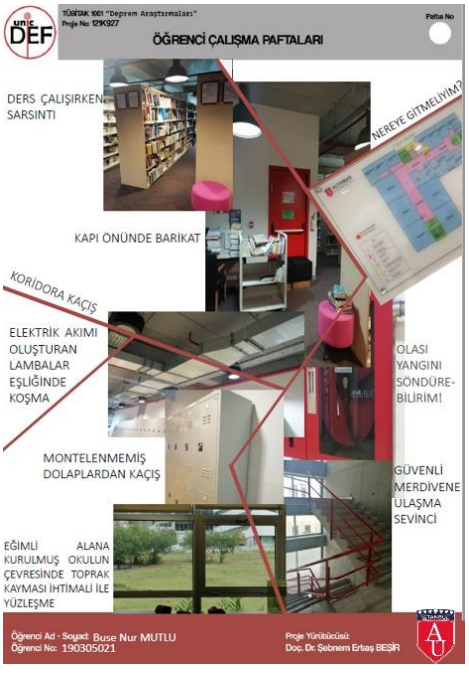
Figure 3. Demographic Information of Students Participating in the Practice Study

2.3. Data Collecting

Students were asked to complete a practice assignment in both the pilot and practice studies. In this activity, students select a location within the school and categorize the non-structural elements in the interior as "architectural elements, furniture and accessories, electromechanical equipment" and the hazards caused by non-structural elements during the earthquake process, as well as what risks may occur depending on them. Along with the steps a designer should take to limit these risks" in the layout of posters by using the free expression technique in the given format (Table 3).

Table 3. Practice assignment posters

Akdeniz University First Week	Akdeniz University Final Week
	
Karadeniz Technical University First Week	**Karadeniz Technical University Last Week**
	

Mimar Sinan Fine Arts University First Week	Mimar Sinan Fine Arts University Last Week
	
Altınbaş University First Week	**Altınbaş University Last Week**
	

Checklists were used to evaluate practice assignments. The fundamental questions for each module are listed below.

- Was he/she able to identify the **hazards?**
- Was he/she able to identify the **risks** related to the hazards?

- Was he/she able to identify the **precautions** for the hazards?

The instructors assigned scores between 1 and 5 in accordance with the checklist's three fundamental questions. 0 points are given if there is no information available about the module. Therefore, the percentage improvement in the students' professional awareness was calculated.

Information was gathered about the course's status in the curriculum, lesson plans, learning objectives, and instructional materials by considering the percentage frequencies obtained with six interview questions created specifically for the students as part of the research project. It was also evaluated in accordance with the outcomes of the practice assignment.

3. Findings

Since interior architecture is an applied science, various activities for measuring knowledge and awareness have been suggested. The data from the practice assignment were revealed as part of the scope of the research. In order to measure the students' practice assignment efficiency, earthquake experiences were first discussed. In this regard, while 79.5% of the participants in the pilot study had prior earthquake experience, 53.8% of the students who participated in the practice study had prior earthquake experience (Figure 4).

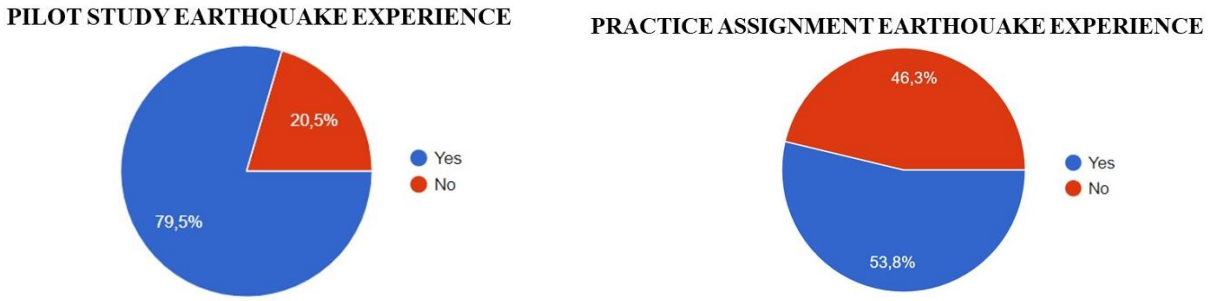


Figure 4. Earthquake experiences of students who participated in the pilot and practice studies

Furthermore, the professional awareness activities, which were also carried out in the pilot and practice studies, were created in the classroom environment, individually during the course, under the control of the course's responsible lecturer, within appropriate environments. The instructors assessed the hazards, risks, and precautions that the students identified for the courses on a scale of 1 to 5 based on the three basic questions in the checklist.

As shown in Figure 5, the first and last homework of two students out of 21 in the pilot study at Akdeniz University received the same score and stayed stable. Since 1 student did not attend that week's lesson, a negative success level occurred. However, the 18 students' success rates increased. The greatest increase rate is 4 times while the smallest is 1.3 times.

Pilot Study Percentages		
Student	Akdeniz University	Altınbaş University
1	%50	%200
2	%300	%233
3	%255	%25
4	%200	%30
5	%275	%150
6	%400	%75
7	%180	%40
8	%0	%100
9	%106	%80
10	%143	%600
11	%0	%33
12	%73	%180
13	%44	%171
14	%206	%-100
15	%-100	%113
16	%220	%14
17	%180	%38
18	%13	%40
19	%83	%9
20	%71	%133
21	%24	%45
22		%86
23		%33
Increase:	Stable:	Decrease:

Figure 5. Pilot study success rates

Altınbaş University, on the other hand, has seen an increase in the success rate of 22 students out of 23 students, as shown in Figure 5. The greatest increase rate is 6 times, and the smallest is 0,09 times. With 1 student not attending the course, a negative level of success occurred.

The pilot study assessed the percentage increase in students' practice assignment achievement for each module. In this regard, it was determined in the first assignment that the furniture module had the highest awareness with 47 and 40 points in Akdeniz and Altınbaş Universities. The furniture module received the highest mark in the final assignment, with 75 and 62 points in both universities. The interior walls module at Akdeniz University increased by 6,2 times and the interior walls module at Altınbaş University increased by 7,33 times. Interior stairs and elevators modules have the lowest percentages of improvement in both universities, as well as the lowest first and final homework grades (Table 4).

Table 4. Pilot study module success scores and percentages

Modules	Akdeniz University			Altınbaş University		
	First Assignment	Last Assignment	Rate	First Assignment	Last Assignment	Rate
Windows (W)	20	68	2,40	10	21	1,10
Doors (D)	26	59	1,27	15	40	1,67
Interior Walls (IW)	5	36	6,20	3	25	7,33
Suspended Ceilings (SC)	28	63	1,25	18	26	0,44
Interior Finishes (IF)	3	20	5,67	7	13	0,86
Interior Stairs (IS)	0	0	0	20	20	0
Furniture (F)	47	75	0,60	40	62	2,20
Accessories (A)	40	70	0,75	10	20	1
Lighting Elements (LE)	25	37	0,48	16	36	1,25
Equipment (E)	37	71	0,92	16	21	0,31
Elevators (EL)	0	0	0	13	3	-0,77

When the assignments of the students were reviewed in the pilot study, it was found that they confused the concepts of hazards and risk and had difficulties developing precautions for the modules.

In the practice study at Akdeniz University, as shown in Figure 6, there is a percentage increase between the first and last homework of all 24 students. The success rate of 24 students who took and finished the course increased. While the biggest increase rate was 2,33 times, an increase of at least 0,13 times is noticed. These findings demonstrate that the experimental approach is effective.

Practice Study Percentages				
Student	Akdeniz University	Karadeniz Technical University	Mimar Sinan Fine Arts University	Altınbaş University
1	%56	%120	%200	%367
2	%178	%375	%-100	%-100
3	%233	%183	%90	%122
4	%160	%150	%767	%-100
5	%150	%56	%150	%-100
6	%20	%250	%278	%-100
7	%77	%233	%350	%122
8	%100	%150	%100	
9	%13	%-100	%67	
10	%33	%300	%0	
11	%72	%160	%291	
12	%50	%80	%67	
13	%111	%483	%44	
14	%150	%238	%36	
15	%95	%400	%92	
16	%100	%173	%107	
17	%89	%142	%-100	
18	%158	%267	%158	
19	%100	%133	%122	
20	%107	%158	%237	
21	%175	%400	%183	
22	%36	%78	%33	
23	%33	%188		
24	%217	%42		
25		%65		
26		%-100		
27		%180		
28		%217		
Increase: Stable: Decrease:				

Figure 6. Practice study success rates

The success rate of 26 students out of 28 at Karadeniz Technical University has increased. While the greatest increase rate was 4,83 times, at least a 0,42 times increase was seen. A low level of success occurred because two students did not attend the lesson. These findings demonstrate that the

experimental approach is effective. The success rate of 19 students out of 22 at Mimar Sinan Fine Arts University has increased. The greatest increase rate is 7,67 times and the lowest is 0,33 times. The absence of two students has resulted in a lower degree of success. The success score of one student stayed stable at the same value. These findings demonstrate that the experimental approach is effective. The success rate for 3 out of 7 students at Altınbaş University has increased. The greatest increase rate is 3,67 times and the lowest is 1,22 times. A negative success rate has happened due to 4 students failing to attend the course. These findings demonstrate that the experimental approach is effective.

The percentage increase in the success of the students' practice assignment for each module was examined in the practice study. In this regard, the first assignment showed that the furniture module had the highest awareness, with 78 points in Akdeniz, 59 points in Karadeniz Teknik, 56 points in Mimar Sinan, and 9 points in Altınbaş Universities. The furniture module received the highest score in the final assignment, with 106, 128, 92, and 15 points in four universities. Interior stairs module has increased the rate by 3,57 times in Akdeniz University. Windows module has increased the rate by 2,55 times in Karadeniz Teknik University, interior stairs module has increased the rate by 9 times in Mimar Sinan University, and furniture module has increased the rate by 0,67 times in Altınbaş University (Table 5).

Table 5. Practice study module success rates

Modules	Akdeniz University			Karadeniz Technical University			Mimar Sinan Fine Arts University			Altınbaş University		
	First	Last	Rate	First	Last	Rate	First	Last	Rate	First	Last	Rate
Windows (W)	41	89	1,17	20	71	2,55	52	90	0,73	0	0	0
Doors (D)	34	58	0,71	16	55	2,44	42	65	0,55	6	10	0,67
Interior Walls (IW)	21	56	1,67	13	46	2,54	13	31	1,38	0	3	0,03
Suspended Ceilings (SC)	18	51	1,83	39	89	1,28	27	68	1,52	0	0	0,03
Interior Finishes (IF)	0	18	0,18	17	33	0,94	6	31	4,17	0	0	0
Interior Stairs (IS)	7	32	3,57	23	52	1,26	3	30	9	0	2	0,02
Furniture (F)	78	106	0,36	59	128	1,17	56	92	0,64	9	15	0,67
Accessories (A)	43	66	0,53	16	52	2,25	15	36	1,40	6	6	0
Lighting Elements (LE)	42	62	0,48	23	59	1,57	32	60	0,88	0	3	0,03
Equipment (E)	35	65	0,86	31	92	1,97	23	63	1,74	0	9	0,09
Elevators (EL)	0	9	0,09	0	4	0,04	6	25	3,17	0	6	0,06

When the pilot study and the practice study were compared, the practice study was found to have a greater value with 7,67 times increase. The increase in this rate could indicate that it has an impact on students' professional awareness, particularly following the 6 February earthquake. However, the increased expertise of the instructors giving the course, as well as the failure of the pilot study to be experienced during the implementation phase, could be the cause. Furniture and elevators received the greatest and lowest rankings in both studies. The fact that the furniture module scores highly in both groups, the most awareness is seen as furniture in terms of non-structural elements, and the elevators module has the least awareness may be due to their professional awareness having less knowledge of electromechanical equipment. The highest increase in the pilot study was 6,2 times in the interior walls module; the highest increase in the practice study was 9 times in the interior stairs

module (Table 6). This result demonstrates the importance of modules other than well-known furniture and accessories in terms of non-structural aspects and focuses students' professional awareness to other architectural modules.

Table 6. Comparison of pilot study and practice study

	Highest Success Rate	Lowest Success Rate	Highest Scoring Module	Lowest Scoring Module	Highest Increasing Module
Pilot Study	6	-1	Furniture	Elevators	Interior Walls
Practice Study	7,67	-1	Furniture	Elevators	Interior Stairs

Consequently, when the students' first and last practice assignments are analyzed; it was discovered that they could distinguish between hazards and risks and discussed general difficulties in the first assignments. It has been noted that in their previous projects, they spotted hazards, risks, and precautions more easily, discussed them in greater depth, and produced mitigation ideas. Thus, the outcomes from the pilot study in two universities and the practice study in four universities suggest that the experimental approach was effective.

4. Conclusion

What precautions interior architects can take against potential hazards and risks encountered during the earthquake process is provided with adequate and appropriate information they can get during their education. The purpose of this study was to assess the effects of non-structural elements' hazards and risks on the professional awareness and knowledge levels of interior architecture students during the earthquake process. Therefore, the students' professional awareness and relevant knowledge levels increased significantly in statistical terms as a result of the material they received during the course. Furthermore, the hazards that may occur for non-structural elements during the earthquake process, as well as the use of various techniques to identify the risks that they might create, may contribute to more successful practice assignment results. All of these have been beneficial in helping students comprehend the 11 modules on detecting hazards with what types of risks may occur, and what measures may be taken after obtaining and training for professional awareness, both theoretically and practically.

At the completion of the pilot study's assignment, the students of Akdeniz University achieved a success score of 90%, while the students of Altınbaş University received a score of 95%, which corresponds to an A in the university grading system. The pilot study indicated that the success rate of two universities was 92.5%.

Akdeniz University students received an 80.74% success rate in the practice study, which corresponds to a BA grade in the university grading system. Students at Karadeniz Technical University received a success rate of 77.5%, which corresponds to a BB grade in the university grading system. Students at Mimar Sinan Fine Arts University received a success rate of 198%, which corresponds to an A grade in the university grading system. Students at Altınbaş University received 89% success points, which corresponded to a BA grade in the university grading system. The practice study's analysis indicated that the success rate of four universities was 86.81%. The pilot study has a better success rate than the practice study. The reason for this may be that more students in the pilot study group had earthquake experience, according to the data presented in Figure 2.

Earthquake awareness training for non-structural elements for interior architects in charge of interior design is critical for developing countries such as Turkey, which is frequently struck by earthquakes. Consequently, interior architect candidates' professional awareness of non-structural aspects should be strengthened, and the relevant training should be provided to develop knowledge on this issue. Therefore, the hazards caused by non-structural elements, which can cause as much harm as structural elements, can be reduced.

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