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Academic Resilience of Physical Therapy and Rehabilitation Students After the Earthquake in Turkey

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Abstract

Academic resilience could be defined as the ability of students to effectively manage academic difficulties, anxiety, and academic pressure (Radhamani & Kalaivani, 2021). Corresponding to this notion, this study intends to examine the academic resilience of second-year physical therapy and rehabilitation students who started their undergraduate education after the February 6, 2023 earthquakes. A phenomenological approach, in particular, was used to learn about the students' first-hand experiences. This study was conducted with 22 second-year students studying at Hatay Mustafa Kemal University, Department of Physical Therapy and Rehabilitation and taking the Vocational English course in the spring semester of 2024-2025 academic year. Participants were selected using the convenience sampling method according to their readiness and reachability in the class. In this study, the data obtained through semi-structured interviews were analysed using the thematic analysis method emphasized by Braun and Clarke (2006). Findings were examined under three themes: the difficulties students face in their academic lives, strategies to cope with difficulties, and the support needed to improve their academic resilience. As a result of the findings, a number of factors affecting student resilience and strategies developed to cope with these factors have emerged.

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Keywords: Academic resilience; coping strategies; higher education; earthquake

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Introduction

The term academic resilience has been considered as prominent in studies conducted in the field of education, especially in the context of students who are experiencing great difficulties. According to Yeager and Dweck (2012), academic resilience is the ability of students to maintain motivation, persist in their efforts, and overcome obstacles in the face of academic difficulties in order to achieve success. Where difficulties are acute, resilience is essential for ongoing success (Radhamani & Kalaivani, 2021). This is quite relevant for students who experience catastrophic events such as natural disasters that seriously affect their academic lives.

On February 6, 2023, the Kahramanmaraş Earthquakes with magnitudes of 7.7 and 7.6 had a devastating effect on 11 cities in Türkiye and caused many deaths (AFAD, 2023). Described as the "Disaster of the Century", these earthquakes caused the death of more than 50,000 people (TRTHaber, 2023). Such a major disaster causes psychological collapse in addition to massive physical destruction for survivors and interruption in education.

Studies (Faye et al., 2018; Cénat et al., 2020) have revealed that traumatic events such as earthquakes cause an increase in anxiety, fear, and depression levels in affected people. In this context, Nasir (2023) suggested that psychological resilience is important in reducing the negative effects of these experiences on people and helps with adaptation to daily life after a disaster. Kim & Oh (2019) emphasize that resilience is of great importance for university students since they need to balance their academic responsibilities with coping strategies for their emotional and psychological concerns. In this respect, it is suggested that students with high psychological resilience develop better after trauma and overcome academic difficulties more easily (Kim & Oh, 2019).

The earthquakes that occurred in Türkiye unfortunately affected every aspect of life, including higher education. For this reason, universities continued online education for a while in order to minimize the obstacle to education (Telli & Altun, 2023; Özer, 2023). However, as Gutierrez et al. (2005) stated in their study, these sudden changes in education can negatively affect students' social interactions, academic motivations and learning experiences. In this context, Uysal and Yenal (2014) stated that such a disaster makes the academic journey of university students, who are individuals in the identity and independence development phase, difficult.

Students went through the devastating experience of the February 6, 2023 earthquake and survived and started their university education in the following academic year experienced both personal and academic difficulties. The fact that these students continue their education in higher education despite the trauma and stress disorder caused by such a devastating event is significant for us to understand how academic resistance is displayed in this context. According to Izadpanah (2022), resilience within the academic context includes various variables such as coping mechanisms, emotional support, and self-directed learning strategies.

The concept of self-directed learning (SDL) is a key element of academic resilience because it improves students' problem-solving skills, keeps them motivated in the face of challenges, and encourages students to take responsibility for their own learning (Izadpanah, 2022). Furthermore, educational institutions have a major role in developing resilience by providing psychological well-being support and implementing continuous learning strategies for students who have survived disasters (Telli & Altun, 2023). With respect to this, providing mental and academic support to students who survived the earthquake is essential for both their academic success and their health.

This study intends to examine the academic resilience of second-year physical therapy and rehabilitation students who started their undergraduate education after the February 6, 2023 earthquakes. The study specifically aims to determine the main components of the concept of resilience, namely coping strategies, social support mechanisms, self-regulation techniques, and how these students cope with academic difficulties after the earthquake disaster. Identifying the factors that play a role in ensuring resilience may be meaningful for educators and authorities to take targeted actions to support students coping with academic and mental difficulties. In this context, this study aims to shed light on the following research questions:

- 1) How do second-year physical therapy and rehabilitation students who survived the February 6, 2023 earthquakes describe and develop their academic resilience?
- 2) What experiences impact their academic resilience in the wake of the earthquake?

Methodology

Research Design

This study was prepared as a qualitative case study with the aim of examining the academic resilience of physical therapy and rehabilitation department students who started their university education after February 6, 2023. A phenomenological approach, in particular, was used to learn about the students' first-hand experiences. The use of a phenomenological approach was appropriate for in-depth investigation of students' academic experiences following the earthquake disaster from their own perspectives.

Participants

This study was conducted with second-year students studying at Hatay Mustafa Kemal University, Department of Physical Therapy and Rehabilitation in the spring semester of 2024-2025 academic year. Participants were selected employing the convenience sampling method according to their readiness and reachability in the class. All students in the class were invited to participate voluntarily in the study. 22 of them, involving participants of different genders, agreed to participate and completed the interview form. Demographic details were not included in the analysis as they were not essential to the purpose of the study. The sample was not decided on to stand for a large population, but was selected to obtain rich and comprehensive data in accordance with the purpose of the study.

Data Collection Tools

Data were collected through the use of a semi-structured interview form including three open-ended questions. These questions were designed to analyse students' opinions, difficulties experienced and coping strategies in the context of academic resilience, especially after the earthquake disaster. Although participants of the study were physical therapy and rehabilitation students taking the Vocational English course, the interview questions were not directly related to this course. The course setting facilitated the data collection and sample selection purposes.

The interview questions were prepared subsequent to extensive research in the relevant literature and by considering the purpose of the study, the academic difficulties experienced by the students, the strategies they developed in response to these adversities, and the support mechanisms they needed to increase their resilience. The interview questions were as follows:

What challenges you the most academically? What strategies do you use to cope with difficult times? What kind of support do you need to develop your academic resilience?

The form was prepared via Google Forms, which facilitated participants' access by allowing time-independent contributions. Before the actual form was distributed, a pilot application was conducted with two students to check the clarity and appropriateness of the interview form. Necessary revisions were carried out based on their feedback, and the final version of the interview form was sent to the entire class via a common online link. Participants were informed about the purpose of the study and their consent was obtained prior to participation. Returns were gathered anonymously.

Data Analysis

In this study, the data obtained through semi-structured interviews were analysed using the thematic analysis method emphasized by Braun and Clarke (2006). In the initial stage, all interviews were literally written down to confirm accuracy. Second, open coding was used to identify common ideas and sequences in the participants' responses. The resulting codes were divided into larger categories, mainly based on resilience aspects and coping strategies. For the reliability of the results, verification was requested from the participants regarding the verification of the researcher's understanding through member checking. Ethical considerations were adhered to at every stage of the study; consent forms were obtained before the interviews and participant information was kept confidential. In addition, peer debriefing was used in data analysis, which aimed to ensure the trustworthiness and dependability of the findings by discussing the themes that emerged with the fellow researcher.

Results and Discussion

In this study, the data were analysed in accordance with the thematic analysis method proposed by Braun and Clarke (2006). The themes that emerged from the participants' answers to the open-ended questions are presented under each question title with the participants' excerpts.

Table 1. Difficulties faced by students in their academic lives

Theme	Subcategory	Codes	Frequency (f)
Academic workload	Course intensity, electives	too many courses, group assignments	6
Exam stress	Test anxiety	Exam apprehension, Apprehension about low grades	6
Psychological aspects	Ambiguity, Anxiety about future	Pressure, ambiguity, nervousness	6
Physical and social aspects	Distance, marriage, sleep	distance, marital status, sleep issues	4
Time management	Insufficient time management	Time management, Deficit of focus	3
Absence of academic support	Faculty behaviour, communication	uncertain course schedules, communication problems	2

As seen in Table 1, academic workload, time management and exam stress were most frequently cited as the difficulties students encountered in their academic lives after the earthquake (f=6 for each). In addition, physical and social aspects (f=4), time management (f=3) and absence of academic support (f=2) were other difficulties cited by students. These findings suggest that students need diverse support systems.

Considering academic workload, most students claimed that the large number of courses, elective courses, and group assignments caused excessive load on their academic lives:

“Too many courses” (P11)

“Some elective courses feel unnecessary” (P17)

In terms of exam stress, students stressed that they experienced exam anxiety and were afraid of getting low grades:

“I’m already afraid of the exams, to be honest” (P3)

“I get way too stressed during exams” (P4)

Regarding psychological aspects, students stated that there is uncertainty and anxiety in their academic lives and that they are worried about the future:

“Ambiguity”, “Anxiety about future” (P9, P10)

As for physical and social aspects, students specified the effects of home-school distance, sleep problems and marital status on their academic performance:

“Distance to school, age, and being married” (P11)

“My irregular sleep pattern” (P20)

The final two themes, time management and absence of academic support, revealed that students had difficulties in time management and effective planning of time, and in addition to these, uncertainties in course schedules and communication problems with professors create some difficulties in their academic lives with the following words:

“Time management” (P1)

“I get distracted easily and can’t concentrate” (P8)

According to these findings, the participants stated that the most difficult points in their academic lives were intense homework, exam anxiety and stress related to their academic performance, and these results are compatible with prior studies in terms of examination anxiety and academic assignment load, which are important risk indicators of poor academic performance. In this regard, Martin and Marsh (2008) addressed these academic difficulties and obstacles with the concepts of Academic Buoyancy and Academic Resilience in their study. According to their definitions, academic buoyancy is the challenges in students' academic lives, such as exam anxiety, not being able to meet assignment deadlines, and low exam grades. Academic resilience, on the other hand, is defined as more than daily obstacles. In this context, based on the study findings and the earthquakes that occurred on February 6, while many students may show academic buoyancy due to excessive course load and exam anxiety, other students, especially those who survived the disaster, may need more systematic support to create deeper and longer-term academic resilience. In addition, environmental and psychological factors such as the distance of the school from the student, the student's age, and marital status were also found to have a negative effect on students' academic engagement. These challenges seem to increase students' psychological stress and decrease their adjusting capacity. This finding agrees with Mwangi et al. (2017) study, which suggested that both internal and external factors can reduce students' ability to keep their academic resilience, especially when support from academic institutional is inadequate.

Table 2. Coping strategies in difficult times

Theme	Subcategory	Codes	Frequency (f)
Emotional Regulation	Taking up hobbies, rest	Watching movies, music, knitting	7
Social Support	Guidance, counselling	Taking advice, counsel	5
Ignoring and Repression	Letting things slide, silence	Silence, refusal	4
Goal-directedness	Setting goal, motivation	Target, motivation	3
Physical Activity	Exercise, breathwork	Exercise, deep breathing	2

According to Table 2, the most frequently cited coping strategies were emotional regulation ($f=7$), social support ($f=5$), ignoring and repression ($f=4$), goal-orientedness ($f=3$) and finally physical activity ($f=2$), respectively. These findings suggest that students most often use emotional regulation strategies to cope with difficult times, along with seeking social support, but also make use of emotion ignoring and repression, goal-directedness, and physical activity, but to a lesser extent.

Considering emotional regulation, most students expressed individual relaxation activities such as watching movies and listening to music to feel better during difficult times:

“I spend time on myself, focus on my hobbies, knit, and watch movies” (P4)

“I sleep” (P15)

In terms of social support, students argued that they receive guidance and advice from trusted individuals during difficult times.

“I take advice from people I trust... Sometimes I make decisions alone” (P16)

“I receive help” (P11)

Regarding ignoring and repression, some students said that during difficult times in their academic lives, they sometimes go with the flow, while others act as if everything is going well.

“I stay quiet and act like there's no problem” (P12)

“I just let it flow” (P14)

The remaining two themes, goal-directedness and physical activity, showed that students' orientation towards their goals, self-motivation, and moreover, breathing and physical exercises contribute positively to their resilience.

“Focusing on my future goals” (P8)

“Motivating myself” (P18)

“I listen to music”, “I take deep breaths” (P7, P21)

The strategies used by students to cope with difficult times were mostly related to regulating their emotions, seeking social support, and individual activities. In this context, they stated that they tried to cope with stressful and anxious situations with activities such as starting a new hobby, listening to music, and doing sports. This finding agrees with Polat (2023) and Keener et al.'s (2021) studies in which it was observed that individuals with high psychological resilience tend to cope better with difficult situations. Furthermore, when people who survive devastating events such as earthquakes receive psychological support, it can change their resilience levels, which reveals the effectiveness of coping strategies (Sirin Gok et al., 2024). As a result of these findings, emotional and social support mechanisms are important in students' psychological resilience and thus in their academic resilience.

Table 3. Support Needs in Increasing Academic Resilience

Theme	Subcategory	Codes	Frequency (f)
Psychological Support	Therapy, confidence, attention	Mental health support, reliance	8
Social Support	Family, peers, teachers	family support, academic attention	6
Structural Support	Institutional adaptability, basic necessities	Remote course opportunities, need for enough sleep	5
Financial Support	Financial aids, income	money, career opportunities	4
Social Activities	Social interaction	extracurricular activities	2

Table 3 shows that the most frequently emphasized needs of students are psychological support (f=8) and social support (f=6). In addition to these supports, students also request structural support (f=5), financial support (f=4) and social activities (f=2). The fact that

students are in this diverse requirement reveals that their resilience needs to be supported both individually and environmentally and institutionally.

Psychological support, which was the most frequently mentioned need by students, was viewed as the essential facet of their resilience:

“Psychological and emotional support” (P16)

“It would be beneficial if students had counsellors they could reach out to whenever they needed” (P17)

Considering social support, family, peers and teachers support were regarded as necessary:

“Support from family and friends” (P22)

“I wish teachers would communicate more effectively with students” (P15)

As for structural and financial support, some students claimed that they were in need of physical resources, basic needs as well as financial aids such as money and career opportunities:

“It would be better if some of the courses were given as remote courses” (P11)

“Quality sleep environment, stress management” (P12)

“I need money” (P18)

Regarding social activities, some students mentioned the lack of social activities and emphasized their need to socialize:

“We need more social activities” (P14)

According to the results, psychological and moral support was the most prominent support in increasing students' academic resilience. The results also support the findings of Sirin Gok et al.'s (2024) study, in which the necessity of emotional needs such as peer and teacher attention and/or therapy support on students' academic success is addressed. Moreover, it is suggested that institutional supports such as distance education opportunities and flexible class hours will make it easier for students to cope with academic difficulties (Keener et al., 2021). In this context, Van Hoek et al. (2019) emphasized that academic and psychological support for students studying in difficult environments where disasters such as earthquakes occur will

positively reflect on their resilience and therefore their academic success. That's why, it is noteworthy to develop flexible and student-centred methods within the scope of teaching and learning policy.

This study was conducted to examine the academic resilience of a group of students who survived the February 6, 2023 earthquakes and started their higher education in September. The findings were examined under three themes: the difficulties students face in their academic lives, strategies to cope with them, and the support needed to improve their academic resilience. As a result of the findings, many factors affecting student resilience and strategies developed to cope with these factors have emerged.

Conclusion

The present study investigated the academic resilience of students who survived the February 6, 2023 earthquakes and started their higher education in the same year, and three themes emerged: difficulties faced by students in their academic lives, coping strategies in difficult times and support needs in increasing academic resilience. According to the findings, although the students experienced some difficulties in psychological, physical and social aspects in their academic lives, it was concluded that their resilience was shaped by emotional regulation, social and psychological support. This study has been a necessary step in revealing the factors affecting the academic resilience of students who started higher education under difficult conditions. The difficulties that students encountered in their academic lives, the strategies they developed and the supports they needed can shed light on the developments to be made in the higher education system. These findings of the study indicate that in addition to psychological support, structural preparations such as policies for affiliated schools and educational planning should be integrated to improve academic resilience. Ultimately, this study makes a contribution to the growing collection of studies that reveal that student resilience is not stable and emerges through correlational and environmental aspects, especially after distressing experiences such as earthquakes.

The Conflict of Interest Statement

I hereby declare that I have no conflicting interests with respect to any parties involved in this study.

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The Research and Publication Ethics Statement

Data collection for this study was initiated after obtaining ethical approval from the University's Social and Humanities Ethics Committee on 20.05.2025.

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