




Opinions of school administrators on school effectiveness after the earthquakes

Yaşanan depremler sonrasında okul etkililiği konusunda okul yöneticilerinin görüşleri

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Abstract: Schools, as educational institutions, have played a crucial role as shelters during earthquake disasters and have subsequently contributed to the normalization of life through educational and training activities. In this context, the role of school administrators working in these institutions has become prominent. Effective use of human and material resources by school administrators is essential for school effectiveness. This qualitative phenomenological study aimed to explore the experiences, opinions, and recommendations of school administrators regarding school effectiveness after earthquakes. The study involved 17 school administrators selected using purposeful sampling method from those working in Elazığ during the 2023-2024 academic year. Data were collected through semi-structured interviews and analyzed using content analysis. Findings revealed that school administrators made efforts to enhance disaster awareness among staff after earthquake disasters. Guidance services provided support, particularly to students facing psychological issues. While some participants found the support from superiors sufficient, many reported deficiencies in this regard. It was evident that earthquakes had physical, administrative, and educational impacts on schools. The study also highlighted a lack of disaster awareness among administrators, teachers, and students, negatively affecting educational activities.

Keywords: School effectiveness, disaster awareness, school administrators

Özet: Eğitim Kurumu olan okullar deprem felaketlerinde önemli birer sığınak olmuş, sonrasında ise eğitim ve öğretim faaliyetleri ile hayatın normalleşmesinde etkili olmuştur. Bu süreçte okullarda görev yapan okul yöneticilerinin rolü ön plana çıkmıştır. Okul yöneticilerinin, insan ve maddi kaynakları efektif şekilde kullanmaları okul etkililiği açısından önem arz etmektedir. Bu amaçla gerçekleştirilen çalışmada yaşanan depremler sonrasında okul etkililiği konusunda okul yöneticilerinin tecrübeleri, görüşleri ve tavsiyeleri önemli görülmektedir. Çalışma, olgubilim (fenomonoloji) deseninin kullanıldığı nitel bir araştırmadır. Çalışma grubu, 2023-2024 eğitim-öğretim yılında Elazığ ilinde görev yapan okul yöneticileri arasından amaçlı örnekleme yöntemi ile belirlenmiş toplam 17 okul yöneticisinden oluşmaktadır. Veri toplama aracı olarak, yarı yapılandırılmış görüşme formu kullanılmıştır. Yapılan görüşmeler sonucu elde edilen veriler içerik analizine tabi tutulmuştur. Okul yöneticilerinin deprem felaketleri sonrasında kurumlarında tüm personelin afet bilinci farkındalığını arttırmaya çalıştığı, rehberlik servislerinin özellikle psikolojik sorun yaşayan öğrencilere destek vermelerini sağladığı belirlenmiştir. İllerde ve ilçelerdeki yönetim birimlerinin çalışmalarını bazı yöneticiler yeterli görmüş, fakat birçok yönetici bu konuda eksiklikler olduğunu belirtmiştir. Okulların depremlerden fiziki, yönetsel ve eğitim öğretim boyutlarında etkilendiği sonucuna ulaşılmıştır. Eğitim öğretim faaliyetlerinin yürütülmesinde yönetici, öğretmen ve öğrencilere depremin olumsuz yansıdığı, yeterli afet bilincinin olmadığı saptanmıştır.

Anahtar Sözcükler: Okul etkililiği, afet bilinci, okul yöneticileri

1. Introduction

Disasters are generally the result of suddenly unfolding natural events. A disaster unpleasantly affects people in physical, social, and economical manners. It also restricts daily life and individual activities and has societal consequence whether it is originated from technology, human actions, or natural occurrences (Ergünay, 1996). In other words, any event that has a negative impact on individuals and the areas in which they live can be considered a disaster (Dikmenli & Gafa,

2017). One of these disasters is earthquake, which is an unquestionable reality in Türkiye. Türkiye is located in one of the regions with a high risk of earthquakes worldwide (Gezer & Şahin, 2022). Due to the fear, loss of life, and damage they cause, earthquakes are referred to as disasters (Tanyaş et al., 2013). Recently, Türkiye has witnessed devastating earthquakes in a number of regions, including Erzincan in 1992, Dinar in 1995, Gölcük in 1999, Bingöl in 2003, Van in 2011, Elazığ in 2020, and Kahramanmaraş in 2023. Disasters lead to various economic, psychological, and social impacts on the regions they strike (Bıçakcı & Okumuş, 2023), and education is among the most significant areas of impact (Tüzün, 2023). After the earthquakes that struck Elazığ in 2020 and Kahramanmaraş in 2023, face-to-face education was temporarily suspended in certain provinces of Türkiye due to the extensive damage caused by these incidents. Schools were also affected by the loss of teachers and students, as well as housing problems. The interruption of education has had a negative impact on the effectiveness of educational institutions. The repercussions of large-scale disasters, such as earthquakes, are not confined to individuals and societies; educational institutions are also subject to substantial impact. The disruption of educational processes can directly influence the effectiveness of schools and exert a negative influence on students' academic achievements and learning experiences.

School effectiveness evaluates how well a school operates to enhance students' achievements in the learning process and provide a positive educational experience (Creemers et al., 2022; Çetin & Koçak, 2024; Scaarens, 1994). School effectiveness covers a range of components, including teachers, students, school management, curriculum, and environmental factors (Cheng, 2022; Koyuncu & Kazak, 2023). One of the primary goals of effective schools is to enhance students' academic achievements in a positive learning environment (Askell-Williams & Koh, 2020; Uçak & Bilgivar, 2023). Effective schools play a crucial role in teaching fundamental competencies to students throughout the school process (Balci, 2014; Yumuşak & Korkmaz, 2021). In effective schools, actions should be taken to efficiently and effectively use teaching materials, physical conditions, and school resources to improve students' success (Akan & Kılıç, 2019; Polatcan & Cansoy, 2018). Moreover, in effective schools, school administration should also operate in line with the goals of effective education to carry out of learning activities without any problem (Işık & Gümüş, 2017; Turhan et al., 2017). Researchers have identified common characteristics of effective schools. In the literature, it is seen that effective schools have a structure that prioritises student-centred approaches, encourages the active participation of all stakeholders and monitors student achievement. They are also characterised by strong and committed school administrators who provide a disciplined school environment and ensure efficient use of resources in educational institutions. (Karip & Köksal, 1996; Özdemir & Sezgin, 2002). In effective schools, the success-oriented attitudes of school administrators, teachers, students, and parents contribute to the success of instructional activities. In such schools, the attitudes of students and parents toward the school are also positive (Çinkır, 2006). School administrators have an important position in effective schools. They play a crucial role in establishing a beneficial learning environment and creating a positive school climate, both of which are essential for school success. In the context of these responsibilities, school administrators have a significant impact on school effectiveness. In this sense, it is stated in the literature that school administrators' leadership skills (Hofman & Hofman, 2011) and self-efficacy (Paglis & Green, 2002; Tschannen-Moran & Gareis, 2004) influence school effectiveness.

After the recent earthquakes in Türkiye, school administrators in earthquake-prone areas have faced several challenges such as damage and safety concerns in schools, unavailability of teacher and staff, and infrastructure problems. School administrators have been placed upon with addressing these problems and providing solutions. However, there are not any studies focusing directly on post-earthquake school effectiveness. School administrators have gained valuable

experience in school safety and emergency management in recent years due to earthquakes. Therefore, their knowledge and insights in terms of school building safety, the protection of students and staff, and the implementation of emergency plans during natural disasters such as earthquakes are of great significance. After earthquakes, the educational process may be disrupted during the period of returning to normal life. School administrators play a vital role in determining the kind of programs or resources required to compensate for these delays. These insights can assist in developing strategies to ensure that students can continue their education. Earthquakes can result in the closure of schools and thus may lead to remote learning and the use of educational technologies. School administrators can make significant decisions regarding the planning and implementation of these technologies. Therefore, the opinions of school administrators on school effectiveness after earthquakes play a critical role in school safety, educational quality, and community well-being. For these reasons, their experiences and perspectives are of great importance for better preparedness and more effective crisis management against earthquakes.

In this context, it is important to examine the challenges faced by administrators, how they address these challenges, and what systemic or administrative issues they experience. Accordingly, answers to the following research questions have been sought:

1. Have there been any changes in your school after the earthquakes? If so, evaluate them in terms of physical conditions, administrative changes, and educational activities (interruptions and limitations).
2. After earthquakes, what measures were taken by the school administration to ensure the continuity of educational activities in your institution? Please explain.
3. Do you consider the measures taken by the district and school management regarding conducting educational activities in your institution in response to disasters to be adequate? What recommendations do you have?
4. Can you elaborate on how the earthquakes have affected the educational activities in your institution? (From the perspectives of administrators, teachers, and students)
5. What are your opinions regarding the effective use of human and material resources in the school after the earthquakes?

2. Methodology

2.1. Research Design

This study employed the phenomenological approach which is a qualitative research method. Contrary to quantitative research, in qualitative research, the researcher actively engages in the analysis process rather than relying on automated analysis programs (Creswell, 2017; Pham, 2018). Qualitative research involves the holistic examination and interpretation of observations, interviews, or information and documents in their natural context (Baltacı, 2017). The aim of qualitative research is to explain how individuals make sense of their lives and interpret the events they experience (Newman & Hitchcock, 2011; Shields & Twycross, 2003; Yılmaz, 2013). Individuals may interpret events differently and thus providing clear reasons for why individuals interpret facts in different ways is the objective of the phenomenological design (Çapar & Ceylan, 2022).

2.2. Participants

The study consisted of a total of 17 school administrators selected using purposive sampling in Elazığ during the 2023-2024 academic year. In purposive sampling, individuals who meet specific criteria and have particular characteristics are included in the study (Büyüköztürk et al., 2018). The aim of purposive sampling is to reduce bias, increase validity, and enhance reliability in research (Baltacı, 2018). In the study, it was assumed that school administrators in earthquake-prone schools were more appropriate for the study's scope. Demographic information about the participants is provided in Table 1.

Table 1

Demographic features of the participants

Participant	Gender	Duty	Duration of Administrative Duty	Participant	Gender	Duty	Duration of Administrative Duty
P1	Male	Chief Assistant School Principal	17 years	P10	Male	School Assistant Principal	21 years
P2	Male	Chief Assistant School Principal	23 years	P11	Male	School Principal	23 years
P3	Male	School Principal	11years	P12	Male	School Assistant Principal	15 years
P4	Male	School Assistant Principal	14 years	P13	Male	School Assistant Principal	12 years
P5	Female	Chief Assistant School Principal	25 years	P14	Male	School Principal	21 years
P6	Male	School Principal	18 years	P15	Male	School Assistant Principal	24 years
P7	Male	School Assistant Principal	22 years	P16	Male	School Assistant Principal	13years
P8	Male	School Assistant Principal	24 years	P17	Female	School Principal	15 years
P9	Male	School Assistant Principal	23 years				

2.3. Data Collection Instrument

In this study, a semi-structured interview form was used as the data collection instrument. In the interviews, in addition to the questions in the interview form, additional questions may be asked to participants if necessary (Polat, 2022). The questions asked during the interviews to obtain additional information that emerged spontaneously are called driller questions (Creswell, 2017, p. 286; Merriam, 2015). In this study, six interview questions were developed based on the literature and a draft version of the interview form was prepared. To determine whether the interview questions in the draft version served the research objectives, expert opinions were obtained from four faculty members in the Department of Educational Management. Based on the expert opinions, one of the interview questions was left out as it was considered out of scope, three of the interview questions were modified and the final version of the interview form was prepared.

To ensure the structure and content validity, an interview form was developed based on expert opinions. The form was implemented through one-on-one interviews with school administrators from different educational levels in Elazığ over a period of 13 days, until data saturation was reached. When responses began to repeat, the data collection phase was concluded. As a result, 17 participants took part in the study. The data were then transferred to digital format.

2.4. Data Analysis

Content analysis was used in data analysis. In content analysis, the data is coded, and then these codes are categorized. In the study, the participants were coded as P1, P2, P3,..., P17. Participants were coded based on their roles as school

principal (SP), Chief Assistant School Principal (CASP), and assistant school principal (SAP). Participant opinions were individually examined, and similar statements were categorized. These categories were then associated with the most relevant themes based on their meanings. Since some opinions could be applicable to a number of themes, it resulted in a situation where the number of opinions exceeded the number of participants. Later, the data were quantified and represented in terms of frequency.

To assess the reliability of the study, the formula developed by Miles and Huberman (1994) was employed. In this context, the data were reviewed by two associate professors and one assistant professor faculty member, all of whom are experts in the field. The feedback received from these experts was calculated using Miles and Huberman's formula for the agreement percentage, which is calculated as follows: Agreement Percentage = (Agreement / (Agreement + Disagreement)) x 100.

In qualitative research, reliability is typically considered achieved when the agreement percentage is 90% or higher (Patton, 2002). In this study, the agreement percentage was calculated as follows: In thematic coding, it was determined that there were 213 common opinions and 15 different opinions. Agreement Percentage = $213 / (213 + 15) * 100 = 93.42\%$.

3. Findings

Based on the analysis of data gathered from face-to-face interviews, the following findings were reached. In this context, participants were asked the question, "1. Have there been any changes in your school after the earthquakes? If so, evaluate them in terms of physical conditions, administrative changes, and educational activities (interruptions and limitations)." The responses were analyzed, and the results are presented in Table 2.

Table 2

The observed changes

Theme	Sub-Theme	Codes	f
Change	Physical	Renovation	8
		Relocation	3
		Shared building usage	2
	Administrative	Increased difficulty	3
		Psychological issues	3
		Staff	1
		Working hours	1
	Educational	Attendance problem	4
		Disruptions	3
		Transferred students	3
		Student profile	2
		Earthquake awareness	2
		Double-shift education	1
		Transportation problem	1
	Not Observed		4
Total			41

As shown in Table 2, the opinions of the participants regarding changes in their schools after the earthquake are categorized into four sub-themes: "Physical," "Administrative," "Educational," and "Not Observed." Under the "Physical" sub-theme, responses included renovation (n=8), relocation (n=3), and shared building usage (n=2). For the "Administrative" sub-theme, responses involved increased difficulty (n=3), psychological issues (n=3), and staff and working hours (n=1). Within the "Educational" sub-theme, responses covered attendance problem (n=4), disruptions

and transferred students (n=3), earthquake awareness and student profile (n=2), and double-shift education and transportation problem (n=1). Some remarkable participant opinions for this theme were as follows:

(P6, SP): "Actually, there were minor cracks in the paint and some broken tiles. Nevertheless, these minor damages do not hinder educational activities." (Physical: renovation)

(P1, CSAP): "We had to move to a different school because our school was undergoing renovations. Unfortunately, this disrupted the organization of educational activities. Managing this process, which will take at least one year, is really challenging." (Administrative : increased difficulty)

(P9, SAP): "The reasons for these disruptions are parents who do not want to send their children to school due to the fear of earthquakes and the fact that absenteeism is allowed. A person who cannot find a place to stay cannot be forced to send their child to school." (Educational: Attendance problem)

These findings indicated that the majority of the participants were affected by a number of problems. It was emphasized that the physical damages caused by the earthquake not only increased workload but also disrupted educational activities. Furthermore, it was found that the emotional SApect of the earthquake had an impact on all individuals in the schools and had negative implications for education.

To examine the measures taken by school administrators to ensure the continuity of the educational activities after the earthquakes, the question "After earthquakes, what measures were taken by the school administration to ensure the continuity of educational activities in your institution? Please explain." was asked. Table 3 shows the responses given to these questions.

Table 3

The measures taken by the school administrators

Theme	Sub-Theme	f
The Measures	Parental Informations	9
	Drill	7
	Disaster Plan	7
	Renovation	7
	Student Informations	7
	Psychological Support for Students	6
	Building Inspection	5
	Guidance Service	5
	Official Inspections	4
	Remote Education	2
	Total	59

As shown in Table 3, the major codes on the measures taken in their institutions after the earthquake were categorized into the sub-themes of "Parental Informations " (n=9), "Drills" and "Renovation" (n=7), and "Remote education" and "Student information." Some participant opinions for this theme is as follows:

(P17, SP): " Parents were provided with information regarding observational damage assessment studies conducted after the earthquake. The parents were informed about the earthquake resilience of the school." (Parental informations)

(P16, SAP): "Building structure inspections were conducted, repairs and renovations were carried out, parents were informed to ensure student attendance, and risky situations in terms of occupational safety were eliminated." (Renovation, parental informations)

(P15, SAP): "As the school administration, we provided students with guidance services, including training on stress disorders, depression, and orientation, to help them overcome their traumas. It was observed that these interventions had a positive impact on the students." (Psychological support)

The findings revealed that school administrators primarily focused on addressing the physical damages in the school. It was found that the safety of the school's physical structure was guaranteed, especially for parents, and later sent to students through official documents. Additionally, they made efforts to prepare for a potential disaster by conducting earthquake drills. It was also found that they sought assistance from guidance services and experts to provide emotional support to students affected by the earthquake.

To investigate the opinions of school administrators regarding the measures taken by the superiors, participants were asked the question, "Do you consider the measures taken by the district and school management regarding conducting educational activities in your institution in response to disasters to be adequate? What recommendations do you have?" The responses of the participants are presented in Table 4.

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The measures taken by the superiors

Theme	Sub-theme	Codes	<i>f</i>
Measures taken by the Superiors	Sufficient	Collaboration	3
		Workflow	8
		Coordination	6
		Communication	5
		Disaster Awareness	5
	Insufficient	Relocation Issues	4
		Authorities	3
		Technical Operations	3
		Customized School Practices	2
		Equitable and Equal Resource Distribution	1
	Total		40

As shown in Table 4, the opinions of the participants on the measures taken by the superiors were categorized into two sub-themes: "Sufficient" and "Insufficient." In the "Sufficient" sub-theme, the opinion of collaboration (n=3) was coded. In the "Insufficient" sub-theme, various codes were identified, including workflow (n=8), coordination (n=6), communication and disaster awareness (n=5), and relocation issues (n=4). Some of the participant opinions were as follows:

(P1, CSAP) "I consider it sufficient; they work in coordination, but there are occasional timing issues. Some decisions are delayed in their implementation." (Sufficient: Collaboration; Insufficient: Workflow)

(P14, SP) "I do not think it is at the desired level. There are partial difficulties in communication with senior management, which leads to operational problems. Local authorities and school administrators should be given more initiative. In this way, faster and more consistent decisions can be made. Moreover, there have been disruptions in relocation procedures for students who had to be transferred to other schools." (Insufficient: Communication, Authorities, Relocation Issues)

(P15, SAP) "No, I do not consider it sufficient. First of all, I would like to see an identification assigned to each building. All relevant information about the building should be recorded on this identification. Disaster training should be provided more seriously." (Insufficient: Customized School Practices; Disaster awareness)

These findings indicated that school administrators, in general, did not consider measures taken by the superiors sufficient. Particularly, it was stated that communication and coordination issues among departments slowed down the process and led to delays in decision-making and implementation. In addition, it was emphasized that specific measures

should be taken for each building in educational institutions, buildings should have identification numbers, practical disaster awareness training should be provided to staff and students, and resources should be distributed fairly according to the needs of the schools.

In order to examine the opinions of the participants regarding the changes in the academic achievements of their institutions, participants were asked the question, " Can you elaborate on how the earthquakes have affected the educational activities in your institution? (From the perspectives of administrators, teachers, and students)". Table 5 shows the responses of the participants.

Table 5

The impact of earthquakes on academic achievement

Theme	Sub-theme	Codes	f
The impact of earthquakes on academic achievement	Administrator	Student Relocation	8
		Psychological Distress	5
	Teacher	Reduced Lesson Pace	8
		Psychological Distress	6
	Student	Attendance	9
		Academic Achievement	7
		Psychological Problems	6
		Lack of Concentration	5
		Class Hours	4
	Total		54

Table 5 showed that the opinions of the participants on regarding the impact of earthquakes on academic achievement were categorized into three sub-themes: "Administrator," "Teacher," and "Student." The most frequent codes in "Administrator" sub-theme were student relocation (n=8) and psychological difficulties (n=5). In addition, the most frequent codes in "Teacher" sub-theme were reduced lesson pace (n=8) and psychological distress (n=6). The "Student" sub-theme comprised attendance (n=9), academic achievement (n=7), psychological problems (n=6), lack of concentration (n=5), and class hours (n=4). Some participant statements were as follows:

(P8, SAP): "Not all administrators and teachers, but some of them, including me, were earthquake victims as parents after the earthquake. The decision to allow absenteeism in schools, especially due to the high number of transfers from other city centers severely affected by the earthquake, made it difficult to maintain unity in our school. Due to the heavily damaged houses around the school, parents who had to move to different neighborhoods in the city faced difficulties in bringing and picking up their children from school. These factors inevitably had a negative impact on education." (Student: Attendance)

(P5, CSAP): "Students, teachers, and even some of our administrative colleagues experienced psychological fears. They panicked at even a slight noise or shake, like when a large vehicle passed by the school." (Teacher: Psychological Distress)

(P7, SAP): "Since we have a double-shift education (morning and afternoon sessions), students can sometimes be late for the classes that start at 07:00 in the morning. We have to have block lessons, which means students have to stay in class for 80 minutes. This can have a negative impact on students academically." (Student: Attendance, Class Hours)

These findings showed that the psychological well-being of teachers and students in schools was negatively affected by these disasters. Particularly, students' disruptions in their studies due to obligatory reasons had a negative impact on their academic performance. The high number of student transfers and the variability in class sizes increased the

workload of administrators, which in turn negatively affected the motivation and concentration of teachers. As a result, this situation had a negative effect on the school's academic performance.

In order to investigate how school administrators, use the resources in their institutions, participants were asked the question, "What are your opinions regarding the effective use of human and material resources in the school after the earthquakes?" Table 6 shows the responses of the participants.

Table 6

The use of resources

Theme	Sub-theme	<i>f</i>
Use of Human and Material Resources	Disaster Plans	10
	Building Inspections	9
	Psychological Support	8
	Disaster Education	7
	Careful Use of Resources	4
Total		38

As shown in Table 6, the opinions of the participants on the use of human and material resources were divided into five sub-themes: "Disaster Plans," "Building Inspections," "Psychological Support," "Disaster Education," and "Careful Use of Resources." Some participant opinions were as follows:

(P4, SAP): "...There is a need to increase mental health and psychological resilience activities." (Psychological Support)

(P12, SAP): "Our school should not tolerate wastefulness in terms of financial resources. However, when it comes to spending on people, it should be done with the mindset that no expense can be spared, while taking all necessary precautions." (Careful Use of Resources)

(P3, SP): "Comprehensive disaster plans should be prepared in schools before disasters, and training should be provided. Buildings should be regularly inspected." (Disaster Education)

The findings revealed that school administrators emphasized the need for schools to develop comprehensive disaster plans and systematically inspect and address any deficiencies in school buildings. They also stressed the importance of providing disaster education to all staff, particularly students, before disasters. Furthermore, it was identified that psychological support should be offered after disasters. The findings also highlighted the importance of not wasting resources and instead using them carefully and sensibly.

4. Result and Discussion

In this study, interviews were conducted to examine how the earthquake disaster affected school administrators and its impact on the school's educational activities. How human and material resources were managed during this process were also investigated. Accordingly, the following conclusions were reached.

It was revealed that schools were affected by earthquakes in physical, managerial, and educational SAPECTs. Particularly in educational terms, it was found that there was a compulsory disruption in education, students were transferred to different schools, class sizes increased in many schools, some schools switched to double-shift education, students faced relocation issues due to changes in their residences, absenteeism increased, and there were changes in the profiles of students in the classroom. However, there were also positive developments in terms of earthquake awareness. School

administrators experienced an increase in their workload, teacher and student circulation, changes in working hours, and problems as a result of psychological issues in the schools. Furthermore, it was indicated that school administrators experienced disruptions in educational activities due to physical reasons such as school relocation and renovation. Disasters, which may result in loss of life and property, can also significantly disrupt education (Telli & Altun, 2023). In this sense, Aydoğdu and Fofana (2023) reported that earthquakes had various effects on the development of young children, including their physical health, nutrition, education, social life, and psychological well-being. Similarly, Çamur (2023) highlighted the negative impact of disasters on education and education stakeholders' social and psychological well-being. Dönmez (2023) pointed out that the earthquake-related destruction and migrations disturbed music education of students and had negative effects on their psycho-social well-being.

It was also found in this study that the participants put efforts to increase disaster awareness among all members in their institutions after earthquake disasters. Guidance services played a crucial role in providing support, particularly to students having psychological problems. The participants collaborated with official authorities to evaluate the structural integrity of school buildings and shared the findings with teachers, students, and parents to establish trust. In addition, it was found that disaster plans were updated, and disaster drills were conducted in schools to ensure that students' educational activities would not be disrupted. Similar to findings of the present study, Aydoğdu and Fofana (2023) reported intervention efforts aimed at removing the negative impact of the earthquake on children and increasing earthquake-related awareness after Kahramanmaraş earthquakes on February 6, 2023. In addition, Mızrak (2018) indicated that individuals with disaster education are more well-prepared for disasters and have enhanced protection. In this sense, pre- and post-earthquake information and education can reduce the damage caused by earthquakes and increase awareness (Fetihi & Gülay, 2011). Disaster education helps individuals become aware of potential risks without experiencing a natural disaster (Muttarak & Pothisiri, 2013).

Some participants considered the efforts of superiors as sufficient. However, the majority of them acknowledged deficiencies in this regard. These deficiencies included inadequate workflow and communication, insufficient coordination, and a lack of customized school practices. It was determined that superiors needed to develop and keep disaster plans up-to-date, and these plans should contain specific measures for disasters such as earthquakes. The participants believed that teachers and students should know how to behave in disaster, and therefore, regular disaster education and drills should be essential. In this sense, Tüzün (2023) emphasized that Kahramanmaraş earthquakes affected everyone directly or indirectly in different ways and revealed our vulnerability and unpreparedness at individual, institutional, and societal levels in the face of such a disaster.

It was also revealed that earthquake had negative effects on administrators, teachers, and students. It impacted the conduct of educational activities and revealed a lack of sufficient disaster awareness. It was found that administrators and teachers experienced psychological problems. In addition, high student circulation increased the workload of administrators and reduced the effectiveness of teachers in their lessons. The students, who were the most affected by the earthquake, experienced psychological problems and needed emotional support. They faced interruptions in their education, had attendance problems, decreased academic performance, and difficulties adapting to changing physical conditions. Telli and Altun (2023) noted that students could experience fear due to the stress and anxiety caused by earthquakes, which in turn may have negative impacts on their daily lives and school achievements. Aydoğdu and Fofana (2023) emphasized the importance of prioritizing the support of children's social, emotional, and psychological well-being after earthquakes to reduce the psychological impact of such events.

The participants also pointed out inefficiencies in the use of the school's human and material resources. In order to address these shortcomings, they emphasized the need to provide psychological support to schools, develop national disaster plans, regularly inspect school buildings, plan responsibilities within the administrative hierarchy, and ensure the efficient use of resources. In an extensive educational system with a large staff, the establishment of emergency response teams and providing education on pre- and post-earthquake measures is considered important to prepare students for such disasters. Furthermore, it was concluded that necessary physical improvements should be made in schools, emergency resources (such as food, water, and blankets) should be stocked, and communication infrastructure should be established after potential disasters. Selçuk and Erem (2022) outlined the following measures for earthquake preparedness: conducting periodic educational campaigns within families, institutions, and communities; preparing emergency kits and containers; establishing emergency communication lines and plans; publishing programs and informative advertisements in the media to raise awareness; closely monitoring housing construction and urbanization processes; constructing modern and earthquake-resistant buildings; and strengthening or demolishing damaged and vulnerable structures.

As a result, it can be stated that earthquakes had negative social and psychological effects on all education stakeholders, including students, parents, teachers, and administrators. The disruptions and migrations caused by earthquakes disrupted education and negatively affected students' academic performance. It can be stated that school administrators lacked proficiency in disaster management, and had a low level of disaster awareness, which in turn led to the inadequate use of schools during disasters. To enhance the effectiveness of schools during earthquake and other natural disasters, it is recommended that school administrators receive training in disaster management. Firstly, emergency response teams should be formed in schools and their duties and responsibilities should be clearly defined. These teams can manage the process more efficiently by acting quickly and in coordination during the disaster. In addition, psychosocial support services should be strengthened so that both administrators and teachers can better respond to the psychological needs of students in times of crisis. In order to increase the physical safety of schools, it is of great importance to regularly inspect the buildings and carry out necessary reinforcement works. In addition, alternative education methods such as distance education systems should be developed in order to be prepared for possible interruptions in post-disaster education. Finally, cooperation with local administrations, non-governmental organisations and related public institutions should be increased and a stronger solidarity should be ensured in the disaster management process by conducting joint projects. Such comprehensive measures will contribute to making schools more resilient against disasters.

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Türkçe Uzun Özet

Türkiye’de yaşanan son depremlerden sonra deprem bölgesinde görev yapan okul yöneticileri birçok zorlukla karşı karşıya kalmışlardır. Deprem sonrasında okullarda hasar ve güvenlik sorunları, öğretmen ve personel eksikliği ve altyapı sorunları gibi birçok sorun yaşanmıştır. Bu sorunların çözümü noktasında okul yöneticilerine birçok görev düşmüştür. Alanyazın taramasında deprem sonrası etkili okul etkililiği ile ilgili doğrudan bir araştırmaya rastlanmamıştır. Okul yöneticileri, okul güvenliği ve acil durum yönetimi konusunda son yıllarda yaşanan depremlerden ötürü deneyime sahiptirler. Bu nedenle, depremler gibi doğal afetler sırasında okul binalarının güvenliği, öğrenci ve personelin korunması, acil durum planlarının uygulanması gibi konularda bilgi ve görüşleri büyük önem taşımaktadır. Depremlerden sonra hayatın normalleşme sürecinde eğitim kaybı yaşanabilir. Okul yöneticileri, bu kaybı telafi etmek için ne tür programlar veya kaynaklar gerektiğini belirleme konusunda önemli bir rol oynarlar. Bu görüşler, öğrencilerin eğitimlerini sürdürebilmeleri için stratejiler geliştirilmesine yardımcı olabilir. Depremler okulların kapatılmasına neden olabilir. Bu durumda, uzaktan eğitim ve eğitim teknolojileri kullanımı önem kazanır. Okul yöneticileri, bu teknolojilerin kullanımının planlanması ve uygulanması konusunda önemli kararlar alabilirler. Sonuç olarak, okul yöneticilerinin depremler sonrasında okul etkililiği konusundaki görüşleri, okulların güvenliği, eğitim kalitesi ve toplumun refahı açısından kritik bir rol oynar. Bu nedenle, onların deneyimleri ve görüşleri, depremlere karşı daha iyi hazırlık ve daha etkili kriz yönetimi için büyük öneme sahiptir.

Bu çerçevede, yöneticilerinin yaşadıkları sorunlar, bu sorunları çözme şekilleri, sistemsel veya yaşanan yönetsel sorunların neler olduğu önemli görülmektedir. Çalışma kapsamında okul yöneticilerin okullarının etkililiğini sürdürmek adına aşağıdaki araştırma sorularına yanıtlar aranmıştır.

Bu çalışma, olgubilim (fenomonoloji) deseninin kullanıldığı nitel bir araştırmadır. 2023-2024 eğitim-öğretim yılında Elâzığ ilinde görev yapan okul yöneticileri arasından amaca yönelik örnekleme yöntemi ile belirlenmiş toplam 17 okul yöneticisinden oluşmaktadır. Çalışmada veri toplama amacı ile yarı yapılandırılmış görüşme formu kullanılmıştır. Bu bağlamda literatüre dayalı altı adet görüşme sorusu hazırlanarak görüşme kılavuzunun taslak hâli hazırlanmıştır. Görüşme kılavuzu taslak formunda yer alan görüşme sorularının, araştırma amaçlarına hizmet edip etmediğini belirlemek amacıyla Eğitim Yönetimi Bilim Dalı öğretim üyelerinden dört öğretim üyesinden uzman görüşü alınmıştır. Uzman görüşleri doğrultusunda görüşme sorularından biri kapsam dışı olarak belirtildiği için görüşme kılavuzundan çıkarılmış, üç görüşme sorusunda da belirtilen değişiklikler yapılarak görüşme kılavuzuna son hâli verilmiştir.

Yapı ve kapsam geçerliliği sağlamak için alınan uzman görüşleri doğrultusunda görüşme kılavuzu oluşturulmuştur. Hazırlanan görüşme formu 13 gün süresinde Elâzığ ilinde yer alan farklı öğretim kademelerindeki okullarda görev yapan okul yöneticileri ile bire bir görüşmeler yapılarak veri doygunluğuna ulaşıncaya kadar uygulanmıştır. Cevapların tekrar edildiği görülünce uygulama sonlandırılmıştır. Elde edilen veriler dijital ortama aktarılarak 17 görüşme formu elde edilmiştir.

Yapılan görüşmeler sonucu elde edilen veriler içerik analizine tabi tutulmuştur. İçerik analizi kapsamında elde edilen görüşler kodlanır ve bu kodlar kategorize edilir. Katılımcı görüşleri K1, K2, K3,....., K17 olarak kodlanmıştır. Katılımcılardan okul müdürleri (M), müdür başyardımcıları (MBY), müdür yardımcıları (MY) biçiminde kodlanmıştır. Katılımcı görüşleri ayrı ayrı incelenmiş, birbirine benzer ifadeler gruplandırılmıştır. Daha sonra bu kodlar anlamına göre en yakın temaya yerleştirilmiştir. Birden çok temaya yerleşebilecek görüşler olduğundan, görüş sayısının katılımcı sayısını aştığı görülmektedir. Daha sonra bu veriler sayısallaştırılmış ve frekans olarak sembolize edilmiştir. Araştırmanın güvenilirliğini belirlemek için Miles ve Huberman'ın (1994) geliştirdiği formül kullanılmıştır. Bu kapsamda alanında uzman iki doçent ve bir doktor öğretim üyesine de veriler gönderilmiştir. Her iki uzmandan gelen dönütler Miles ve Huberman'ın (1994) (Uzlaşma Yüzdesi = Görüş Birliği (Na) / (Görüş Birliği (Na) + Görüş Ayrılığı) x100) formülü kullanılarak hesaplanmıştır. Nitel araştırmada değerlendirmeye ilişkin uzlaşma yüzdesinin %90 ve üzeri olduğu durumlarda güvenilirlik sağlanmış olur (Patton, 2002). Bu araştırmada uzlaşma yüzdesi= $213/(213+15)*100= 93,42$ bulunmuştur.

Okulların depremlerden fiziki, yönetsel ve eğitim öğretim boyutlarında etkilendiği sonucuna ulaşılmıştır. Özellikle eğitim öğretim boyutunda, eğitime zorunlu ara verildiği, öğrencilerin nakiller ile farklı okullara geçtiği, birçok okulda sınıf mevcutlarının arttığı hatta ikili öğretime geçildiği, öğrencilerin ikametlerinin değişmesinden ötürü okullarına ulaşım sorunları yaşandığı, devamsızlık olayının arttığı, sınıftaki öğrencilerin profillerinin değiştiği gibi olumsuz görülebilecek durumların yanı sıra deprem bilinci noktasında olumlu gelişmeler olduğu sonuçlarına ulaşılmıştır. Okul yöneticilerinin okullardaki iş yükünün artması, öğretmen ve öğrenci sirkülasyonunun olması, çalışma saatlerinin değişerek mevcut düzenlerinin bozulması ve okullardaki bireylerdeki psikolojik rahatsızlıklardan ötürü sorunlar oluştuğu belirlenmiştir. Ayrıca okul yöneticilerinin okullarının taşınması, tadilat görmesi gibi fiziksel sebeplerden ötürü de eğitim öğretim faaliyetlerinde aksamalar yaşandığı bilgisi tespit edilmiştir. Zaman zaman can ve mal kaybına sebep olan afetlerin aynı zamanda eğitimi de sekteye uğratabilmektedir (Telli & Altun, 2023). Aydoğdu ve Fofana (2023) yaptıkları çalışmada, depremin küçük çocukların başta vücut sağlıklarında, beslenmelerinde, eğitimlerinde, sosyal yaşantılarında, psikolojilerinde olmak üzere birçok gelişim alanlarında etkileri olduğu belirlemiştir. Çamur (2023), afetlerin birçok alanda olumsuz etkisi olduğu gibi eğitime de yansımalarının olduğunu, bununla birlikte eğitim paydaşlarının sosyal ve psikolojik anlamda olumsuz yönde etkilendiğini belirtmiştir. Dönmez (2023), deprem sonrası yıkım ve göçlerden dolayı öğrencilerin müzik eğitiminin aksadığını ve onların psiko-sosyal durumları üzerinde olumsuz etkilere neden olduğunu belirtmiştir.

Okul yöneticilerinin deprem felaketleri sonrasında kurumlarında tüm personelin afet bilinci farkındalığını arttırmaya çalıştığı, rehberlik servislerinin özellikle psikolojik sorun yaşayan öğrencilere destek vermelerini sağladığı belirlenmiştir. Yöneticiler, okul binasının sağlamlığı konusunda resmi birimlerle görüşerek incelemeler yapıldığı ve elde edilen verilerin, öğretmenler, öğrenciler ve velilerle paylaşarak güven ortamını oluşturmaya çalışmışlardır. Bununla birlikte afet planları güncellenmiş, okulda afet tatbikatları gerçekleştirilmiştir. Bu sayede öğrencilerin eğitim öğretim faaliyetlerini aksatmaması sağlanmaya çalışılmıştır. Aydoğdu ve Fofana (2023), 6 Şubat 2023 tarihindeki depremin çocuklar üzerindeki olumsuz etkisini iyileştirmek ve depremle ilgili farkındalıklarını artırmak amacıyla müdahale çalışmalarının yapıldığını saptamıştır. Mızrak (2018), afet eğitimi alan insanlar afetlere daha iyi ve daha fazla hazırlandıklarını ve afetlerden daha iyi korunduklarını belirtmiştir. Deprem öncesi ve sonrası yapılan bilgilendirmeler, depremden daha az zarar görmeyi sağlayacak ve farkındalığı artırabilecektir (Fetihi & Gülay, 2011). Afet eğitimi ile bireyler herhangi bir doğal afete maruz kalmadan olası riskler hakkında farkındalık sahibi olurlar (Muttarak & Pothisiri, 2013).

İllerde ve ilçelerdeki yönetim birimlerinin çalışmalarını bazı yöneticiler yeterli görmüş, fakat birçok yönetici bu konuda eksikliklerden bahsetmiştir. Bu eksiklikler; işleyişin ve iletişimin yetersiz olması, koordinasyonun yetersizliği,

okullara özel çözümlerin üretilmemesi gibi nedenler belirlenmiştir. Üst yönetimlerin, afet planları oluşturmaları ve güncel tutmaları gerektiği, bu planların, depremler gibi afetler için spesifik önlemleri içermeleri gerektiği belirlenmiştir. Öğretmenler ve öğrenciler, afet durumlarında nasıl davranacaklarını bilmeleri gerektiği, bu nedenle, afet eğitimleri ve tatbikatları düzenli olarak yapılması gerektiği sonucuna ulaşılmıştır. Tüzün (2023), Şubat 2023 depreminin, farklı düzeylerde ve şekillerde de olsa herkesi doğrudan ya da dolaylı olarak etkilediği; bu ölçekte bir afet karşısında bireysel, kurumsal, toplumsal farklı düzeylerde kırılganlığımızı ve hazırlıksızlığımızı açıkça gösterdiğini belirtmiştir.

Eğitim öğretim faaliyetlerinin yürütülmesinde yönetici, öğretmen ve öğrencilere depremin olumsuz yansıdığı, yeterli afet bilincinin olmadığı saptanmıştır. Yöneticiler ve öğretmenlerin psikolojik sorunlar yaşadığı, öğrenci sirkülasyonunun fazla olmasının yöneticilerin iş yoğunluğunu arttırdığı, öğretmenlerinde derslerdeki etkililiğini azalttığı belirlenmiştir. Depremden en fazla etkilenenler olan öğrencilerin ise psikolojik sorunlar yaşadığı bu noktada duygusal destek almaları gerektiği, eğitim kesintileri yaşadıkları, devamsızlık sorunlarının olduğu, akademik başarılarının düştüğü, fiziki koşulların değişmesinin sıkıntıları yaşadıkları sonucuna ulaşılmıştır. Telli ve Altun (2023), öğrencilerin deprem sonrası yaşanan stres ve kaygı nedeniyle korku yaşayabileceklerini, günlük yaşantılarına ve okuldaki başarılarına olumsuz yansımalarının olabileceğini belirtmiştir. Aydoğdu ve Fofana (2023), deprem sonrası çocukların sosyal, duygusal, psikolojik iyi oluşlarının desteklenmesi, depremlerin psikolojik etkisini azaltmak açısından öncelikli olduğunu ifade etmiştir.

Okulun insan ve maddi kaynaklarının daha efektif kullanılması yönünde okul yöneticileri aksaklıklar yaşandığını belirtmişlerdir. Bu aksaklıkların giderilmesi noktasında okullara psikolojik destek verilmesi gerektiğini, ülke genelinde afet planlarının yapılması gerektiğini, okul binalarının düzenli olarak fiziki kontrollerinin yapılması gerektiği, yönetim kademesinde görev dağılımlarının planlı yapılması gerektiği ve kaynakların etkili bir biçimde kullanılması gerektiği belirlenmiş. Geniş bir kadrosu bulunan eğitim sisteminde acil durum ekiplerinin oluşturulması ve deprem öncesi ile sonrası yapılacak tedbirler hakkında eğitim verilerek öğrencileri bu tür afetlere hazırlamak önemli görülmüştür. Ayrıca okullarda gerekli fiziksel iyileştirmelerin yapılması, acil durum kaynaklarının (yiyecek, su, battaniye gibi) bulundurulması ve olası afetler sonrasında iletişim altyapısının kurulması gerektiği sonucuna ulaşılmıştır. Selçuk ve Erem (2022) depreme hazırlık konusunda yapılması gerekenleri şu şekilde ifade etmiştir: periyodik olarak ailede, kurumlarda ve toplumda eğitim çalışmaları yapılmalı, acil durum çantaları, acil durum konteynerları hazırlanmalı, acil iletişim hatları ve planları yapılmalı, farkındalık yaratmak için sürekli basın ve yayın organlarında programlar ve bilgilendirici reklamlar yayınlanmalı, konut yapımı ve kentleşme süreçleri sıkı şekilde kontrol edilmeli, modern ve depreme dayanıklı binalar inşa edilmeli, hasarlı ve dayanıksız binalar güçlendirilmeli veya yıkılmalıdır.

Sonuç olarak deprem gibi doğal afetlerin öğrenciler, veliler, öğretmenler ve yöneticilerle birlikte tüm eğitim paydaşlarında sosyal ve psikolojik olarak olumsuz etkiler yarattığı, deprem nedeniyle yaşanan yıkımlar ve göçlerin eğitimi aksattığı, öğrencilerin akademik başarılarının olumsuz etkilenmesine neden olduğu söylenebilir. Okul yöneticilerinin afet yönetimi konusunda yetersiz oldukları ve afet bilincinin düşük olduğu dolayısıyla okulların yeteri kadar etkili kullanılmadığı sonucu çıkarılabilir. Deprem ve diğer doğal afetlerin yaşandığı durumlarda okulların etkililiğinin artırılması amacıyla okul yöneticilerinin afet yönetimi konusunda eğitim alması gerektiği söylenebilir.