



BEHAVIORS RELATED TO PRIMARY SCHOOL PRINCIPALS' CRISIS MANAGEMENT SKILLS: IN THE CONTEXT OF THE FEBRUARY 6TH 2023 EARTHQUAKE

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Abstract

In the face of the unpredictable nature of crises, it is expected that school principals exhibit behaviors aimed at maintaining the psychological well-being of teachers, students, and parents along with the educational processes. The sudden occurrence of the February 6, 2023 earthquakes, has presented an important crisis situation in which school principals are expected to display the desired behaviors. This research aims to reveal to what extent school principals demonstrated their crisis management skills in the context of the February 6, 2023 earthquake and what behaviors they exhibited during crisis management processes, based on teachers' opinions. The research was carried out with a mixed method approach in which quantitative and qualitative research methods were used together. The sample of the research consisted of 295 teachers, and the study group consisted of 18 teachers selected from the same sample by purposeful sampling method. Quantitative data of the research were collected using the crisis management scale, and qualitative data were collected using a semi-structured interview form. According to the quantitative results of the research, it was determined that the crisis management skill levels of school principals were "mostly" in the pre-crisis and post-crisis periods, and "sometimes" during the crisis period. When teachers' opinions were examined, it was seen that school principals were unprepared for crises arising from natural disasters such as earthquakes and that they mostly followed the Ministry of National Education guidelines and therefore lacked initiative. School principals who were able to take initiative took action to support the psychological health of teachers, students and parents by meeting their needs and gained their trust.

Keywords: crisis management, school principals' crisis management behaviors, February 6th, 2023 earthquakes.

Introduction

When considering the organic relationships of schools, which, as an organization, have an open and social system with the environment, it seems inevitable that they will be affected by both internal and external crises. Events such as the shooting incident on January 17, 1989, in Stockton, California, where an armed individual killed 5 students and injured 29 people, including one teacher (Pitcher & Poland, 1992), the restructuring of education in New Orleans after the Katrina hurricane in 2005 (Anderson, 2010; Baum et al., 2009), and the need for some schools to move to empty school buildings in Dallas, Texas, due to severe

damage caused by storms on the evening of October 20, 2019 (Potter et al., 2021), highlight how crises affect schools. The earthquake in the Canterbury region of New Zealand with a magnitude of 7.1 on September 4, 2010, leading to the closure of schools for several weeks (Mutch, 2015), and the earthquakes on February 6 in Turkey, affecting 10 provinces including Adana, Kahramanmaraş, Gaziantep, Osmaniye, Hatay, Kilis, Malatya, Diyarbakır, Şanlıurfa, and Adıyaman, causing over 50,000 casualties, are examples of crises arising from earthquakes. On February 6, 2023, at 04:17, earthquakes with magnitudes of 7.5 and 7.6 occurred with the epicenter in Ekinözü-Kahramanmaraş (38.0818 N - 37.1773 E) with a 9-hour interval (Kandilli Rasathanesi, 2023; SETA, 2023). The destructive impact of the earthquake led people to be relocated to tent cities or temporary shelters. Due to migration from earthquake-affected areas to other provinces and tragic loss of lives, education was interrupted until March 1 in the ten affected provinces and until February 20 in the remaining provinces, while universities transitioned to distance education for the spring semester of the 2022-2023 academic year. The declaration of the COVID-19 outbreak as a pandemic by the World Health Organization on March 11, 2020, resulted in over 1.5 billion students in more than 200 countries being unable to attend school (UNESCO, 2021), highlighting the impact of crises at the local and global levels on the education process. Additionally, aggressive behaviors exhibited by students in schools (Karasavidou & Alexopoulos, 2019), sexual assaults, accidents, and injuries (Adamson & Peacock, 2007) can be cited as examples of crises specific to schools that also affect the education process.

As can be understood from these examples, crises that pose a threat to schools (Brock, 2000) not only impact the education process but also adversely affect the well-being of students, teachers, and parents (American Psychological Association [APA], 2020; Anderson & Weiner, 2023; Karabulut & Bekler, 2019; La Greca & Silverman, 2009; Sayın, 2008). The ability of schools to emerge from crises with minimal damage in various contexts depends on the effective crisis management skills demonstrated by their administrators (Demirtaş, 2000; Özgür, 2018). Expecting schools to come out of the crisis process with minimal damage has primarily drawn attention to the behavior of school principals regarding their crisis management skills, among many other factors. Therefore, the research focuses on determining the levels of crisis management skills of school principals based on teacher perceptions and examining how they manage the crisis process in the pre-crisis, during, and post-crisis periods.

Research Problem

As an organization, crisis management in schools encompasses a systematic process that involves identifying risks from internal and external factors that may lead to crises, developing strategies to mitigate these risks, minimizing the physical and psychological impacts of crises, and ensuring a return to normalcy (Karaağaç et al., 2022, p. 635). The correct management of this process requires a focus on the crisis management skills of school principals, who are the common point of contact for school stakeholders (Adamson & Peacock, 2007). On any given school day, school principals may find themselves in the lead role of crisis management (McCarty, 2012), and they are expected to know how to prevent dangers during a crisis (Karasavidou & Alexopoulos, 2019). Research indicates that unexpected crises disrupt the educational process, affecting the physical and mental health of teachers, students, and parents (Brock, 2000). This underscores the importance of effective crisis management behaviors, particularly during the crisis, by school principals (American Psychological Association, 2020). Consequently, it is essential for school principals to exhibit their crisis management skills during the crisis and ensure the psychological well-being of stakeholders, particularly students (Anderson & Weiner, 2023; Sayın, 2008).

Because, in the case of crises such as earthquakes, which are caused by natural factors, families and communities generally rely on schools to provide stability and serve as a channel for accessing resources (Demirtaş, 2000; Potter et al., 2021; United Nations, 2010). During this process, children and young people seek guidance from supportive adults such as parents, teachers, and school principals (Tarrant, 2011). After a disaster like an earthquake, children are not only lacking in coping abilities with trauma but also in resources to effectively deal with their experiences (Baum et al., 2009, p. 62). Studies addressing the relationship between the aftermath of an earthquake and educational outcomes support the notion that the most significant damage after an earthquake occurs in terms of access to education and a decline in educational performance (Bethke, 2005; Caruso & Miller, 2015).

After an earthquake, elementary school-aged children who are forced to move away from schools and experience the loss of friends may develop various psychological problems such as anxiety, aggression, and depression (Karabulut & Bekler, 2019; La Greca & Silverman, 2009). Children want to know that they and their families are safe before, during, and after an earthquake (Gürbüz & Koyuncu, 2023, p. 382) and expect adults to help them adapt to future conditions (Mutch, 2015). Therefore, it is important how primary school principals reach out to students and parents during the pre-crisis, crisis moment, and post-crisis periods and how they engage in dialogue with teachers during this process (Pira & Sohodol, 2004; Tutar, 2000; Vergilil Tüz, 2014; Weitzel & Johnson, 1989). As a result, specific behaviors are expected from school principals in the pre-crisis, crisis moment, and post-crisis periods.

Pre-Crisis Period: In the pre-crisis period, where crisis signals are accurately perceived, and the analysis of possible risks and action plans for risks are made (Capanigro, 2000; Pira & Sohodol, 2004), school principals are expected to inform their staff after analyzing potential risks, prepare an action plan for earthquakes (Aksu & Deveci, 2009), and exhibit behaviors aimed at minimizing the potential damage of an earthquake to education by establishing a crisis management team.

Crisis Period: In the crisis period, which is the period when the crisis begins and stakeholders in the organization enter a state of fear and panic with the shock experienced at the onset of the crisis (Peker & Aytürk, 2000, p.282), school principals are expected to use strong communication channels to stay in touch with the stakeholders of the school, provide them with a sense of trust and belonging along with confirmed information (Chatzipanagiotou & Katsarou, 2023; Coombs, 2007; Mutch, 2015; Potter et al., 2021), and lead the crisis management team in obtaining the necessary training (Aksu & Deveci, 2009).

Post-crisis Period: In the post-crisis period, where a better assessment can be made to see the gaps in the system and the roadmap for preparing plans against crises is drawn (Güleryüz, 2015), school principals are expected to analyze the reactions of school stakeholders to the crisis, design methods to facilitate their adaptation to the school and education (Mutch, 2015), and exhibit behaviors aimed at developing a new crisis management plan, taking into account the opinions of school stakeholders along with the experiences gained (Aksu & Deveci, 2009).

For the development of behaviors expected from school principals in the pre-crisis, during-crisis, and post-crisis periods, it is crucial for principals to have received adequate training and be proficient in crisis management strategies. When examining relevant research, it is observed that school principals often feel unprepared for crisis periods (Mutch, 2015), and there is a need to increase awareness and skills (Tokel, 2018). However, it is noted that the training of school administrators in crisis leadership is limited (Chatzipanagiotou & Katsarou, 2023; McCarty, 2012). Furthermore, it is noteworthy that studies, rather than addressing how school principals can improve their behaviors related to crisis management skills, primarily focus on quantitative research aimed at determining the levels of crisis management skills of school principals (Adıgüzel, 2007; Bıyıkloğlu, 2020; Çakır & Çakır, 2022; Çalışkan, 2020; Duran & Arslan, 2022; Gezer, 2020; Karadağ, 2022; Kaymak et al., 2023; Maya, 2014; Özalp

& Levent, 2022; Ulusoy, 2020). Additionally, studies that deeply examine crisis management skills through qualitative research (Döş & Cömert, 2012; Pekgöz, 2020; Saka, 2021; Ocak, 2006; Var, 2022) and mixed methods research (Sayın, 2008; Şahin, 2014) are limited.

School principals' greatest supporters in reaching students during the crisis management process are teachers, who naturally serve as a bridge (Baum et al., 2009). It is expected that teachers, whose well-being is supported thanks to school principals, will also support the well-being of students with whom they communicate and build family ties throughout the day in their classrooms (Karaferye, 2022; OECD, 2021). Therefore, it can be said that teachers' perceptions of school principals' crisis management skills shape their approaches to students and parents during a crisis. However, when examining research addressing teachers' perceptions of school principals' crisis management skills, it is understood that the managerial skills of school principals are not highly perceived during crisis periods (Duran & Arslan, 2022; Ercan, 2021; Maya, 2014; Savcı, 2008; Şahin 2014; Tanrıku, 2022; Yurtsever, 2022). Therefore, the focus of the study is on determining the levels of school principals' crisis management skills based on teachers' perceptions and examining the behaviors exhibited by school principals and how they manage the crisis management process through one-on-one interviews with teachers.

Based on all this data, school principals are expected to demonstrate the ability to manage the periods before, during, and after a crisis correctly to preserve the mental health of the educational environment and school stakeholders (Elbedour et al., 2020; Sayın, 2008). The researchers of the study, experiencing the earthquakes on February 6 in Kilis and Gaziantep and observing the behaviors of school principals in the crisis management process from a teacher's perspective, have led to an examination of the disappointment experienced, the level of school principals' crisis management skills, and how they managed the crisis management process based on teacher opinions.

Research Focus

The focus of this study was to analyze primary school principals' crisis management skills in the pre-crisis period, during the crisis period and in the post-crisis period.

Research Aim and Research Questions

This study aimed to determine the level at which primary school principals demonstrate crisis management skills based on teachers' perceptions, identify the behaviors exhibited by primary school principals in the crisis management processes according to teachers' opinions, and understand how they manage the process. In line with this aim, the following questions have been addressed:

1. What is the level of primary school principals' crisis management skills in the pre-crisis period, crisis period, and post-crisis period?
2. What behaviors do primary school principals exhibit in the pre-crisis period? How do they manage the pre-crisis period?
3. What behaviors do primary school principals exhibit during the crisis period? How do they manage the crisis period?
4. What behaviors do primary school principals exhibit in the post-crisis period? How do they manage the post-crisis period?

Research Methodology

General Background

This research was conducted using a mixed methods research design, which combines both quantitative and qualitative research methods. A mixed methods research design involves the researcher collecting and analyzing data, incorporating findings, and making inferences using both qualitative and quantitative approaches or methods in a single study or research program (Creswell, 2018). The research design adopted in this study was referred to as an explanatory sequential design, where quantitative data is collected and then qualitatively analyzed (Creswell & Plano Clark, 2020). Therefore, the research was conducted based on the adopted aim, following the explanatory sequential design.

Accordingly, the quantitative phase of the research was based on empiricism, which epistemologically asserts that knowledge can be obtained through specific criteria, ontologically aligned with objectivity, which advocates for concrete reality (Göksoy, 2019), and methodologically relied on survey methods, which aim to reveal the opinions of large populations (Büyüköztürk et al., 2020). In axiological terms, it was based on valuing the objectivity of the findings of the scale without the researcher's interpretation. Based on these foundational assumptions, the research adopted the positivist paradigm (Kivunja & Kuyini, 2017) in the quantitative phase accepting the singularity and measurability of reality.

The qualitative phase of the research, on the other hand, was epistemologically rooted in the researcher's perspective, ontologically embraced relative ontology due to the acceptance of multiple realities (Kivunja & Kuyini, 2017), methodologically relied on qualitative research methods, particularly the phenomenology design, which focuses on the essence of human experiences (Creswell, 2018). From an axiological perspective, the judgments of researchers and participant views on the subject were considered valuable. Based on these foundational assumptions, the research adopted the interpretive paradigm in the qualitative phase, acknowledging the multiplicity and subjectivity of reality.

Mixed methods research inherently involves the use of multiple paradigms and data collection methods (Creswell & Plano Clark, 2020). It values both objective and subjective perspectives.

Sample

The population of this research consists of 820 teachers who are working in 54 state primary schools in the central district of Kilis during the 2022-2023 academic year (Kilis MEM, 2023). The sample, selected to represent the population, consists of 295 teachers determined through a simple random sampling method, calculated considering a 95% confidence interval and a 5% margin of error, using an appropriate sample size table (Büyüköztürk et al., 2020, p.101).

Of the total 295 participants in the study, 66% ($n=195$) were female and 33.9% ($n=100$) were male. When the age groups of the participants are analyzed, the majority of them, 38.3% ($n=113$), are between the ages of 27-31. In terms of marital status, it is found that 64.4% ($n=190$) of the participants are married, while 35.6% ($n=105$) are single. When examining the educational background of the participants, 90.2% ($n=266$) have a bachelor's degree, 9.8% ($n=29$) have a master's degree. Looking at the years of professional experience, it is understood that 38.0% ($n=112$) of the participants have between 1-5 years of professional experience.

The study group for the qualitative part of the research consists of 18 teachers selected through purposeful sampling from the 295 teachers included in the sample. The purposeful sampling method is based on selecting a study group that can provide rich data relevant to the

research objectives (Marriam, 2018; Patton, 2015). In this context, the formation of the study group was based on teachers participating in the survey assessing their perceptions of school principals' crisis management skills and having experienced the earthquakes on February 6th. Among the 18 participants in the study group, 55.5% ($n=10$) are female, 44.5% ($n=8$) are male, and all of them are married. The study group consists of participants with 38.8% ($n=7$) aged 37 and above and 44.5% ($n=8$) who have been teaching for 6-10 years. When examining the educational background of the participants in the study group, it is found that 88.8% ($n=16$) have a bachelor's degree, while 11.1% ($n=2$) have a master's degree.

Instrument and Procedures

Before proceeding with the data collection process of the research, approval was obtained from the Gaziantep University Social Sciences and Humanities Ethics Committee with decision number 347468 dated 23.06.2023. In the quantitative part of the research, a two-stage data collection tool was used to determine the level of primary school principals' crisis management skills based on teacher perceptions. The data collection tool consists of two parts: the first part includes demographic information in the form of a "Personal Information Form" for teachers, while the second part includes the "Crisis Management Skills of Primary School Principals" scale developed by Aksu and Deveci (2009). The scale consists of 31 items, with the first sub-dimension covering items 1-7 related to the "Pre-Crisis Period," the second sub-dimension covering items 8-15 related to the "Crisis Period," and the third sub-dimension covering items 16-31 related to the "Post-Crisis Period."

Qualitative data for the research were obtained through face-to-face interviews conducted by the researcher and a semi-structured interview form. The questions in the semi-structured interview form were developed based on the scale items used in the research and expert opinions, organized within the framework of the pre-crisis period, crisis period, and post-crisis period. The interviews were conducted based on voluntariness, at a time convenient for the teachers, and in a place where they felt comfortable, according to their preferences. The interviews were recorded with the consent of the teachers using a voice recording device, and the responses were later transcribed, assigned codes such as P1 (Participant 1 = P1, Participant 2 = P2, etc.), and analyzed in writing.

Data Analysis

The levels at which school principals exhibited their crisis management skills in the pre-crisis period, crisis period, and post-crisis period were determined by examining mean and standard deviation values. IBM SPSS 26 statistical software program was used in the analysis.

For the qualitative part of the research, the data obtained through interviews were transcribed in writing. The transcribed responses were organized under the headings of "pre-crisis period, crisis period, and post-crisis period" corresponding to the questions asked. The question headings here formed the predetermined themes. Notable contributions of the participants were included under the respective themes. Descriptive data analysis techniques were followed during this process. Subsequently, commonalities in the responses to the questions were coded to reach sub-themes, and the stages of content analysis techniques were followed (Marriam, 2018). The emerged sub-themes were organized under the predetermined themes.

Validity and Reliability

Validity and reliability in research are important steps contributing to its scientific quality. Reliability refers to consistently obtaining the same data at different times and measurements, while validity refers to the ability to measure the desired characteristic (Büyükoztürk et al., 2020; Marriam, 2018). Internal validity in research indicates the extent to which a cause-and-effect relationship among variables has been achieved, while external validity relates to the generalizability of the results to other applications (Gliner, Morgan, & Leech, 2009). External validity, often associated with survey design studies, is related to the researcher's ability to apply the results to a larger sample group (Creswell & Plano Clark, 2020, p. 227).

In the quantitative phase of the research, the "Crisis Management Skills of Primary School Principals" scale developed by Aksu and Deveci (2009) was used. The Cronbach Alpha technique was used in the reliability calculations of the scale, and the Cronbach reliability coefficient was calculated as .88 for the pre-crisis period sub-dimension, .96 for the crisis period sub-dimension, .97 for the post-crisis period sub-dimension, and .97 for the overall scale. Therefore, due to the Cronbach reliability coefficient of the scale used in the research being between ".80-1.00," it was considered "highly reliable" (Uzunsakal & Yıldız, 2018). The opinions in the scale, prepared in a 5-point Likert-type format, were scored as Never=1, Rarely=2, Sometimes=3, Often=4, and Always=5. External validity for the quantitative method of the research was ensured by selecting a sample that could represent the research population. Thus, inferences can be made about different individuals and situations, allowing for generalization.

Validity and reliability criteria in qualitative research are expressed as credibility for internal validity, transferability for external validity, and dependability for reliability (Marriam, 2018) to establish the credibility of the research, feedback was obtained from the participants on the clarity and accuracy of the findings obtained through member checking, and adjustments were made accordingly. The results were also presented to expert examiners. Using Patton's "analyst triangulation" strategy, the data were coded by two different individuals, the results were compared, and consensus was reached before reorganization. To ensure transferability, the research process was described in detail along with the study group and presented to the reader. The findings were organized and tabulated to facilitate generalization to different studies. To ensure dependability, the researcher's position, data collection, and analysis processes were clearly explained in the methodology section of the research.

Research Results

Quantitative Findings for the Pre-Crisis Period, Crisis Period, and Post-Crisis Period

In this section, findings related to the first research problem are presented in Table 1.

Table 1
Descriptive Results Regarding Elementary School Principals' Management Skills in Pre-Crisis, Crisis, and Post-Crisis Period Sub-Dimensions According to Teacher Perceptions

Dimension	Crisis Management Skills	N	\bar{X}	SD
Pre-Crisis Period (\bar{X} =3.52)	1. Before a crisis emerges, they can perceive crisis signals coming from various sources.	295	3.48	.885
	2. Before a crisis occurs, they create crisis scenarios.	295	3.42	.927
	3. They identify potential issues that could pose a threat to the organization in advance.	295	3.40	.954
	4. They monitor crises occurring in the environment.	295	3.72	.892
	5. They carefully examine every situation that could lead to a crisis.	295	3.61	1.001
	6. They are sensitive to crisis indicators.	295	3.69	.976
	7. Employees are knowledgeable about strategies for protecting against the negative effects of a crisis.	295	3.38	.973
Crisis Period (\bar{X} =3.19)	8. To protect against a crisis, they prepare a written crisis management plan.	295	3.15	1.210
	9. Within the framework of the crisis management plan, they prepare a crisis communication plan.	295	3.15	1.174
	10. They prepare an emergency action plan to be implemented during the crisis period.	295	3.30	1.183
	11. They take the lead in ensuring that the crisis management team receives the necessary training.	295	3.19	1.105
	12. They establish crisis control and risk management teams.	295	3.15	1.141
	13. They inform all employees about the crisis management plan.	295	3.31	1.127
	14. They provide confirmed information about the ongoing crisis.	295	3.28	1.157
	15. They organize training sessions on crisis management that encompass all employees.	295	3.01	1.158
Post-Crisis Period (\bar{X} =3.55)	16. They foster collaboration among employees during crisis management.	295	3.58	1.040
	17. They enable employees to participate in the decision-making process.	295	3.49	1.089
	18. They remove barriers that hinder efficient work during the crisis process.	295	3.57	.986
	19. They constantly review the school's goals and objectives.	295	3.66	1.025
	20. They conduct multidimensional assessments related to the crisis process.	295	3.52	1.059
	21. They conduct a post-crisis situation analysis.	295	3.65	1.065
	22. They establish new objectives after the crisis.	295	3.62	1.026
	23. They evaluate the conducted crisis management and identifies shortcomings.	295	3.61	1.089
	24. They undertake a restructuring effort after the crisis.	295	3.52	1.043
	25. They develop the school's vision after the crisis.	295	3.51	1.104
	26. They can identify the strengths and weaknesses of the school after the crisis.	295	3.75	1.005
	27. They develop effective methods for coping with crises.	295	3.57	1.007
	28. They turn crises into opportunities and makes them beneficial for the organization.	295	3.42	1.114

Post-Crisis Period ($\bar{X}=3.55$)	29. They facilitate the training of the crisis management team in line with new developments.	295	3.42	1.060
	30. They determine new strategies and tactics to deal with potential crises.	295	3.49	1.108
	31. They provide employees with the opportunity to develop new skills and use them.	295	3.50	1.111
Total	Crisis Management Skills	295	3.45	.799

When examining Table 1, based on the perceived crisis management skills, it can be concluded that the pre-crisis and post-crisis periods are the periods with the highest levels of measurement, while the crisis period exhibits the lowest perceived skill levels. In this context, the behaviors related to the perceived pre-crisis period, crisis period, and post-crisis period management skills have been examined in accordance with the participants' views, and the findings are presented in the subsequent sections of the study under the research question headings.

When examining Table 1, based on the perceived crisis management skills, it can be concluded that the pre-crisis and post-crisis periods are the periods with the highest levels of measurement, while the crisis period exhibits the lowest perceived skill levels. In this context, the behaviors related to the perceived pre-crisis period, crisis period, and post-crisis period management skills have been examined in accordance with the participants' views, and the findings are presented in the subsequent sections of the study under the research question headings.

Qualitative Findings on Behaviors Exhibited in the Pre-Crisis Period and How They Managed the Pre-Crisis Period

Table 2
Behaviors of School Principals in the Pre-Crisis Period According to Teacher Opinions

Theme	Behaviors in the Pre-Crisis Period	
Sub-Theme	Codes	<i>f</i>
Proactive Response to Crisis Signals	Taking Precautions for Possible Crises	5
	Conducting Meetings for Potential Crises	5
	Issuing Warnings for Crises That May Occur within the School	4
	Issuing Warnings for Crises Arising from the School's Environment	3
Reactive Response to Crisis Signals	Implementing Mandatory Drills Required by the Ministry of Education	8
	Failure to Anticipate Possible Crises	7
Creating Crisis Scenarios Based on Experience	Creating Crisis Scenarios Based on School-Based Experiences	3
	Creating Crisis Scenarios Based on Incidents in the School Environment	2
	Creating Crisis Scenarios Based on Personal Experiences	1
Not Creating Crisis Scenarios	Belief that Different Types of Crises Won't Occur in Elementary Schools	2
	Acting Impromptu During a Crisis	2
Using Communication Skills in Crisis Prevention Information	Informing Teachers through One-on-One Communication	5
	Establishing Problem-Solving Oriented Communication	1
Considering Crisis Prevention Information Dissemination Unnecessary	Neglecting the Importance of Crisis Prevention Information	6
	Failure to Anticipate Different Types of Crises in Elementary Schools	5
	Leaving Teachers to Deal with the Crisis on Their Own	4

Table 2 reveals that the teachers consulted expressed their views on how school principals behave in the pre-crisis period under the sub-themes of "proactive and unanticipated response to crisis signals," "creating crisis scenarios based on experience or not," "using communication skills for crisis prevention information," and "considering crisis prevention information unnecessary."

When examining the views of teachers expressing how school principals take precautions against potential crises, the following statements from P13 and P14 have drawn attention:

"If there is a situation that might go wrong, the principal immediately tries to take preventive measures before it goes wrong. For example, in the face of a possible crisis, he never puts us in a difficult situation; he solves the problems himself." (P13)

"We exchange ideas about possible negatives. Our principal, in the teacher council meeting, for instance, sits with us younger teachers, asks for our opinions, and has a very good habit of listening." (P14)

The opinions of teachers who think that school principals act without foresight regarding crisis signals are as follows:

"Before the earthquake, we did a drill related to earthquakes, but these were the routine drills that the Ministry of Education asks for on specific dates. Besides that, no extra drills were conducted." (P4)

"Our school principal has a calm demeanor; for example, when you are serious about a situation, he remains calm in the face of the seriousness of the incident." (P3)

The opinions of teachers P2 and P1, who stated that they saw school principals' behavior of creating crisis scenarios as unnecessary, came to the fore:

"Maybe these are put on the back burner because they do not happen. Because there is a belief that there are no major crises in primary schools." (P2)

"In case of a crisis, the only thing we have in our minds is to call the ambulance, and there is nothing else." (P1)

Teachers P2 who mentioned that school principals use their communication skills to inform teachers about crisis prevention, expressed how school principals personally inform them as follows:

"We can experience unexpected problems with parents, and he talks to us about what we should do in response to that." (P2)

Some teachers, like P5 and P6, expressed that school principals do not prioritize informing teachers about crisis prevention, saying,

"Well, they cannot think of such things; they do not stand out in these matters". (P5)

"We had a case that could have gone to the police station before; even in that situation, he didn't come to us and ask if we needed anything or provide support." (P6)

Qualitative Findings Regarding the Behaviors Exhibited During the Crisis Period and How They Managed the Crisis

Table 3
Behaviors of School Principals During the Crisis Period According to Teacher Opinions

Theme	Behaviors in the Crisis Period	
Sub-Theme	Codes	f
Rational Behavior in Emergency Action Plan Preparation	Conducting a Situation Analysis for Teachers' Vital Needs	7
	Taking Action for Teachers' Vital Needs	5
	Establishing Communication with Environmental Organizations to Address Needs	3
Remaining Insensitive During Emergency Action Plan Preparation	Avoiding Making an Emergency Action Plan	4
	Failure to Collaborate on Action Plan Creation	3
Demonstrating Active Behaviors in Crisis Team Formation	Taking Action to Form a Crisis Team	7
	Distributing Responsibilities Within the Crisis Team	5
	Participating in Assistance with the Crisis Team	2
Displaying Passive Behaviors in Crisis Team Formation	Waiting for Ministry of Education guidelines for crisis intervention	4
	Not taking initiative in forming a crisis team	4
	Keeping the crisis teams created at the beginning of the year passive	3
Regularly Sharing the Crisis Process	Regularly sharing the crisis process through a WhatsApp group	5
	Having one-on-one meetings with teachers regarding the crisis process	4
Avoiding Taking Responsibility for Sharing the Crisis Process	Sharing only official letters related to the crisis process	7
	Being indifferent to teacher expectations regarding information about the crisis process	7
Informing Teachers About Crisis Management Training	Conveying crisis management training organized by the Ministry of Education to teachers	6
	Communicating various crisis management training sessions to teachers	1
Remaining Indifferent to Teachers Receiving Crisis Management Training	Leaving crisis management training to the discretion of teachers	7

When Table 3 is examined, it can be seen that the opinions of the teachers consulted express the behaviors of school principals regarding crisis management under the sub-themes of rational behavior and considering planning for emergency action plans unnecessary, showing active and passive behaviors in forming crisis teams, regularly sharing the crisis process and avoiding taking responsibility for sharing, informing teachers about crisis management training, and showing indifference to their training.

Among the teachers who expressed their views on school principals' behaviors in preparing emergency action plans, P14 and P10 explained how school principals analyze teachers' vital situations and needs before preparing emergency action plans:

"First, he asked how we are, if everyone is okay, if there is anyone outside." (P14)
"For example, in our school, there was a door open; he immediately had it repaired and opened the other door at the end of the school, demolished the wall. After the earthquake, he did this to prepare for a possible earthquake." (P10)

Among the teachers who expressed that school principals avoid preparing emergency action plans, P16, and P6 conveyed their impressions and thoughts in this regard:

"In our school, there is a lot of chaos and uncertainty due to the presence of Syrians. Especially regarding problems with parents and students, there is no action plan." (P16)

"It should be solved through collaboration, there should be an exchange of ideas. I expected the school principal to do such things." (P6)

Among the teachers who expressed their views on school principals taking the initiative to form an active crisis team, P14 and P10 described how the school principal took action:

"For example, there is a civil defence club, and my club and I were directed to inform our friends about certain issues. He gave us the initiative." (P14)

"Our help arrived, and he and his family distributed the aid together with the village headman. He and his family were also here." (P10)

P1 and P4 made the following statements regarding the passive behavior of school principals in forming a crisis team and their lack of initiative during the crisis process:

"I didn't see the school principal take any extra steps without an announcement from the Ministry of National Education. Whatever the Ministry of Education said, that's what happened." (P1)

"Actually, we had a crisis management team established at the beginning of the year, but it's only on paper. It's not active." (P14)

Regarding how school principals regularly share the crisis process, P4 and P8 explained how the school principal managed this process:

"Currently, for example, regarding meals, in contact with AFAD or the municipality, I am informed at this stage, or if there is no food coming, he keeps us regularly informed." (P4)

"I stayed at the school for three days after the earthquake, and he was with us for those three days. He made me feel that sincerity and trust." (P8)

Among the teachers who expressed that school principals avoid taking responsibility for sharing the crisis process, P7 and P18 mentioned that the school principals only shared the official announcements and expressed their needs in this process:

"In other words, except for official announcements, we were not informed." (P7)

"Our school principal was generally quiet; he didn't call. He only informed us of the information from the Ministry of Education. This was a very uncomfortable situation for me because I was curious about the school." (P18)

Among the teachers who expressed that school principals direct them to crisis management training, P4 mentioned:

"He directed us about seminars conducted by the Ministry of National Education, which covered topics such as psycho-social support for teachers in need and those who experienced loss." (P4)

Finally, among the teachers who expressed that school principals leave it to their own initiative to receive crisis management training, P2 stated that they believed they were capable of seeking out such training themselves:

"Maybe he thinks we can think of those kinds of things. For example, I attended a few trainings. We are teachers, and we don't need the administration to tell us." (P2)

Qualitative Findings Regarding the Behaviors Exhibited in the post-crisis period

Table 4
Behaviors of School Principals in the Post-Crisis Period According to Teacher Opinions

Theme	Behaviors in the Post-Crisis Period	
Sub-Theme	Codes	<i>f</i>
Engaging with School Stakeholders	Holding a meeting with teachers to evaluate the crisis process	5
	Providing psychosocial support to students through the guidance unit	4
	Communicating with parents regarding the crisis process	4
Avoiding Communication with School Stakeholders	Failure to take steps towards cooperation with school stakeholders	10
	Complying only with MoNE guidelines in communicating with school stakeholders	4
	Ignoring teachers' needs for collaboration	3
Conducting an Internal Situation Analysis in the School	Analyzing the damage situation of the school	4
	Analyzing the psychological well-being of teachers	3
	Analyzing students' psychological well-being	3
	Failure to take action to analyze the situation	4
	Not organizing a meeting to analyze the situation	2
Conducting Post-Crisis Restructuring Work	Updating the school exit plan for a possible earthquake after the crisis	3
	Planning for student attendance after the crisis	3
	Informing parents about student attendance status after the crisis	2
	Ignoring the need for new planning after the crisis	7
	Ignoring teachers' suggestions for a new plan	1
Highlighting the Strengths and Weaknesses of the School in Turning the Crisis into an Opportunity	Increasing teachers' organizational commitment	6
	Providing solidarity within the organization	5
	Developing social relations with environmental institutions	5
	Increasing parents' confidence in the school	5
	Demonstrating inadequate behavior in cooperating with teachers	6
	Determining if the school is unprepared for a major crisis	5
	Determining that the school's emergency assembly area is inadequate	1
Inability to take risks after the crisis	2	

When Table 4 is examined, among the teachers who stated that school principals act in collaboration with school stakeholders, P13 and P4 mentioned what steps the principal took and how this step gave them confidence:

"Yes, when the principal takes a step, he gathers us and treats us. After the school opened, he told us that if the children are too scared and can't relax, we can have classes outside. He listened to our ideas." (P13)

"What should we do? The students were very scared. He got support from me as the guidance counselor regarding psychosocial support." (P4)

Among the school principals who expressed the view that school principals avoid communicating with school stakeholders, P1 and P18 complaints about this issue were highlighted as follows:

"There was no collaboration or joint action. Psychosocial studies were shared, but they already came from the Ministry of Education. Teachers were not asked about their situation." (P1)

"After the earthquake, there was no collaboration with the school stakeholders. We acted on our own. Only written documents were shared." (P18)

Teachers who stated that school principals conduct situation analysis after the crisis, P4 mentioned how the well-being of teachers and the psychological states of students were taken into account by the school principal:

"After the earthquake, we had a meeting. We discussed the places in the school that needed repair, the places that needed plastering, and the psychology of the children." (P4)

In contrast to this, teachers who stated that school principals avoid conducting a situation analysis after the crisis, P6 and P7 summarized the situation as follows:

"No situation analysis or meeting was held specifically for the earthquake." (P6)

"For example, we didn't have any meetings, didn't conduct a situation analysis, everything remained in the earthquake drill we did before." (P7)

Among the teachers who stated that school principals made plans for a possible post-crisis crisis, P14 talked about the plan updated by the school principal in case of recurrent earthquakes, and P3 and P2 talked about the school principal's policy regarding student attendance as follows:

"If there is another earthquake, how we should evacuate the school as soon as possible or how we should protect ourselves was explained. We updated it in the form of 'drop, cover, hold.'" (P14)

"The fact that few students came was an advantage for those who did. We had the opportunity to take care of them individually. But it was a disadvantage for the students who couldn't come. Mr. Principal told us to persuade them to come." (P3)

"Some of our students couldn't come to school because of the danger. Parents were called one by one, and their students' attendance status was discussed. But convincing them and taking responsibility for this is not easy when there is a vital danger." (P2)

Teachers who stated that school principals do not engage in planning for a possible crisis after the crisis, P4 mentioned that the school principal did not feel the need for such planning, and P6 described the school principal's reaction to a new planning suggestion as follows:

"He did not make any new planning or updates. Everything is developing improvisationally. He intervenes when there is a problem." (P4)

"I made a suggestion. Since the students were not coming to school due to the danger, let's make the class hours 30 minutes. The Ministry of Education already said to keep the children outside more, but he does the opposite, takes them outside for 5 minutes and has a 40-minute class." (P6)

Teachers who stated that school principals turn the crisis into an opportunity by highlighting the school's strengths, P4 and P14 believed that the school principal turned the crisis into an opportunity by attracting parents to the school and gaining their trust:

"I think he turned the crisis into an opportunity in points such as attracting parents to the school and gaining their trust regarding the crisis." (P4)

"I saw how strong the bond among teachers was, both in terms of personnel and psychologically. During that period, we also organized parents. We collected 17 boxes of aid for the villages that were destroyed." (P14)

On the other hand, the opinions of teachers P1 and P4, who think that school principals have identified the weak points of the school in turning the crisis into an opportunity, are as follows:

"One of the weaknesses is the lack of collaboration. In my view, the earthquake ended, the subject closed. It's like that at the administrative level." (P1)

"We still have questions about evacuation. For example, if the earthquake had happened during school hours on Monday, we would not have known how the children would be evacuated." (P4)

Discussion

In this study, the behaviors of school principals regarding crisis management were examined in general during crisis periods, and specifically during the process of the earthquakes that occurred on February 6th. Based on the findings of the research, it was concluded that school principals exhibited lower levels of behavior related to the crisis period compared to the pre-crisis and post-crisis periods. In addition, it was observed that, based on the opinions of teachers, school principals mostly adhered to the Ministry of National Education (MoNE) guidelines, lacked initiative, acted insensitively towards the process, and remained passive in increasing awareness among teachers about the crisis management process. Therefore, teachers often felt isolated during the crisis process, while school principals who took initiative and showed sensitivity to solving problems quickly in the crisis management process made teachers and students feel safe.

When examining teachers' perceptions of school principals' crisis management skills, it was found that they perceived their pre-crisis and post-crisis behaviors as "Mostly" and their crisis period behaviors as "Sometimes." The reason for teachers perceiving their pre-crisis management skill levels as higher may be attributed to the confidence they gained from the practices related to earthquake and fire drills required by the Ministry of National Education, the Violence Action Plans (Maya, 2014), and the crisis intervention teams established at the beginning of the school year. However, the passive behaviors exhibited by school principals in implementing these plans during a crisis may have led teachers to perceive their crisis management skill levels as lower during crises. Indeed, when examining research on determining school principals' crisis management skill levels, it is seen that the behaviors of school principals during the crisis period are perceived at a lower level (Ercan, 2021; Karakuş & İnandı, 2018; Sağlam & Özsezer, 2015; Yurtsever, 2022). Considering that the examined research was conducted in different regions, including İzmir, Mersin, Uşak, and Ankara, and did not focus on a specific natural disaster, it can be said that school principals may not exhibit sufficient management behaviors during crises, including earthquakes.

Furthermore, despite the presence of a general regulation regarding intervention in disasters and emergencies issued by the Directorate of Support Services of the Ministry of National Education (MoNE, 2021), the passive behavior of school principals in intervening in crises is evident. Similarly, the perception of higher crisis management skill levels by school principals in the post-crisis period may be due to the understanding of disaster management in Turkey, which is built on the idea of "healing wounds as soon as possible" after a disaster (Filiz, 2004).

Research results also revealed that there are differences in the perception of the adequacy of school principals' crisis management sub-dimensions (Duran & Arslan, 2022; Ercan & Aksu, 2022; Gezer, 2020; Kaymak et al., 2023; Maya, 2014; Tanrikulu, 2022; Ulusoy, 2020; Ulutaş, 2010). When teachers' attitudes are taken into account, they tend to have a more positive attitude towards administrators who have received crisis management training, are innovative, willing to take risks, and exhibit leadership qualities (Bıyıklıoğlu, 2020; Çakır & Çakır, 2022; Karadağ,

2022; Saka, 2021; Sayın, 2008; Tanrıkulu, 2022; Ulutaş, 2010; Yurtsever, 2022). Therefore, it can be said that teacher perceptions are shaped by the education and leadership behaviors of school principals in the field of crisis management.

When teachers' opinions about the behaviors of school principals during the pre-crisis period and how they managed the pre-crisis period were evaluated, it was understood that school principals mainly exhibited preventive behaviors by organizing meetings and giving warnings about crises originating from within and around the school to respond to crisis signals. School principals who were described as lacking foresight were found to only implement drills required by the Ministry of National Education. Research has shown that the most preventive behavior is exhibited during the crisis preparedness period in schools (Var, 2022). However, the findings indicate that school principals only took measures related to crises within and around the school, while they merely followed MoNE guidelines in the case of crises such as earthquakes, which require a different approach. The most common crisis situations in schools are related to students, teachers, and parents (Tokel, 2018; Töre, 2020), as well as violence and injuries (Çelebi, 2019). The failure to learn from natural disasters in Turkey (TEDMEM, 2023) may have led school principals to have a narrow perspective on different types of crises and to act passively during a crisis process caused by natural disasters like earthquakes (İra & Yalçın, 2022).

One of the behaviors exhibited by school principals during the pre-crisis period is the creation of crisis scenarios. It has been understood that school principals create crisis scenarios by utilizing their school's internal and external resources as well as their own experiences. However, some school principals do not create earthquake scenarios due to their belief that different types of crises will not occur, resulting in improvisation during the crisis and leaving them feeling helpless (Yavuz et al., 2021). Research conducted in various regions of Turkey also shows that one of the lowest-rated items perceived during the pre-crisis period is "creating crisis scenarios before a crisis occurs" (Bıyıklıoğlu, 2020; Maya, 2014; Sağlam & Özsezer, 2015; Ulusoy, 2020). Therefore, it can be said that school principals in various regions of Turkey may lack the necessary experience (McCarty, 2012; Trethowen, 2009) and creative thinking skills (Elbedour, 2020; Smith & Riley, 2012) to imagine possible scenarios for potential crises.

During the pre-crisis period, school principals were found to use their communication skills to inform about crisis prevention, but it was determined that most school principals found this communication unnecessary. According to teachers' opinions, school principals who engage in one-on-one communication build trust among teachers, while those who find communication unnecessary leave teachers to deal with the crisis on their own. The quantitative findings of the research also revealed that teachers perceived that they did not have sufficient knowledge about strategies to protect themselves from the negative effects of a crisis. However, research has emphasized the importance of open communication flow during crisis management (Ohia, 2019) and has highlighted communication and information dissemination as crucial measures to avoid crises (Tokel, 2018). Panagiotopoulos et al. (2018) have also stated in their research that teachers expect comprehensive support from school principals to overcome conflicts. In this regard, it can be said that school principals in Turkey primarily focus on meeting the needs of teachers on the front lines during major crises like natural disasters (Brock, 2000) and see teachers as intermediaries to reach students. School principals who were indifferent to preparing emergency action plans during the pre-crisis period were perceived to be unable to perceive crisis situations, leading to incorrect actions during crises (Yavuz et al., 2021) and leaving themselves and their schools unprepared for crises (Karasavidou & Alexopoulos, 2019; Mutch, 2015).

During the crisis period, when examining the behaviors of school principals and how they managed the pre-crisis period according to teachers' opinions, it was concluded that school principals acted rationally by analyzing teachers' vital needs and contacting environmental

organizations to prepare emergency action plans. Some school principals, however, remained indifferent to emergency action plans and kept the crisis teams formed at the beginning of the school year passive. Consistent with the findings, existing literature contains evidence that emergency teams are not effectively utilized during crises (Çelebi, 2019; Javed & Niazi, 2015). However, during crises, true leaders are expected to take initiative, even under pressure (Mutch, 2015; Potter et al., 2021). When examining relevant studies, it is clear that creating an emergency response team is one of the essential tasks of school principals during crisis management (Aksoy & Aksoy, 2003; Erkan, 1996; Nelson, 2018). School principals who act swiftly and proactively are seen as taking life-saving steps (Chatzipanagiotou & Katsarou, 2023). In this context, it can be said that school principals are unable to take initiative due to their adherence to MoNE guidelines (Aytaç & Tokel, 2018; Var, 2022) and are unable to display true leadership behavior in forming a crisis team.

In the context of the research, it was revealed that during the crisis period, school principals exhibited behaviors such as regularly sharing information about the crisis process and informing teachers about crisis management training. However, the majority of school principals avoided taking responsibility and remained indifferent to teacher training, leaving it to the teachers' discretion. School principals who provided information about the training only shared MoNE guidelines. The quantitative findings of the research also indicate that teachers perceived a lack of training on crisis management, which is supported by the literature (Erkan & Aksu, 2022; Karakuş & İnandı, 2018; Maya, 2014; Sağlam & Özsezer, 2015; Ulutaş, 2010). In contrast, during the crisis process, accurate information sharing should be a priority for school administrators (Gainey, 2010). Research has shown that up-to-date information sharing during a crisis prevents the spread of misinformation (Erkan, 1996; Fraker Bonow, 2022; Smith & Riley, 2012; Var, 2022) and that hearing from an authorized person creates a reassuring atmosphere (Mutch, 2015). Therefore, it can be said that teachers who are regularly informed about the crisis process act with confidence during the crisis, while uninformed teachers feel insecure and confused. Furthermore, in the literature, it is emphasized that teachers need crisis management training the most during natural disasters (Çelebi, 2019; Javed & Niazi, 2015; Potter et al., 2021), and it is stated that without adequate training for teachers, emergency action plans are meaningless (Brock, 2000). Therefore, it can be interpreted that school principals in Turkey should go beyond simply conveying crisis management and natural disaster-related training organized by MoNE to teachers and take initiatives to ensure that teachers receive alternative training.

When examining the behaviors of school principals during the post-crisis period based on teachers' opinions, it was found that school principals interacted with teachers, students, and parents to provide psychosocial support and guidance, aiming to support the psychological well-being of students. However, most of them avoided collaboration and adhered only to MoNE guidelines. When reviewing the literature, it is observed that during crisis interventions, school administration and the guidance service are actively involved (Çelebi, 2019), and school principals seek the most support from guidance counsellors in crisis resolution (Tokel, 2018), as effective crisis management is rooted in planning, with psychologists playing a key role (Elbedour, 2020). In this context, it can be said that during the post-crisis period, the steps taken by school principals to support the psychological well-being of students are functionally dependent on the crucial role of guidance counsellors.

The research revealed that during the post-crisis period, some school principals conducted a situation analysis regarding the school's damage status and the psychological well-being of teachers and students, while others did not take any action in this regard. In the literature, it is noted that during times of uncertainty, fear, and anxiety, school leaders are burdened with an additional duty of providing psychological support to stakeholders (Chatzipanagiotou & Katsarou, 2023; Var, 2022). Indeed, in Turkey, following the 1999 Marmara and 2011 Van

earthquakes, students experienced post-traumatic stress and adjustment disorders, highlighting the need for psychological support (TEDMEM, 2023). Therefore, it can be said that school principals should take steps to reduce the stress of teachers and students who have experienced trauma at different levels, with a situation analysis being an important initial step in supporting their psychological well-being during the post-crisis period.

According to teachers' opinions, during the post-crisis period, school principals took steps regarding student attendance statuses. When reviewing the literature, it is observed that in major disasters such as pandemics or earthquakes, mass displacements occur, parents are afraid to send their children to school, and all these factors negatively affect student attendance and participation (Mutch, 2015; Var, 2022). Fletcher and Nicholas (2016) emphasized in their research that in such situations, school principals should actively work to improve students' learning conditions. In this context, it can be said that school principals in Turkey have not displayed strategic behaviors at a sufficient level to ensure that students can safely attend school during the post-crisis period.

The behavior identified among school principals in the post-crisis period is the ability to turn the crisis into an opportunity and, in this context, reveal the strengths and weaknesses of the school. According to the research results, as a strength of the school, it was found that teachers' organizational commitment and parents' trust in the school increased, and social relationships at the school improved. As a weakness, it was revealed that collaboration was not achieved, the school was unprepared for major crises, and risk-taking was lacking in crisis management. Research has shown that school principals who prioritize communication and support for teachers as leaders create a lasting and positive environment that increases teachers' organizational commitment.

Furthermore, in the literature, it has been observed that the behavior of turning crises into opportunities is highly exhibited (Bıyıklıoğlu, 2020; Karakuş & İnandı, 2018; Sağlam & Özsezer, 2015). The best example of this is the processes that occurred in organizations after the Covid-19 crisis. In these processes, adapting to change was seen as an opportunity, and the questioning of organizational problems was facilitated (Aydemir & Demirci, 2005). Additionally, after crisis processes, it has been revealed that school principals, along with critical thinking, problem-solving, and flexible thinking skills, also adopt leadership practices (Chatzipanagiotou & Katsarou, 2023). Therefore, it can be said that crises serve as triggers for existing improvements, and organizations can be better positioned after a crisis (Karasavidou & Alexopoulos, 2019; Smith & Riley, 2012). In this context, after an earthquake crisis, school principals who can communicate and collaborate effectively with their surroundings have the opportunity to increase teachers' organizational commitment, parents' trust in the school, and the school's social relationships, thus demonstrating a leadership identity.

Conclusions and Implications

Based on all these results, it has been revealed that school principals are unprepared for crises such as natural disasters due to their inability to foresee different types of crises, and therefore, they remain passive in responding to crises, not taking initiative beyond the Ministry of Education guidelines. However, Turkey is considered a high-risk country, and it is known that the risks that arise can be specific to local, regional, and national levels as well as specific to institutions. Nevertheless, there is limited research in the literature on how school principals can deal with natural disasters alongside crises in schools, and there is a need for professional development programs in this regard. Therefore, it is recommended to plan practical training programs to enable school principals to gain a leadership identity against the unpredictable nature of crises and to expand their powers to respond more quickly and flexibly to crises.

Various studies have emphasized that successful crisis leaders consider the "big picture" and build strong relationships based on trust by using communication and collaboration channels during crisis processes. In this study, it was found that school principals who gained the trust of school stakeholders by using communication skills in post-crisis mutual aid and solidarity processes supported teachers' psychological well-being and increased their organizational commitment. Therefore, it can be said that school principals who exhibit communication and collaboration behaviors in post-crisis processes can turn the crisis into an opportunity by making the school the center of its ecological environment. Based on the results of the research, the following recommendations are made:

- Training programs should be organized to develop crisis management skills for school principals to enable them to act more strategically during crisis periods.
- Awareness should be raised among school principals that crises are an inevitable situation, and therefore, necessary measures to minimize the damage to the institution should be taken before crises occur.
- Future research can include different types of crises, including earthquakes, in other provinces, and it can also diversify the school types to increase the generalizability of the findings.

Declaration of Interest

The authors declare no competing interest.

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